SUPLEMENTO
副 刊

SUMÁRIO

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 174/99:

Estende ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo de 1978 Relativo à Convenção Internacional para Salvaguarda da Vida Humana no Mar, de 1974 (SOLAS 74/78), aprovado pelo Decreto n.º 78/83, de 14 de Outubro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 14 de Outubro de 1983, na versão dada pelas emendas de 10 de Novembro de 1988, aprovadas pelo Decreto n.º 38/92, de 20 de Agosto, cujo texto foi publicado no *Diário da República*, 1.ª série, de 20 de Agosto de 1992. 5663

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto do Governo n.º 78/83:

Aprova para adesão o Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974. 5663

目 錄

共和國總統府

第174/99號共和國總統令：

將經一九八八年十一月十日修正案修正之《關於1974年國際海上人命安全公約的1978年議定書》（SOLAS 74/78）延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用；上述議定書係經十月十四日第78/83號命令通過，且文本已公布於一九八三年十月十四日《共和國公報》第一組，而上述修正案係經八月二十日第38/92號命令通過，且文本已公布於一九九二年八月二十日《共和國公報》第一組 5663

外 交 部

第78/83號政府命令：

通過《關於一九七四年國際海上人命安全公約的一九七八年議定書》，以待加入 5663

Imprensa Oficial de Macau, Rua da Imprensa Nacional, s/n — Macau. *Tel.: 573822 • Fax: 596802 • E-mail:* iom@macau.ctm.net
Netsite: http://www.imprensa.macau.gov.mo

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 38/92:

Aprova, para adesão, as emendas ao Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar. 5685

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 173/99:

Estende ao território de Macau, nos mesmos termos em que a eles está vinculado o Estado Português, a Convenção Internacional da Prevenção da Poluição por Navios (MARPOL), de 1973, e o Protocolo a ela relativo, de 17 de Fevereiro de 1978, aprovados pelo Decreto n.º 25/87, de 10 de Julho, cujo texto foi publicado no *Diário da República,* 1.ª série, de 10 de Julho de 1987. 5691

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto do Governo n.º 25/87:

Aprova, para adesão, o Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, feito em Londres em 17 de Fevereiro de 1978. 5691

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 172/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Internacional para Salvagurada da Vida Humana no Mar, de 1974 (SOLAS 74/78), aprovada pelo Decreto n.º 79/83, de 14 de Outubro, cujo texto foi publicado no *Diário da República,* 1.ª série, de 14 de Outubro de 1983. 5805

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto do Governo n.º 79/83:

Aprova, para ratificação, a Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974. 5805

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 171/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1987, aprovada pelo Decreto n.º 45/90, de 20 de Outubro, cujo texto foi publicado no *Diário da República,* 1.ª série, de 20 de Outubro de 1990. 6000

外 交 部

第 38/92 號命令：

通過《關於國際海上人命安全公約的一九七八年議定書的修正案》，以待加入 5685

共 和 國 總 統 府

第 173/99 號共和國總統令：

將《一九七三年國際防止船舶造成污染公約》（MARPOL）及與其有關之一九七八年二月十七日之議定書延伸至澳門地區，按照葡萄牙政府受該公約及議定書約束之相同規定適用；該公約及議定書係經七月十日第25/87號命令通過，且文本已公布於一九八七年七月十日《共和國公報》第一組 5691

外 交 部

第 25/87 號政府命令：

通過一九七八年二月十七日在倫敦簽訂之《關於一九七三年國際防止船舶造成污染公約的一九七八年議定書》，以待加入 5691

共 和 國 總 統 府

第 172/99 號共和國總統令：

將《一九七四年國際海上人命安全公約》（SOLAS 74/78）延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經十月十四日第79/83號命令通過，且文本已公布於一九八三年十月十四日《共和國公報》第一組 5805

外 交 部

第 79/83 號政府命令：

通過《一九七四年國際海上人命安全公約》，以待批准 5805

共 和 國 總 統 府

第 171/99 號共和國總統令：

將一九八七年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；該修正案係經十月二十日第45/90號命令通過，且文本已公布於一九九零年十月二十日《共和國公報》第一組 6000

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 45/90:

Aprova, para adesão, as emendas introduzidas ao Regulamento Internacional para Evitar Abalroamentos no Mar, 1972. 6000

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 157/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Internacional para a Supressão do Tráfico de Mulheres e Crianças, aprovada, para ratificação, pela Lei n.º 1544, de 4 de Fevereiro de 1924. 6003

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Lei n.º 1:544:

Aprova, para ratificação, a Convenção Internacional para a supressão do tráfico de mulheres e crianças, celebrada em Genebra em 30 de Setembro de 1921 entre Portugal e outros países. 6003

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 189/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Alfandegária Relativa à Simplificação de Formalidades Quanto à Importação de Bens para Exibição ou Utilização em Exposições, Feiras ou Encontros Similares, de 8 de Junho de 1961, cujo texto foi publicado no *Diário do Governo*, 1.ª série, de 20 de Setembro de 1962. 6006

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Aviso:

Torna público ter sido assinada a Convenção aduaneira relativa às facilidades concedidas para a importação de mercadorias destinadas a serem apresentadas ou utilizadas em exposições, feiras, congressos ou manifestações semelhantes. 6006

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 188/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção sobre o Reconhecimento e Execução de Sentenças Arbitrais Estrangeiras, de 10 de Junho de 1958, ratificada pelo Decreto do Presidente da República n.º 52/94, de 8 de Julho, cujo texto foi publicado no *Diário da República*, 1.ª série, de 8 de Julho de 1994. 6017

外交部

第45/90號命令：

通過《一九七二年國際海上避碰規則公約修正案》，以待加入 6000

共和國總統府

第157/99號共和國總統令：

將《禁止販賣婦孺國際公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經一九二四年二月四日第1544號法律通過，以待批准 6003

外交部

第1：544號法律：

通過葡萄牙與其他國家之間於一九二一年九月三十日在日內瓦訂立之《禁止販賣婦孺國際公約》，以待批准 6003

共和國總統府

第189/99號共和國總統令：

將一九六一年六月八日之《關於在展覽會、交易會、會議等事項中便利展出和需用物品進口的海關公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約之文本已公布於一九六二年九月二十日《政府公報》第一組 6006

外交部

通告：

茲公布：已簽署《關於在展覽會、交易會、會議等事項中便利展出和需用物品進口的海關公約》..... 6006

共和國總統府

第188/99號共和國總統令：

將一九五八年六月十日之《關於承認和執行外國仲裁裁決的公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經七月八日第52/94號共和國總統令批准，且文本已公布於一九九四年七月八日《共和國公報》第一組 6017

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 52/94:

Aprova, para ratificação, a Convenção sobre o Reconhecimento e a Execução de Sentenças Arbitrais Estrangeiras. 6017

ASSEMBLEIA DA REPÚBLICA

Resolução da Assembleia da República n.º 37/94:

Aprova, para ratificação, a Convenção sobre o Reconhecimento e a Execução de Sentenças Arbitrais Estrangeiras. 6018

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 185/99:

Estente ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo à Alteração do Artigo 56.º da Convenção sobre Aviação Civil Internacional, de 6 de Outubro de 1989. 6023

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 48/97:

Aprova, para ratificação, o Protocolo Relativo à Alteração do Artigo 56.º da Convenção sobre Aviação Civil Internacional, adoptado em Montreal em 6 de Outubro de 1989. 6023

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 184/99:

Estende ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo a Uma Emenda ao Artigo 83.º-Bis da Convenção sobre Aviação Civil Internacional, de 6 de Outubro de 1980. 6026

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 49/97:

Aprova, para ratificação, o Procolo Relativo a Uma Emenda ao Artigo 83.º-bis da Convenção sobre Aviação Civil Internacional, adoptado em Montréal em 6 de Outubro de 1980. 6026

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 183/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção sobre as Substâncias Psicotrópicas, de 21 de Fevereiro de 1971. 6029

共和國總統府

第 52/94 號共和國總統令：

批准《關於承認和執行外國仲裁裁決的公約》，以待批准 6017

共和國議會

第 37/94 號共和國議會決議：

通過《關於承認和執行外國仲裁裁決的公約》，以待批准 6018

共和國總統府

第 185/99 號共和國總統令：

將一九八九年十月六日之《關於修改國際民用航空公約第五十六條的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用 6023

外交部

第 48/97 號命令：

通過一九八九年十月六日在蒙特利爾通過之《關於修改國際民用航空公約第五十六條的議定書》，以待批准 6023

共和國總統府

第 184/99 號共和國總統令：

將一九八零年十月六日之《關於國際民用航空公約第八十三條分條修正案的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用 6026

外交部

第 49/97 號命令：

通過一九八零年十月六日在蒙特利爾通過之《關於國際民用航空公約第八十三條分條修正案的議定書》，以待批准 6026

共和國總統府

第 183/99 號共和國總統令：

將一九七一年二月二十一日之《精神藥物公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用 6029

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 10/79:

Aprova para adesão a Convenção sobre as Substâncias Psicotrópicas. 6030

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 178/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1989, aprovada pelo Decreto n.º 56/91, de 21 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 21 de Setembro de 1991. 6054

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 56/91:

Aprova, para ratificação, emendas ao Regulamento Internacional para Evitar Abalroamentos no Mar, aprovado pelo Decreto n.º 55/78, de 27 de Junho. .. 6054

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 177/99:

Estende ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1981, cujo texto foi publicado no *Diário da República*, 1.ª série, de 9 de Novembro de 1983. 6055

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Aviso:

Torna público ter Portugal aceitado a Resolução A.464, adoptada na 12.ª Assembleia da Organização Marítima Internacional. 6055

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 176/99:

Estende ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo a Uma Emenda à Alínea *a*) do Artigo 50.º da Convenção sobre Aviação Civil Internacional, adoptado em 26 de Outubro de 1990, aprovado pelo Decreto n.º 47/97, de 3 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 3 de Setembro de 1997. 6064

外 交 部

第10/79號命令：

通過《精神藥物公約》，以待加入 6030

共 和 國 總 統 府

第178/99號共和國總統令：

將一九八九年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；該修正案係經九月二十一日第56/91號命令通過，且文本已公布於一九九一年九月二十一日《共和國公報》第一組 6054

外 交 部

第56/91號命令：

通過《國際海上避碰規則公約修正案》，以待批准；該修正案係經六月二十七日第55/78號命令通過 6054

共 和 國 總 統 府

第177/99號共和國總統令：

將一九八一年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；有關文本已公布於一九八三年十一月九日《共和國公報》第一組 6055

外 交 部

通告：

茲公布：葡萄牙已接納在國際海事組織第十二次大會上通過之A-464號決議 6055

共 和 國 總 統 府

第176/99號共和國總統令：

將一九九零年十月二十六日通過之《關於國際民用航空公約第五十條第一款修正案的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用；該議定書係經九月三日第47/97號命令通過，且文本已公布於一九九七年九月三日《共和國公報》第一組 6064

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 47/97:

Aprova, para ratificação, o Protocolo Relativo a Uma Emenda à Alínea *a*) do Artigo 50.º da Convenção sobre Aviação Civil Internacional, adoptado em Montréal em 26 de Outubro de 1990. 6064

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 206/99:

Estende ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Regulamento das Radiocomunicações da União Internacional das Telecomunicações, de 6 de Dezembro de 1979. 6067

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 39-A/92:

Aprova o Regulamento das Radiocomunicações, assinado em Genebra a 16 de Dezembro de 1979, no âmbito da Convenção Internacional das Telecomunicações. 6067

外 交 部

第 47/97 號命令：

通過一九九零年十月二十六日在蒙特利爾通過之《關於國際民用航空公約第五十條第一款修正案的議定書》，以待批准 6064

共 和 國 總 統 府

第 206/99 號共和國總統令：

將一九七九年十二月六日《國際電訊聯盟無線電規則》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用 6067

外 交 部

第 39-A/92 號命令：

通過一九七九年十二月十六日在日內瓦簽署之《國際電訊公約》範疇內之《無線電規章》..... 6067

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 174/99

de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendido ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, de 1974 (SOLAS 74/78), aprovado pelo Decreto n.º 78/83, de 14 de Outubro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 14 de Outubro de 1983, na versão dada pelas emendas de 10 de Novembro de 1988, aprovadas pelo Decreto n.º 38/92, de 20 de Agosto, cujo texto foi publicado no *Diário da República*, 1.ª série, de 20 de Agosto de 1992.

Foram ouvidos os órgãos de governo do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com os referidos decretos de aprovação e textos da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

DIRECÇÃO-GERAL DOS NEGÓCIOS ECONÓMICOS

Decreto do Governo n.º 78/83

de 14 de Outubro

O Governo decreta, nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o seguinte:

Artigo único. É aprovado para adesão o Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974, cujos textos em inglês e a respectiva tradução para português vão anexos ao presente decreto.

Visto e aprovado em Conselho de Ministros de 29 de Setembro de 1983. — *Mário Soares — Carlos Alberto da Mota Pinto — Jaime José Matos da Gama.*

Assinado em 4 de Outubro de 1983.

Publique-se.

O Presidente da República, ANTÓNIO RAMALHO EANES.

Referendado em 6 de Outubro de 1983.

O Primeiro-Ministro, *Mário Soares.*

(D.R. n.º 237, I Série, de 14 de Outubro de 1983)

共和國總統府

共和國總統令 第174/99號
八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將經一九八八年十一月十日修正案修正之《關於1974年國際海上人命安全公約的1978年議定書》（SOLAS 74/78）延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用：上述議定書係經十月十四日第78/83號命令通過，且文本已公布於一九八三年十月十四日《共和國公報》第一組，而上述修正案係經八月二十日第38/92號命令通過，且文本已公布於一九九二年八月二十日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過議定書及修正案之命令及公約之文本公布於《澳門政府公報》。

共和國總統 沈拜奧

（一九九九年八月五日第181期《共和國公報》第一組-A）

外交部

經濟事務統籌司

政府命令 第78/83號
十月十四日

政府根據《憲法》第二百條第一款c項之規定，命令制定法規如下：

獨一條

通過《關於1974年國際海上人命安全公約的1978年議定書》，以待加入；該議定書之英文本及葡文譯本附於本命令。

一九八三年九月二十九日於部長會議批閱及通過——*Mário Soares* ——*Carlos Alberto da Mota Pinto* ——*Jaime José Matos da Gama*

一九八三年十月四日簽署。

命令公布。

共和國總統

ANTÓNIO RAMALHO EANES

一九八三年十月六日副署。

總理

Mário Soares

（一九八三年十月十四日第237期《共和國公報》第一組）

Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974

The Parties to the present Protocol,

Being Parties to the International Convention for the Safety of Life at Sea, 1974, done at London on 1 November 1974;

Recognizing the significant contribution which can be made by the above-mentioned Convention to the promotion of the safety of ships and property at sea and the lives of persons on board;

Recognizing also the need to improve further the safety of ships, particularly tankers;

Considering that this objective may best be achieved by the conclusion of a Protocol Relating to the International Convention for the Safety of Life at Sea, 1974,

have agreed as follows:

ARTICLE I

General obligations

The Parties to the present Protocol undertake to give effect to the provisions of the present Protocol and the annex hereto which shall constitute an integral part of the present Protocol. Every reference to the present Protocol constitutes at the same time a reference to the annex hereto.

ARTICLE II

Application

1 — The provisions of articles II, III [other than paragraph *a*)], IV, VI, *b*), *c*) and *d*), VII and VIII of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as «the Convention») are incorporated in the present Protocol, provided that references in those articles to the Convention and to Contracting Governments shall be taken to mean references to the present Protocol and to the Parties to the present Protocol, respectively.

2 — Any ship to which the present Protocol applies shall comply with the provisions of the Convention, subject to the modifications and additions set out in the present Protocol.

3 — With respect to the ships of non-parties to the Convention and the present Protocol, the Parties to the present Protocol shall apply the requirements of the Convention and the present Protocol as may be necessary to ensure that no more favourable treatment is given to such ships.

ARTICLE III

Communication of information

The Parties to the present Protocol undertake to communicate to, and deposit with, the secretary-general of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as «the Organization») a list of nominated surveyors or recognized organizations which are authorized to act on their behalf in the administration of measures for safety of life at sea, for circulation to the Parties and for safety of life at sea for circulation to the Parties for information of their officers. The administration shall therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations.

ARTICLE IV

Signature, ratification, acceptance, approval and accession

1 — The present Protocol shall be open for signature at the headquarters of the Organization from 1 June 1978 to 1 March 1979 and shall thereafter remain open for accession. Subject to the provisions of paragraph 3 of this article, States may become Parties to the present Protocol by:

a) Signature without reservation as to ratification, acceptance or approval; or

b) Signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or

c) Accession.

2 — Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the secretary-general of the Organization.

3 — The present Protocol may be signed without reservation, ratified, accepted, approved or acceded to only by States which have signed without reservation, ratified, accepted, approved or acceded to the Convention.

ARTICLE V

Entry into force

1 —The present Protocol shall enter into force 6 months after the date on which not less than 15 States, teh combined merchant fleets of which constitute not less than 50 % of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with article IV of the present Protocol, provided however that the present Protocol shall not enter into force before the Convention has entered into force.

2 — Any instrument of ratification, acceptance, approval or accession deposited after the date on which the present Protocol enters into force shall take effect 3 months after the date of deposit.

3 — After the date on which an amendment to the present Protocol is deemed to have been accepted under article VIII of the Convention, any instrument of ratification, acceptance, approval or accession deposited shall apply to the present Protocol as amended.

ARTICLE VI

Denunciation

1 — The present Protocol may be denounced by any Party at any time after the expiry of 5 years from the date on which the present Protocol enters into force for that Party.

2 — Denunciation shall be effected by the deposit of an instrument of denunciation with the secretary-general of the Organization.

3 — A denunciation shall take effect 1 year, or such longer period as may be specified in the instrument of denunciation, after its receipt by the secretary-general of the Organization.

4 — A denunciation of the Convention by a Party shall be deemed to be a denunciation of the present Protocol by that Party.

ARTICLE VII

Depositary

1 — The present Protocol shall be deposited with the secretary-general of the Organization (hereinafter referred to as «the Depositary»).

2 — The Depositary shall:

a) Inform all States which have signed the present Protocol or acceded thereto of:

i) Each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;

ii) The date of entry into force of the present Protocol;

iii) The deposit of any instrument of denunciation of the present Protocol together with the date on which it was received and the date on which the denunciation takes effect;

b) Transmit certified true copies of the present Protocol to all States which have signed the present Protocol or acceded thereto.

3 — As soon as the present Protocol enters into force, a certified true copy thereof shall be transmitted by the Depositary to the Secretariat of the United Nations for registration and publication in accordance with article 102 of the Charter of the United Nations.

ARTICLE VIII

Languages

The present Protocol is established in a single original in the Chinese, English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German and Italian languages shall be prepared and deposited with the signed original.

In witness whereof the undersigned being duly authorized by their respective Governments for that purpose have signed the present Protocol.

Done at London this 17th day of February 1978.

ANNEX

Modifications and Additions to the International Convention for the Safety of Life at Sea, 1974

CHAPTER I

General provisions

PART A

Application, definitions, etc.

Regulation 2

Definitions

The following paragraph is added to the existing text:

n) "Age of a ship" means the elapsed period of time determined from the year of build as indicated on the ship's registry papers.

PART B

Surveys and certificates

Regulation 6

Inspection and survey

The existing text of regulation 6 is replaced by the following:

a) The inspection and survey of ships, so far as regards the enforcement of the provisions of the present regulations and the granting of exemptions therefrom, shall be carried out by officers of the Administration. The Administration may, however, entrust the inspections and surveys either to surveyors nominated for the purpose or to organizations recognized by it.

b) The Administration shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended. These inspections may be carried out by the Administration's own inspection services, or by nominated surveyors, or by recognized organizations, or by other Parties upon request of the Administration. Where the Administration, under the provisions of regulations 8 and 10 of this chapter, establishes mandatory annual surveys, the above unscheduled inspections shall not be obligatory.

c) An Administration nominating surveyors or recognizing organizations to conduct inspections and surveys as set forth in paragraphs *a*) and *b*) of this regulation shall as a minimum empower any nominated surveyor or recognized organization to:

i) Require repairs to a ship; and

ii) Carry out inspections and surveys if requested by the appropriate authorities of a Port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations.

d) When a nominated surveyor or recognized organization determines that the condition of the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate or is such that the ship is not fit to proceed to sea without danger to the ship, or persons on board, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the relevant certificate should be withdrawn and the Administration shall be notified immediately; and, if the ship is in the port of another Party, the appropriate authorities of the Port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or recognized organization has notified the appropriate authorities of the Port State, the Government of he Port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation. When applicable, the Government of the Port State concerned shall ensure that the ship shall not sail until it can proceed to sea, or leave port for the purpose of proceeding to the appropriate repair yard, without danger to the ship or persons on board.

e) In every case, the Administration shall fully guarantee the completeness and efficiency of the inspection and survey, and shall undertake to ensure the necessary arrangements to satisfy this obligation.

Regulation 7

Surveys of passenger ships

The existing text of paragraph *b*), *iii*), is replaced by the following:

b) .....

iii) A survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in regulation 11 of chapter, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the ship complies in all respects with the provisions of the Convention and the present Protocol and of the International Regulations for Preventing Collisions at Sea in force, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration.

Regulation 8

Surveys of life saving appliances and other equipment of cargo ships

The existing text of regulation 8 is replaced by the following:

a) The life-saving appliances, except a radiotelegraph installation in a motor lifeboat or a portable radio apparatus for survival craft, the echosounding device, the gyro-compass, the fire-extinguishing appliances and the inert gas system of cargo ships to which chapters II-1, II-2, III and V of the Convention and the present Protocol apply, shall be subject to initial and subsequent surveys as prescribed for passenger ships in regulation 7 of chapter I of the Convention and the present Protocol with the substitution of 24 months for 12 months in sub-paragraph *a*), *ii*), of that regulation. The fire control plans in new ships and the pilot ladders, mechanical pilot hoists, lights, shapes and means of making sound signals carried by new and existing ships shall be included in the surveys for the purpose of ensuring that they comply fully with the requirements of the Convention and the present Protocol and, where applicable, the International Regulations for Preventing Collisions at Sea in force.

b) Intermediate surveys shall be made for tankers of 10 years of age and over, within 3 months before or after the anniversary date of the cargo ship safety equipment certificate, to ensure that equipment specified in paragraph *a*) of this regulation has been maintained in accordance wtih regulation 11 of this chapter and that it is in good working condition. Such intermediate surveys shall be endorsed on the cargo ship safety equipment certificate issued in accordance with regulation 12, *a*), *iii*), of chapter I of the Convention.

Regulation 10

Surveys of hull, machinery and equipment of cargo ships

The existing text of regulation 10 is replaced by the following:

a) The hull, machinery and equipment (other than items in respect of which cargo ship safety equipment certificates, cargo ship safety radiotelegraphy certificates or cargo ship radiotelephony certificates are issued) of a cargo ship shall be surveyed on completion and thereafter in such a manner as the Administration may consider necessary in order to ensure that their condition is in all respects satisfactory and at the following intervals:

i) At intervals specified by the Administration but not exceeding 5 years (periodical surveys);

ii) In addition to such periodical surveys a tanker of 10 years of age and over shall undergo a minimum of one intermediate survey during the period of validity of its cargo ship safety construction certificate. In cases where only one such intermediate survey is carried out in any one certificate validity period, it shall be held not before 6 months prior to, nor later than 6 months after, the half-way date of the certificate's period of validity.

b) The initial and periodical survey shall be such as to ensure that the arrangements, material and scantlings of the structure, boilers and other pressure vessels, their appurtenances, main and auxiliary machinery including steering gear and associated control systems, electrical installation and other equipment are in all respects satisfactory for the service for which the ship is intended. Such surveys shall, in the case of tankers, also include inspection of the outside of the ship's bottom, pump rooms, cargo and bunker piping systems, vent piping, pressure vacuum valves and flame screens.

c) The intermediate survey of tankers of 10 years of age and over shall include inspection of steering gear equipment and associated control systems, pump rooms, cargo and bunker piping systems on deck and in pump rooms, vent piping, pressure vacuum valves and flame screens, the electrical installations in dangerous zones, and the outside of the ship's bottom. In addition to the visual inspection of the electrical installation, the insulation resistance of the electrical equipment in dangerous zones is to be tested. If, upon examination, there should be any doubt as to

the condition of the piping, extra measures, such as pressure tests and thickness determination, shall be taken as necessary. Such intermediate surveys shall be endorsed on the cargo ship safety construction certificate issued in accordance with regulation 12, *a*), *ii*), of chapter I of the Convention.

d) A survey, either general or partial according to the circumstances, shall be made when required after an investigation prescribed in regulation 11 of this chapter, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the ship is fit to proceed to sea without danger to the ship or persons on board.

Regulation 11

Maintenance of conditions after survey

The existing text of regulation 11 is replaced by the following:

a) The condition of the ship and its equipment shall be maintained to conform with the provisions of the Convention and the present Protocol to ensure that the ship in all respects will remain fit to proceed to sea without danger to the ship or persons on board.

b) After any survey of the ship under regulations 6, 7, 8, 9 or 10 of chapter I of the Convention and the present Protocol has been completed, no change shall be made in the structural arrangement, machinery, equipment and other items covered by the survey, without the sanction of the Administration.

c) Whenever an accident occurs to a ship or a defect is discovered, either of which affects the safety of the ship or the efficiency or completeness of its life-saving appliances or other equipment, the master or owner of the ship shall report at the earliest opportunity to the Administration, the nominated surveyor or recognized organization responsible for issuing the relevant certificate, who shall cause investigations to be initiated to determine whether a survey, as required by regulations 6, 7, 8, 9 or 10 of chapter I of the Convention and the present Protocol, is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the Port State and the nominated surveyor or recognized organization shall ascertain that such a report has been made.

Regulation 14

Duration and validity of certificates

The existing text of regulation 14 is replaced by the following:

a) Certificates other than the cargo ship safety construction certificate, the cargo ship safety equipment certificate and any exemption certificate shall be issued for a period not exceeding 12 months. The cargo ship safety construction certificate shall be issued for a period not exceeding 5 years. The cargo ship safety equipment certificate shall be issued for a period not exceeding 24 months. Exemption: Certificates shall not be valid for longer than the period of the certificates to which they refer.

b) No extension of the 5 year period of validity of the cargo ship safety construction certificate shall be permited.

c) If a survey takes place within 2 months before the end of the period for which a cargo ship safety radiotelegraph certificate or a cargo ship safety radiotelephony certificate issued in respect of cargo ships of 300 tAB and upwards, but less than 500 tAB, was originally issued, that certificate may be withdrawn, and a new certificate may be issued which shall expire 12 months after the end of the said period.

d) If the ship at the time when a certificate, other than that referred to in paragraph *b*) of this regulation, expires is not in a port of the country in which it is registered or is to be surveyed, the Administration may extend the certificate, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the country in which it is registered or is to be surveyed, and then only in cases where it appears proper and reasonable to do so.

e) No certificate shall be extended under the provisions of paragraph *d*) of this regulation for a longer period than 5 months, and a ship to which an extension is granted shall not, on its arrival in the country in which it is registered or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or country without having obtained a new certificate.

f) A certificate, other than that referred to in paragraph *b*) of this regulation, which has not been extended under the foregoing provisions of this regulation, may be extended by the Administration for a period of grace up to 1 month from the date of expiry stated on it.

g) A certificate shall cease to be valid:

i) If the inspections and surveys are not carried out within the periods specified under regulations 7, *a*), 8, 9 and 10, *a*), of chapter I of the Convention and the present Protocol or as they may have been extended in accordance with paragraphs *d*), *e*) or *f*) of this regulation; or

ii) Upon transfer of the ship to the flag of another Government. A new certificate shall only be issued when the Government issuing the new certificate is fully satisfied that the ship is in compliance with the requirements of regulation 11, *a*) and *b*), of this chapter. In the case of a transfer between Parties, if requested within 3 months after

the transfer has taken place, the Government of the Party, whose flag the ship was formerly entitled to fly, shall, as soon as possible, transmit to the Administration copies of the certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports.

Regulation 19

Control

The existing text of regulation 19 is replaced by the following:

a) Every ship when in a port of another Party is subject to control by officers duly authorized by such Government in so far as this control is directed towards verifying that the certificates issued under regulation 12 or regulation 13 of chapter I of the Convention are valid.

b) Such certificates, if valid, shall be accepted unless there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of any of the certificates or that the ship and its equipment are not in compliance with the provisions of regulation 11, *a*) and *b*), of this chapter.

c) In the circumstances given in paragraph *b*) of this regulation or where a certificate has expired or ceased to be valid, the officer carrying out the control shall take steps to ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the appropriate repair yard without danger to the ship or persons on board.

d) In the event of this control giving rise to an intervention of any kind, the officer carrying out the control shall forthwith inform, in writing, the consul or, in his absence, the nearest diplomatic representative of the state whose flag the ship is entitled to fly of all the circumstances in which intervention was deemed necessary. In addition, nominated surveyors or recognized organizations responsible for the issue of the certificates shall also be notified. The facts concerning the intervention shall be reported to the Organization.

e) The Port State authority concerned shall notify all relevant information about the ship to the authorities of the next port of call, in addition to parties mentioned in paragraph *d*) of this regulation, if it is unable to take action as specified in paragraphs *c*) and *d*) of this regulation or if the ship has been allowed to proceed to the next port of call.

f) When exercising control under this regulation all possible efforts shall be made to avoid a ship being unduly detained or delayed. If a ship is thereby unduly detained or delayed, it shall be entitled to compensation for any loss or damage suffered.

CHAPTER II-I

Construction — Subdivision and stability, machinery and electrical installations

PART A

General

Regulation 1

Application

The following sub-paragraphs are added to the existing text of paragraph *b*):

b) .....

iii) Notwithstanding the provisions of sub-paragraph *ii*) of this paragraph and sub-paragraph *a*), *iii*), of this regulation, for the purposes of paragraph *d*) of regulation 29 of this chapter, a new tanker means a tanker:

1) For which the building contract is placed after 1 June 1979; or

2) In the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or

3) The delivery of which is after 1 June 1982; or

4) Which has undergone an alteration or modification of a major character:

a) For which the contract is placed after 1 June 1979; or

b) In the absence of a contract, the construction work of which is begun after 1 January 1980; or

c) Which is completed after 1 June 1982.

iv) For the purposes of paragraph *d*) of regulation 29 of this chapter, an existing tanker is a tanker which is not a new tanker as defined in sub-paragraph *iii*) of this paragraph.

v) For the purposes of sub-paragraph *iii*) of this paragraph, conversion of an existing tanker of 20 000 m/tdw and upwards to meet the requirements of the present Protocol or the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, shall not be deemed to constitute an alteration or modification of a major character.

Regulation 2

Definitions

The following paragraphs are added to the existing text:

k) The remote steering gear control system is the means by which required rudder movements are transmitted from the navigating bridge to the steering gear power unit controls.

l) The main steering gear is the machinery, the steering gear power units, if any, and ancillary equipment and the means of applying torque to the rudder stock (c.g. tiller or quadrant) necessary for effecting movement of the rudder for the purpose of steering the ship under normal service conditions.

m) The steering gear power unit is:

i) In the case of electric steering gear, an electric motor and its associated electrical equipment;

ii) In the case of electro-hydraulic steering gear, an electric motor and its associated electrical equipment and connected pump;

iii) In the case of other hydraulic steering gear, a driving engine and connected pump.

n) The auxiliary steering gear is that equipment which is provided for effecting movement of the rudder for the purpose of steering the ship in the event of failure of the main steering gear.

PART C

Machinery and electrical installations

Regulation 29

Steering gear

The following paragraph is added to the existing text:

d) Tankers only:

i) The following shall apply to every new tanker of 10 000 tAB and upwards and, not later than 2 years from the date of entry into force of the present Protocol, to every existing tanker of 10 000 tAB and upwards:

1) 2 remote steering gear control systems shall be provided, each of which shall be operable separately from the navigating bridge. This does not require duplication of the steering wheel or steering lever. In the event of failure of the remote steering gear control system in operation, the other system shall be capable of being brought into immediate operation from a position on the navigating bridge. Each remote steering gear control system, if electric, shall be served by its own separate circuit supplied from the steering gear power circuit from a point within the steering gear compartment. In the event of failure of electrical power supply to a remote steering gear control system an alarm shall be given on the navigating bridge. The alarms required in this sub-paragraph shall be both audible and visual and situated in a position on the navigating bridge where they can be readily observed;

2) Control of the main steering gear shall also be provided in the steering gear compartment;

3) Means shall be provided in the steering gear compartment to disconnect the remote steering gear control system from the power circuit;

4) A means of communication shall be provided between the navigating bridge and the steering gear compartment;

5) The exact angular position of the rudder shall be indicated on the navigating bridge. The rudder angle indication shall be independent of the remote steering gear control system; and

6) The angular position of the rudder shall be recognizable in the steering gear compartment.

ii) In every new tanker of 10 000 tAB and upwards, in addition to the requirements of paragraph *a*) and sub-paragraph *d*), *i*), of this regulation, the following shall apply:

1) The main steering gear shall comprise 2 or more identical power units and it shall be capable of operation the rudder as required by sub-paragraph *d*), *ii*), 2), of this regulation while operating with 1 or more power units. As far as reasonable and practicable, the main steering gear shall be so arranged that a single failure in its piping or in one of the power units will not impair the integrity of the remaining part of the steering gear. All mechanical couplings which are part of the steering gear and the mechanical connexion with any remote steering gear control system, if any, shall be of sound and

reliable construction to the satisfaction of the Administration;

2) The main steering gear shall, with the ship at its deepest sea-going draught, be capable of putting the rudder over from 35° on one side to 35° on the other side with the ship running ahead at maximum service speed. The rudder shall be capable of being put over from 35° on either side to 30° on the other side in not more than 28", under the same conditions;

3) The main steering gear shall be operated by power where necessary to fulfil the requirements of sub-paragraph *d*), *ii*), 2), of this regulation;

4) The main steering gear power units shall be arranged to start automatically when power is restored after a power failure;

5) In the event of failure of any of the steering gear power units an alarm shall be given on the navigating bridge. Every steering gear power unit shall be capable of being brought into operation either automatically or manually from a position on the navigating bridge; and

6) An alternative power supply, at least sufficient to supply a steering gear power unit so as to enable it to move the rudder as specified below, and also to supply its associated remote steering gear control system and rudder angle indicator, shall be provided, automatically, within 45", either from the emergency source of electrical power, or from another independent source of power located in the steering gear compartment. This independent source of power shall be used only for this purpose and shall have a capacity sufficient for half an hour of continuous operation. The steering gear power unit, when being supplied by the alternative power supply, shall at least be capable of putting the rudder over from 15° on one side to 15° on the other side in not more than 60" with the ship at its deepest sea-going draught while running at one half of its maximum service speed ahead or 7 knots, whichever is the greater.

CHAPTER II-2

Construction — Fire protection, fire detection and fire extinction

PART A

General

Regulation 1

Application

The following sub-paragraphs are added to the existing text of paragraph *a*):

a) .....

iv) Notwithstanding the provisions of sub-paragraphs *ii*) and *iii*) of this paragraph, for the purposes of paragraph *a*), *ii*), of regulation 55 and of regulation 60 of this chapter, a new tanker means a tanker:

1) For which the building contract is placed after 1 June 1979; or

2) In the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or

3) The delivery of which is after 1 June 1982; or

4) Which has undergone an alteration or modification of a major character:

a) For which the contract is placed after 1 June 1979; or

b) In the absence of a contract, the construction work of which is begun after 1 January 1980; or

c) Which is completed after 1 June 1982.

v) For the purposes of paragraph *a*), *ii*), of regulation 55 and of regulation 60 of this chapter, an existing tanker is a tanker which is not a new tanker as defined in sub-paragraph *iv*) of this paragraph.

vi) For the purposes of sub-paragraph *iv*) of this paragraph, conversion of an existing tanker of 20 000 tdw and upwards to meet the requirements of the present Protocol or the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution

from Ships, 1973, shall not be deemed to constitute an alteration or modification of a major character.

Regulation 3

Definitions

The existing text of paragraph *v*) is replaced by the following:

v) «Lightweight» means the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effects.

The following paragraph is added to the existing text:

x) «Crude oil» means any oil occuring naturally in the earth whether or not treated to render it suitable for transportation and includes:

i) Crude oil from which certain distillate fractions may have been removed; and

ii) Crude oil to which certain distillate fractions may have been added.

PART E

Fire safety measures for tankers

Regulation 55

Application

The existing text of this regulation is replaced by the following:

a) Unless expressly provided otherwise:

i) This Part shall apply to all new tankers carrying crude oil and petroleum products having a flashpoint not exceeding 60° C (140° F) (closed cup test) as determined by an approved flashpoint apparatus and a *Reid* vapour pressure which is below atmospheric pressure and other liquid products having a similar fire hazard; and

ii) In addition, all ships covered by this Part shall comply with the requirements of regulations 52, 53 and 54 of chapter II–2 of the Convention except that fixed gas fire extinguishing systems for cargo spaces shall not be used for new tankers and for those existing tankers complying with regulation 60 of this chapter. For existing tankers not required to comply with regulation 60, the Administration, in applying the requirements of paragraph *f*) of regulation 52, may accept a froth system capable of discharging froth internally or externally to the tanks. The details of the installation shall be to the satisfaction of the Administration.

b) Where cargoes other than those referred to in sub-paragraph *a*), *i*), of this regulation which introduce additional fire hazards are intended to be carried additional safety measures shall be required to the satisfaction of the Administration.

c) Combination carriers shall not carry solid cargoes unless all cargo tanks are empty of oil and gas freed or unless, in each case, the Administration is satisfied with the arrangements provided.

Regulation 60

Cargo tank protection

The existing text of this regulation is replaced by the following:

a) For new tankers of 20 000 tdw and upwards, the protection of the cargo tanks deck area and cargo tanks shall be achieved by a fixed deck froth system and a fixed inert gas system in accordance with the requirements of regulations 61 and 62 of chapter II–2 of the Convention except that in lieu of the above installations; the Administration, after having given consideration to the ship's arrangement and equipment, may accept other combinations of fixed installations if they afford protection equivalent to the above, in accordance with regulation 5 of chapter I of the Convention.

b) To be considered equivalent, the system proposed in lieu of the deck froth system shall:

i) Be capable of extinguishing spill fires and also preclude ignition of spilled oil not yet ignited; and

ii) Be capable of combating fires in ruptured tanks.

c) To be considered equivalent, the system proposed in lieu of the fixed inert gas system shall:

i) Be capable of preventing dangerous accumulations of explosive mixtures in intact cargo tanks during normal service throughout the ballast voyage and necessary in tank operations; and

ii) Be so designed as to minimize the risk of ignition from the generation of static electricity by the system itself.

d) Any existing tanker of 20 000 tdw and upwards engaged in the trade of carrying crude oil shall be fitted with an inert gas system, complying with the requirements of paragraph *a*) of this regulation, not later than a date:

i) For a tanker of 70 000 tdw and upwards, 2 years after the date of entry into force of the present Protocol; and

ii) For a tanker of less than 70 000 tdw, 4 years after the date of entry into force of the present Protocol, except that for tankers less than 40 000 tdw not fitted with tank washing machines having an individual throughput of greater than 60 m³ per hour, the Administration may exempt existing tankers from the requirements of this paragraph, if it would be unreasonable and impractica-

ble to apply these requirements, taking into account the ship's design characteristics.

e) Any existing tanker of 40 000 tdw and upwards engaged in the trade of carrying oil other than crude oil and any such tanker of 20 000 tdw and upwards engaged in the trade of carrying oil other than crude oil fitted with tank washing machines having an individual throughput of greater than 60 m³ per hour shall be fitted with an inert gas system, complying with the requirements of paragraph *a*) of this regulation, not later than a date:

i) For a tanker of 70 000 tdw and upwards, 2 years after the date of entry into force of the present Protocol; and

ii) For a tanker of less than 70 000 tdw, 4 years after date of entry into force of the present Protocol.

f) Any tanker operating with a cargo tank cleaning procedure using crude oil washing shall be fitted with an inert gas system complying with the requirements of regulation 62 of chapter II-2 of the Convention and with fixed tank washing machines.

g) All tankers fitted with a fixed inert gas system shall be provided with a closed ullage system.

h) Any new tanker of 2000 tAB and upwards not covered by paragraph *a*) of this regulation shall be provided with a froth system capable of discharging froth internally or externally to the tanks. The details of such installation shall be to the satisfaction of the Administration.

CHAPTER V

Safety of navigation

Regulation 12

Shipborne navigational equipment

The existing text of paragraph *a*) is replaced by the following:

a) All ships of 1600 tAB and upwards but less than 10 000 tAB shall be fitted with at least 1 radar. All ships of 10 000 tAB and upwards shall be fitted with at least 2 radars, each capable of operating independently of the other. All radars fitted in compliance with this regulation shall be of a type approved by the Administration and shall conform to operational standards not inferior to those adopted by the Organization. Facilities for plotting radar readings shall be provided on the bridge in those ships.

Regulation 19

Use of the automatic pilot

The following paragraph is added to the existing text:

d) The manual steering shall be tested after prolonged use of the automatic pilot and before entering areas where navigation demands special caution.

The following new regulations are added to this chapter:

Regulation 19-1

Operation of steering gear

In areas where navigation demands special caution ships shall have more than 1 steering gear power unit in operation when such units are capable of simultaneous operation.

Regulation 19-2

Steering gear — Testing and drills

a) Within 12 hours before departure, the ship's steering gear shall be checked and tested by the ship's crew. The test procedure shall include, where applicable, the operation of the following:

i) The main steering gear;
ii) The auxiliary steering gear;
iii) The remote steering gear control systems;
iv) The steering positions located on the navigating bridge;
v) The emergency power supply;
vi) The rudder angle indicators in relation to the actual position of the rudder;
vii) The remote steering gear control system power failure alarms; and
viii) The steering gear power unit failure alarms.

b) The checks and tests shall include:

i) The full movement of the rudder according to the required capabilities of the steering gear;
ii) A visual inspection of the steering gear and its connecting linkage; and
iii) The operation of the means of communication between the navigating bridge and steering gear compartment.

c) .....

i) Simple operating instructions with a block diagram showing the change-over procedures for remote steering gear control systems and steering gear power units shall be permanently displayed on the navigating bridge and in the steering gear compartment;
ii) All officers concerned with the operation and or maintenance of steering gear shall be familiar with the operation of the steering systems fitted on the ship and with the procedures for changing from one system to another.

d) In addition to the routine checks and tests prescribed in paragraphs *a*) and *b*) of this regulation, emergency steering drills shall take place at least once every 3 months in order to practise emergency steering procedures. These drills shall include direct control from within the steering gear compartment, the communications procedure with the navigating bridge and, where applicable, the operation of alternative power supplies.

e) The Administration may waive the requirement to carry out the checks and tests prescribed in paragraphs *a*) and *b*) of this regulation for ships which regularly ply on voyages of short duration. Such ships shall carry out these checks and tests at least once every week.

f) The date upon which the checks and tests prescribed in paragraphs *a*) and *b*) of this regulation are carried out and the date and details of emergency steering drills carried out under paragraph *d*) of this regulation shall be recorded in the log book as may be prescribed by the Administration.

APPENDIX

Form of safety construction certificate for cargo ships

The following form of supplement is added to the existing form:

Supplement to the cargo ship safety construction certificate

(Official seal) *(Country)*

Issued under the provisions of the

Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974

Name of ship	Distinctive number or letters	Port of registry	Deadweight of ship (metric tons)	Year of build

Type of ship:

Tanker engaged in the trade of carrying crude oil *.
Tanker engaged in the trade of carrying oil other than crude oil *.
Tanker engaged in the trade of carrying crude/other oil *.
Cargo ship other than a tanker engaged in the trade of carrying oil *.

Date of contract for building or alteration or modification of a major character ...
Date on which keel was laid or ship was at a similar stage of construction or on which an alteration or modification of a major character was commenced ...
Date of delivery or completion of an alteration or modification of a major character ...

---

* Delete as appropriate.

This supplement shall be permanently attached to the cargo ship stafety construction certificate.
This is to certify:

That the ship has been surveyed in accordance with regulation 10 of chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974; and
That the survey showed that the condition of the hull, machinery and equipment as defined in the above regulation was in all respects satisfactory and that the ship complied with the requirements of that Protocol.

This certificate is valid until ... subject to intermediate survey(s) at intervals of ...

Issued at ...

(Place of issue of certificate.)

... 19 ...

(Signature of duly authorized official issuing the certificate.)
(Seal or stamp of the issuing authority, as appropriate.)

Intermediate survey

This is to certify that at an intermediate survey required by regulation 10 of chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, this ship was found to comply with the relevant provisions of that Protocol.
Signed ...

(Signature of duly authorized official.)

Place ...
Date ...
Next intermediate survey due ...

(Seal or stamp of the authority, as appropriate.)

Signed ...

(Signature of duly authorized official.)

Place ...
Date ...
Next intermediate survey due ...

(Seal or stamp of the authority, as appropriate.)

Signed ...

(Signature of duly authorized official.)

Place ...
Date ...
Next intermediate suvey due ...

(Seal or stamp of the authority, as appropriate.)

Signed ...

(Signature of duly authorized official.)

Place ...
Date ...

(Seal or stamp of the authority, as appropriate.)

Form of safety equipment certificate for cargo snips

The following form of supplement is added to the existing form:

Supplement to the cargo ship safety equipment certificate

(Official seal) *(Country)*

Issued under the provisions of the

Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974

Name of ship	Distinctive number or letters	Port of registry	Deadweight of ship (metric tons)	Year of build

Type of ship:

Tanker engaged in the trade of carrying crude oil *.
Tanker engaged in the trade of carrying oil other than crude oil *.

Tanker engaged in the trade of carrying crude/other oil *.
Cargo ship other than a tanker engaged in the trade of carying oil *.

Date of contract for building or alteration or modification of a major character ...
Date on which keel was laid or ship was at a similar stage of construction or on which an alteration or modification of a major character was commenced ...
Date of delivery or completion of an alteration or modification of a major character ...

---

*Delete as appropriate.

This supplement shall be permanently attached to the cargo ship safety equipment certificate.
This is to certify:

That the ship has been surveyed in accordance with regulation 8 of chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974; and
That the survey showed that the condition of the safety equipment as defined in the above regulation was in all respects satisfactory and that the ship complied with requirements of that Protocol.

This certificate is valid until ... subject to intermediate survey(s) at intervals of ...
Issued at ...

(Place of issue of certificate.)

... 19 ...

(Signature of duly authorized official issuing the certificate.)
(Seal or stamp of the issuing authority, as appropriate.)

Intermediate survey

This is to certify that at an intermediate survey required by regulation 8 of chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, the ship was found to comply with the relevant provisions of that Protocol.
Signed ...

(Signature of duly authorized official.)

Place ...
Date ...
Next intermediate survey due ...

(Seal or stamp of the authority, as appropriate.)

Signed ...

(Signature of duly authorized official.)

Place ...
Date ...

(Seal or stamp of the authority, as appropriate.)

Under the provisions of regulation 14 of chapter I of the Protocol the validity of this certificate is extended until
.....
Signed ...

(Signature of duly authorized official.)

Place ...
Date ...

(Seal or stamp of the authority, as appropriate.)

Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

As Partes do presente Protocolo,

Sendo Partes da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, elaborada em Londres em 1 de Novembro de 1974;

Reconhecendo o importante contributo que pode ser dado pela Convenção acima mencionada na promoção da segurança dos navios e outros bens no mar e das vidas das pessoas embarcadas;

Reconhecendo também a necessidade de aperfeiçoar a segurança dos navios, particularmente a dos navios-tanques;

Considerando que este objectivo pode ser melhor alcançado com a conclusão de um Protocolo Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974,

acordaram no seguinte:

ARTIGO I

Obrigações gerais

As Partes do presente Protocolo comprometem-se a dar cumprimento às prescrições do presente Protocolo e seu anexo, o qual constitui uma parte integrante do presente Protocolo. Qualquer referência ao presente Protocolo constitui ao mesmo tempo uma referência ao seu anexo.

ARTIGO II

Aplicação

1 — As prescrições dos artigos II, III [excepto parágrafo *a*)], IV, VI, *b*), *c*) e *d*), VII e VIII da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974 (daqui em diante referida como «a Convenção») estão incluídas no presente Protocolo, desde que as referências naqueles artigos à Convenção e aos Governos contratantes sejam tomadas como referências ao presente Protocolo e às Partes do presente Protocolo, respectivamente.

2 — Qualquer navio a que o presente Protocolo se aplique deve cumprir com as prescrições da Convenção, alteradas pelas modificações e adições contidas no presente Protocolo.

3 — Relativamente aos navios das Partes não contratantes da Convenção e do presente Protocolo, as Partes do presente Protocolo devem aplicar os requisitos da Convenção e do presente Protocolo, na medida do necessário, para assegurar que tais navios não beneficiem de tratamento mais favorável.

ARTIGO III

Comunicação de informações

As Partes do presente Protocolo comprometem-se a comunicar e a depositar junto do secretário-geral da Organização Marítima Consultiva Intergovernamental, (daqui em diante referida como «a Organização») uma lista dos peritos designados ou organizações reconhecidas, que estão autorizadas a actuar em seu nome na aplicação das medidas para a salvaguarda da vida humana no mar, para circulação pelas Partes e conhecimento dos seus funcionários. A Administração, portanto, deve notificar a Organização das responsabilidades específicas e condições da autoridade delegada nos peritos designados ou organizações reconhecidas.

ARTIGO IV

Assinatura, ratificação, aceitação, aprovação e adesão

1 — O presente Protocolo está aberto para assinatura na sede da Organização de 1 de Junho de 1978 até 1 de Março de 1979, e em seguida manter-se-á aberto à adesão. Sujeitos às prescrições do parágrafo 3 deste artigo, os Estados podem tornar-se Partes do presente Protocolo por:

a) Assinatura sem reserva quanto a ratificação, aceitação ou aprovação; ou

b) Assinatura sujeita a ratificação, aceitação ou aprovação, seguida de ratificação, aceitação ou aprovação; ou

c) Adesão.

2 — A ratificação, aceitação, aprovação ou adesão efectuam-se pelo depósito de um instrumento apropriado junto do secretário-geral da Organização.

3 — A assinatura sem reserva, ratificação, aceitação, aprovação ou adesão do presente Protocolo só pode ser efectuada pelos Estados que tenham assinado sem reserva, ratificado, aceite, aprovado ou aderido à Convenção.

ARTIGO V

Entrada em vigor

1 — O presente Protocolo entra em vigor 6 meses após a data na qual não menos de 15 Estados, cujas frotas mercantes somadas constituam pelo menos 50 % da tonelagem bruta da frota mercante mundial, se tenham tornado Partes dele de acordo com o artigo IV do presente Protocolo, estipulando-se, contudo, que o presente Protocolo não entrará em vigor antes da Convenção.

2 — Qualquer instrumento de ratificação, aceitação, aprovação ou adesão, depositado depois da data do presente Protocolo entrar em vigor, produz efeito 3 meses depois da data do depósito.

3. Qualquer instrumento de ratificação, aceitação, aprovação ou adesão depositado depois da data em que uma alteração ao presente Protocolo é considerada ter sido aceite, de acordo com o artigo VIII da Convenção, aplica-se ao Protocolo na sua forma modificada.

ARTIGO VI

Denúncia

1 — O presente Protocolo pode ser denunciado por qualquer Parte em qualquer momento após expirados 5 anos depois da data em que o presente Protocolo entrou em vigor para essa Parte.

2 — A denúncia é efectuada por depósito de um instrumento de denúncia junto do Secretário-Geral da Organização.

3 — A denúncia produz efeito um ano após a recepção do instrumento de denúncia pelo Secretário-Geral da Organização, a não ser que nele se especifique um período mais longo.

4 — A denúncia da Convenção por uma Parte é considerada como uma denúncia do presente Protocolo por essa Parte.

ARTIGO VII

Depositário

1 — O presente Protocolo deve ser depositado junto do Secretário-Geral da Organização (daqui em diante referido como «o Depositário»).

2 — O Depositário:

a) Informará todos os Estados que assinaram o presente Protocolo, ou a ele aderiram, de:

i) Cada nova assinatura ou depósito de um instrumento de ratificação, aceitação, aprovação ou adesão, bem como da respectiva data;

ii) A data de entrada em vigor do presente Protocolo;

iii) O depósito de qualquer instrumento de denúncia do presente Protocolo, bem como a data na qual foi recebido e a data em que a denúncia se torna efectiva;

b) Transmitirá cópias autenticadas e certificadas do presente Protocolo a todos os Estados que assinaram o presente Protocolo ou a ele aderiram.

3 — Logo que o presente Protocolo entre em vigor, uma cópia autenticada e certificada do mesmo é transmitida pelo Depositário ao Secretariado das Nações Unidas para registo e publicação, de acordo com o artigo 102.° da Carta das Nações Unidas.

ARTIGO VIII

Línguas

O presente Protocolo está redigido num original único em chinês, espanhol, francês, inglês e russo, sendo cada texto igualmente autêntico. Serão preparadas traduções oficiais em alemão, árabe e italiano, as quais serão depositadas juntamente com o original assinado.

Em testemunho do que os abaixo assinados, devidamente autorizados para este efeito pelos seus Governos, assinaram o presente Protocolo.

Feito em Londres no dia 17 de Fevereiro de 1978.

ANEXO

Modificações e adições à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

CAPÍTULO I

Disposições gerais

PARTE A

Aplicação, definições, etc.

Regra 2

Definições

O parágrafo seguinte é acrescentado ao texto existente:

n) «Idade de um navio» significa o período de tempo decorrido desde o ano de construção que consta nos documentos de registo.

PARTE B

Vistorias e certificados

Regra 6

Inspecção e vistoria

O texto existente da regra 6 é substituído pelo seguinte:

a) A inspecção e vistoria dos navios, no que respeita à execução das prescrições das presentes regras e à concessão de isenções, devem ser efectuadas por funcionários da Administração. A Administração pode, contudo, delegar as inspecções e vistorias quer em peritos nomeados para esse fim, quer em organizações por ela reconhecidas.

b) A Administração deve instituir sistemas de inspecções não programadas a levar a efeito durante o período de validade do certificado. Tais inspecções devem assegurar que o navio e o seu equipamento estão em condições satisfatórias para o serviço a que o navio é destinado. Estas inspecções podem ser feitas pelos seus próprios serviços de inspecção, ou por peritos nomeados, ou por organizações reconhecidas ou ainda por outras Partes a pedido da Administração. Quando a Administração, de acordo com o previsto nas regras 8 e 10 deste capítulo, impõe vistorias anuais obrigatórias, as inspecções não programadas acima indicadas não devem ser obrigatórias.

c) A Administração que nomeie peritos ou reconheça organizações para efectuar inspecções e vistorias de acordo com os parágrafos *a*) e *b*) desta regra deve dar, como mínimo, poder ao perito nomeado ou organização reconhecida para:

i) Exigir reparações ao navio; e

ii) Efectuar as inspecções e vistorias, se requeridas pelas autoridades competentes do Estado do porto onde o navio se encontra.

A Administração deve notificar a Organização das responsabilidades específicas e condições de delegação da autoridade nos peritos nomeados ou organizações reconhecidas.

d) Quando um perito nomeado ou organização reconhecida verifica que as condições do navio ou do seu equipamento não correspondem essencialmente aos pormenores do certificado ou são tais que o navio não está em condições de sair para o mar, sem perigo para o navio ou pessoas embarcadas, tal perito ou organização deve assegurar-se imediatamente de que são tomadas medidas correctivas e deve notificar a Administração sem demora. Se tais medidas correctivas não forem tomadas, o certificado respectivo deve ser retirado e a Administração imediatamente notificada; e, se o navio está no porto de outra Parte, as autoridades competentes do país desse porto devem ser também notificadas imediatamente. Quando um funcionário da Administração, um perito nomeado ou uma organização reconhecida tenha notificado as autoridades competentes do país do porto, o Governo do país do respectivo porto deve dar a tal funcionário, perito ou organização toda a assistência necessária para desempenhar as suas funções de acordo com esta regra. Quando necessário, o Governo do país do porto deve assegurar que o navio não saia para o mar até estar em condições de iniciar a viagem ou deixar o porto com o fim de demandar um estaleiro para proceder à reparação apropriada, sem perigo para o navio ou pessoas embarcadas.

e) Em qualquer caso, a Administração deve garantir que as inspecções e vistorias sejam efectuadas completa e eficientemente e deve tomar as necessárias providências para satisfazer esta obrigação.

Regra 7

Vistorias a navios de passageiros

O texto existente do parágrafo *b*), *iii*), é substituído pelo seguinte:

b) .....

iii) Uma vistoria geral ou parcial, de acordo com as circunstâncias, deve ser feita depois de uma reparação resultante das investigações prescritas na regra 11 deste capítulo ou quando seja feita qualquer reparação ou substituição importante. A vistoria deve ser feita de forma a assegurar que as reparações ou substituições necessárias foram efectivamente feitas, que o material e a mão-de-obra utilizados em tais reparações ou alterações são totalmente satisfatórios e que o navio satisfaz em todos os aspectos aos requisitos da Convenção, do presente Protocolo e das Regras Internacionais para Evitar Abalroamentos no Mar, em vigor, e às leis, decretos, ordens e regulamentos promulgados pela Administração.

Regra 8

Vistorias aos meios de salvação e outro equipamento de navios de carga

O texto existente da regra 8 é substituído pelo seguinte:

a) Com excepção das instalações radiotelegráficas das embarcações salva-vidas com motor ou dos equipamentos portáteis de radiocomunicações das embarcações e jangadas salva-vidas, os meios de salvação, a sonda acústica, a girobússula e as instalações de extinção de incêndios e de gás inerte dos navios de carga a que se aplicam os capítulos II–1, II–2, III e V da Convenção e o presente Protocolo devem ser sujeitos a vistoria inicial e vistorias subsequentes, como previsto para os navios de passageiros na regra 7 do capítulo I da Convenção e no presente Protocolo, substituindo 12 meses por 24 meses na alínea *ii*) do parágrafo *a*) dessa regra. As vistorias devem abranger os planos de combate a incêndios a bordo de navios novos, assim como escadas de pilotos, escadas mecânicas de pilotos, faróis, balões e aparelhos de

sinalização sonora, a bordo de navios novos e existentes, com o fim de se verificar se satisfazem em todos os pontos aos requisitos da Convenção e do presente Protocolo e do Regulamento Internacional para Evitar Abalroamentos no Mar, em vigor, quando aplicável.

b) Em navios-tanques de 10 ou mais anos de existência devem ser feitas vistorias intermédias anuais dentro dos 3 meses antes ou depois da data em que o certificado de segurança do equipamento para navio de carga complete 1 ano, para assegurar que os equipamentos prescritos no parágrafo *a*) desta regra se mantêm de acordo com a regra 11 deste capítulo e que estão em boas condições de funcionamento.

Estas vistorias intermédias devem ser registadas no verso do certificado de segurança do equipamento para navio de carga, emitido de acordo com a regra 12, *a*), *iii*), do capítulo I da Convenção.

Regra 10

Vistorias ao casco, máquinas e equipamento de navios de carga

O texto existente da regra 10 é substituído pelo seguinte:

a) O casco, as máquinas e o equipamento (além dos componentes cobertos por um certificado de segurança do equipamento para navio de carga, um certificado de segurança da radiotelegrafia para navio de carga ou um certificado de segurança radiotelefónica para navio de carga) de um navio de carga devem ser vistoriados depois do seu acabamento e seguidamente, com os intervalos de tempo julgados necessários pela Administração, de modo a garantir que o seu estado é inteiramente satisfatório, com a seguinte periodicidade:

i) Em intervalos especificados pela Administração e não superiores a 5 anos (vistorias periódicas);

ii) Adicionalmente a tais vistorias periódicas, um navio-tanque de 10 ou mais anos de existência deve ser submetido no mínimo a uma vistoria intermédia durante o período de validade do seu certificado de segurança de construção para navio de carga. Nos casos em que só seja efectuada uma vistoria intermédia durante o período de validade do certificado, ela não deve ser efectuada nem 6 meses antes nem 6 meses depois da data de metade do período da validade desse certificado.

b) As vistorias inicial e periódica devem ser executadas de forma que permitam garantir que o arranjo, materiais e escantilhões das estruturas, caldeiras e outros recipientes de pressão, seus acessórios, máquinas principal e auxiliares, incluindo máquina do leme e sistemas de controle associados, instalação eléctrica e outros equipamentos estão em condições satisfatórias para o serviço a que o navio se destina. No caso de navios-tanques, tais inspecções devem incluir também inspecções ao fundo exterior do navio, casa das bombas, sistemas de encanamentos de carga e combustível, respiradouros, válvulas de vácuo e pára-chamas.

c) A vistoria intermédia dos navios-tanques de 10 ou mais anos de existência deve incluir a inspecção ao equipamento da máquina do leme e sistema de controle associados, casa das bombas, sistemas de encanamentos de carga e combustível no convés e na casa das bombas, respiradouros, válvulas de vácuo e pára-chamas, instalações eléctricas nas zonas perigosas e o fundo exterior do navio. Adicionalmente à inspecção visual da instalação eléctrica deve ser verificada a resistência de isolamento do equipamento eléctrico nas zonas perigosas. Se, em consequência do exame, existirem dúvidas no que respeita às condições dos encanamentos, devem-se tomar as medidas adicionais que se considerarem necessárias, tais como provas de pressão e determinação da espessura. Tais vistorias intermédias devem ser registadas no certificado de segurança de construção para navios de carga, emitido de acordo com a regra 12, *a*), *ii*), do capítulo I da Convenção.

d) Uma vistoria geral ou parcial, conforme as circunstâncias, deve ser feita, quando necessário, depois de uma investigação de acordo com a regra 11 deste capítulo ou quando sejam feitas reparações ou alterações importantes. A vistoria deve ser executada de tal forma que garanta que as reparações ou alterações necessárias foram efectivamente feitas, que o material e mão-de-obra de tais reparações ou alterações são totalmente satisfatórios e que o navio está apto a iniciar a viagem sem perigo para o mesmo ou para as pessoas a bordo.

Regra 11

Conservação das condições após a vistoria

O texto existente da regra 11 é substituído pelo seguinte:

a) A condição do navio e seus equipamentos deve ser mantida de acordo com os requisitos da Convenção e do presente Protocolo, a fim de garantir que o navio está em condições de segurança para sair para o mar sem perigo para o navio ou para as pessoas a bordo.

b) Depois de ter sido completada qualquer vistoria ao navio, conforme as regras 6, 7, 8, 9 ou 10 do capítulo I da Convenção e do presente Protocolo, nenhuma alteração pode ser feita à estrutura, máquinas, equipamento, etc., cobertos pela vistoria sem autorização da Administração.

c) Quando ocorrer um acidente a um navio ou for detectado um defeito que afecte a segurança do navio, a eficiência ou integridade dos seus meios de salvação ou outro equipamento, o comandante ou o armador deve informar o mais breve possível a Administração, o perito nomeado ou a organização reconhecida responsável pela emissão do respectivo certificado, que investigará se se torna necessário efectuar uma vistoria, nos termos das regras 6, 7, 8, 9 ou 10 do capítulo I

da Convenção e do presente Protocolo. Se o navio se encontra num porto de outra Parte, o comandante ou armador deve informar também imediatamente as autoridades competentes do país a que o porto pertence, devendo o perito nomeado ou a organização reconhecida verificar se tal informação foi feita.

Regra 14

Duração e validade dos certificados

O texto existente da regra 14 é substituído pelo seguinte:

a) Os certificados, excepto o certificado de segurança de construção para navio de carga, certificado de segurança de equipamento para navio de carga e certificado de dispensa, devem ser emitidos por um período máximo de 12 meses. O certificado de segurança de construção para navio de carga deve ser emitido por um período máximo de 5 anos. O certificado de segurança de equipamento para navio de carga deve ser emitido por um período máximo de 24 meses. Os certificados de dispensa não devem ter validade superior à dos certificados a que se referem.

b) Não deve ser permitida qualquer prorrogação do certificado de segurança de construção para navio de carga com o período de validade de 5 anos.

c) Se se realizar uma vistoria nos 2 meses que antecedem o termo do período de validade de um certificado de segurança radiotelegráfica para navio de carga ou um certificado de segurança radiotelefónica para navio de carga, respeitantes a navios de carga de arqueação bruta igual ou superior a 300 t, mas inferior a 500 t, este certificado pode ser retirado e passado novo certificado, cuja validade terminará 12 meses depois da data em que terminava o referido período.

d) Se o período de validade de um certificado, excepto o referido no parágrafo *b*) desta regra, expirar quando o navio não se encontra num porto do país onde está registado ou onde deva ser vistoriado, a Administração pode prorrogar o certificado, mas tal prorrogação só será concedida com o fim de permitir que o navio complete a sua viagem para o país onde está registado ou onde deve ser vistoriado, e somente quando tal medida se afigure oportuna e razoável.

e) Nenhum certificado deve ser prorrogado nas condições do parágrafo *d*) desta regra por espaço de tempo superior a 5 meses, e o navio ao qual tenha sido concedida tal prorrogação não poderá, com base na mesma, depois de chegar ao país onde está registado ou ao porto onde deve ser vistoriado, largar novamente sem que obtenha novo certificado.

f) Um certificado, excepto o referido no parágrafo *b*) desta regra, que não tenha sido prorrogado de acordo com as disposições precedentes da presente regra pode ser prorrogado pela Administração por um período de graça máximo de 1 mês além da data de expiração de validade nele indicada.

g) Um certificado deixa de ser válido:

i) Se as inspecções e vistorias não forem efectuadas dentro dos períodos especificados nas regras 7, *a*), 8, 9 e 10, *a*), do capítulo I da Convenção e do presente Protocolo ou dentro dos períodos resultantes de prorrogação concedida ao abrigo dos parágrafos *d*), *e*) e *f*) desta regra; ou

ii) Se o navio for transferido para outra bandeira. Um novo certificado só deve ser emitido quando o Governo que o emite verificar que o navio satisfaz completamente os requisitos da regra 11, *a*) e *b*), deste capítulo. No caso de uma transferência entre Partes, se requerido dentro de 3 meses depois da transferência, o Governo da Parte a que o navio pertencia deve enviar à Administração, o mais breve possível, cópias dos certificados passados ao navio antes da transferência e, se possível, cópias das respectivas vistorias.

Regra 19

Fiscalização

O texto existente da regra 19 é substituído pelo seguinte:

a) Qualquer navio quando no porto de uma outra Parte fica sujeito à fiscalização pelos funcionários devidamente autorizados pelo Governo dessa Parte, no que respeita à verificação da validade dos certificados emitidos de acordo com a regra 12 ou 13 do capítulo I da Convenção.

b) Tais certificados, se válidos, devem ser aceites, a menos que haja motivo evidente para considerar que a condição do navio ou do seu equipamento não corresponde substancialmente aos pormenores de algum dos certificados ou que o navio e o seu equipamento não estão de acordo com os requisitos da regra 11, *a*) e *b*), deste capítulo.

c) Nas circunstâncias do parágrafo *b*) desta regra ou quando um certificado expirou ou deixou de ser válido, o funcionário que efectua a fiscalização deve tomar medidas para garantir que o navio não sai até estar em condições de prosseguir viagem ou de deixar o porto com o objectivo de seguir para um estaleiro de reparações sem perigo para o navio ou para as pessoas embarcadas.

d) No caso de esta fiscalização dar origem a uma intervenção de qualquer espécie, o funcionário que a efectuar deve informar sem demora, por escrito, o cônsul ou, na sua falta, o representante diplomático mais próximo do país a que o navio pertence de todas as circunstâncias que levaram a considerar necessária a intervenção. Adicionalmente, deve também notificar os peritos nomeados ou as organizações reconhecidas responsáveis pela emissão dos certificados. Os factos relativos à intervenção serão relatados à Organização.

e) A autoridade do país a que o porto pertence deve comunicar às autoridades do próximo porto de escala as condições do navio, além das partes mencionadas no parágrafo *d*) desta regra, se não estiver em condições de agir como especificado nos parágrafos *c*) e *d*) desta regra ou se o navio tiver sido autorizado a prosseguir viagem para o próximo porto de escala.

f) No exercício da fiscalização no âmbito desta regra devem ser feitos todos os esforços para evitar que um navio seja indevidamente retido ou atrasado. Em consequência, se um navio for indevidamente retido ou atrasado, tem direito a uma indemnização por perdas e danos.

CAPÍTULO II-1

Construção — Subdivisão e estabilidade, máquinas e instalações eléctricas

PARTE A

Generalidades

Regra 1

Aplicação

As alíneas seguintes juntam-se ao texto existente do parágrafo *b*):

b) .....

iii) Sem prejuízo dos requisitos da alínea *ii*) do presente parágrafo e da alínea *iii*) do parágrafo *a*) da presente regra, para os fins do parágrafo *d*) da regra 29 do presente capítulo, um navio-tanque novo significa um navio-tanque:

1) Para o qual o contrato de construção foi assinado depois de 1 de Junho de 1979; ou
2) Na ausência de contrato de construção, a sua quilha tenha sido assente ou se encontre numa fase equivalente de construção depois de 1 de Janeiro de 1980; ou
3) A sua entrega tenha sido feita depois de 1 de Junho de 1982; ou
4) Tenha sofrido uma grande alteração ou modificação:

a) Para a qual o contrato tenha sido assinado depois de 1 de Junho de 1979; ou

b) Na ausência de um contrato, os trabalhos tenham começado depois de 1 de Janeiro de 1980; ou

c) Que foi concluída depois de 1 de Junho de 1982;

iv) Para os fins do parágrafo *d*) da regra 29 do presente capítulo, um navio-tanque existente é um navio-tanque que não é um navio-tanque novo, como definido na alínea *iii*) do presente parágrafo;

v) Para os fins da alínea *iii*) do presente parágrafo, a conversão de um navio-tanque existente de 20 000 t de porte bruto ou mais, de modo a satisfazer as exigências do presente Protocolo ou o Protocolo de 1978 Relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, não deve ser considerada como uma grande alteração ou modificação.

Regra 2

Definições

Os parágrafos seguintes juntam-se ao texto existente:

k) O sistema de comando à distância do aparelho de governo é o meio pelo qual os movimentos exigidos ao leme são transmitidos da ponte de navegação aos comandos da unidade de potência do aparelho de governo.

l) O aparelho de governo principal é composto pelas máquinas, unidades de potência do aparelho de governo, se existirem, equipamento auxiliar e dispositivos para aplicação do momento à madre do leme (exemplo, cana do leme ou quadrante) necessários para efectuar o movimento do leme tendo em vista o governo do navio em condições normais de serviço.

m) A unidade de potência do aparelho de governo é:

i) No caso do aparelho de governo eléctrico, um motor eléctrico e o seu equipamento eléctrico associado;

ii) No caso do aparelho de governo electro-hidráulico, um motor eléctrico, o seu equipamento eléctrico e bomba associada;

iii) No caso de outro aparelho de governo hidráulico, um motor de accionamento e bomba associada.

n) O aparelho de governo auxiliar é o equipamento instalado para efectuar o movimento do leme, a fim de governar o navio em caso de avaria do aparelho de governo principal.

PARTE C

Máquinas e instalações eléctricas

Regra 29

Aparelho de governo

O seguinte parágrafo junta-se ao texto existente:

d) Somente navios-tanques:

i) As disposições seguintes devem ser aplicadas aos navios-tanques novos de

10 000 tAB ou superior e, até 2 anos depois da entrada em vigor do presente Protocolo, aos navios-tanques já existentes da mesma tonelagem:

1) Devem ser instalados 2 sistemas de comando à distância do aparelho de governo, cada um dos quais deve ser accionado independentemente da ponte de navegação. Tal não implica duplicação da roda de leme ou da alavanca de comando. No caso de avaria do sistema de comando à distância do aparelho de governo em funcionamento, o outro sistema deve ser capaz de ser operado de imediato, em qualquer momento, a partir de um ponto da ponte de navegação. Cada sistema de comando à distância do aparelho de governo, se for eléctrico, deve ser servido por circuito próprio separado, alimentado pelo circuito de alimentação do aparelho de governo, a partir de um ponto situado dentro da casa da máquina do leme. No caso de avaria na alimentação eléctrica do sistema de comando à distância do aparelho de governo, será dado alarme na ponte de navegação. Os alarmes exigidos neste subparágrafo devem ser simultaneamente sonoros e visuais e devem estar situados na ponte de navegação, numa posição em que possam ser facilmente observados;
2) Deve existir também um comando do aparelho de governo principal na casa da máquina do leme;
3) Na casa da máquina do leme devem existir meios que permitam desligar o sistema de alimentação do circuito do comando à distância do aparelho de governo;
4) Devem existir meios de comunicação entre a ponte de navegação e a casa da máquina do leme;
5) A posição exacta do ângulo do leme deve ser indicada na ponte de navegação. A indicação do ângulo do leme deve ser independente do sistema de comando à distância do aparelho de governo; e
6) A posição angular do leme deve ser identificável na casa da máquina do leme.

ii) A todos os navios-tanques novos de 10 000 tAB ou superior, além dos requisitos do parágrafo *a)* e da alínea *i)* do parágrafo *d)* da presente regra, devem ser aplicados mais os seguintes:

1) O aparelho de governo principal deve possuir 2 ou mais unidades de potência idênticas e deve ser capaz de fazer funcionar o leme como exigido na alínea *ii)*, 2), do parágrafo *d)* da presente regra, quer seja accionada por uma ou mais unidades de potência. Tanto quanto seja razoável e praticável, o aparelho de governo principal deve ser concebido de modo que uma única avaria nos seus encanamentos ou numa das unidades de potência não afecte a integridade das restantes partes do aparelho de governo. Todas as uniões mecânicas que façam parte do aparelho de governo e todas as ligações mecânicas com qualquer sistema de comando à distância do aparelho de governo, se existirem, devem ser de construção segura e de confiança, de modo a satisfazer a Administração;
2) O aparelho de governo principal, com o navio no calado máximo, deve ser capaz de levar o leme de 35° de um bordo a 35° do outro bordo, com o navio a navegar a vante, à velocidade máxima de serviço. Nas mesmas condições, deve ser capaz de levar o leme de 35° de um bordo a 30° do outro bordo num tempo não superior a 28 segundos;
3) O aparelho de governo principal deve ser accionado mecanicamente quando tal for necessário para satisfazer os requisitos da alínea *ii)*, 2), do parágrafo *d)* da presente regra;
4) As unidades de potência do aparelho de governo principal devem ser concebidas de modo a arrancarem automaticamente quando a energia for restabelecida após uma falha desta;
5) No caso de avaria em qualquer das unidades de potência do aparelho de governo, deve tocar um sinal de alarme na ponte de navegação. Todas as unidades de potência do aparelho de governo devem poder ser postas em funcionamento, automática ou manualmente, a partir de uma posição na ponte de navegação;
6) Deve existir um meio alternativo para fornecer energia, quer seja a fonte de energia eléctrica de emergência, quer outra fonte

independente localizada no compartimento do aparelho de governo, com capacidade pelo menos suficiente para alimentar automaticamente, dentro de 45 segundos, uma unidade de potência do aparelho de governo, de modo a mover o leme como se especifica abaixo, e para alimentar também o sistema de comando à distância do aparelho de governo e o indicador do ângulo do leme. Aquela fonte de energia independente deve ser usada unicamente para este fim e deve ter capacidade suficiente para meia hora de funcionamento contínuo. A unidade de potência do aparelho de governo, quando alimentada pela fonte de energia alternativa, deve pelo menos ser capaz de levar o leme de 15° de um bordo a 15° do outro bordo, em não mais de 60 segundos, com o navio no calado máximo e a navegar a vante à maior das seguintes velocidades: metade da velocidade máxima de serviço ou 7 nós.

CAPÍTULO II-2

Construção — Prevenção, detecção e extinção de incêndios

PARTE A

Generalidades

Regra 1

Aplicação

As alíneas seguintes juntam-se ao texto existente do parágrafo *a*).

a) .....

.....

iv) Sem prejuízo dos requisitos das alíneas *ii*) e *iii*) do presente parágrafo, para os fins da alínea *ii*) do parágrafo *a*) das regras 55 e 60 do presente capítulo, um navio-tanque novo significa um navio-tanque:

1) Para o qual o contrato de construção foi assinado depois de 1 de Junho de 1979; ou
2) Na ausência de contrato de construção, a sua quilha tenha sido assente ou se encontre numa fase equivalente de construção depois de 1 de Janeiro de 1980; ou
3) Tenha sido entregue depois de 1 de Junho de 1982; ou
4) Tenha sofrido uma grande alteração ou modificação:
   a) Para a qual o contrato tenha sido assinado depois de 1 de Junho de 1979; ou
   b) Na ausência de um contrato, os trabalhos tenham começado depois de 1 de Janeiro de 1980; ou
   c) Que foi concluída depois de 1 de Junho de 1982.

v) Para os fins da alínea *ii*) do parágrafo *a*) das regras 55 e 60 do presente capítulo, um navio-tanque existente é um navio-tanque que não seja um navio-tanque novo, tal como é definido na alínea *iv*) do presente parágrafo.

vi) Para os fins da alínea *iv*) do presente parágrafo, a conversão de um navio-tanque existente de 20 000 tdw ou mais, de modo a satisfazer as exigências do presente Protocolo ou o Protocolo de 1978 Relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, não deve ser considerada como uma grande alteração ou modificação.

Regra 3

Definições

O texto existente do parágrafo *v*) é substituído pelo seguinte:

v) «Navio leve» significa o deslocamento de um navio, expresso em toneladas métricas, sem carga, combustível, óleo lubrificante, lastro de água, água doce e água de alimentação das caldeiras nos tanques, mantimentos, passageiros e tripulação e respectiva bagagens.

O seguinte parágrafo junta-se ao texto existente:

x) «Petróleo bruto» significa qualquer mistura de hidrocarbonetos líquidos que exista em estado natural na terra, quer seja ou não preparada para o transporte, e inclui:

i) Petróleo bruto do qual possam ter sido extraídas algumas fracções de destilação;
ii) Petróleo bruto ao qual possam ter sido adicionadas algumas fracções de destilação.

PARTE E

Medidas de segurança contra incêndios em navios-tanques

Regra 55

Aplicação

O texto existente da presente regra é substituído pelo seguinte:

a) Salvo indicação expressa em contrário:

i) A presente Parte deve aplicar-se a todos os navios-tanques novos que transportem

petróleo bruto e produtos derivados do petróleo que tenham um ponto de inflamação que não exceda 60°C (140°F) (prova em cadinho fechado), determinado num aparelho de medida do ponto de inflamação de tipo aprovado e cuja pressão de vapor *Reid* seja inferior à pressão atmosférica, e outros produtos líquidos que apresentem um risco análogo de incêndio; e

ii) Além disso, todos os navios a que se aplique a presente Parte devem cumprir o prescrito nas regras 52, 53 e 54 do capítulo II-2 da Convenção, excepto no que se refere a instalações fixas de extinção de incêndio por gás para espaços de carga, que não devem ser instaladas em navios-tanques novos e nos navios-tanques existentes em que não seja exigido o presente capítulo. Nos navios-tanques existentes em que não seja exigido o cumprimento da regra 60 a Administração, ao aplicar os requisitos do parágrafo *f*) da regra 52, pode aceitar uma instalação de espuma capaz de a descarregar no interior ou exterior dos tanques. Os pormenores da instalação devem ser de modo a satisfazer a Administração.

b) Quando se pretenderem transportar outras cargas diferentes das citadas na alínea *i*) do parágrafo *a*) da presente regra, devem ser tomadas as medidas de segurança adicionais que a Administração julgue convenientes.

c) Os navios de carga combinados só devem transportar produtos sólidos quando todos os tanques de carga estejam vazios e desgasificados ou quando, em cada caso, forem tomadas medidas que no parecer da Administração sejam satisfatórias.

Regra 60

Protecção dos tanques de carga

O texto existente da presente regra é substituído pelo seguinte:

a) Em navios-tanques novos de 20 000 tdw ou mais a superfície do convés onde se encontram os tanques e os próprios tanques devem ser protegidos por uma instalação fixa de espuma montada no convés e uma instalação fixa de gás inerte que cumpram o estipulado nas regras 61 e 62 do capítulo II-2 da Convenção. No entanto, em substituição de tais instalações, a Administração, depois de examinar o arranjo e o equipamento do navio, pode aceitar outras combinações de instalações fixas, se estas oferecerem uma protecção equivalente, em conformidade com o disposto na regra 5 do capítulo I da Convenção.

b) Para que possa ser considerada como equivalente, a instalação proposta, em substituição da de espuma instalada no convés, deve:

i) Ser capaz de extinguir o incêndio em substâncias derramadas e de impedir a ignição do combustível derramado que ainda não esteja a arder; e

ii) Ser capaz de combater incêndios em tanques com roturas.

c) Para que possa ser considerada como equivalente, a instalação proposta, em substituição da instalação fixa de gás inerte, deve:

i) Ser capaz de impedir acumulações perigosas de misturas explosivas nos tanques de carga intactos, durante o serviço normal, ao longo de toda a viagem em lastro e enquanto se efectuem todas as operações necessárias no interior dos tanques; e

ii) Ser concebida de modo que o risco de ignição proveniente da formação de electricidade estática na própria instalação seja reduzido ao mínimo.

d) Qualquer navio-tanque existente de 20 000 tdw ou mais, utilizado no transporte de petróleo bruto, deve ser equipado com uma instalação de gás inerte que satisfaça aos requisitos do parágrafo *a*) da presente regra, não mais tarde do que:

i) Para navios-tanques de 70 000 tdw ou mais, 2 anos após a data da entrada em vigor do presente Protocolo; e

ii) Para navios-tanques de menos de 70 000 tdw, 4 anos após a data da entrada em vigor do presente Protocolo, excepto para navios-tanques de menos de 40 000 tdw, não equipados com máquinas para lavar tanques com uma capacidade individual superior a 60 m³ por hora, caso em que a Administração pode isentar esses navios-tanques existentes dos requisitos do presente parágrafo, se considerar que a sua aplicação não é razoável nem praticável, tendo em conta as características de projecto do navio.

e) Qualquer navio-tanque existente de 40 000 tdw ou mais, utilizado no transporte de outros produtos, excepto petróleo bruto, e qualquer navio-tanque existente de 20 000 tdw ou mais, utilizado no mesmo transporte, equipado com máquinas para lavar tanques, tendo uma capacidade individual superior a 60 m³ por hora, deve ser equipado com uma instalação de gás inerte que cumpra os requisitos do parágrafo *a*) da presente regra, não mais tarde do que:

i) Para navios-tanques de 70 000 tdw ou mais, 2 anos após a entrada em vigor do presente Protocolo; e

ii) Para navios-tanques de menos de 70 000 tdw, 4 anos após a entrada em vigor do presente Protocolo.

f) Qualquer navio-tanque que utilize um processo de limpeza dos tanques de carga usando petróleo bruto para lavagem deve ser equipado com uma instalação de gás inerte que cumpra os re-

quisitos da regra 62 do capítulo II-2 da Convenção e com máquinas fixas de lavar tanques.

g) Todos os navios-tanques equipados com uma instalação fixa de gás inerte devem ser equipados com um sistema indicador de espaço vazio nos tanques, sem que seja necessário abrir estes.

h) Qualquer navio-tanque novo de arqueação bruta igual ou superior a 2000 t não abrangido pelo parágrafo *a*) da presente regra deve ser equipado com uma instalação de espuma, capaz de a descarregar no interior ou no exterior dos tanques. Os pormenores desta instalação devem ser de modo a satisfazer a Administração.

CAPÍTULO V

Segurança da navegação

Regra 12

Auxiliares de navegação a bordo

O texto existente do parágrafo *a*) é substituído pelo seguinte:

a) Todos os navios de 1600 tAB ou mais, mas de menos de 10 000 tAB, devem ser equipados com, pelo menos, 1 radar. Todos os navios de 10 000 tAB ou mais devem ser equipados com, pelo menos, 2 radares, cada um deles capaz de operar independentemente do outro.

Todos os radares montados de acordo com esta regra devem ser de um tipo aprovado pela Administração e devem corresponder às características padrão de funcionamento não inferiores às adoptadas pela Organização.

Nas pontes desses navios devem existir meios que permitam fazer o registo gráfico das indicações do radar *(plotting)*.

Regra 19

Utilização do piloto automático

O parágrafo seguinte junta-se ao texto já existente:

d) O governo manual deve ser verificado depois de uso prolongado do piloto automático e antes de entrar em áreas onde a navegação requeira cuidados especiais.

As regras seguintes juntam-se ao presente capítulo:

Regra 19-1

Modo de operar com o aparelho de governo

Em áreas onde a navegação requeira cuidados especiais os navios devem ter em funcionamento mais de uma unidade de potência do aparelho de governo, quando essas unidades puderem trabalhar simultaneamente.

Regra 19-2

Aparelho de governo — Provas e exercícios

a) Dentro do período de 12 horas antes da partida do navio o aparelho de governo deve ser verificado pela tripulação do navio. Os procedimentos para o teste devem incluir, quando possível, o funcionamento do seguinte:

i) Aparelho de governo principal;
ii) Aparelho de governo auxiliar;
iii) Sistemas de comando à distância do aparelho de governo;
iv) Postos de governo localizados na ponte de navegação;
v) Fonte de energia de emergência;
vi) Indicadores de ângulo de leme, em relação à verdadeira posição do leme;
vii) Alarmes de avaria do sistema de alimentação do comando à distância do aparelho de governo; e
viii) Alarmes de avaria da unidade de potência do aparelho de governo.

b) As verificações e provas devem incluir:

i) O movimento total do leme, de acordo com as possibilidades requeridas para o aparelho de governo;
ii) Inspecção visual do aparelho de governo e suas transmissões;
iii) Operação dos meios de comunicação entre a ponte e a casa da máquina do leme.

i) Na ponte de navegação e na casa da máquina do leme devem estar expostas permanentemente instruções simples contendo o modo de operar e um diagrama funcional que indique os procedimentos de comutação dos sistemas de comando a distância do aparelho de governo e das suas unidades de potência;

ii) Todos os oficiais que operam e ou façam a manutenção do aparelho de governo devem estar familiarizados com o modo de operar os sistemas de governo que equipam o navio e com os procedimentos para mudar de um sistema para outro.

d) Além das verificações e provas de rotina prescritas nos parágrafos *a*) e *b*) desta regra, devem ser efectuados exercícios de governo do navio em situações de emergência, pelo menos uma vez em cada 3 meses, a fim de se adquirir experiência nos procedimentos de governo apropriados para essas situações. Tais exercícios devem incluir o comando directo de dentro da casa da máquina do leme, os procedimentos de comunicações com a ponte de navegação e, quando possível, a utilização das fontes alternativas de energia.

e) A Administração pode dispensar a execução das verificações e provas prescritas nos parágrafos *a*) e *b*) desta regra nos navios que, regularmente, fazem viagens de curta duração. Estes navios devem fazer estas verificações e provas pelo menos uma vez por semana.

f) A data na qual as verificações e provas prescritas nos parágrafos *a*) e *b*) desta regra são efectuadas e a data e detalhes dos exercícios de governo do navio em situações de emergência

efectuados como prescrito no parágrafo *d*) desta regra devem ser registados no diário de navegação prescrito pela Administração.

APÊNDICE

Modelo do certificado de segurança de construção para navios de carga

O seguinte modelo de suplemento junta-se ao modelo existente:

Suplemento do certificado de segurança de construção para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições do

Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Porte bruto do navio (toneladas métricas)	Ano de construção

Tipo de navio:

Navio-tanque utilizado no transporte de petróleo bruto *.
Navio-tanque utilizado no transporte de hidrocarbonetos que não sejam petróleo bruto *.
Navio-tanque utilizado no transporte de petróleo bruto/outros hidrocarbonetos *.
Navio de carga, não navio-tanque, utilizado no transporte de hidrocarbonetos *.

Data do contrato de construção ou de uma grande alteração ou modificação ...
Data do assentamento da quilha do navio, ou em que o navio estava em fase equivalente de construção, ou em que foi iniciada uma grande alteração ou modificação ...
Data da entrega do navio ou da conclusão de uma grande alteração ou modificação ...

* Riscar o que não interessa.

Este suplemento deve estar permanentemente apenso ao certificado de segurança de construção para navio de carga.
Certifica-se:

Que o navio foi vistoriado de acordo com a regra 10 do capítulo I do Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974; e
Que a vistoria, como definida na regra acima indicada, provou que o estado do casco, máquinas e equipamento eram satisfatórios em todos os aspectos e que o navio está de acordo com os requisitos daquele Protocolo.

Este certificado é válido até ... sujeito a vistoria(s) intermédia(s) a intervalos de ...

Passado em ...

(Local de emissão do certificado.)

... 19...

...

(Assinatura da entidade oficial devidamente autorizada a emitir o certificado)

(Selo ou carimbo da autoridade, conforme adequado.)

Vistoria intermédia

Certifica-se que na vistoria intermédia exigida pela regra 10 do capítulo I do Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, se verificou que este navio está de acordo com as prescrições aplicáveis daquele Protocolo.

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...
Próxima vistoria intermédia será em ...

(Selo ou carimbo da autoridade, conforme adequado.)

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...
Próxima vistoria intermédia será em ...

(Selo ou carimbo da autoridade, conforme adequado.)

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...
Próxima vistoria intermédia será em ...

(Selo ou carimbo da autoridade, conforme adequado.)

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...

(Selo ou carimbo da autoridade, conforme adequado.)

Modelo do certificado de segurança de equipamento para navios de carga

O seguinte modelo de suplemento junta-se ao modelo existente:

Suplemento do certificado de segurança de equipamento para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições do

Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Porte bruto do navio (toneladas métricas)	Ano de construção

Tipo de navio:

Navio-tanque utilizado no transporte de petróleo bruto *.
Navio-tanque utilizado no transporte de hidrocarbonetos que não sejam petróleo bruto *.
Navio-tanque utilizado no transporte de petróleo bruto/outros hidrocarbonetos *.
Navio de carga, não navio-tanque, utilizado no transporte de hidrocarbonetos *.

Data do contrato de construção ou de uma grande alteração ou modificação ...
Data do assentamento da quilha do navio, ou em que o navio estava em fase equivalente de construção, ou em que foi iniciada uma grande alteração ou modificação ...
Data da entrega do navio ou da conclusão de uma grande alteração ou modificação ...

* Riscar o que não interessa.

Este suplemento deve estar permanentemente apenso ao certificado de segurança de equipamento para navio de carga.
Certifica-se:

Que o navio foi vistoriado de acordo com a regra 8 do capítulo I do Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974; e
Que a vistoria, como definida na regra acima indicada, provou que as condições do equipamento de segurança eram satisfatórias em todos os aspectos e que o navio está de acordo com os requisitos daquele Protocolo.

Este certificado é válido até ..., sujeito a vistoria(s) intermédia(s) a intervalos de ...

Passado em ...

(Local de emissão do certificado.)

... 19...

...
(Assinatura da entidade oficial devidamente autorizada a emitir o certificado.)

(Selo ou carimbo da autoridade, conforme adequado.)

Vistoria intermédia

Certifica-se que na vistoria intermédia exigida pela regra 8 do capítulo I do Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, se verificou que este navio está de acordo com as prescrições aplicáveis daquele Protocolo.

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...
Próxima vistoria intermédia será em ...

(Selo ou carimbo da autoridade, conforme adequado.)

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...

(Selo ou carimbo da autoridade, conforme adequado.)

Em conformidade com as prestações da regra 14 do capítulo I da Convenção, a validade deste certificado é prorrogada até ...

Assinatura ...

(Assinatura da entidade oficial devidamente autorizada.)

Local ...
Data ...

(Selo ou carimbo da autoridade, conforme adequado.)

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 38/92

de 20 de Agosto

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

Artigo único. São aprovadas, para adesão, as emendas ao Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, de 1974, adoptadas em 10 de Novembro de 1988, cuja versão autêntica em língua inglesa e a respectiva tradução em língua portuguesa seguem em anexo ao presente decreto.

Visto e aprovado em Conselho de Ministros de 2 de Julho de 1992. — *Aníbal António Cavaco Silva — Joaquim Fernando Nogueira — Duarte Ivo Cruz — Eduardo Eugénio Castro de Azevedo Soares.*

Ratificado em 21 de Julho de 1992.

Publique-se.

O Presidente da República, MÁRIO SOARES.

Referendado em 25 de Julho de 1992.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 191, I Série-A, de 20 de Agosto de 1992)

外交部

命令 第38/92號

八月二十日

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

獨一條 —— 通過一九八八年十一月十日通過之《關於 1974 年國際海上人命安全公約的 1978 年議定書的修正案》，以待加入；該修正案之英文原文及葡文譯本附於本命令。

一九九二年七月二日於部長會議批閱及通過——*Aníbal António Cavaco Silva —— Joaquim Fernando Nogueira —— Duarte Ivo Cruz —— Eduardo Eugénio Castro de Azevedo Soares*

一九九二年七月二十一日批准。

命令公布。

共和國總統 MÁRIO SOARES

一九九二年七月二十五日副署。

總理 *Aníbal António Cavaco Silva*

（一九九二年八月二十日第191期《共和國公報》第一組-A）

RESOLUTION OF THE CONFERENCE OF PARTIES TO THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, ON THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM, ADOPTED ON 10 NOVEMBER 1988.

Adoption of amendments to the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, concerning radiocommunications for the global maritime distress and safety system.

The Conference:

Noting article VIII, *c*), of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as «the Convention») and article II, paragraph 1, of the Protocol of 1978 relating to the Convention (hereafter referred to as «the 1978 Protocol») concerning the procedure for amending the 1978 Protocol by a Conference of Contracting Parties;

Having considered amendments to the Convention concerning radiocommunications for the global maritime distress and safety system, proposed and circulated to the Members of the Organization and all Contracting Governments to the Convention:

1 — Adopts, in accordance with article VIII, *c*), *ii*), of the Convention, amendments to the annex to the 1978 Protocol, the text of which is given in the annex to the present resolution.

2 — Decides in accordance with article VIII, *c*), *iii*), of the Convention that the amendments shall be deemed to have been accepted and shall enter into force in accordance with the following procedures:

a) The amendments shall be deemed to have been accepted on 1 February 1990, unless by that date one third of the Parties to the 1978 Protocol, or the Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, notify the Secretary-General of the Organization that they object to the amendments;

b) The amendments which are deemed to have been accepted in accordance with paragraph *a*) shall enter into force with respect to all Parties to the 1978 Protocol except those which have objected to the amendments under paragraph *a*) and which have not withdrawn such objections on or before 1 February 1992;

c) Notwithstanding paragraphs *a*) and *b*), the amendments shall not enter into force if the amendments to the Convention adopted by the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System by resolution 1 are deemed not to have been accepted in accordance with article VIII, *b*), *vi*), 2), of the Convention.

ANNEX

Amendments to the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, concerning radiocommunications for the global maritime distress and safety system.

CHAPTER I

General provisions

PART B

Surveys and certificates

Regulation 8

Survey of life-saving appliances and other equipment of cargo ships

In paragraph *a*) the existing words «The life-saving appliances, except a radiotelegraph installation in a motor lifeboat or a portable radio apparatus, for survival craft, the echo-sounding device, the gyro-compass, the fire extinguishing appliances and the inert gas system of cargo ships» are replaced by «The life-saving appliances and arrangements (except radio installations), the shipborne navigational equipment, the fire safety systems and appliances and the inert gas system of cargo ships of 500 t gross tonnage and upwards».

Regulation 10

Surveys of hull, machinery and equipment of cargo ships

In paragraph *a*) the existing words «cargo ship safety radiotelegraphy certificates or cargo ship safety radiotelephony certificates» are replaced by «or cargo ship safety radio certificates».

Regulation 14

Duration and validity of certificates

In paragraph *c*) the existing words «cargo ship safety radiotelegraphy certificate or a cargo ship safety radiotelephony certificate» are replaced by «cargo ship safety radio certificate».

APPENDIX

The existing form of the Cargo Ship Safety Construction Certificate in the appendix to the 1974 SOLAS Convention and the existing form of supplement to the Cargo Ship Safety Construction Certificate in the appendix to the 1978 SOLAS Protocol are replaced by the following:

Form of safety construction certificate for cargo ships

CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE

(Official seal) *(State)*

Issued under the provisions of the International Convention for the Safety of Life at Sea, 1974, as modified by the Protocol of 1978 relating thereto under the authority of the Government of

...
(Name of the State)

by ...
(Person or organization authorized)

Particulars of ship (1):

Name of ship...
Distinctive number or letters...
Port of registry...
Gross tonnage...
Deadweight of ship (metric tons) (2)...
IMO number (3)...

Type of ship (4):

Oil tanker;
Chemical tanker;
Gas carrier;
Cargo ship other than any of the above.

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced...

This is to certify:
1 — That the ship has been surveyed in accordance with the requirements of regulation I/10 of the Convention, as modified by the 1978 Protocol.
2 — That the survey showed that the condition of the structure, machinery and equipment as defined in the above regulation was satisfactory and the ship complied with the relevant requirements of chapters II-1 and II-2 of the Convention (other than those relating to fire safety systems and appliances and fire control plans).
3 — That in implementing regulation I/6, *b*), the Government has instituted (4):

Mandatory annual surveys;
Unscheduled inspections.

4 — That an exemption certificate has/has not (4) been issued.

This certificate is valid until...
Issued at... (place of issue of certificate).

... ...
(Date of issue) (Signature of authorized official issuing the certificate)

(Seal or stamp of the issuing authority, as appropriate)

Intermediate survey

(for tankers of 10 years of age and over)

This is to certify that at an intermediate survey required by regulation I/10 of the Convention, as modified by the 1978 Protocol this ship was found to comply with the relevant provisions of the Convention.

Signed:...(signature of authorized official).

Place:...

Date:...

(Seal or stamp of the authority, as appropriate)

Signed:... (signature of authorized official).

Place:...

Date:...

(Seal or stamp of the authority, as appropriate)

Mandatory annual survey or unscheduled inspections

This is to certify that the ship has been surveyed in accordance with regulation I/6, *b*), of the Convention, as modified by the 1978 Protocol and the relevant recommendations of the Organization (5).

1st mandatory annual survey (4) (6). Signed:...
1st unscheduled inspection (4). Place:...
Date:...

(Seal or stamp of the authority, as appropriate)

2nd mandatory annual survey (4) (6). Signed:...
2nd unscheduled inspection (4). Place:...
Date:...

(Seal or stamp of the authority, as appropriate)

3rd mandatory annual survey (4) (6). Signed:...
3rd unscheduled inspection (4). Place:...
Date:...

(Seal or stamp of the authority, as appropriate)

4th mandatory annual survey (4) (6). Signed:...
4th unscheduled inspection (4). Place:...
Date:...

(Seal or stamp of the authority, as appropriate)

(1) Alternatively, the particulars of the ship may be placed horizontally in boxes.
(2) For oil tankers, chemical tankers and gas carriers only.
(3) In accordance with resolution A.600(15) — IMO ship identification number scheme, this information may be included voluntarily.
(4) Delete as appropriate.
(5) Reference is made to the Guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code adopted by the Organization by resolution A.560(14).
(6) An intermediate survey, but not an unscheduled inspection, may take the place of a mandatory annual survey.

The existing form of the cargo ship safety equipment certificate in the appendix to the 1974 SOLAS Convention and the existing form of supplement to the cargo ship safety equipment certificate in the appendix to the 1978 SOLAS Protocol are replaced by the following:

Form of Safety Equipment Certificate for Cargo Ships

CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment (form E).

(Official seal) *(State)*

Issued under the provisions of the International Convention for the Safety of Life at Sea, 1974, as modified by the Protocol of 1978 relating thereto under the authority of the Government of

...
(Name of the State)

by
...
(Person or organization authorized)

Particulars of ship (1):

Name of ship...
Distinctive number or letters...
Port of registry...
Gross tonnage...
Deadweight of ship (metric tons) (2)...
Length of ship (regulation III/3.10)...
IMO number (3)...

Type of ship (4):

Oil tanker;
Chemical tanker;
Gas carrier;
Cargo ship other than any of the above.

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced...

This is to certify:
1 — That the ship has been surveyed in accordance with the requirements of regulation I/8 of the Convention, as modified by the 1978 Protocol.
2 — That the survey showed that:
2.1 — The ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;

2.2 — The life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Covnention;

2.3 — The ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;

2.4 — The ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;

2.5 — The ship was provided with lights, shapes and means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;

2.6 — In all other respects the ship complied with the relevant requirements of the Convention.

3 — That the ship operates in accordance with regulation III/26.1.1.1 within the limits of the trade area...

4 — That in implementing regulation I/6, *b*), the Government has instituted (4):

Mandatory annual surveys;
Unscheduled inspections.

5 — That an exemption certificate has/has not (4) been issued.

This certificate is valid until...
Issued at... (place of issue of certificate).

... ...
(Date of issue) (Signature of authorized official issuing the certificate)

(Seal or stamp of the issuing authority, as appropriate)

Intermediate survey

(for tankers of 10 years of age and over)

This is to certify that at an intermediate survey required by regulation I/8 of the Convention, as modified by the 1978 Protocol, this ship was found to comply with the relevant provisions of the Convention.

Signed:...(signature of authorized official).

Place:...

Date:...

(Seal or stamp of the authority, as appropriate)

Mandatory annual survey or unscheduled inspection

This is to certify that the ship has been surveyed in accordance with regulation I/6, *b*), of the Convention, as modified by the 1978 Protocol and the relevant recommendations of the Organization (5).

Mandatory annual survey (4) (6). Signed:...
Unscheduled inspection (4). Place:...
Date:...

(Seal or stamp of the authority, as appropriate)

Under the provisions of regulation I/14 of the Convention, as modified by the 1978 Protocol, the validity of this certificate is extended until...

Signed: .....

Place: .....

Date: .....

(Seal or stamp of the authority, as appropriate)

(1) Alternatively, the particulars of the ship may be placed horizontally in boxes.
(2) For oil tankers, chemical tankers and gas carriers only.
(3) In accordance with resolution A.600(15) — IMO ship identification number scheme, this information may be included voluntarily.
(4) Delete as appropriate.
(5) Reference is made to the Guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code adopted by the Organization by resolution A.560(14).
(6) An intermediate survey, but not an unscheduled inspection, may take the place of a mandatory annual survey.

RESOLUÇÃO DA CONFERÊNCIA DAS PARTES DO PROTOCOLO DE 1978 RELATIVO À CONVENÇÃO INTERNACIONAL PARA A SALVAGUARDA DA VIDA HUMANA NO MAR, 1974, SOBRE O SISTEMA MUNDIAL DE SOCORRO E DE SEGURANÇA MARÍTIMA, ADOPTADA EM 10 DE NOVEMBRO DE 1988.

Adopção das emendas ao Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, relativas às radiocomunicações para o sistema mundial de socorro e de segurança marítima.

A Conferência:

Notando o artigo VIII, *c*), da Convenção Internacional para a Salvaguarda da Vida Humana no Mar (daqui em diante designada por «a Convenção») e o artigo II, parágrafo 1, do Protocolo de 1978 relativo à Convenção (daqui em diante designado por «o Protocolo SOLAS de 1978») respeitante aos procedimentos para emendar o Protocolo SOLAS de 1978 pela Conferência das Partes Contratantes;

Tendo considerado as emendas à Convenção respeitantes às radiocomunicações para o sistema mundial de socorro e de segurança marítima, propostas e feitas circular por todos os membros da Organização e todos os Governos contratantes da Convenção:

1 — Adopta, de acordo com o artigo VIII, *c*), *ii*), da Convenção, as emendas ao anexo ao Protocolo SOLAS de 1978, cujo texto se encontra em anexo à presente resolução.

2 — Decide, nos termos do artigo VIII, *c*), *iii*), da Convenção, que as emendas serão consideradas aceites e entrarão em vigor de acordo com os seguintes procedimentos:

a) As emendas serão consideradas aceites em 1 de Fevereiro de 1990, a menos que, até esta data, um terço das partes do Protocolo SOLAS de 1978 ou as Partes cujas frotas mercantes em conjunto representem pelo menos 50% da tonelagem bruta da frota mercante mundial notifiquem o Secretário-Geral que recusam as emendas;

b) As emendas que tenham sido consideradas aceites, em conformidade com o parágrafo *a*) entrarão em vigor em 1 de Fevereiro de 1992 para todas as Partes do Protocolo SOLAS de 1978, excepto para os que tenham objectado estas emendas de acordo com o parágrafo *a*) e que não tenham retirado tais objecções;

c) Não obstante os parágrafos *a*) e *b*), as emendas não entrarão em vigor se as emendas à Convenção adoptadas pela resolução 1 da Conferência dos Governos Contratantes da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, relativas ao Sistema Mundial de Socorro e de Segurança Marítima, não forem consideradas aceites de acordo com o artigo VIII, *b*), *vi*), 2), da Convenção.

ANEXO

Emendas ao Protocolo de 1978 relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, respeitantes às radiocomunicações para o sistema mundial de socorro e de segurança marítima.

CAPÍTULO I

Disposições gerais

PARTE B

Vistorias e certificados

Regra 8

Vistoria aos meios de salvação e outro equipamento de navios de carga

No parágrafo *a*) substituir as palavras «com excepção das instalações radiotelegráficas das embarcações salva-vidas com motor ou dos equipamentos portáteis de radiocomunicações das embarcações e jangadas salva-vidas, os meios de salvação, a sonda acústica, a girobússola, as instalações de extinção de incêndios e de gás inerte dos navios de carga» pelas palavras «os dispositivos e os meios de salvação (excepção feita às instalações radioeléctricas), o equipamento de navegação do navio, os sistemas e as instalações de prevenção, de detecção e de combate a incêndios e o sistema de gás inerte dos navios de carga de uma arqueação bruta igual ou superior a 500 t».

Regra 10

Vistoria ao casco, máquina e equipamento de navios de carga

No parágrafo *a*) substituir as palavras «um certificado de segurança da radiotelegrafia para navio de carga ou um certificado de segurança radiotelefónica para navio de carga» por «um certificado de segurança radioelétrica para navio de carga».

Regra 14

Duração e validade dos certificados

No parágrafo *c*) substituir as palavras «um certificado de segurança radiotelegráfica para navio de carga ou um certificado de segurança radiotelefónica para navio de carga» por «um certificado de segurança radioeléctrica para navio de carga».

APÊNDICE

O modelo actual do certificado de segurança de construção para navios de carga no apêndice à Convenção SOLAS de 1974 e o actual modelo do suplemento do certificado de segurança de construção para navio de carga no apêndice ao Protocolo SOLAS de 1978 são substituídos pelos seguintes:

Modelo de certificado de segurança de construção para navio de carga

CERTIFICADO DE SEGURANÇA DE CONSTRUÇÃO PARA NAVIO DE CARGA

(Selo oficial) *(Estado)*

Emitido segundo as disposições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, modificada pelo Protocolo SOLAS de 1978, sob a autoridade do Governo de

...
(Nome do Estado)

por

...
(Pessoa ou organização autorizada)

Características do navio (1):

Nome do navio ...
Distintivo do navio em número ou letras ...
Porto de registo ...
Arqueação bruta ...
Porte do navio (toneladas métricas) (2) ...
Número IMO (3) ...

Tipo de navio (4):

Petroleiro;
Navio-tanque de produtos químicos;
Navio-tanque de gás;
Outro navio de carga não mencionado acima.

Data do assentamento da quilha ou estado equivalente de construção ou, onde aplicável, data em que se iniciaram trabalhos de uma grande transformação ou alteração ...

Certifica:

1 — Que o navio foi vistoriado em conformidade com os requisitos da regra I/10 da Convenção, modificada pelo Protocolo SOLAS de 1978.

2 — Que a vistoria verificou que o estado do casco, das máquinas e do equipamento, conforme definido na referida regra, era satisfatório e que o navio cumpria os requisitos pertinentes dos capítulos II-1 e II-2 da Convenção (com excepção dos que se referem aos sistemas e dispostivos de protecção contra incêndios, detecção e aos planos de combate a incêndios).

3 — Que no cumprimento da regra I/6, *b*), o Governo instituiu (4):

Vistorias obrigatórias anuais;
Inspecções não programadas.

4 — Que um certificado de isenção foi/não foi (4) emitido.

O presente certificado é válido até ...

Emitido em ... (local de emissão do certificado).

... ...
(Data de emissão) (Assinatura da pessoa autorizada a emitir o certificado)

(Selo ou carimbo, conforme apropriado, da autoridade que emite o certificado)

Vistoria intermédia

(para navios-tanques com 10 ou mais anos)

Certifica-se que numa vistoria intermédia exigida pela regra I/10 da Convenção, modificada pelo Protocolo SOLAS de 1978, se verificou que este navio satisfaz às disposições fundamentais da Convenção.

Assinado: ... (assinatura da pessoa autorizada).

Local: ...

Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

Assinado: ... (assinatura da pessoa autorizada).

Local: ...

Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

Vistorias anuais obrigatórias ou inspecções não programadas

Certifica-se que o navio foi vistoriado de acordo com a regra I/6, *b*), da Convenção, modificada pelo Protocolo SOLAS de 1978 e as recomendações pertinentes da Organização (5).

1.ª vistoria obrigatória anual (4) (6). Assinado ...
1.ª inspecção não programada (4). Local: ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

2.ª vistoria obrigatória anual (4) (6). Assinado: ...
2.ª inspecção não programada (4). Local ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

3.ª vistoria obrigatória anual (4) (6). Assinado: ...
3.ª inspecção não programada (4). Local: ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

4.ª vistoria obrigatória anual (4) (6). Assinado: ...
4.ª inspecção não programada (4). Local: ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

(1) Em alternativa as características do navio podem também ser apresentadas sob a forma de uma tabela.
(2) Somente para petroleiros, navios tanques de produtos químicos e navios tanques de gás.
(3) De acordo com a resolução A.600(15) — Esquema Numérico da IMO de Identificação de Navios — esta indicação pode ser incluída voluntariamente.
(4) Cortar o que não interessa.
(5) Faz-se referência às linhas de orientação sobre vistorias exigidas pelo Protocolo SOLAS de 1978, pelo Código Internacional de Produtos Químicos a Granel e pelo Código Internacional de Transportes de Gás, adoptadas pela Organização pela Resolução A.560(14).
(6) Uma vistoria intermédia, mas não uma inspecção não programada, pode substituir uma vistoria anual obrigatória.

O modelo actual do certificado de segurança do equipamento para navio de carga no apêndice à Convenção SOLAS de 1974 e o actual modelo do suplemento ao certificado de segurança do equipamento para navio de carga no apêndice ao Protocolo SOLAS de 1978 são substituídos pelo seguinte:

Modelo de certificado de segurança do equipamento para navio de carga

CERTIFICADO DE SEGURANÇA DO EQUIPAMENTO PARA NAVIO DE CARGA

O presente certificado deverá ser suplementado com a relação do equipamento (modelo E).

(Selo oficial) *(Estado)*

Emitido segundo as disposições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, modificada pelo Protocolo SOLAS de 1978, sob a autoridade do Governo de

...
(Nome do Estado)

por

...
(Pessoa ou organização autorizada)

Características do navio (1):

Nome do navio ...
Distintivo do navio em número ou letras ...
Porto de registo ...
Arqueação bruta ...
Porte do navio (toneladas métricas) (2) ...
Comprimento do navio (regra III/3.10) ...
Número IMO (3) ...

Tipo de navio (4):

Petroleiro;
Navio-tanque de produtos químicos;
Navio-tanque de gás;
Outro navio de carga não mencionado acima.

Data do assentamento da quilha ou estado equivalente de construção ou, onde aplicável, data de início dos trabalhos de uma grande transformação ou alteração ...

Certifica:
1 — Que o navio foi vistoriado de acordo com os requisitos da regra I/8 da Convenção, modificada pelo Protocolo SOLAS de 1978.
2 — Que a vistoria mostrou:
2.1 — Que o navio obedece aos requisitos da Convenção no que diz respeito aos sistemas e dispositivos de protecção contra incêndio, detecção e aos planos de combate a incêndios;
2.2 — Que os meios de salvação e o equipamento das embarcações, das jangadas salva-vidas e embarcações de socorro satisfaziam aos requisitos da Convenção;
2.3 — Que o navio estava munido de um aparelho lança-cabos e do equipamento radioeléctrico utilizado nos meios de salvação de acordo com os requisitos da Convenção;
2.4 — Que o navio satisfazia aos requisitos da Convenção no que diz respeito ao equipamento de navegação do navio, aos meios de embarque de pilotos e às publicações náuticas;
2.5 — Que o navio possuía luzes, sinais de navegação e meios para emitir sinais sonoros e de socorro, conforme os requisitos da Convenção e do Regulamento Internacional para Evitar Abalroamentos no Mar em vigor;
2.6 — Que o navio obedecia a todos os outros requisitos pertinentes da Convenção.
3 — Que o navio opera de acordo com a regra III/26.1.1.1 dentro dos limites da seguinte área de tráfego ...
4 — Que na implementação da regra I/6, *b*) o Governo instituiu (4):

Vistorias obrigatórias anuais;
Inspecções não programadas.

5 — Que um certificado de isenção foi/não foi (4) emitido.

Este certificado é válido até ...

Emitido em ... (local de emissão do certificado).

... ...
(Data de emissão) (Assinatura da pessoa autorizada a emitir o certificado)

(Selo ou carimbo, conforme apropriado, da autoridade que emite o certificado)

Vistoria intermédia

(para navios-tanques com 10 ou mais anos)

Certifica-se que na vistoria intermédia exigida pela regra I/10 da Convenção, modificada pelo Protocolo SOLAS de 1978, se verificou que este navio satisfaz às disposições pertinentes da Convenção.

Assinado: ... (assinatura da pessoa autorizada).

Local: ...

Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

Vistoria anual obrigatória ou inspecção não programada

Certifica-se que o navio foi vistoriado de acordo com a regra I/6, *b*), da Convenção, modificada pelo Protocolo SOLAS de 1978 e as recomendações pertinentes da Organização (5).

Vistoria obrigatória anual (4) (6). Assinado: ...
Inspecção não programada (4). Local: ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

Conforme as disposições da regra I/14 da Convenção, modificada pelo Protocolo SOLAS de 1978, a validade deste certificado é prorrogada até ...

Assinado: ...
Local: ...
Data: ...

(Selo ou carimbo da autoridade, conforme apropriado)

(1) Em alternativa as características do navio podem também ser apresentadas sob a forma de uma tabela.
(2) Somente para petroleiros, os navios-tanques de produtos químicos e navios-tanques de gás.
(3) De acordo com a resolução A.600(15) — Esquema Numérico da IMO de Identificação de Navios — esta indicação pode ser incluída voluntariamente.
(4) Cortar o que não interessa.
(5) Faz-se referência às linhas de orientação sobre vistorias exigidas pelo Protocolo SOLAS de 1978, pelo Código Internacional de Produtos Químicos a Granel e pelo Código Internacional de Transportes de Gás, adoptadas pela Organização pela Resolução A.560(14).
(6) Uma vistoria intercalar, mas não uma inspecção aleatória, pode substituir uma vistoria obrigatória anual.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 173/99

de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

São estendidos ao território de Macau, nos mesmos termos em que a eles está vinculado o Estado Português, a Convencão Internacional da Prevenção da Poluição por Navios (MARPOL), de 1973, e o Protocolo a ela relativo, de 17 de Fevereiro de 1978, aprovados pelo Decreto n.º 25/87, de 10 de Julho, cujo texto foi publicado no *Diário da República*, 1.ª série, de 10 de Julho de 1987.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com o referido decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto do Governo n.º 25/87

de 10 de Julho

O Governo decreta, nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o seguinte:

Artigo 1.º É aprovado para adesão o Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, feito em Londres em 17 de Fevereiro de 1978. O texto original em inglês e a respectiva tradução para português seguem em anexo ao presente decreto.

Art. 2.º As disposições do presente Protocolo e da Convenção serão lidas e interpretadas em conjunto como um único instrumento. O texto original em inglês e a restante tradução para português seguem em anexo ao presente decreto.

共和國總統府

共和國總統令 第173/99號

八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將《1973年國際防止船舶造成污染公約》（MARPOL）及與其有關之一九七八年二月十七日之議定書延伸至澳門地區，按照葡萄牙政府受該公約及議定書約束之相同規定適用；該公約及議定書係經七月十日第25/87號命令通過，且文本已公布於一九八七年七月十日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過公約及議定書之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月五日第181期《共和國公報》第一組-A）

外交部

政府命令 第25/87號

七月十日

政府根據《憲法》第二百條第一款c項之規定，命令制定法規如下：

第一條

通過一九七八年二月十七日在倫敦簽訂之《關於1973年國際防止船舶造成污染公約的1978年議定書》，以待加入；該議定書之英文原本及葡文譯本附於本命令。

第二條

上述議定書及公約之規定須視作獨一文書閱讀及解釋，其英文原本及葡文譯本附於本命令。

Visto e aprovado em Conselho de Ministros de 30 de Abril de 1987. — *Aníbal António Cavaco Silva — Leonardo Eugénio Ramos Ribeiro de Almeida — Pedro José Rodrigues Pires de Miranda — João Maria Leitão de Oliveira Martins.*

Assinado em 4 de Junho de 1987.

Publique-se.

O Presidente da República, MÁRIO SOARES.

Referendado em 8 de Junho de 1987.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 156, I Série, de 10 de Julho de 1987)

一九八七年四月三十日於部長會議批閱及通過——

Aníbal António Cavaco Silva —— Leonardo Eugénio Ramos Ribeiro de Almeida —— Pedro José Rodrigues Pires de Miranda —— João Maria Leitão de Oliveira Martins

一九八七年六月四日簽署。

命令公布。

共和國總統 MÁRIO SOARES

一九八七年六月八日副署。

總理 *Aníbal António Cavaco Silva*

（一九八七年七月十日第156期《共和國公報》第一組）

CONVENÇÃO INTERNACIONAL PARA A PREVENÇÃO DA POLUIÇÃO POR NAVIOS, 1973

As Partes na presente Convenção:

Conscientes da necessidade de preservar o ambiente humano em geral e o meio marinho em particular;

Reconhecendo que os hidrocarbonetos e outras substâncias prejudiciais lançadas de navios, deliberadamente, por negligência ou acidentalmente, constituem uma séria fonte de poluição;

Reconhecendo também a importância da Convenção Internacional para a Prevenção da Poluição das Águas do Mar pelos Óleos, 1954, como sendo o primeiro instrumento multilateral concluído com o principal objectivo de protecção do ambiente e apreciando o significativo contributo que esta Convenção tem dado para a preservação do ambiente contra a poluição nos mares e nas costas;

Desejando alcançar a eliminação completa da poluição intencional do meio marinho por hidrocarbonetos e outras substâncias prejudiciais, bem como a minimização de descargas acidentais de tais substâncias;

Considerando que este objectivo pode ser melhor alcançado pelo estabelecimento de regras com um significado universal, não limitadas à poluição por hidrocarbonetos,

acordaram no seguinte:

ARTIGO 1

Obrigações gerais no âmbito da Convenção

1 — As Partes na Convenção comprometem-se a dar cumprimento às disposições da presente Convenção e aos anexos pelos quais ficam obrigadas, com o fim de evitar a poluição do meio marinho pela descarga de substâncias prejudiciais ou de efluentes contendo tais substâncias, em contravenção com a Convenção.

2 — Salvo disposição expressa em contrário, qualquer referência à presente Convenção constitui simultaneamente uma referência aos seus protocolos e anexos.

ARTIGO 2

Definições

Para os fins da presente Convenção, salvo disposição expressa em contrário:

1 — «Regras» significa as regras constantes nos anexos à presente Convenção.

2 — «Substância prejudicial» significa qualquer substância que, uma vez lançada para o mar, é susceptível de constituir perigo para a saúde humana, de causar danos aos recursos vivos e à vida marinha, de afectar locais de recreio ou de interferir com outras utilizações legítimas do mar e inclui qualquer substância sujeita a controle pela presente Convenção.

3 — *a*) «Descarga», referida a substâncias prejudiciais ou a efluentes contendo tais substâncias, significa qualquer forma de lançamento de produtos efectuada por um navio e inclui qualquer escoamento, lançamento, derrame, fuga, bombagem, emanação ou esgoto.

b) «Descarga» não inclui:

i) Imersão com o significado que lhe é dado na Convenção para a Prevenção da Poluição Marinha por Operações de Imersão de Detritos e Outros Produtos, concluída em Londres em 13 de Novembro de 1972; ou

ii) Lançamento de substâncias prejudiciais provenientes directamente da prospecção, exploração e consequente tratamento no mar dos recursos minerais do seu leito; ou

iii) Lançamento de substâncias prejudiciais para fins de investigação científica legítima visando a redução ou controle da poluição.

4 — «Navio» significa uma embarcação de qualquer tipo que opere no meio marinho e inclui embarcações de sustentação hidrodinâmica, veículos de sustentação por ar, submersíveis, estruturas flutuantes e plataformas fixas ou flutuantes.

5 — «Administração» significa o governo do Estado sob cuja autoridade o navio opera. No caso de um navio autorizado a arvorar a bandeira de um Estado, a administração é o governo desse Estado. No caso de plataformas fixas ou flutuantes utilizadas na prospecção e exploração do leito do mar e do seu subsolo adjacente às costas, sobre as quais o Estado costeiro exerce o direito de soberania para fins de prospecção e exploração dos seus recursos naturais,

a administração é o governo do Estado costeiro em questão.

6 — «Incidente» significa um acontecimento envolvendo a descarga real ou presumível para o mar de uma substância prejudicial ou de efluentes contendo tal substância.

7 — «Organização» significa a Organização Marítima Internacional.

ARTIGO 3

Âmbito de aplicação

1 — A presente Convenção aplicar-se-á:

a) Aos navios que arvorem a bandeira de uma Parte na Convenção; e

b) Aos navios que não arvorem a bandeira de uma Parte, mas que operem sob a autoridade dessa Parte.

2 — Nada no presente artigo será interpretado como derrogando ou alargando os direitos soberanos das Partes sobre o leito do mar e seu subsolo adjacente às suas costas para efeitos de prospecção e exploração dos seus recursos naturais, reconhecidos pelo direito internacional.

3 — A presente Convenção não se aplicará a navios de guerra, a navios de guerra auxiliares ou a qualquer outro navio pertencente a ou operado por um Estado e utilizado no momento considerado unicamente para fins de serviço público não comercial. Contudo, cada Parte assegurará, através de medidas apropriadas que não dificultem as operações ou a capacidade operacional desses navios que lhe pertençam ou sejam por ela operados, que tais navios procedam, na medida do possível e razoável, de modo compatível com a presente Convenção.

ARTIGO 4

Violações

1 — Serão proibidas quaisquer violações dos requisitos da presente Convenção e serão estabelecidas as correspondentes sanções, nos termos da lei da administração do navio em questão, independentemente do local em que a violação ocorra. Sempre que a administração for informada de qualquer violação e considerar que dispõe de provas suficientes que lhe permitam proceder relativamente à alegada violação, instaurará o respectivo processo logo que possível, em conformidade com a sua lei.

2 — Serão proibidas quaisquer violações aos requisitos da presente Convenção cometidas na área da jurisdição de qualquer Parte na Convenção e serão estabelecidas as correspondentes sanções, nos termos da lei dessa Parte. Sempre que tal violação ocorra, essa Parte:

a) Instaurará um processo, de acordo com a sua lei; ou

b) Fornecerá à administração do navio informações e provas, que estejam na sua posse, de que ocorreu uma violação.

3 — Quando a administração receber informações ou provas de uma violação da presente Convenção cometida por um seu navio, a administração informará prontamente a Parte que lhe forneceu as informações ou provas, bem como a Organização, da acção tomada.

4 — As penas fixadas na lei de uma Parte, nos termos e para os fins do presente artigo, serão suficientemente severas para desencorajar as violações da presente Convenção e serão igualmente severas independentemente do local em que as violações ocorram.

ARTIGO 5

Certificados e regras especiais para inspecção de navios

1 — Tendo em consideração as disposições do parágrafo 2 do presente artigo, um certificado emitido sob a autoridade de uma Parte na Convenção, de acordo com as disposições das regras, será aceite pelas outras Partes e considerado, para todos os fins abrangidos pela presente Convenção, como tendo a mesma validade de um certificado emitido por elas.

2 — Um navio obrigado a possuir um certificado, de acordo com as disposições das regras, está sujeito, enquanto se encontrar nos portos ou terminais no mar sob a jurisdição de uma Parte, a inspecções por funcionários devidamente autorizados por essa Parte. Tal inspecção limitar-se-á à verificação de que existe a bordo um certificado válido, salvo quando existam motivos sérios para acreditar que o estado do navio ou dos seus equipamentos não corresponde substancialmente ao especificado nesse certificado. Neste caso, ou se o navio não possuir um certificado válido, a Parte que efectua a inspecção tomará medidas convenientes de modo a garantir que o navio só possa largar para o mar quando não represente uma ameaça inaceitável para o meio marinho. Tal Parte pode, contudo, conceder autorização ao navio para sair do porto ou terminal no mar com o objectivo de se dirigir ao mais próximo e apropriado estaleiro de reparações que esteja disponível.

3 — Se uma Parte recusar a um navio estrangeiro a entrada nos portos ou terminais no mar sob a sua jurisdição ou tomar qualquer acção contra tal navio por este não cumprir as disposições da presente Convenção, a Parte informará imediatamente o cônsul ou representante diplomático da Parte cuja bandeira o navio arvora ou, se isto não for possível, a respectiva administração. Antes de recusar a entrada ou de tomar qualquer acção, a Parte pode consultar a administração do navio em questão. A administração será igualmente informada quando um navio não possuir um certificado válido, em conformidade com as disposições das regras.

4 — No que se refere aos navios pertencentes a não Partes na Convenção, as Partes aplicarão os requisitos da presente Convenção de modo a garantir que não é dado tratamento mais favorável a tais navios.

ARTIGO 6

Detecção de violações e execução da Convenção

1 — As Partes na Convenção cooperarão na detecção de violações e na execução das disposições da presente Convenção, aplicando todas as medidas apropriadas e praticáveis de detecção e de vigilância contínua do meio ambiente, bem como os procedimen-

tos adequados para envio de relatórios e recolha de provas.

2 — Um navio ao qual a presente Convenção se aplica pode ser sujeito, em qualquer porto ou terminal no mar de uma Parte, a inspecções por funcionários nomeados ou autorizados por essa Parte, com o fim de verificar se o navio descarregou quaisquer substâncias prejudiciais em violação das disposições das regras. Se uma inspecção indicar a existência de uma violação da Convenção, será enviado um relatório à administração para acção apropriada.

3 — Qualquer Parte fornecerá provas à administração, se existirem, de que o navio descarregou substâncias prejudiciais ou efluentes contendo tais substâncias, em violação das disposições das regras. Na medida do possível, a autoridade competente da Parte mencionada notificará o capitão do navio da alegada violação.

4 — Após a recepção dessas provas, a administração assim informada investigará o assunto, podendo solicitar à outra Parte que lhe sejam fornecidas mais ou melhores provas da alegada violação. Se a administração considerar que dispõe de provas suficientes que lhe permitam proceder relativamente à alegada violação, instaurará o respectivo processo logo que possível, em conformidade com a sua lei. A administração informará prontamente a Parte que comunicou a alegada violação, bem como a Organização, da acção tomada.

5 — Qualquer Parte pode igualmente inspeccionar um navio a que se aplique a presente Convenção, quando se encontrar nos portos ou terminais no mar sob sua jurisdição, se essa Parte receber um pedido de investigação emitido por outra Parte, juntamente com provas suficientes de que esse navio descarregou em qualquer local substâncias prejudiciais ou efluentes contendo tais substâncias. O relatório de tal investigação será enviado à Parte que a solicitou e à administração, de forma que possa ser tomada a acção adequada nos termos da presente Convenção.

ARTIGO 7

Atrasos indevidos causados a navios

1 — Serão efectuadas todas as diligências possíveis para evitar que um navio seja indevidamente retido ou atrasado nos termos do artigo 4, 5 ou 6 da presente Convenção.

2 — Se um navio for indevidamente retido ou atrasado nos termos do artigo 4, 5 ou 6 da presente Convenção, terá direito a indemnização por qualquer perda ou dano sofrido.

ARTIGO 8

Relatórios de incidentes envolvendo substâncias prejudiciais

1 — Em caso de incidente, será elaborado sem demora um relatório, tão completo quanto possível, em conformidade com as disposições do protocolo I à presente Convenção.

2 — Cada Parte na Convenção:

a) Tomará todas as providências necessárias para que um funcionário ou agência adequado receba e processe todos os relatórios de incidentes; e

b) Notificará a Organização pormenorizadamente dessas providências para conhecimento das outras Partes e Estados membros da Organização.

3 — Sempre que uma Parte receba um relatório, nos termos das disposições do presente artigo, essa Parte enviará o relatório, sem demora, para:

a) A administração do navio implicado; e

b) Qualquer outro Estado que possa ser afectado.

4 — Qualquer Parte na Convenção compromete-se a emitir instruções aos seus navios e aeronaves de inspecção marítima e demais serviços apropriados para que comuniquem às respectivas autoridades qualquer dos incidentes referidos no protocolo I à presente Convenção. Essa Parte, se o considerar conveniente, comunicará o incidente à Organização e a qualquer outra Parte interessada.

ARTIGO 9

Outras convenções e interpretação

1 — Ao entrar em vigor, a presente Convenção substitui a Convenção Internacional para a Prevenção da Poluição das Águas do Mar pelos Óleos, 1954, e suas emendas, para as Partes naquela Convenção.

2 — Nada na presente Convenção prejudicará a codificação e desenvolvimento do direito do mar pela Conferência das Nações Unidas sobre o Direito do Mar, convocada no cumprimento da Resolução 2750 C (XXV) da Assembleia Geral das Nações Unidas, nem as presentes ou futuras reclamações ou pontos de vista jurídicos de qualquer Estado respeitantes ao direito do mar e à natureza e extensão da jurisdição do Estado costeiro e do Estado de bandeira.

3 — Na presente Convenção, o termo «jurisdição» será interpretado à luz do direito internacional em vigor no momento da aplicação ou interpretação da presente Convenção.

ARTIGO 10

Solução de conflitos

Qualquer conflito entre duas ou mais Partes na Convenção, respeitante à interpretação ou aplicação da presente Convenção, que não tenha sido possível solucionar por negociações entre as Partes envolvidas será submetido, mediante pedido de qualquer das Partes, à arbitragem regulada no protocolo II à presente Convenção, salvo se acordado diferentemente.

ARTIGO 11

Comunicação de informações

1 — As Partes na Convenção comprometem-se a comunicar à Organização:

a) O texto das leis, resoluções, decretos, regulamentos e outros instrumentos que tenham sido promulgados sobre as várias matérias do âmbito da presente Convenção;

b) Uma lista de agências não governamentais que estejam autorizadas a actuar em seu nome em

assuntos relacionados com o projecto, construção e equipamento de navios destinados ao transporte de substâncias prejudiciais, de acordo com as disposições das regras;

c) Um número suficiente de exemplares dos seus certificados emitidos nos termos das disposições das regras;

d) Uma lista de instalações de recepção indicando a sua localização, capacidade, instalações disponíveis e outras características;

e) Relatórios oficiais ou seus resumos que demonstrem os resultados da aplicação da presente Convenção; e

f) Um relatório estatístico anual, em impresso normalizado pela Organização, das sanções efectivamente aplicadas por violação da presente Convenção.

2 — A Organização notificará as Partes da recepção de qualquer comunicação em conformidade com o presente artigo e enviará a todas as Partes qualquer informação que lhe seja comunicada nos termos das alíneas *b*) a *f*) do parágrafo 1 do presente artigo.

ARTIGO 12

Acidentes com navios

1 — Cada administração compromete-se a efectuar a investigação de qualquer acidente ocorrido com qualquer dos seus navios sujeitos às disposições das regras, se tal acidente tiver causado prejuízos importantes no meio marinho.

2 — Qualquer Parte na Convenção compromete-se a fornecer à Organização informações relativas aos resultados de tais investigações, quando considerar que as mesmas podem contribuir para a definição de emendas desejáveis à presente Convenção.

ARTIGO 13

Assinatura, ratificação, aceitação, aprovação e adesão

1 — A presente Convenção fica aberta para assinatura desde 15 de Janeiro de 1974 até 31 de Dezembro de 1974, na sede da Organização, continuando a partir daí aberta para adesão. Os Estados podem tornar-se Partes na presente Convenção mediante:

a) Assinatura sem reserva para ratificação, aceitação ou aprovação; ou

b) Assinatura sujeita a ratificação, aceitação ou aprovação, seguida de ratificação, aceitação ou aprovação; ou

c) Adesão.

2 — A ratificação, aceitação, aprovação ou adesão será concretizada mediante o depósito do correspondente instrumento junto do secretário-geral da Organização.

3 — O secretário-geral da Organização informará todos os Estados que assinaram a presente Convenção ou a ela aderiram de qualquer assinatura ou depósito de um novo instrumento de ratificação, aceitação, aprovação ou adesão e da data do seu depósito.

ARTIGO 14

Anexos facultativos

1 — No momento da assinatura, ratificação, aceitação, aprovação ou adesão à presente Convenção, um Estado pode declarar não aceitar qualquer dos anexos III, IV e V à presente Convenção ou a sua totalidade (seguidamente designados como «anexos facultativos»). Tendo em consideração o acima referido, as Partes na Convenção ficarão obrigadas a qualquer anexo no seu todo.

2 — Um Estado que tenha declarado não ficar obrigado a um anexo facultativo pode em qualquer momento aceitar tal anexo, depositando junto da Organização um instrumento do tipo referido no artigo 13, parágrafo 2.

3 — Um Estado que fizer uma declaração respeitante a qualquer anexo facultativo, nos termos do parágrafo 1 do presente artigo, e que subsequentemente não tenha aceitado esse anexo, em conformidade com o parágrafo 2 do presente artigo, não ficará sujeito a qualquer obrigação, nem terá o direito de reivindicar quaisquer privilégios nos termos da presente Convenção relativos às matérias respeitantes a tal anexo, e todas as referências às Partes na presente Convenção não incluirão esse Estado, no que respeita às matérias relacionadas com tal anexo.

4 — A Organização informará os Estados que assinaram ou aderiram à presente Convenção de qualquer declaração nos termos do presente artigo, bem como da recepção de qualquer instrumento depositado de acordo com as disposições do parágrafo 2 do presente artigo.

ARTIGO 15

Entrada em vigor

1 — A presente Convenção entra em vigor 12 meses após a data em que pelo menos 15 Estados, cujas frotas mercantes combinadas constituam não menos de 50 % da tonelagem de arqueação bruta da marinha mercante mundial, se tenham tornado Partes na presente Convenção, de acordo com o artigo 13.

2 — Qualquer anexo facultativo entra em vigor 12 meses após a data em que forem satisfeitas as condições estipuladas no parágrafo 1 do presente artigo em relação a esse anexo.

3 — A Organização informará os Estados que assinaram a presente Convenção ou a ela aderiram da data da sua entrada em vigor ou da data da entrada em vigor de um anexo facultativo, de acordo com o parágrafo 2 do presente artigo.

4 — Para os Estados que depositaram um instrumento de ratificação, aceitação, aprovação ou adesão da presente Convenção ou de qualquer dos anexos facultativos depois de preenchidos os devidos requisitos, mas antes da entrada em vigor da Convenção, a ratificação, aceitação, aprovação ou adesão tornar-se-á efectiva na data da entrada em vigor da Convenção ou do anexo, ou 3 meses após a data de depósito do instrumento, prevalecendo a data mais tardia.

5 — Para os Estados que depositaram um instrumento de ratificação, aceitação, aprovação ou adesão depois da entrada em vigor da Convenção ou de qualquer anexo facultativo, a Convenção ou o anexo facultativo entra em vigor 3 meses após a data do depósito do instrumento.

6 — Depois da data em que fiquem preenchidas todas as condições exigidas pelo artigo 16 para introduzir uma emenda à presente Convenção ou a um anexo facultativo em vigor, qualquer instrumento aplicar-se-á ao texto emendado da Convenção ou do anexo.

ARTIGO 16

Emendas

1 — A presente Convenção pode ser emendada por qualquer dos procedimentos especificados nos parágrafos seguintes.

2 — Emendas após terem sido apreciadas pela Organização:

a) Qualquer emenda proposta por uma Parte na Convenção será submetida à Organização e distribuída pelo seu secretário-geral a todos os membros da Organização e a todas as Partes pelo menos 6 meses antes da sua apreciação;

b) Qualquer emenda proposta e distribuída nos termos indicados em *a*) será submetida pela Organização a um órgão apropriado para apreciação;

c) As Partes na Convenção, sejam ou não membros da Organização, terão direito de participar nos trabalhos do órgão apropriado;

d) As emendas serão adoptadas por uma maioria de dois terços das Partes na Convenção, presentes e votantes;

e) Se forem adoptadas de acordo com a alínea *d*), as emendas serão comunicadas para aceitação, pelo secretário-geral da Organização, a todas as Partes na Convenção;

f) Uma emenda será considerada como aceite nas seguintes condições:

i) Uma emenda a um artigo da Convenção será considerada como aceite na data em que for aceite por dois terços das Partes cujas frotas mercantes combinadas constituam pelo menos 50 % da tonelagem de arqueação bruta da marinha mercante mundial;

ii) Uma emenda a um anexo à Convenção será considerada como aceite de acordo com o procedimento especificado na alínea *f*), *iii*), a não ser que o órgão apropriado, na altura da sua adopção, determine que a emenda deva ser considerada como aceite na data em que tenha sido aceite por dois terços das Partes cujas frotas mercantes combinadas constituam pelo menos 50% da tonelagem de arqueação bruta da marinha mercante mundial. Contudo, em qualquer momento, antes da entrada em vigor de uma emenda a um anexo à Convenção, qualquer Parte pode notificar o secretário-geral da Organização de que a sua aprovação expressa será necessária antes da entrada em vigor da emenda para essa Parte. Aquele levará tal notificação e a sua data de recepção ao conhecimento das Partes;

iii) Uma emenda a um apêndice a um anexo à Convenção será considerada como aceite no fim de um período a determinar pelo órgão apropriado no momento da sua adopção, período esse que não será inferior a 10 meses, a não ser que dentro desse período seja comunicada qualquer objecção à Organização pelo menos por um terço das Partes ou pelas Partes cujas frotas mercantes combinadas constituam pelo menos 50 % da tonelagem de arqueação bruta da marinha mercante mundial, preenchida que seja qualquer destas condições;

iv) Uma emenda ao protocolo I à Convenção ficará sujeita aos mesmos procedimentos que as emendas aos anexos à Convenção, nos termos da alínea *f*), *ii*) ou *iii*);

v) Uma emenda ao protocolo II à Convenção ficará sujeita aos mesmos procedimentos que as emendas a um artigo da Convenção, nos termos da alínea *f*), *i*);

g) Uma emenda entrará em vigor de acordo com as seguintes condições:

i) No caso de uma emenda a um artigo da Convenção, ao protocolo II ou ao protocolo I ou a um anexo à Convenção que não esteja sujeita ao procedimento especificado na alínea *f*), *iii*), a emenda, aceite em conformidade com as precedentes disposições, entrará em vigor 6 meses após a data da sua aceitação para as Partes que declararam tê-la aceite;

ii) No caso de uma emenda ao protocolo I, a um apêndice a um anexo ou a um anexo à Convenção que esteja sujeita ao procedimento especificado na alínea *f*), *iii*), a emenda, considerada como aceite em conformidade com as condições precedentes, entrará em vigor 6 meses após a data da sua aceitação por todas as Partes, com excepção das que, antes dessa data, tenham feito uma declaração de não aceitação ou uma declaração, nos termos da alínea *f*), *ii*), de que é neces sária a sua aprovação expressa.

3 — Emendas adoptadas por uma conferência:

a) A pedido de uma Parte, apoiada pelo menos por um terço das Partes, a Organização convocará uma conferência das Partes na Convenção, a fim de apreciar emendas à presente Convenção;

b) Qualquer emenda adoptada por tal conferência, por uma maioria de dois terços das Partes presentes e votantes, será comunicada, para aceitação, pelo secretário-geral da Organização a todas as Partes Contratantes;

c) A não ser que a conferência decida de outro modo, a emenda será considerada como aceite e como tendo entrado em vigor, em conformidade com os procedimentos especificados para esse fim no parágrafo 2, alíneas *f*) e *g*).

4 — *a*) No caso de uma emenda a um anexo facultativo, qualquer referência no presente artigo a uma

«Parte na Convenção» será considerada como uma referência a uma Parte obrigada por esse anexo.

b) Qualquer Parte que tenha recusado aceitar uma emenda a um anexo será considerada como não Parte unicamente para fins de aplicação dessa emenda.

5 — A adopção e entrada em vigor de um novo anexo estarão sujeitas aos mesmos procedimentos que a adopção e entrada em vigor de uma emenda a um artigo da Convenção.

6 — Salvo disposição expressa em contrário, qualquer emenda à presente Convenção, feita nos termos do presente artigo, relacionada com a estrutura de um navio, aplicar-se-á apenas aos navios cujo contrato de construção esteja celebrado ou, na ausência de um contrato de construção, cuja quilha foi assente na data da entrada em vigor da emenda ou após essa data.

7 — Qualquer emenda a um protocolo ou a um anexo relacionar-se-á com a essência desse protocolo ou anexo e será compatível com os artigos da presente Convenção.

8 — O secretário-geral da Organização informará todas as Partes de quaisquer emendas que entrem em vigor nos termos do presente artigo, juntamente com a data da entrada em vigor dessa emenda.

9 — Qualquer declaração de aceitação ou de objecção a uma emenda, nos termos do presente artigo, será notificada por escrito ao secretário-geral da Organização. Este dará a conhecer essa notificação e a data da sua recepção às Partes na Convenção.

ARTIGO 17

Promoção de cooperação técnica

As Partes na Convenção promoverão, em consulta com a Organização e outros organismos internacionais, com a assistência e coordenação do director executivo do Programa das Nações Unidas para o Meio Ambiente, o auxílio às Partes que solicitem assistência técnica para:

a) A formação de pessoal científico e técnico;
b) O fornecimento de equipamento e instalações necessários para recepção e vigilância contínua;
c) A adopção de outras medidas e disposições para prevenir ou reduzir a poluição do meio marinho por navios; e
d) O incentivo à investigação;

de preferência nos países interessados, de modo a atingir os propósitos e objectivos da presente Convenção.

ARTIGO 18

Denúncia

1 — A presente Convenção ou qualquer anexo facultativo pode ser denunciado por qualquer Parte na Convenção, em qualquer momento, após decorridos 5 anos a partir da entrada em vigor da Convenção ou de tal anexo para essa Parte.

2 — A denúncia é efectuada mediante notificação escrita ao secretário-geral da Organização, que informará todas as outras Partes de qualquer notificação recebida e da data da sua recepção, bem como da data a partir da qual a denúncia terá efeito.

3 — Uma denúncia terá efeito 12 meses após a recepção da sua notificação pelo secretário-geral da Organização, ou após o termo de qualquer outro período mais longo indicado na notificação.

ARTIGO 19

Depósito e registo

1 — A presente Convenção será depositada junto do secretário-geral da Organização, que enviará cópias certificadas a todos os Estados que tenham assinado a presente Convenção ou a ela aderido.

2 — Logo que a presente Convenção entre em vigor, o secretário-geral da Organização enviará o texto ao Secretário-Geral das Nações Unidas para registo e publicação, em conformidade com o artigo 102 da Carta das Nações Unidas.

ARTIGO 20

Línguas

A presente Convenção é redigida em exemplar único, cujos textos em espanhol, francês, inglês e russo fazem igualmente fé. Serão preparadas e depositadas com os originais assinados traduções oficiais em alemão, árabe, italiano e japonês.

Em fé do que os abaixo assinados (*), devidamente autorizados pelos seus respectivos governos para esse efeito, assinaram a presente Convenção.

Feita em Londres no dia 2 de Novembro de 1973.

PROTOCOLO I

Disposições respeitantes aos relatórios sobre incidentes envolvendo substâncias prejudiciais

(em conformidade com o artigo 8 da Convenção)

ARTIGO I

Obrigação de relatar

1 — O capitão de um navio envolvido num incidente mencionado no artigo III do presente protocolo, ou outra pessoa encarregada do navio, relatará os pormenores de tal incidente sem demora e da forma mais completa possível, em conformidade com as disposições deste protocolo.

2 —Em caso de abandono do navio referido no parágrafo 1 do presente artigo, ou quando o relatório estiver incompleto ou for impossível de obter, o proprietário, afretador, armador ou operador do navio ou seus representantes assumem, na medida do possível, as obrigações do capitão, nos termos das disposições deste protocolo.

ARTIGO II

Métodos de relatar

1 — Sempre que possível, o relatório será transmitido por rádio, mas em qualquer caso pelas vias mais rápidas disponíveis no momento. Aos relatórios transmitidos por rádio será dada a mais alta prioridade possível.

2 — Os relatórios serão enviados ao funcionário ou agência apropriada, especificados no parágrafo 2, alínea *a*), do artigo 8 da Convenção.

(*) Omitidas as assinaturas.

ARTIGO III

Quando há lugar a relatórios

O relatório será elaborado sempre que um incidente envolva:

a) Qualquer descarga não permitida nos termos da presente Convenção; ou
b) Qualquer descarga permitida nos termos da presente Convenção, quando:
  i) For efectuada com o propósito de garantir a segurança de um navio ou a salvaguarda de vidas humanas no mar; ou
  ii) Resultar de avaria no navio ou no seu equipamento; ou
c) Qualquer descarga de uma substância prejudicial com o propósito de combater um incidente específico de poluição, ou por motivos de investigação científica legítima para a redução ou controle da poluição; ou
d) A previsão de qualquer descarga como as referidas nas alíneas *a*), *b*) ou *c*) do presente artigo.

ARTIGO IV

Conteúdo do relatório

1 — O relatório incluirá, em geral:

a) A identificação do navio;
b) O grupo data-hora da ocorrência do incidente;
c) A posição geográfica do navio no momento do incidente;
d) As condições dominantes de vento e estado do mar no momento do incidente; e
e) Detalhes relevantes respeitantes ao estado do navio.

2 — O relatório incluirá, em particular:

a) Uma indicação clara ou descrição das substâncias prejudiciais em causa, incluindo, se possível, os termos técnicos correctos de tais substâncias (não devem ser usadas designações comerciais em substituição dos termos técnicos correctos);
b) Uma declaração ou estimativa de quantidades, concentrações e condições prováveis das substâncias prejudiciais descarregadas ou susceptíveis de serem descarregadas para o mar;
c) Uma descrição das embalagens e marcas de identificação, quando relevante; e
d) Se possível, o nome do expedidor, do destinatário ou do fabricante.

3 — O relatório indicará claramente se a substância prejudicial descarregada ou susceptível de ser descarregada é um hidrocarboneto, uma substância nociva sólida, líquida ou gasosa e se tal substância era ou é transportada a granel ou em embalagens, contentores, depósitos portáteis, camiões-tanques ou vagões-cisternas.

4 — O relatório será completado, quando necessário, com outras informações relevantes solicitadas por qualquer destinatário do mesmo ou desde que a entidade que o enviou o considere apropriado.

ARTIGO V

Relatório suplementar

Qualquer pessoa obrigada nos termos do presente protocolo a enviar um relatório, quando possível:

a) Juntará ao relatório inicial, se necessário, as informações respeitantes à evolução da situação; e
b) Satisfará, tanto quanto possível, as solicitações dos Estados afectados com informações adicionais respeitantes ao incidente.

PROTOCOLO II

Arbitragem

(em conformidade com o artigo 10 da Convenção)

ARTIGO I

Salvo acordo em contrário das Partes em conflito, o processo de arbitragem far-se-á de conformidade com as normas estabelecidas no presente Protocolo.

ARTIGO II

1 — Será constituído um tribunal arbitral a pedido de uma Parte na Convenção dirigido a outra Parte, em aplicação do artigo 10 da presente Convenção. O pedido de arbitragem consistirá de uma exposição do caso acompanhada dos documentos comprovativos.

2 — A Parte requerente informará o secretário-geral da Organização do seu pedido para a constituição de um tribunal, dos nomes das Partes no conflito e dos artigos da Convenção ou das regras sobre as quais há, na sua opinião, desacordo quanto à sua interpretação ou aplicação. O secretário-geral transmitirá esta informação a todas as Partes.

ARTIGO III

O tribunal será composto de três membros: um árbitro nomeado por cada Parte no conflito e um terceiro nomeado por acordo entre os dois primeiros. que será o presidente.

ARTIGO IV

1 — Se, no termo de um período de 60 dias a contar da nomeação do segundo árbitro, o presidente do tribunal não tiver sido nomeado, o secretário-geral da Organização, a pedido de qualquer das Partes, procederá à sua nomeação num período adicional de 60 dias, seleccionando-o de uma lista de pessoas qualificadas, previamente elaborada pelo Conselho da Organização.

2 — Se, num período de 60 dias a contar da data de recepção do pedido, uma das Partes não tiver nomeado o membro do tribunal por cuja designação é responsável, a outra Parte pode informar directamente o secretário-geral da Organização, que nomeará o presidente do tribunal num período de 60 dias, seleccionando-o da lista indicada no parágrafo 1 do presente artigo.

3 — O presidente do tribunal, depois de nomeado, solicitará à Parte que não nomeou um árbitro que o

faça da mesma forma e nas mesmas condições. Se a Parte não proceder à nomeação solicitada, o presidente do tribunal pedirá ao secretário-geral da Organização para fazer a nomeação na forma e condições prescritas no parágrafo precedente.

4 — O presidente do tribunal, se nomeado nos termos das disposições do presente artigo, não pode ter nem ter tido a nacionalidade de uma das Partes interessadas, excepto com consentimento da outra Parte.

5 — Em caso de falecimento ou não comparência de um árbitro por cuja nomeação uma das Partes é responsável, essa Parte nomeará um substituto num período de 60 dias, a contar da data do falecimento ou não comparência. Se essa Parte não proceder à nomeação, a arbitragem prosseguirá com os restantes árbitros. No caso de falecimento ou não comparência do presidente do tribunal, será nomeado um substituto em conformidade com as disposições do artigo III ou, na ausência de acordo entre os membros do tribunal, num período de 60 dias a contar do falecimento ou não comparência, em conformidade com as disposições do presente artigo.

ARTIGO V

O tribunal pode ouvir e decidir sobre os pedidos reconvencionais emergentes directamente do assunto em conflito.

ARTIGO VI

Qualquer Parte será responsável pela remuneração do seu árbitro, pelos custos consequentes e pelos custos resultantes da preparação da sua própria causa. A remuneração do presidente do tribunal e todas as despesas gerais motivadas pela arbitragem serão suportadas igualmente pelas Partes. O tribunal manterá o registo de todas as suas despesas e fornecerá uma informação final das mesmas.

ARTIGO VII

Qualquer Parte na Convenção que tenha um interesse de natureza jurídica e possa ser afectada pela decisão do tribunal pode associar-se ao processo de arbitragem com o consentimento do tribunal, depois de participar por escrito às Partes que tenham iniciado o processo.

ARTIGO VIII

Qualquer tribunal arbitral constituído nos termos das disposições do presente protocolo estabelecerá as suas normas de funcionamento.

ARTIGO IX

1 — As decisões do tribunal, tanto em matéria de procedimento e de locais de reunião, como sobre qualquer outro assunto que lhe seja submetido, serão tomadas por maioria de votos dos seus membros; a ausência ou abstenção de um dos membros do tribunal por cuja nomeação as Partes foram responsáveis não constituirá impedimento para que o tribunal tome uma decisão. Em caso de igualdade, o voto do presidente é de qualidade.

2 — As Partes facilitarão o trabalho do tribunal e, em especial, de acordo com a sua legislação, e usando todos os meios ao seu dispor:

a) Fornecerão ao tribunal todos os documentos e informações necessários;

b) Permitirão ao tribunal a entrada no seu território, para audição de testemunhas ou peritos e para visitas ao local.

3 — A ausência ou não comparência de uma Parte não constituirá impedimento no processo.

ARTIGO X

1 — O tribunal pronunciará a sentença no período de 5 meses a contar da data da sua constituição, a não ser que decida, em caso de necessidade, prorrogar este prazo por um período suplementar não superior a 3 meses. A sentença do tribunal será acompanhada de uma exposição explicando as razões que a determinaram, será final, sem recurso, e será comunicada ao secretário-geral da Organização. As Partes cumprirão imediatamente a sentença.

2 — Qualquer controvérsia que surgir entre as Partes quanto à interpretação ou execução da sentença pode ser submetida por qualquer das Partes à apreciação do tribunal que pronunciou a sentença para que este decida ou, se não for possível, a outro tribunal constituído para este fim da mesma forma que o tribunal original.

ANEXO I

Regras para a prevenção da poluição por hidrocarbonetos

CAPÍTULO I

Generalidades

Regra 1

Definições

Para os fins do presente anexo:

1 — «Hidrocarbonetos» significa petróleo sob qualquer forma, incluindo petróleo bruto, fuelóleo, lamas, resíduos e produtos refinados (que não sejam petroquímicos sujeitos às disposições do anexo II à presente Convenção) e, sem limitar as generalidades precedentes, inclui as substâncias mencionadas no apêndice I a este anexo.

2 — «Mistura de hidrocarbonetos» significa uma mistura contendo qualquer teor em hidrocarbonetos.

3 — «Combustível líquido» significa qualquer hidrocarboneto utilizado como combustível nas máquinas de propulsão e auxiliares do navio em que é transportado.

4 — «Navio petroleiro» significa um navio construído ou adaptado fundamentalmente para transporte de hidrocarbonetos a granel nos seus espaços de carga, incluindo navios de carga combinada e qualquer «navio-tanque para transporte de produtos químicos», tal como definido no anexo II à presente Convenção, quando transporte um carregamento total ou parcial de hidrocarbonetos a granel.

5 — «Navio de carga combinada» significa um navio projectado para transporte quer de hidrocarbonetos quer de carga sólida a granel.

6 — «Navio novo» significa um navio:

a) Cujo contrato de construção foi celebrado depois de 31 de Dezembro de 1975; ou
b) Na ausência de um contrato de construção, cuja quilha foi assente, ou se encontrava numa fase equivalente de construção, depois de 30 de Junho de 1976; ou
c) Cuja entrega foi efectuada depois de 31 de Dezembro de 1979; ou
d) Que sofreu uma grande modificação:
  i) Cujo contrato foi celebrado depois de 31 de Dezembro de 1975; ou
  ii) Na ausência de um contrato, cujos trabalhos foram iniciados depois de 30 de Junho de 1976; ou
  iii) Cujos trabalhos terminaram depois de 31 de Dezembro de 1979.

7 — «Navio existente» significa um navio que não é um navio novo.

8 — «Grande modificação» significa a modificação de um navio existente:

a) Que altera substancialmente as suas dimensões ou capacidade de carga; ou
b) Que modifica o tipo do navio; ou
c) Cuja intenção seja, na opinião da administração, prolongar consideravelmente a sua vida; ou
d) Que, de qualquer outra forma, altere o navio de modo que, se fosse um navio novo, ficaria sujeito às disposições pertinentes da presente Convenção que não lhe seriam aplicáveis como navio existente.

9 — «Terra mais próxima». — A expressão «da terra mais próxima» significa desde a linha de base a partir da qual é delimitado o mar territorial do território em questão, de acordo com o direito internacional, excepto no que se refere à costa nordeste da Austrália, em que, para os fins da presente Convenção, a expressão «da terra mais próxima» significa desde uma linha traçada a partir de um ponto na costa da Austrália situado na latitude 11° 00′ S, longitude 142° 08′ E, e deste para os seguintes pontos:

Latitude 10° 35′ S, longitude 141° 55′ E;
Latitude 10° 00′ S, longitude 142° 00′ E;
Latitude 9° 10′ S, longitude 143° 52′ E;
Latitude 9° 00′ S, longitude 144° 30′ E;
Latitude 13° 00′ S, longitude 144° 00′ E;
Latitude 15° 00′ S, longitude 146° 00′ E;
Latitude 18° 00′ S, longitude 147° 00′ E;
Latitude 21° 00′ S, longitude 153° 00′ E,

e por fim para um ponto na costa da Austrália situado na latitude 24° 42′ S, longitude 153° 15′ E.

10 — «Área especial» significa uma área do mar em que, por razões técnicas reconhecidas relativamente às suas condições oceanográficas e ecológicas e às características particulares do seu tráfego, é requerida a adopção de métodos especiais obrigatórios para a prevenção da poluição do mar por hidrocarbonetos. Nas áreas especiais incluem-se as referidas na regra 10 do presente anexo.

11 — «Taxa instantânea de descarga de hidrocarbonetos» significa o quociente entre o débito de descarga de hidrocarbonetos em litros por hora, em qualquer momento, e a velocidade do navio em nós nesse momento.

12 — «Tanque» significa um espaço fechado formado pela estrutura permanente do navio e que é projectado para o transporte de líquidos a granel.

13 — «Tanque lateral» significa qualquer tanque adjacente ao costado.

14 — «Tanque central» significa qualquer tanque que está para dentro de anteparas longitudinais.

15 — «Tanque de resíduos» significa um tanque especialmente destinado à recolha de resíduos, águas de lavagem de tanques e outras misturas de hidrocarbonetos.

16 — «Lastro limpo» significa o lastro de um tanque que, desde a última vez que transportou hidrocarbonetos, tenha sido limpo de tal forma que o seu efluente, se descarregado de um navio parado em águas limpas e calmas num dia claro, não produza traços visíveis de hidrocarbonetos, quer na superfície da água quer no litoral adjacente, nem deposite lamas ou emulsões sob a superfície da água ou no litoral adjacente. Se o lastro for descarregado através de um equipamento monitor de descarga de hidrocarbonetos, aprovado pela administração, e tal equipamento indicar um teor em hidrocarbonetos no efluente não excedendo 15 partes por milhão, essa indicação é comprovativa de que o lastro era limpo, não obstante a presença de traços visíveis.

17 — «Lastro segregado» significa a água de lastro contida num tanque, que está completamente separado dos sistemas de carga de hidrocarbonetos e de combustível líquido, e que é exclusivamente utilizado para lastro, ou para lastro e outras cargas que não sejam hidrocarbonetos ou substâncias nocivas, tal como definidos nos anexos à presente Convenção.

18 — «Comprimento» (*L*) significa 96 % do comprimento total medido numa linha de flutuação situada a 85 % do pontal mínimo de construção medido a partir da face superior da quilha, ou o comprimento desde a face de vante da roda da proa até ao eixo da madre do leme naquela linha de flutuação, se este for maior. Nos navios projectados com caimento traçado, a linha de flutuação onde o comprimento é medido será paralela à linha de flutuação de projecto. O comprimento (*L*) será medido em metros.

19 — «Perpendiculares a vante e a ré» serão traçadas pelos extremos a vante e a ré do comprimento (*L*). A perpendicular a vante passará na intercepção da face de vante da roda de proa com a linha de água em que o comprimento é medido.

20 — «Meio navio» situa-se a meio do comprimento (*L*).

21 — «Boca» (*B*) significa a boca máxima do navio, medida a meio navio, até à ossada nos navios com um casco metálico ou até à face exterior do forro nos navios com casco de qualquer outro material. A boca (*B*) será medida em metros.

22 — «Porte bruto» (*DW*) significa a diferença, expressa em toneladas métricas, entre o deslocamento de um navio em água de densidade 1,025 carregado até à linha de flutuação correspondente ao bordo livre de verão que lhe foi atribuído e o deslocamento leve.

23 — «Deslocamento leve» significa o deslocamento de um navio, em toneladas métricas, sem carga, combustível, óleo lubrificante, água de lastro, água doce e água de alimentação das caldeiras nos tanques, materiais de consumo, passageiros e suas bagagens.

24 — «Permeabilidade» de um espaço significa o quociente entre o volume desse espaço que se presume possa ser ocupado por água e o seu volume total.

25 — «Volumes» e «áreas» de um navio serão calculados, em todos os casos, até às linhas de traçado.

Regra 2

Âmbito de aplicação

1 — Salvo disposição expressa em contrário, as disposições do presente anexo aplicar-se-ão a todos os navios.

2 — Nos navios que não sejam navios petroleiros com espaços de carga construídos e utilizados para transportar hidrocarbonetos a granel e cuja capacidade total seja igual ou superior a 200 m^3, os requisitos das regras 9, 10, 14, 15, parágrafos 1, 2 e 3, regras 18, 20 e 24, parágrafo 4, do presente anexo, aplicáveis a navios petroleiros, aplicar-se-ão também à construção e utilização destes espaços, excepto se a capacidade total for inferior a 1000 m^3, caso em que podem ser aplicados os requisitos da regra 15, parágrafo 4, do presente anexo, em vez dos requisitos da regra 15, parágrafos 1, 2 e 3.

3 — Quando um navio petroleiro transportar, num dos seus espaços de carga, substâncias sujeitas às disposições do anexo II à presente Convenção, ser-lhe-ão igualmente aplicáveis os requisitos pertinentes do anexo II.

4 — *a*) Os navios de sustentação hidrodinâmica, veículos de sustentação por ar e outros tipos novos de navios (navios de efeito de superfície, submersíveis, etc.) cujas características de construção tornem injustificável ou impraticável a aplicação de qualquer das disposições dos capítulos II e III do presente anexo relativas à sua construção e equipamento podem ser dispensados pela administração do cumprimento de tais disposições sempre que a sua construção e equipamento ofereçam protecção equivalente contra a poluição por hidrocarbonetos, tendo em conta o serviço a que se destinam.

b) No certificado referido na regra 5 do presente anexo figurarão os pormenores de tais dispensas concedidas pela administração.

c) A administração que concede tais dispensas, logo que possível, mas num período que não exceda 90 dias, comunicará à Organização os pormenores e os motivos das mesmas, as quais serão comunicadas pela Organização às Partes na Convenção para informação e acção apropriada, se necessário.

Regra 3

Equivalentes

1 — A administração pode autorizar a montagem, num navio, de instalações, materiais, dispositivos ou equipamentos, em substituição daqueles que são exigidos pelo presente anexo, desde que estas instalações, materiais, dispositivos ou equipamentos sejam pelo menos tão eficazes como os exigidos por este anexo. Esta competência da administração não lhe permite, contudo, substituir as normas de projecto e construção prescritas pelas regras do presente anexo por métodos operativos equivalentes cuja finalidade seja o controle das descargas de hidrocarbonetos.

2 — A administração que autoriza a montagem de instalações, materiais, dispositivos ou equipamentos em substituição dos que são exigidos pelo presente anexo, transmitirá os respectivos pormenores à Organização a fim de estes serem comunicados às Partes na Convenção para informação e acção apropriada, se necessário.

Regra 4

Vistorias

1 — Os navios petroleiros de arqueação bruta igual ou superior a 150 t e todos os outros navios de arqueação bruta igual ou superior a 400 t serão sujeitos às vistorias a seguir especificadas:

a) Uma vistoria inicial, antes de o navio entrar ao serviço ou antes da emissão, pela primeira vez, do certificado exigido nos termos da regra 5 do presente anexo, que incluirá a vistoria completa da sua estrutura, equipamento, instalações, disposições e materiais, na medida em que o navio esteja abrangido por este anexo. Esta vistoria será de modo a assegurar que a estrutura, equipamento, instalações, disposições e materiais cumpram integralmente os requisitos aplicáveis do presente anexo;

b) Vistorias periódicas, a intervalos determinados pela administração, mas não excedendo 5 anos, que permitam assegurar que a estrutura, equipamento, instalações, disposições e materiais cumpram integralmente os requisitos aplicáveis do presente anexo. Contudo, quando a validade do Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) for prorrogada, de acordo com as disposições da regra 8, parágrafo 3 ou 4, deste anexo, o intervalo das vistorias periódicas pode ser correspondentemente alargado.

c) Vistorias intermédias, a intervalos determinados pela administração, mas não excedendo 30 meses, que permitam assegurar que o equipamento e sistemas de bombagem e de encanamentos associados, incluindo os monitores de descarga de hidrocarbonetos, os equipamentos separadores hidrocarbonetos/água e os equipamentos de filtragem de hidrocarbonetos, cumpram integralmente os requisitos aplicáveis do presente anexo e estão em boas condições de funcionamento. Estas vistorias intermédias serão registadas no Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973), emitido em conformidade com a regra 5 deste anexo.

2 — A administração estabelecerá as medidas apropriadas para os navios que não estão sujeitos às disposições do parágrafo 1 da presente regra, de modo a garantir o cumprimento das disposições aplicáveis deste anexo.

3 — As vistorias a navios, para verificação da aplicação das disposições do presente anexo, serão efectuadas por funcionários da administração. A administração pode, contudo, delegar a execução das vistorias quer em inspectores nomeados para este fim, quer em organismos por ela reconhecidos. Em qualquer

dos casos, a administração interessada garantirá em absoluto a integral execução e eficiência das vistorias.

4 — Após a execução de qualquer das vistorias previstas na presente regra não serão efectuadas quaisquer modificações significativas na estrutura, equipamento, instalações, disposições ou materiais inspeccionados sem autorização da administração, com excepção das substituições directas de tal equipamento ou instalações.

Regra 5

Emissão de certificados

1 — Um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) será emitido, após a vistoria efectuada de acordo com as disposições da regra 4 do presente anexo, para os navios petroleiros de arqueação bruta igual ou superior a 150 t e para todos os outros navios de arqueação bruta igual ou superior a 400 t que sejam utilizados em viagens para portos ou terminais no mar sob a jurisdição de outras Partes na Convenção. No caso de navios existentes, este requisito aplicar-se-á 12 meses após a entrada em vigor da presente Convenção.

2 — Tal certificado será emitido pela administração ou por qualquer pessoa ou organismo por ela devidamente autorizado. Em qualquer dos casos, a administração assume plena responsabilidade pelo certificado.

Regra 6

Emissão de um certificado por outro governo

1 — O governo de uma Parte na Convenção pode, a pedido da administração, mandar vistoriar um navio e, se entender que as disposições do presente anexo estão a ser cumpridas, emitirá ou autorizará a emissão de um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) para o navio, em conformidade com o presente anexo.

2 — Uma cópia do certificado e uma cópia do relatório de vistoria serão enviadas, logo que possível, à administração que pediu a vistoria.

3 — Um certificado assim emitido incluirá uma declaração de que foi emitido a pedido da administração e terá o mesmo valor e igual reconhecimento que o certificado emitido de acordo com a regra 5 do presente anexo.

4 — Nenhum Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) será emitido para um navio que arvore a bandeira de um Estado que não é Parte na Convenção.

Regra 7

Modelo do certificado

O Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) será redigido numa língua oficial do país que o emite e de acordo com o modelo que consta no apêndice II ao presente anexo. Se a língua utilizada não for nem o francês nem o inglês, o texto incluirá uma tradução numa destas línguas.

Regra 8

Validade do certificado

1 — Um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973) será emitido por um período de validade determinado pela administração, que não excederá 5 anos a contar da data de emissão, excepto nos casos previstos nos parágrafos 2, 3 e 4 da presente regra.

2 — Se um navio, ao expirar o certificado, não se encontrar num porto ou num terminal no mar sob jurisdição da Parte na Convenção cuja bandeira o navio arvora, o período de validade do certificado pode ser prorrogado pela administração, mas esta prorrogação será concedida apenas com a finalidade de permitir ao navio completar a sua viagem até ao Estado cuja bandeira arvora ou até ao Estado em que irá ser vistoriado, e unicamente nos casos em que a mesma seja considerada oportuna e razoável.

3 — Nenhum certificado será assim prorrogado por um período superior a 5 meses e um navio a que tenha sido concedida tal prorrogação, uma vez chegado ao Estado cuja bandeira arvora ou ao porto em que vai ser vistoriado, não será autorizado a largar deste porto ou a deixar aquele Estado, com base em tal prorrogação, sem ter obtido um novo certificado.

4 — Um certificado que não tenha sido prorrogado de acordo com as disposições do parágrafo 2 da presente regra pode ser prorrogado pela administração por um período de graça não superior a 1 mês, a contar da data em que expira a validade nele indicada.

5 — Um certificado deixará de ser válido se forem introduzidas modificações significativas na estrutura, equipamento, instalações, disposições ou materiais exigidos sem a aprovação da administração, à excepção da substituição directa de tal equipamento ou instalações, ou se não tiverem sido efectuadas as vistorias intermédias especificadas pela administração nos termos da regra 4, parágrafo 1, alínea *c*), do presente anexo.

6 — Um certificado emitido para um navio deixará de ser válido quando o navio mudar de bandeira, com excepção do disposto no parágrafo 7 da presente regra.

7 — Quando um navio mudar de bandeira, o certificado continuará em vigor por um período que não exceda 5 meses, desde que não expire antes do termo deste período, ou até que a administração emita um certificado de substituição, conforme o caso. Logo que possível, após a mudança de bandeira, o Governo da Parte cuja bandeira o navio anteriormente arvorava enviará à Administração uma cópia do certificado que o navio possuía antes da mudança e, se possível, uma cópia do correspondente relatório de vistoria.

CAPÍTULO II

Requisitos relativos à prevenção da poluição operacional

Regra 9

Controle das descargas de hidrocarbonetos

1 — Tendo em consideração as disposições das regras 10 e 11 do presente anexo e do parágrafo 2 desta regra, será proibida qualquer descarga para o mar de hidrocarbonetos ou misturas de hidrocarbonetos por

um navio abrangido pelo presente anexo, excepto quando forem satisfeitas todas as seguintes condições:

a) No caso de um navio petroleiro, com excepção do previsto na alínea *b*) deste parágrafo:

i) O navio petroleiro não se encontra numa área especial;

ii) O navio petroleiro encontra-se a mais de 50 milhas marítimas da terra mais próxima;

iii) O navio petroleiro segue a sua rota;

iv) A taxa instantânea de descarga de hidrocarbonetos não excede 60 l por milha marítima;

v) A quantidade total de hidrocarbonetos descarregados para o mar não excede, no caso dos navios petroleiros existentes, 1/15 000 da carga total da qual os resíduos provêm e, para os navios petroleiros novos, 1/30 000 da carga total da qual os resíduos provêm; e

vi) O navio petroleiro tem em funcionamento, com excepção do disposto na regra 15, parágrafos 5 e 6, do presente anexo, um equipamento monitor de descarga de hidrocarbonetos e um ou mais tanques de resíduos como exigido na regra 15 do presente anexo;

b) No caso de navios não petroleiros de arqueação bruta igual ou superior a 400 t e de navios petroleiros, no que se refere às águas dos porões das casas de máquinas, excluindo as águas dos porões das casas das bombas de carga, excepto quando os seus efluentes estejam misturados com resíduos da carga de hidrocarbonetos:

i) O navio não se encontra numa área especial;

ii) O navio encontra-se a mais de 12 milhas marítimas da terra mais próxima;

iii) O navio segue a sua rota;

iv) O teor em hidrocarbonetos do efluente é inferior a 100 partes por milhão; e

v) O navio tem em funcionamento um equipamento monitor de descarga de hidrocarbonetos, um separador hidrocarbonetos/água, um equipamento de filtragem de hidrocarbonetos ou outra instalação como exigido pela regra 16 do presente anexo.

2 — No caso de um navio de arqueação bruta inferior a 400 t que não seja navio petroleiro e que navegue fora das áreas especiais, a administração assegurará que seja equipado, na medida do possível e do razoável, com instalações que permitam a retenção dos resíduos de hidrocarbonetos a bordo e a sua descarga para instalações de recepção ou para o mar, em cumprimento dos requisitos do parágrafo 1, alínea *b*), da presente regra.

3 — Sempre que sejam observados traços visíveis de hidrocarbonetos à superfície da água, ou abaixo desta, nas imediações de um navio ou da sua esteira, os governos das Partes na Convenção devem, na medida do possível, investigar prontamente tais factos, de modo a verificar se houve violação das disposições da presente regra ou da regra 10 deste anexo. A investigação deve mencionar, em particular, o vento e estado do mar, a rota e velocidade do navio, outras fontes possíveis de traços visíveis nas imediações do navio e todos os registos pertinentes de descargas de hidrocarbonetos.

4 — As disposições do parágrafo 1 da presente regra não se aplicarão à descarga de lastro limpo ou segregado. As disposições do parágrafo 1, alínea *b*), da presente regra não se aplicarão à descarga de misturas de hidrocarbonetos que, sem diluição, possua um teor em hidrocarbonetos não excedendo 15 partes por milhão.

5 — Nenhuma descarga para o mar conterá substâncias químicas ou outras substâncias em quantidades ou concentrações perigosas para o meio marinho, nem substâncias químicas ou outras substâncias introduzidas na descarga com a finalidade de dissimular as condições de descarga especificadas na presente regra.

6 — Os resíduos dos hidrocarbonetos que não podem ser descarregados para o mar, em cumprimento dos parágrafos 1, 2 e 4 da presente regra, serão retidos a bordo ou descarregados para instalações de recepção.

Regra 10

Métodos para a prevenção da poluição por hidrocarbonetos provenientes de navios operando em áreas especiais

1 — Para os fins do presente anexo, áreas especiais são a área do mar Mediterrâneo, a área do mar Báltico, a área do mar Negro, a área do mar Vermelho e a «área dos golfos», definidas como segue:

a) A área do mar Mediterrâneo significa o mar Mediterrâneo propriamente dito, incluindo os seus golfos e mares, e é limitada do lado do mar Negro pelo paralelo 41° N e a oeste, no estreito de Gibraltar, pelo meridiano 5° 36′ W.

b) A área do mar Báltico significa o mar Báltico propriamente dito, assim como o golfo de Bótnia, o golfo da Finlândia e a entrada do mar Báltico limitada pelo paralelo de Skaw no Skagerrak 57° 44,8′ N.

c) A área do mar Negro significa o mar Negro propriamente dito, limitada do lado do Mediterrâneo pelo paralelo 41° N.

d) A área do mar Vermelho significa o mar Vermelho propriamente dito, incluindo os golfos do Suez e de Aqaba, limitada a sul pela loxodromia que liga Ras si Ane (12° 8,5′ N, 43° 19,6′ E) a Husn Murad (12° 40,4′ N, 43° 30,2′ E).

e) A «área dos golfos» significa a área do mar situada a noroeste da loxodromia ligando Ras al Hadd (22° 30′ N, 59° 48′ E) a Ras al Fasteh (25° 04′ N,. 61° 25′ E).

2 — *a*) Tendo em consideração as disposições da regra 11 do presente anexo, será proibida qualquer descarga para o mar, dentro das áreas especiais, de hidrocarbonetos ou misturas de hidrocarbonetos, proveniente de navios petroleiros e de quaisquer navios de arqueação bruta igual ou superior a 400 t que não sejam navios petroleiros.

b) Dentro das áreas especiais, estes navios reterão a bordo todos os resíduos de hidrocarbonetos e lamas, lastro sujo e águas de lavagem de tanques, que serão descarregados unicamente para instalações de recepção.

3 — *a*) Tendo em consideração as disposições da regra 11 do presente anexo, será proibida qualquer descarga para o mar, dentro das áreas especiais, de hidrocarbonetos ou misturas de hidrocarbonetos proveniente de navios de arqueação bruta inferior a 400 t que não sejam navios petroleiros, excepto quando o teor em hidrocarbonetos do efluente, sem diluição, não exceda 15 partes por milhão ou, em alternativa, quando forem satisfeitas todas as seguintes condições:

i) O navio segue a sua rota;

ii) O teor em hidrocarbonetos do efluente é inferior a 100 partes por milhão; e

iii) A descarga é efectuada tão distante quanto possível de terra, mas em nenhum caso a menos de 12 milhas marítimas da terra mais próxima.

b) Nenhuma descarga para o mar conterá substâncias químicas ou outras substâncias em quantidades ou concentrações que sejam perigosas para o meio marinho, nem substâncias químicas ou outras substâncias introduzidas na descarga com a finalidade de dissimular as condições de descarga especificadas na presente regra.

c) Os resíduos de hidrocarbonetos que não possam ser descarregados para o mar, em cumprimento da alínea *a*) do presente parágrafo, serão retidos a bordo ou descarregados para instalações de recepção.

4 — As disposições da presente regra não se aplicarão às descargas de lastro limpo ou segregado.

5 — Nenhuma das disposições da presente regra proibirá a um navio, numa viagem de que apenas uma parte se efectua numa área especial, de proceder a descargas fora dessa área, de acordo com a regra 9 do presente anexo.

6 — Sempre que sejam observados traços visíveis de hidrocarbonetos à superfície da água, ou abaixo desta, nas imediações de um navio ou da sua esteira, os governos das Partes na Convenção devem, na medida do possível, investigar prontamente tais factos, de modo a verificar se houve violação das disposições da presente regra ou da regra 9 deste anexo. A investigação deve mencionar, em particular, o vento e estado do mar, a rota e velocidade do navio, outras fontes possíveis de traços visíveis nas imediações do navio e todos os registos pertinentes de descargas de hidrocarbonetos.

7 — Instalações de recepção nas áreas especiais:

a) Áreas do mar Mediterrâneo, do mar Negro e do mar Báltico:

i) Os governos das Partes na Convenção cujas costas confinem com qualquer das áreas especiais indicadas comprometem-se a garantir que, o mais tardar até 1 de Janeiro de 1977, todos os terminais de carga de hidrocarbonetos e portos de reparação nas áreas especiais sejam equipados com instalações adequadas à recepção e tratamento de todo o lastro sujo e águas de lavagem de tanques dos navios petroleiros. Além disso, todos os portos nas áreas especiais serão equipados com instalações de recepção adequadas para receber outros resíduos e misturas de hidrocarbonetos provenientes de todos os navios. Estas instalações terão capacidade suficiente para satisfazer as necessidades dos navios que as utilizem sem lhes causar atrasos indevidos.

ii) Os governos das Partes cuja jurisdição se estenda a acessos a vias de navegação marítima de pequena profundidade que obriguem os navios a diminuir o seu calado mediante a descarga de lastro comprometem-se a garantir a montagem das instalações referidas na alínea *a*), *i*), do presente parágrafo, podendo, no entanto, os navios que tenham de descarregar resíduos ou lastro sujo vir a sofrer algum atraso.

iii) No período que medeia entre a entrada em vigor da presente Convenção (se esta data for anterior a 1 de Janeiro de 1977) e 1 de Janeiro de 1977, os navios que naveguem nestas áreas especiais cumprirão os requisitos da regra 9 do presente anexo. Contudo, os governos das Partes cujas costas confinem com qualquer das áreas especiais referidas nesta alínea podem fixar uma data anterior a 1 de Janeiro de 1977, mas posterior à entrada em vigor da presente Convenção, a partir da qual serão aplicados os requisitos da presente regra relativos às áreas especiais em questão:

1) Se todas as instalações de recepção necessárias forem montadas até à data assim fixada; e

2) Desde que as Partes interessadas notifiquem a Organização da data assim fixada pelo menos com 6 meses de antecedência, para comunicação às outras Partes.

iv) Após 1 de Janeiro de 1977, ou após a data fixada de acordo com a alínea *a*), *iii*), do presente parágrafo, se esta for anterior, as Partes notificarão a Organização de todos os casos em que considerem as instalações inadequadas, para que esta o comunique aos governos contratantes.

b) Área do mar Vermelho e área dos golfos:

i) Os governos das Partes cujas costas confinem com as áreas especiais indicadas comprometem-se a garantir que todos os terminais de carga de hidrocarbonetos e portos de reparação nestas áreas especiais sejam equipados, logo que possível, com instalações adequadas à recepção e tratamento de todo o lastro sujo e águas de lavagem de tanques dos navios petroleiros. Além disso, todos os portos nas áreas especiais serão equipados com instalações de recepção adequadas para receber outros resíduos e misturas de hidrocarbonetos provenientes de todos os navios. Estas instalações terão capacidade suficiente para satisfazer as necessidades dos navios que as utilizam sem lhes causar atrasos indevidos.

ii) Os governos das Partes cuja jurisdição se estenda a acessos a vias de navegação marítima de pequena profundidade que obriguem os navios a deminuir o seu calado mediante a descarga de lastro comprometem-se a garantir a montagem das instalações referidas na alínea *b*), *i*), do presente parágrafo, podendo, no entanto, os navios que tenham de descarregar resíduos ou lastro sujo vir a sofrer algum atraso.

iii) As Partes interessadas notificarão a Organização das medidas tomadas, em cumprimento das disposições da alínea *b*), *i*) e *ii*), do presente parágrafo. Após a recepção de suficientes notificações, a Organização fixará uma data, a partir da qual serão aplicados os requisitos da presente regra relativos à área em questão. A Organização notificará todas as Partes da data assim fixada, pelo menos com 12 meses de antecedência.

iv) No período que medeia entre a entrada em vigor da presente Convenção e a data assim fixada, os navios que naveguem nestas áreas especiais cumprirão os requisitos da regra 9 do presente anexo.

v) A partir desta data, os navios petroleiros que carreguem nos portos destas áreas especiais que ainda não disponham das referidas instalações também cumprirão integralmente os requisitos da presente regra. Todavia, os navios petroleiros que entrem nestas áreas especiais, para aí carregarem, farão o possível para entrarem na área unicamente com lastro limpo a bordo.

vi) Após a data da aplicação dos requisitos à área especial em questão, as Partes notificarão a Organização de todos os casos em que considerem as instalações inadequadas, para que esta o comunique à Partes interessadas.

vii) As instalações de recepção previstas na regra 12 do presente anexo estarão montadas, pelo menos, em 1 de Janeiro de 1977 ou 1 ano após a entrada em vigor da presente Convenção, se esta data for posterior.

Regra 11

Excepções

As regras 9 e 10 não se aplicarão:

a) À descarga para o mar de hidrocarbonetos ou de misturas de hidrocarbonetos necessária para garantir a segurança de um navio ou para a salvaguarda de vidas humanas no mar; ou

b) À descarga para o mar de hidrocarbonetos ou de misturas de hidrocarbonetos resultante de avaria no navio ou no seu equipamento:

i) Desde que tenham sido tomadas todas as precauções razoáveis depois da ocorrência da avaria ou da detecção da descarga, a fim de a impedir ou reduzir ao mínimo; e

ii) Salvo se o proprietário ou o capitão tiver agido intencionalmente para provocar a avaria, ou negligentemente e consciente da possibilidade da ocorrência da avaria; ou

c) À descarga para o mar de substâncias contendo hidrocarbonetos aprovada pela administração, quando estas substâncias forem utilizadas para combater incidentes concretos de poluição, com o fim de minimizar os prejuízos dela resultantes. Qualquer descarga desta natureza estará sujeita à aprovação do governo com jurisdição na área onde se tencione efectuar a descarga.

Regra 12

Instalações de recepção

1 — Tendo em consideração as disposições da regra 10 do presente anexo, os governos das Partes comprometem-se a garantir a montagem, nos terminais de carga de hidrocarbonetos, nos portos de reparação e noutros portos onde os navios tenham resíduos de hidrocarbonetos para descarregar, de instalações para a recepção desses resíduos e misturas de hidrocarbonetos retidos a bordo de navios petroleiros e de outros navios com capacidade suficiente, de modo a satisfazer as necessidades dos navios que as utilizem, sem lhes causar atrasos indevidos.

2 — As instalações de recepção referidas no parágrafo 1 da presente regra serão montadas:

a) Em todos os portos e terminais utiizados para o carregamento de petróleo bruto em navios petroleiros, quando estes tenham completado, imediatamente antes da sua chegada, uma viagem em lastro não superior a 72 horas nem a 1200 milhas marítimas;

b) Em todos os portos e terminais onde são carregadas diariamente, em média, mais de 1000 t métricas de hidrocarbonetos a granel que não sejam petróleo bruto;

c) Em todos os portos que possuam estaleiros de reparação naval ou instalações para limpeza de tanques;

d) Em todos os portos e terminais que recebam navios equipados com o(s) tanque(s) de lamas previsto(s) na regra 17 do presente anexo;

e) Em todos os portos, no que respeita a águas de esgoto de porões contendo hidrocarbonetos e a outros resíduos que não possam ser descarregados, em conformidade com a regra 9 do presente anexo; e

f) Em todos os portos utilizados para cargas a granel, no que respeita a resíduos de hidrocarbonetos provenientes de navios de carga combinada que não possam ser descarregados em conformidade com a regra 9 do presente anexo.

3 — A capacidade das instalações de recepção será estabelecida da seguinte forma:

a) Os terminais de carga utilizados para o carregamento de petróleo bruto serão equipados com instalações de recepção suficientes para receber os hidrocarbonetos e misturas de hidrocarbonetos de todos os navios petroleiros que efec-

tuem as viagens referidas no parágrafo 2, alínea *a*), da presente regra e que não possam ser descarregados em conformidade com as disposições da regra 9, parágrafo 1, alínea *a*), do presente anexo;

b) Os portos de carga e terminais mencionados no parágrafo 2, alínea *b*), da presente regra serão equipados com instalações de recepção suficientes para receber os hidrocarbonetos e misturas de hidrocarbonetos de todos os navios petroleiros que transportam hidrocarbonetos a granel — que não sejam petróleo bruto — que não possam ser descarregados em conformidade com as disposições da regra 9, parágrafo 1, alínea *a*), do presente anexo;

c) Todos os portos que possuam estaleiros de reparação naval ou instalações de limpeza de tanques serão equipados com instalações de recepção suficientes para receber todos os resíduos e misturas de hidrocarbonetos retidos para eliminação a bordo dos navios antes da sua entrada nos referidos estaleiros ou instalações;

d) Todas as instalações montadas nos portos e terminais, nos termos do parágrafo 2, alínea *d*), da presente regra, terão capacidade suficiente para receber todos os resíduos retidos, em conformidade com a regra 17 do presente anexo, a bordo dos navios susceptíveis de poderem escalar estes portos e terminais;

e) Todas as instalações montadas nos portos e terminais, nos termos da presente regra, terão capacidade suficiente para receber as águas de esgoto dos porões contendo hidrocarbonetos e outros resíduos que não possam ser descarregados, em conformidade com a regra 9 do presente anexo;

f) As instalações montadas nos portos utilizados para cargas a granel terão em consideração os problemas específicos dos navios de carga combinada.

4 — As instalações de recepção previstas nos parágrafos 2 e 3 da presente regra estarão montadas, o mais tardar, 1 ano após a entrada em vigor da presente Convenção, ou em 1 de Janeiro de 1977, se esta data for posterior.

5 — As Partes notificarão a Organização, para comunicação às Partes interessadas, de todos os casos em que as instalações previstas na presente regra sejam consideradas inadequadas.

Regra 13

Navios petroleiros com tanques de lastro segregado

1 — Todos os navios petroleiros novos de porte bruto igual ou superior a 70 000 t possuirão tanques de lastro segregado e cumprirão os requisitos da presente regra.

2 — A capacidade dos tanques de lastro segregado será calculada de forma que o navio possa navegar em lastro com toda a segurança, sem que seja necessário recorrer à utilização dos tanques de carga para a lastragem com água, salvo nas condições previstas no parágrafo 3 da presente regra. Contudo, em qualquer caso, a capacidade mínima dos tanques de lastro segregado permitirá que, em todas as condições de lastro que possam ocorrer em qualquer momento da viagem, incluindo a de deslocamento leve apenas com lastro segregado, possam ser satisfeitos todos os seguintes requisitos relativos a calados e caimento do navio:

a) A imersão a meio navio *(dm)*, em metros (sem ter em consideração qualquer deformação do navio), não será inferior a:

$$dm = 2{,}0 + 0{,}02\ L$$

b) Os calados nas perpendiculares a vante e a ré terão os valores correspondentes à imersão a meio navio *(dm)*, conforme estabelecido na alínea *a*) do presente parágrafo, com um caimento a ré igual ou inferior a 0,015 *L;* e

c) Em qualquer caso, o calado na perpendicular a ré não será inferior ao calado necessário para assegurar a imersão completa do(s) hélice(s).

3 — Em caso algum será transportada água de lastro nos tanques de carga, excepto quando as condições meteorológicas forem de tal modo severas que se torne necessário, na opinião do capitão, transportar água de lastro adicional nos tanques de carga para garantir a segurança do navio. Esta água de lastro adicional será tratada e descarregada em cumprimento da regra 9 e em conformidade com os requisitos da regra 15 do presente anexo, e esta operação registada no Livro de Registo de Hidrocarbonetos mencionado na regra 20 deste anexo.

4 — Qualquer navio petroleiro que não seja obrigado a possuir tanques de lastro segregado, em conformidade com o parágrafo 1 da presente regra, pode ser, contudo, classificado como navio petroleiro com tanques de lastro segregado, desde que, no caso de um navio petroleiro de comprimento igual ou superior a 150 m, sejam integralmente satisfeitos os requisitos dos parágrafos 2 e 3 da presente regra e, no caso de um navio petroleiro de comprimento inferior a 150 m, as condições de lastro segregado sejam consideradas satisfatórias pela administração.

Regra 14

Segregação de hidrocarbonetos e água de lastro

1 — Salvo no caso previsto no parágrafo 2 da presente regra, os navios novos, que não sejam navios petroleiros, de arqueação bruta igual ou superior a 4000 t e os navios petroleiros novos de arqueação bruta igual ou superior a 150 t não transportarão água de lastro em nenhum tanque de combustível líquido.

2 — Sempre que condições anormais ou a necessidade de transportar grandes quantidades de combustível líquido obriguem a transportar água de lastro, que não seja lastro limpo, em tanques de combustível líquido, esta água de lastro será descarregada para instalações de recepção ou para o mar em conformidade com a regra 9, utilizando o equipamento especificado na regra 16, parágrafo 2, do presente anexo, e esta operação registada no Livro de Registo de Hidrocarbonetos.

3 — Todos os outros navios satisfarão, na medida do possível e do razoável, os requisitos do parágrafo 1 da presente regra.

Regra 15

Retenção de hidrocarbonetos a bordo

1 — Tendo em consideração as disposições dos parágrafos 5 e 6 da presente regra, os navios petroleiros de arqueação bruta igual ou superior a 150 t serão equipados com dispositivos satisfazendo os requisitos dos parágrafos 2 e 3 desta regra, estabelecendo-se que, no caso dos navios petroleiros existentes, os requisitos relativos ao equipamento monitor de descarga de hidrocarbonetos e aos tanques de resíduos serão aplicados 3 anos após a entrada em vigor da presente Convenção.

2 — *a*) Serão instalados meios adequados para a limpeza dos tanques de carga e para a trasfega dos resíduos de lastro sujo e das águas de lavagem dos tanques de carga para um tanque de resíduos aprovado pela administração. Nos navios petroleiros existentes, qualquer dos tanques de carga pode ser destinado a tanque de resíduos.

b) Neste sistema serão instalados dispositivos que permitam trasfegar os resíduos de hidrocarbonetos para um tanque ou conjunto de tanques de resíduos, de modo que o efluente descarregado para o mar satisfaça as disposições da regra 9 do presente anexo.

c) O tanque ou conjunto de tanques de resíduos terá a capacidade suficiente para reter os resíduos provenientes da lavagem dos tanques, os resíduos de hidrocarbonetos e os resíduos de lastro sujo, mas a sua capacidade total não será inferior a 3 % da capacidade de carga de hidrocarbonetos do navio, excepto quando existam tanques de lastro segregado de acordo com a regra 13 do presente anexo, ou quando não existam dispositivos que necessitem utilizar uma quantidade de água adicional à água de lavagem, tais como ejectores, caso em que a administração pode aceitar a redução desta capacidade para 2 %. Os navios petroleiros novos de porte bruto superior a 70 000 t possuirão, pelo menos, 2 tanques de resíduos.

d) Os tanques de resíduos, especialmente no respeitante à localização de entradas, saídas, deflectores ou filtros, quando existam, serão projectados de forma a evitar excessiva turbulência e o arrastamento de hidrocarbonetos ou de emulsões de hidrocarbonetos com a água.

3 — *a*) Será instalado um equipamento monitor de descarga de hidrocarbonetos, aprovado pela administração. Ao examinar o projecto do aparelho de medida do teor em hidrocarbonetos a integrar no equipamento, a administração terá em consideração as especificações recomendadas pela Organização (*). O dispositivo será equipado com uma unidade que permita o registo contínuo da descarga em litros por milha marítima e a quantidade total descarregada, ou o teor em hidrocarbonetos e o débito de descarga. Este registo será identificado pela data e hora e será mantido pelo menos durante 3 anos. O equipamento monitor de descarga de hidrocarbonetos entrará em funcionamento sempre que se verifique uma descarga de efluentes para o mar e assegurará a paragem automática de qualquer descarga de misturas de hidrocarbonetos logo que a taxa instantânea de descarga de hidrocarbonetos exceda o valor permitido pela regra 9, parágrafo 1, alínea *a*), do presente anexo. Qualquer avaria no equipamento monitor fará interromper a descarga e será registada no Livro de Registo de Hidrocarbonetos. Existirá um modo alternativo de funcionamento manual, que pode ser utilizado quando ocorrer uma avaria, mas a unidade avariada será reparada antes de o navio petroleiro iniciar a sua próxima viagem em lastro, a não ser que o navio se dirija para um porto de reparação. Os navios petroleiros existentes cumprirão todas as disposições acima especificadas, à excepção da interrupção da descarga, que pode ser feita manualmente, e do débito de descarga, que pode ser estimado em função das características das bombas.

b) Existirão a bordo detectores eficazes da superfície de separação hidrocarbonetos/água, aprovados pela administração, que permitam determinar, rapidamente e com precisão, a superfície de separação hidrocarbonetos/água nos tanques de resíduos e que poderão ser utiizados noutros tanques onde se efectue a separação hidrocarbonetos/água e a partir dos quais se pretenda descarregar o efluente directamente para o mar.

c) As instruções relativas ao funcionamento do equipamento monitor estarão de acordo com um manual de funcionamento aprovado pela administração. As instruções aplicar-se-ão tanto ao funcionamento manual como ao funcionamento automático e garantirão que os hidrocarbonetos serão sempre descarregados em cumprimento das condições estipuladas na regra 9 do presente anexo (*).

4 — Os requisitos dos parágrafos 1, 2 e 3 da presente regra não se aplicarão aos navios petroleiros de arqueação bruta inferior a 150 t, nos quais o controle de descarga de hidrocarbonetos previsto na regra 9 do presente anexo será efectuado pela retenção a bordo dos hidrocarbonetos e posterior descarga para instalações de recepção de todas as águas de lavagem poluídas. A quantidade total dos hidrocarbonetos e da água utilizada para a lavagem e reenviada para um tanque de armazenagem será registada no Livro de Registo de Hidrocarbonetos. Esta quantidade total será descarregada para instalações de recepção, a não ser que tenham sido tomadas disposições adequadas para garantir que qualquer efluente, cuja descarga para o mar seja permitida, foi eficazmente controlado de modo a ga-

(*) Faz-se referência à Recomendação sobre as Especificações Internacionais para os Equipamentos Separadores Hidrocarbonetos/Água e Aparelhos de Medida do Teor em Hidrocarbonetos, adoptada pela Organização na Resolução A. 233 (VII).

(*) Faz-se referência ao *Guia de Mares Limpos para Navios Petroleiros,* publicado pela International Chamber of Shipping (ICS) e pela Oil Companies International Marine Forum (OCIMF).

rantir o cumprimento das disposições da regra 9 do presente anexo.

5 — A administração pode dispensar do cumprimento dos requisitos dos parágrafos 1, 2 e 3 da presente regra qualquer navio petroleiro que apenas efectue viagens de duração não superior a 72 horas e que não se afaste mais de 50 milhas da terra mais próxima, desde que ao navio petroleiro não seja exigido, nem possua, um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973). Tal dispensa será condicionada ao requisito de que o navio petroleiro retenha a bordo todas as misturas de hidrocarbonetos para posterior descarga em instalações de recepção e à verificação, pela administração, de que as instalações disponíveis são adequadas para receber tais misturas de hidrocarbonetos.

6 — Quando, na opinião da Organização, for impossível obter os equipamentos requeridos pela regra 9, parágrafo 1, alínea *a*), *vi*), do presente anexo, e especificados no parágrafo 3, alínea *a*), desta regra, para o controle em contínuo das descargas de produtos refinados leves (hidrocarbonetos brancos), a administração pode dispensar o cumprimento de tais requisitos, desde que a descarga seja autorizada apenas quando efectuada segundo os procedimentos estabelecidos pela Organização, satisfazendo as condições da regra 9, parágrafo 1, alínea *a*), do presente anexo, com excepção da obrigação de possuir em funcionamento um equipamento monitor de descarga de hidrocarbonetos. A Organização reexaminará a disponibilidade dos equipamentos a intervalos que não excedam 12 meses.

7 — Os requisitos dos parágrafos 1, 2 e 3 da presente regra não se aplicam aos navios petroleiros que transportem asfalto, para os quais o controle da descarga do asfalto, de acordo com a regra 9 deste anexo, será efectuado pela retenção a bordo dos resíduos de asfalto e posterior descarga para instalações de recepção de todas as águas de lavagem poluídas.

Regra 16

Equipamento monitor de descarga de hidrocarbonetos e equipamento separador hidrocarbonetos/água

1 — Todos os navios de arqueação bruta igual ou superior a 400 t serão apetrechados com um equipamento separador hidrocarbonetos/água ou com um equipamento de filtragem, em cumprimento das disposições do parágrafo 6 da presente regra. Se esses navios transportarem grandes quantidades de combustível líquido, cumprirão as disposições do parágrafo 2 desta regra ou do parágrafo 1 da regra 14.

2 — Todos os navios de arqueação bruta igual ou superior a 10 000 t serão equipados:

a) Além dos requisitos do parágrafo 1 da presente regra, com um equipamento monitor de descarga de hidrocarbonetos, em cumprimento do parágrafo 5 da presente regra; ou

b) Em alternativa aos requisitos dos parágrafos 1 e 2, alínea *a*), da presente regra, com um equipamento separador hidrocarbonetos/água, em cumprimento do parágrafo 6 desta regra, e com um equipamento eficaz de filtragem, em cumprimento do parágrafo 7 da presente regra.

3 — A administração garantirá que os navios de arqueação bruta inferior a 400 t sejam equipados, na medida do possível, de modo a reter a bordo os hidrocarbonetos ou as misturas de hidrocarbonetos ou a descarregá-los de acordo com os requisitos da regra 9, parágrafo 1, alínea *b*), do presente anexo.

4 — Para os navios existentes, os requisitos dos parágrafos 1, 2 e 3 da presente regra aplicar-se-ão 3 anos após a entrada em vigor da presente Convenção.

5 — O equipamento monitor de descarga de hidrocarbonetos será do modelo aprovado pela administração. Ao examinar o projecto do aparelho de medida do teor em hidrocarbonetos a integrar no equipamento, a administração terá em consideração as especificações recomendadas pela Organização (*). O dispositivo será equipado com uma unidade que permita o registo contínuo do teor em hidrocarbonetos em partes por milhão. Este registo será identificado pela data e hora e será mantido pelo menos durante 3 anos. O equipamento monitor entrará em funcionamento sempre que se verifique uma descarga de efluentes para o mar e assegurará a paragem automática de qualquer descarga de misturas de hidrocarbonetos logo que o teor em hidrocarbonetos do efluente exceda o valor permitido pela regra 9, parágrafo 1, alínea *b*), do presente anexo. Qualquer avaria no equipamento monitor fará interromper a descarga e será registada no Livro de Registo de Hidrocarbonetos. A unidade avariada será reparada antes de o navio iniciar a sua próxima viagem, a não ser que o navio se dirija para um porto de reparação. Os navios existentes cumprirão todas as disposições acima especificadas, à excepção da interrupção da descarga, que pode ser feita manualmente.

6 — O equipamento separador hidrocarbonetos/água ou o equipamento de filtragem serão do modelo aprovado pela administração e projectados de modo a assegurar que as misturas de hidrocarbonetos descarregadas para o mar, depois de passarem através do equipamento separador ou de filtragem, possuam um teor em hidrocarbonetos não superior a 100 partes por milhão. Ao examinar o projecto destes equipamentos, a administração terá em consideração as especificações recomendadas pela Organização (*).

7 — O equipamento de filtragem de hidrocarbonetos mencionado no parágrafo 2, alínea *b*), da presente regra será do modelo aprovado pela administração e projectado de modo a receber as descargas provenientes do equipamento separador e a produzir um efluente cujo teor em hidrocarbonetos não exceda 15 partes por milhão. Será equipado com um dispositivo de alarme que indique quando este teor não possa ser mantido.

Regra 17

Tanques de resíduos de hidrocarbonetos (lamas)

1 — Todos os navios de arqueação bruta igual ou superior a 400 t possuirão um ou mais tanques de capacidade suficiente, tendo em consideração o tipo de

---

(*) Faz-se referência à Recomendação sobre as Especificações Internacionais para os Equipamentos Separadores Hidrocarbonetos/Água e Aparelhos de Medida do Teor em Hidrocarbonetos, adoptada pela Organização na Resolução A.233 (VII).

aparelho propulsor e a duração das suas viagens, para receber os resíduos de hidrocarbonetos (lamas) que não possam ser tratados de outra forma, de acordo com os requisitos do presente anexo, tais como os resultantes da purificação do combustível e dos óleos lubrificantes e das fugas de hidrocarbonetos nas casas de máquinas.

2 — Nos navios novos, estes tanques serão projectados e construídos de forma a facilitar a sua limpeza e a descarga de resíduos para instalações de recepção. Os navios existentes cumprirão estes requisitos na medida do possível e do razoável.

Regra 18

Sistemas de bombagem, de encanamentos e de descarga nos navios petroleiros

1 — Todos os navios petroleiros possuirão um colector de descarga para ligação às instalações de recepção, localizado no convés em ambos os bordos, a fim de descarregar as águas de lastro sujo ou as águas que contenham hidrocarbonetos.

2 — Em todos os navios petroleiros, os encanamentos de descarga de efluentes para o mar, permitida pela regra 9 do presente anexo, terão os terminais localizados no convés ou no costado do navio acima da linha de água nas condições de lastro máximo. Podem ser aceites diferentes disposições de encanamentos para permitir operar nas condições autorizadas no parágrafo 4, alíneas *a*) e *b*), da presente regra.

3 — Nos navios petroleiros novos serão instalados meios que permitam interromper a descarga de efluentes para o mar a partir de um local situado no convés superior ou acima deste de modo que o colector mencionado no parágrafo 1 da presente regra, quando em serviço, e o efluente proveniente dos encanamentos mencionados no parágrafo 2 desta regra possam ser observados visualmente. Não é necessário instalar meios para a interrupção da descarga a partir do local de observação, se existir um sistema de comunicações eficaz e de confiança, tal como um sistema de comunicações por telefone ou rádio entre o local de observação e o local de comando da descarga.

4 — Todas as descargas serão efectuadas acima da linha de água, com excepção das seguintes:

a) As descargas de lastro segregado e de lastro limpo podem ser efectuadas abaixo da linha de água nos portos ou terminais no mar;

b) Os navios existentes que não possam, sem sofrer modificações, descarregar lastro segregado acima da linha de água podem descarregá-lo abaixo dessa linha, desde que uma inspecção ao tanque, realizada imediatamente antes da descarga, não tenha revelado qualquer contaminação por hidrocarbonetos.

Regra 19

União universal de descarga

A fim de permitir a ligação entre os encanamentos das instalações de recepção e o encanamento de descarga dos resíduos provenientes dos porões das casas de máquinas do navio, ambos serão equipados com uma união universal de descarga, em conformidade com o seguinte quadro:

Dimensões padrão das flanges das uniões de descarga

Descrição	Dimensões
Diâmetro exterior	215 mm
Diâmetro interior	De acordo com o diâmetro exterior do encanamento
Diâmetro do círculo dos pernos	183 mm
Rasgos na flange	6 furos de 22 mm de diâmetro feitos a distâncias iguais, no círculo dos pernos como o diâmetro acima indicado, rasgados até à periferia da flange. Os rasgos terão a largura de 22 mm
Espessura da flange	20 mm
Pernos e porcas: quantidade, diâmetro	6 de 20 mm de diâmetro cada um e de comprimento apropriado
A flange é desenhada para ligar encanamentos com diâmetro interior máximo de 125 mm, será de aço ou outro material equivalente e terá superfície plana. Esta flange, bem como uma junta de material resistente aos hidrocarbonetos, será apropriada para uma pressão de serviço de 6 kg/cm^2.	

Regra 20

Livro de Registo de Hidrocarbonetos

1 — Todos os navios petroleiros de arqueação bruta igual ou superior a 150 t e todos os navios de arqueação bruta igual ou superior a 400 t que não sejam navios petroleiros possuirão um Livro de Registo de Hidrocarbonetos, podendo ou não fazer parte do diário náutico, de acordo com o modelo especificado no apêndice III ao presente anexo.

2 — O Livro de Registo de Hidrocarbonetos será preenchido, para cada tanque, sempre que se proceda a qualquer das seguintes operações a bordo do navio:

a) Navios petroleiros:

i) Carga de hidrocarbonetos;

ii) Trasfega interna da carga de hidrocarbonetos durante a viagem;

iii) Abertura ou fecho, antes e depois das operações de carga e descarga, de válvulas ou de dispositivos análogos que interliguem os tanques de carga;

iv) Abertura ou fecho dos meios de comunicação entre os encanamentos de carga e os encanamentos de lastro com água do mar;

v) Abertura ou fecho das válvulas de costado antes, durante e depois das operações de carga e descarga;

vi) Descarga de hidrocarbonetos;
vii) Lastragem dos tanques de carga;
viii) Limpeza dos tanques de carga;
ix) Descarga de lastro, com excepção do proveniente dos tanques de lastro segregado;
x) Descarga das águas dos tanques de resíduos;
xi) Eliminação de resíduos;
xii) Descarga para o mar da água de porões acumulada nas casas de máquinas durante a estadia em porto e a descarga de rotina para o mar dessa mesma água;

b) Navios que não sejam navios petroleiros:

i) Lastragem ou limpeza dos tanques de combustível líquido ou dos espaços de carga destinados a hidrocarbonetos;
ii) Descarga das águas de lastro ou de limpeza dos tanques mencionados em *i*) da presente alínea;
iii) Eliminação de resíduos;
iv) Descarga para o mar da água de porões acumulada nas casas de máquinas durante a estadia em porto e a descarga de rotina para o mar dessa mesma água.

3 — No caso das descargas de hidrocarbonetos ou de misturas de hidrocarbonetos referidos na regra 11 do presente anexo ou no caso de descarga acidental ou de outra descarga excepcional de hidrocarbonetos não prevista nessa regra, as circunstâncias e os motivos da descarga serão registados no Livro de Registo de Hidrocarbonetos.

4 — Cada uma das operações mencionadas no parágrafo 2 da presente regra será imediata e integralmente registada no Livro de Registo de Hidrocarbonetos, para que fiquem preenchidos no Livro todos os registos correspondentes à citada operação. Cada secção do livro será assinada pelo oficial ou oficiais responsáveis pelas referidas operações e visada pelo capitão do navio. Os registos no Livro de Registo de Hidrocarbonetos serão feitos numa língua oficial do Estado de bandeira do navio e, para os navios possuidores de um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973), em francês ou inglês. No caso de conflito ou divergência, farão fé os registos redigidos numa língua oficial do Estado de bandeira do navio.

5 — O Livro de Registo de Hidrocarbonetos será guardado num lugar de fácil acesso, para facilitar a sua inspecção em qualquer momento razoável, e, salvo no caso de navios a reboque sem tripulação, será mantido a bordo. O Livro de Registo de Hidrocarbonetos será conservado durante um período de 3 anos após o último registo.

6 — A autoridade competente do governo de uma Parte na Convenção pode inspeccionar o Livro de Registo de Hidrocarbonetos a bordo de qualquer navio ao qual o presente anexo se aplica, enquanto o navio estiver num dos seus portos ou terminais no mar, bem como tirar cópias de qualquer registo desse livro e exigir a sua autenticação pelo capitão do navio. Qualquer cópia assim autenticada pelo capitão do navio será aceite em caso de processo judicial como prova dos factos constantes no registo. A inspecção do Livro de Registo de Hidrocarbonetos e a obtenção de cópias autenticadas pela autoridade competente, nos termos do presente parágrafo, serão efectuadas da forma mais rápida possível, sem causar atrasos indevidos ao navio.

Regra 21

Requisitos especiais aplicáveis às plataformas de perfuração e a outras plataformas

As plataformas de perfuração, fixas ou flutuantes, quando efectuem a prospecção, exploração e consequente processamento no mar dos recursos minerais do leito do mar e outras plataformas cumprirão os requisitos do presente anexo aplicáveis a navios de arqueação bruta igual ou superior a 400 t que não sejam navios petroleiros, com as seguintes excepções:

a) Serão equipadas, na medida do possível, com as instalações exigidas nas regras 16 e 17 do presente anexo;
b) Possuirão um registo, num modelo aprovado pela administração, de todas as operações envolvendo descargas de hidrocarbonetos ou de misturas de hidrocarbonetos; e
c) Quando em qualquer área especial, tendo em consideração as disposições da regra 11 do presente anexo, será proibida a descarga para o mar de hidrocarbonetos ou de misturas de hidrocarbonetos, a não ser que o teor em hidrocarbonetos das descargas, sem diluição, não exceda 15 partes por milhão.

CAPÍTULO III

Requisitos para minimizar a poluição por hidrocarbonetos causada por navios petroleiros devido a avarias no costado ou no fundo.

Regra 22

Pressupostos da avaria

1 — Para calcular os hipotéticos derrames de hidrocarbonetos dos navios petroleiros, assumem-se as três dimensões de uma avaria segundo um paralelepípedo localizado no costado ou no fundo do navio, como a seguir se indica. No caso de avarias no fundo, são fixadas duas condições, que se aplicam separadamente às zonas indicadas do navio petroleiro.

a) Avaria no costado:

i) Dimensão longitudinal (ℓ_c):	O menor dos valores $\frac{1}{3}L^{\frac{2}{3}}$ ou 14,5 m
ii) Dimensão transversal (t_c): (medida a partir do costado, perpendicularmente ao plano longitudinal do navio, ao nível correspondente à marca do bordo livre de verão)	O menor dos valores $\frac{B}{5}$ ou 11,5 m
iii) Dimensão vertical (v_c):	A partir da linha base para cima, sem limite superior

b) Avaria no fundo:

	Num comprimento de 0,3 L a partir da perpendicular avante	Em qualquer outra parte do navio
i) Dimensão longitudinal (ℓ_s):	$\frac{L}{10}$	O menor dos valores $\frac{L}{10}$ ou 5 m
ii) Dimensão transversal (t_s):	O menor dos valores $\frac{B}{6}$ ou 10 m, mas não inferior a 5 m	5 m
iii) Dimensão vertical (v_s):	O menor dos valores $\frac{B}{15}$ ou 6 m	

2 — Sempre que apareçam neste capítulo os símbolos indicados na presente regra têm o significado nela definido.

Regra 23

Derrames hipotéticos de hidrocarbonetos

1 — Os derrames hipotéticos de hidrocarbonetos no caso de avarias no costado (O_c) ou no fundo (O_s) serão calculados pelas fórmulas seguintes, no que respeita aos compartimentos afectados pelas avarias ocorridas em qualquer ponto do comprimento do navio, para as dimensões definidas na regra 22 do presente anexo:

a) Avaria no costado:

$$O_c = \Sigma W_i + \Sigma K_i C_i \qquad \text{(I)}$$

b) Avaria no fundo:

$$O_s = \frac{1}{3} (\Sigma Z_i W_i + \Sigma Z_i C_i) \qquad \text{(II)}$$

onde:

W_i = volume em metros cúbicos de um tanque lateral supostamente afectado pela avaria especificada na regra 22 do presente anexo; quando se tratar de um tanque de lastro segregado, o valor do W_i pode ser considerado igual a zero;

C_i = volume em metros cúbicos de um tanque central supostamente afectado pela avaria especificada na regra 22 do presente anexo; quando se tratar de um tanque de lastro segregado, o valor de C_i pode ser considerado igual a zero;

$K_i = 1 - \frac{b_i}{t_c}$; quando b_i é igual ou superior a t_c, o valor de K_i será considerado igual a zero;

$Z_i = 1 - \frac{h_i}{v_s}$; quando h_i é igual ou superior a v_s, o valor de Z_i será considerado igual a zero;

b_i = largura, em metros, do tanque lateral considerado, medida a partir do costado, perpendicularmente ao plano longitudinal do navio, ao nível correspondente à marca do bordo livre de verão;

h_i = altura mínima, em metros, do duplo fundo considerado; quando não existe duplo fundo, o valor de h_i será considerado igual a zero.

Sempre que apareçam no presente capítulo os símbolos indicados neste parágrafo, têm o significado definido nesta regra.

2 — Se um espaço vazio ou um tanque de lastro segregado de comprimento inferior à ℓ_c, como definido na regra 22 do presente anexo, estiver situado entre tanques laterais de hidrocarbonetos, o valor O_c, na fórmula (I) pode ser calculado com base no volume W_i, sendo este o volume real de um desses tanques adjacentes ao espaço considerado (se tiverem igual capacidade), ou do menor dos dois (se tiverem capacidade diferente), multiplicado por S_i, como definido a seguir, tomando para todos os outros tanques laterais afectados pela avaria o valor do volume total real:

$$S_i = 1 - \frac{\ell_i}{\ell_c}$$

onde ℓ_i é o comprimento, em metros, do espaço vazio ou do tanque de lastro segregado considerado.

3 — *a*) Só devem ser tomados em consideração os tanques de duplo fundo vazios ou transportando água limpa quando os tanques situados por cima contiverem carga.

b) Quando o duplo fundo não se prolonga por todo o comprimento e por toda a largura do tanque afectado, considera-se o duplo fundo inexistente e o volume dos tanques situados acima da avaria no fundo será incluído na fórmula (II), mesmo que não se considere o tanque danificado, por motivo da existência deste duplo fundo parcial.

c) Os poços de aspiração podem ser desprezados no cálculo do valor h_i, desde que não tenham uma superfície excessiva e se estendam abaixo do tanque a uma distância mínima, em nenhum caso superior a metade da altura do duplo fundo. Se a profundidade do poço de aspiração for superior a metade da altura do duplo fundo, o valor h_i será considerado igual à altura do duplo fundo menos a altura do poço.

Os encanamentos que servem os poços de aspiração, quando instalados dentro do duplo fundo, serão equiparados com válvulas ou outros dispositivos de fecho situados no ponto de ligação com o tanque, para evitar derrames de hidrocarbonetos no caso de avaria nos encanamentos. Estes encanamentos serão instalados o mais afastados possível do fundo. As válvulas serão mantidas permanentemente fechadas quando o navio estiver no mar sempre que o tanque contenha hidrocarbonetos, podendo apenas ser abertas para a trasfega de carga necessária à correcção do caimento do navio.

4 — Quando uma avaria no fundo afectar simultaneamente quatro tanques centrais, o valor O_s pode ser calculado de acordo com a fórmula:

$$O_s = \frac{1}{4} (\Sigma Z_i W_i + \Sigma Z_i C_i) \qquad \text{(III)}$$

5 — A administração pode aceitar, como meio para reduzir o derrame de hidrocarbonetos no caso de avaria no fundo, a existência, em cada tanque de carga,

de um sistema de trasfega de carga com grande poder de aspiração em emergência, capaz de trasfegar de um ou vários tanques danificados para tanques de lastro segregado ou para outros tanques de carga que estejam disponíveis, sempre que se possa assegurar que estes últimos têm suficiente capacidade residual. Este sistema só será aceitável se tiver capacidade para trasfegar, em 2 horas, uma quantidade de hidrocarbonetos igual a metade da capacidade do maior dos tanques danificados e se os tanques de lastro ou de carga tiverem uma capacidade equivalente de recepção. A aceitação de tal sistema limita-se a permitir o cálculo de O_s por meio da fórmula (III). Os encanamentos para essas aspirações serão instalados a uma altura pelo menos igual à dimensão vertical da avaria no fundo v_s. A administração enviará à Organização as informações sobre os sistemas que tenha aceite, para divulgação pelas outras Partes na Convenção.

Regra 24

Limitação das dimensões e disposição dos tanques de carga

1 — Todos os navios petroleiros novos cumprirão as disposições desta regra. Todos os navios petroleiros existentes serão obrigados a cumprir as disposições desta regra num prazo de 2 anos, a contar da entrada em vigor da presente Convenção, sempre que se encontrem incluídos numa das seguintes categorias:

a) Navios petroleiros cuja entrega foi efectuada depois de 1 de Janeiro de 1977; ou

b) Navios petroleiros que reúnam simultaneamente as seguintes condições:

i) Entrega efectuada depois de 1 de Janeiro de 1977; e

ii) Contrato de construção celebrado depois de 1 de Janeiro de 1974 ou, no caso de não ter sido previamente celebrado um contrato de construção, a quilha tenha sido assente ou se o navio petroleiro se encontrava numa fase equivalente de construção depois de 30 de Junho de 1974.

2 — As dimensões e disposição dos tanques de carga dos navios petroleiros serão tais que os derrames hipotéticos O_c ou O_s, calculados de acordo com a regra 23 do presente Anexo, em qualquer ponto do comprimento do navio, não excedam o maior dos seguintes valores: 30 000 m³ ou 400 $\sqrt[3]{DW}$, mas com um máximo de 40 000 m³.

3 — O volume de qualquer tanque lateral de carga de hidrocarbonetos de um navio petroleiro não excederá 75% dos limites previstos no parágrafo 2 desta regra para os derrames hipotéticos de hidrocarbonetos. O volume de qualquer tanque central de carga de hidrocarbonetos não excederá 50 000 m³. Todavia, nos navios petroleiros com tanques de lastro segregado, como definido na regra 13 do presente anexo, o volume permitido para um tanque lateral de carga de hidrocarbonetos situado entre dois tanques de lastro segregado, cada um de comprimento superior a ℓ_c, pode ser aumentado até ao limite máximo previsto para os derrames hipotéticos de hidrocarbonetos, desde que a largura dos tanques laterais seja superior a t_c.

4 — O comprimento de cada tanque de carga não excederá 10 m ou o maior dos seguintes valores:

a) Se não existir qualquer antepara longitudinal: 0,1 L

b) Se existir apenas uma antepara no plano longitudinal central do navio: 0,15 L

c) Se existirem duas ou mais anteparas longitudinais:

i) Para os tanques laterais: 0,2 L

ii) Para os tanques centrais:

1) Se $\frac{b_i}{B}$ for igual ou superior a $\frac{1}{5}$: 0,2L

2) Se $\frac{b_i}{B}$ for inferior a $\frac{1}{5}$:

— Quando não existir qualquer antepara no plano longitudinal central do navio: $(0{,}5\,\frac{b_i}{B} + 0{,}1)\,L$

— Quando existir uma antepara no plano longitudinal central do navio: $(0{,}25\,\frac{b_i}{B} + 0{,}15)\,L$

5 — A fim de não ultrapassar os limites de volume fixados nos parágrafos 2, 3 e 4 da presente regra, e qualquer que seja o tipo aprovado do sistema de trasfega de carga instalado, se tal sistema puser em comunicação dois ou mais tanques de carga, os tanques serão isolados entre si por meio de válvulas ou outros dispositivos de fecho semelhantes. Estas válvulas ou dispositivos manter-se-ão fechados quando o navio petroleiro estiver no mar.

6 — Os encanamentos que atravessam os tanques de carga e que se encontram situados a uma distância do costado do navio inferior a t_c ou a uma distância do fundo inferior a v_c serão equipados, à entrada dos tanques de carga, com válvulas ou dispositivos de fecho semelhantes. Estas válvulas serão mantidas permanentemente fechadas quando o navio estiver no mar sempre que os tanques contenham hidrocarbonetos, podendo apenas ser abertas para a trasfega de carga necessária à correcção do caimento do navio.

Regra 25

Compartimentação e estabilidade

1 — Todos os navios petroleiros novos cumprirão os critérios de compartimentação e de estabilidade em avaria especificados no parágrafo 3 da presente regra após terem sofrido uma pressuposta avaria no costado ou no fundo, conforme definida no parágrafo 2 desta regra, qualquer que seja o calado nas condições reais de carregamento parcial ou total compatíveis com o caimento e a resistência do navio e com os pesos específicos da carga. Tal avaria será aplicada a todos os pontos possíveis ao longo do comprimento do navio, do seguinte modo:

a) Nos navios petroleiros de comprimento superior a 225 m, em qualquer ponto do comprimento do navio;

b) Nos navios petroleiros de comprimento superior a 150 m mas não excedendo 225 m, em qualquer ponto do seu comprimento, desde que a avaria não afecte uma das anteparas limites, de vante ou de ré, da casa das máquinas situada à popa. A casa das máquinas será considerada como um só compartimento alagável;

c) Nos navios petroleiros com comprimento que não exceda 150 m, em qualquer ponto do seu comprimento entre anteparas transversais adjacentes, com excepção da casa das máquinas. Nos navios petroleiros de comprimento igual ou superior a 100 m, se não for possível cumprir todos os requisitos do parágrafo 3 da presente regra sem prejudicar materialmente as características operacionais do navio, as administrações podem dispensar a aplicação integral destes requisitos.

Quando o navio petroleiro não transportar hidrocarbonetos nos seus tanques de carga, excluindo os resíduos de hidrocarbonetos, não serão consideradas as inerentes condições de lastro.

2 — No que respeita à extensão e natureza da avaria pressuposta, aplicar-se-ão as seguintes disposições:

a) As dimensões da avaria no costado ou no fundo serão as especificadas na regra 22 do presente anexo, com excepção da dimensão longitudinal da avaria no fundo, dentro de $0{,}3L$ a partir da perpendicular a vante, que será igual à dimensão longitudinal da avaria no costado como especificado na regra 22, parágrafo 1, alínea *a*), *i*), deste anexo. Se uma avaria de menores dimensões ocasionar uma situação mais grave, será assumida esta avaria;

b) Quando uma avaria envolvendo anteparas transversais for pressuposta de acordo com o especificado no parágrafo 1, alíneas *a*) e *b*), da presente regra, a distância que separa as anteparas transversais estanques será pelo menos igual à dimensão longitudinal da pressuposta avaria, especificada na alínea *a*) deste parágrafo, para que estas anteparas possam ser consideradas eficazes. Quando esta distância for menor, pressupor-se-á que uma ou mais destas anteparas situadas na zona danificada são inexistentes para efeito da determinação dos compartimentos alagados;

c) Quando uma avaria situada entre anteparas transversais estanques adjacentes for pressuposta de acordo com o especificado no parágrafo 1, alínea *c*), da presente regra, pressupor-se-á que nenhuma antepara transversal principal, nem qualquer antepara transversal limitando tanques laterais ou tanques de duplo fundo está danificada, salvo se:

i) A distância que separa as anteparas adjacentes for inferior à dimensão longitudinal da pressuposta avaria especificada na alínea *a*) do presente parágrafo; ou

ii) Uma antepara transversal apresentar um degrau ou recesso de comprimento superior a 3,05 m localizado na zona de penetração da avaria pressuposta. O degrau formado pela antepara e pelo tecto do pique-tanque de ré não será considerado como um degrau para os fins da presente regra;

d) Se os encanamentos, condutas ou túneis estiverem situados dentro da zona da avaria pressuposta, serão adoptadas medidas para evitar o alagamento progressivo através destes encanamentos, condutas ou túneis de outros compartimentos que não os pressupostamente alagáveis para cada caso de avaria.

3 — Considera-se que os navios petroleiros cumprem os critérios de estabilidade em avaria se satisfizerem os seguintes requisitos:

a) A linha de água final, tendo em consideração a sobreimersão, o adornamento e o caimento, situar-se-á abaixo da aresta inferior de qualquer abertura que possa permitir um alagamento progressivo. Tais aberturas incluirão os respiradores e as aberturas que sejam fechadas por meio de portas ou escotilhas estanques, podendo ser excluídas as aberturas que sejam fechadas por portas de visita e escotilhas à face estanques, pequenas escotilhas estanques dos tanques de carga que mantenham a integridade do convés, portas estanques de corrediça com comando à distância e vigias fixas;

b) Na fase final do alagamento, o ângulo de adornamento devido a um alagamento assimétrico não excederá 25°, podendo, no entanto, este ângulo atingir 30°, se não ocorrer a imersão do convés à borda;

c) A estabilidade na fase final do alagamento será verificada e pode ser considerada como satisfatória se a curva do braço do momento endireitante tiver a amplitude mínima de 20° para além da posição de equilíbrio e simultaneamente o braço do momento endireitante residual for de pelo menos 0,1 m. A administração terá em consideração o risco potencial que pode constituir a imersão temporária das aberturas protegidas ou não protegidas, dentro dos limites da estabilidade residual;

d) A administração assegurar-se-á de que a estabilidade do navio é suficiente nas fases intermédias do alagamento.

4 — Os requisitos do parágrafo 1 da presente regra serão confirmados por cálculos que tenham em consideração as características do projecto do navio, a disposição, a configuração e o conteúdo dos compartimentos danificados, assim como a distribuição, os pesos específicos e o efeito dos espelhos líquidos. Estes cálculos basear-se-ão no seguinte:

a) Serão tidos em consideração os tanques vazios ou parcialmente cheios, o peso específico das cargas transportadas, assim como qualquer derrame de líquidos proveniente de compartimentos danificados;

b) Adoptam-se as seguintes permeabilidades:

Espaços	Permeabilidade
Destinados a paióis	0,60
Ocupados por alojamentos	0,95

Espaços	Permeabilidade
Ocupados por máquinas	0,85
Vazios	0,95
Destinados a líquidos consumíveis	0 ou 0,95 (*)
Destinados a outros líquidos	0 a 0,95 (**)

(*) Aplicar-se-á o factor que conduza aos requisitos mais rigorosos.
(**) A permeabilidade dos compartimentos parcialmente cheios será função da quantidade de líquido transportado.

c) A flutuabilidade de qualquer superstrutura situada imediatamente por cima da avaria no costado não será considerada. As zonas não alagadas das superstruturas situadas fora dos limites da avaria podem, contudo, ser tomadas em consideração desde que estejam separadas do espaço danificado por anteparas estanques e cumpram os requisitos do parágrafo 3, alínea *a*), da presente regra relativamente aos espaços intactos. As portas estanques de charneira podem ser aceites nas anteparas estanques das superstruturas;

d) O efeito dos espelhos líquidos será calculado separadamente para cada compartimento com um ângulo de adornamento de 5°. A administração pode exigir, ou permitir, que o ângulo de adornamento adoptado para o cálculo das correcções dos espelhos líquidos seja superior a 5° no caso dos tanques parcialmente cheios;

e) No cálculo do efeito dos espelhos líquidos dos líquidos consumíveis pressupor-se-á que, para cada tipo de líquido, pelo menos dois tanques transversais situados lado a lado ou um tanque central têm uma superfície livre e ter-se-á em consideração o tanque ou o conjunto de tanques onde o efeito dos espelhos líquidos é mais importante.

5 — Aos capitães dos navios petroleiros e aos responsáveis dos navios petroleiros sem propulsão própria aos quais se aplique o presente anexo serão fornecidas as seguintes informações, devidamente aprovadas:

a) Informação relativa ao carregamento e à distribuição da carga necessária para assegurar o cumprimento das disposições da presente regra; e

b) Dados sobre a capacidade do navio para cumprir os critérios de estabilidade em avaria estabelecidos na presente regra, incluindo a incidência das dispensas que possam ter sido concedidas nos termos do parágrafo 1, alínea *c*), desta regra.

APÊNDICE I

Lista de hidrocarbonetos (*)

Soluções asfálticas

Óleos base
Impermeabilizantes betuminosos
Resíduos de primeira destilação

Óleos

Óleos rectificados
Petróleo bruto
Misturas contendo petróleo bruto
Diesel
Fuelóleo n.º 4
Fuelóleo n.º 5
Fuelóleo n.º 6
Fuelóleo residual
Borras de *fuel*
Óleos para transformadores
Óleos aromáticos (excluem-se óleos vegetais)
Óleos de lubrificação e óleos base
Óleos minerais
Óleos para motores
Óleos de penetração
Óleos para máquinas têxteis
Óleos para turbinas

Destilados

Produtos de destilação directa
Óleos queimados

Gasóleo

Gasóleo de *cracking*

Bases para gasolinas

Alquilatos
Reformados
Combustível de polimerização

Gasolinas:

Natural de condensação
Para automóveis
Para aviões
Directa da coluna
Fuelóleo n.º 1 (Petróleo de queima)
Fuelóleo n.º 1-D
Fuelóleo n.º 2
Fuelóleo n.º 2-D

Combustíveis para motores a jacto:

JP-1 (Petróleo de queima)
JP-3
JP-4
JP-5 (Petróleo pesado)
Combustível para turbinas
Petróleo
White spirits

Naftas:

Solvente
Fracções leves do petróleo
Fracção intermédia

(*) A lista de hidrocarbonetos não deve ser considerada exaustiva.

APÊNDICE II

Modelo de certificado

Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos (1973)

Emitido de acordo com as disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973, sob a autoridade do Governo de .....
(designação oficial completa do país)
por .....
(nome completo da pessoa competente ou do organismo autorizado nos termos das disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973)

Nome do navio	Número ou letras do distintivo do navio	Porto de registo	Arqueação bruta

Tipo de navio:

Navio petroleiro, incluindo navios de carga combinada (*)
Navio para transporte de asfaltos (*)
Outros navios que não sejam petroleiros com tanques de carga abrangidos pela regra 2, parágrafo 2, do anexo I à Convenção (*)
Navio que não seja qualquer dos acima mencionados (*)
Navio novo/navio existente (*)
Data do contrato de construção ou de grande modificação ...
Data de assentamento da quilha, ou em que o navio se encontrava numa fase equivalente de construção, ou em que foi iniciada uma grande modificação ...
Data de entrega do navio ou do termo de uma grande modificação ...

PARTE A

Todos os navios

O navio está equipado com:

Para navios de arqueação bruta igual ou superior a 400 t:

a) Equipamento separador hidrocarbonetos/água (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 100 partes por milhão); ou
b) Um equipamento de filtragem de hidrocarbonetos (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 100 partes por milhão).

Para navios de arqueação bruta igual ou superior a 10 000 t:

c) Um equipamento monitor de descarga de hidrocarbonetos (*) [adicional a *a*) ou a *b*) acima]; ou
d) Equipamento separador hidrocarbonetos/água e um equipamento de filtragem de hidrocarbonetos (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 15 partes por milhão), em vez de *a*) ou *b*) acima.

Pormenores dos requisitos cuja dispensa é concedida nos termos da regra 2, parágrafos 2 e 4, alínea *a*), do anexo I à Convenção:
...
Observações:
...

(*) Riscar como apropriado.

PARTE B

Navios petroleiros (1) (2)

Porte bruto ... toneladas métricas. Comprimento do navio ... m.
Certifica-se que este navio:

a) Está sujeito aos requisitos de construção da regra 24 do anexo I à Convenção e cumpre esses requisitos (*);
b) Não está sujeito aos requisitos de construção da regra 24 do anexo I à Convenção (*);
c) Não está sujeito aos requisitos de construção da regra 24 do anexo I à Convenção, mas cumpre esses requisitos (*).

A capacidade dos tanques de lastro segregado é de ... m³ e cumpre os requisitos da regra 13 do anexo I à Convenção.
A distribuição do lastro segregado é a seguinte:

Tanque	Quantidade	Tanque	Quantidade

Certifica-se:

Que o navio foi vistoriado em conformidade com a regra 4 do anexo I à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, no que respeita à prevenção da poluição de hidrocarbonetos; e

Que nessa vistoria se verificou serem satisfatórias, sob todos os aspectos, as condições da estrutura, equipamento, instalações, disposições e materiais do navio e que o navio cumpre os requisitos aplicáveis do anexo I à Convenção.

Este certificado é válido até ..., sujeito a vistoria(s) intermédia(s) a intervalos de ...

Emitido em ... (local da emissão do certificado).

.../.../ 19...

...

(Assinatura do funcionário devidamente autorizado que emite o certificado)

(Selo branco ou carimbo da autoridade que emite o certificado, conforme apropriado)

(*) Riscar como apropriado.
(1) Esta parte deve ser preenchida para os navios petroleiros, incluindo navios de carga combinada e navios de transporte de asfaltos, e os registos que sejam aplicáveis devem ser preenchidos para navios que não sejam navios petroleiros construídos e utilizados para transportar hidrocarbonetos a granel com capacidade total igual ou superior a 200 m³.
(2) Os certificados emitidos para navios que não sejam os mencionados na nota (1) não necessitam de conter esta página.

Averbamento para navios existentes (4):

Certifica-se que este navio foi equipado de modo a cumprir os requisitos da Convenção Internacional para a Prevenção da Poluição por Navios, 1973, aplicáveis a navios existentes 3 anos após a entrada em vigor da Convenção.

Assinado ...

(Assinatura do funcionário devidamente autorizado)

Local do averbamento ...
Data do averbamento ...

(Selo branco ou carimbo da autoridade, conforme apropriado)

Vistoria intermédia

Certifica-se que na vistoria intermédia exigida pela regra 4, parágrafo 1, alínea *c*), do anexo I à Convenção se verificou que este navio e o estado em que se encontra cumprem as disposições pertinentes da Convenção.

Assinado ...

(Assinatura do funcionário devidamente autorizado)

Local ...
Data ...

(Selo branco ou carimbo da autoridade, conforme apropriado)

Assinado ...

(Assinatura do funcionário devidamente autorizado)

Local ...
Data ...

(Selo branco ou carimbo da autoridade, conforme apropriado)

De acordo com as disposições da regra 8, parágrafos 2 e 4, do anexo I à Convenção, a validade deste certificado é prorrogada até ...

Assinado ...

(Assinatura do funcionário devidamente autorizado)

Local ...
Data ...

(Selo branco ou carimbo da autoridade, conforme apropriado)

(4) Este averbamento só é necessário no primeiro certificado emitido para um navio.

APÊNDICE III

Modelo do Livro de Registo de Hidrocarbonetos

Livro de Registo de Hidrocarbonetos

I — Para navios petroleiros (1)

Nome do navio ...
Capacidade total de carga do navio em metros cúbicos ...
Viagem de ... (data) ... para ... (data) ...

a) Carga de hidrocarbonetos

1. Data e local do carregamento.			
2. Tipo de hidrocarbonetos carregados.			
3. Identificação do(s) tanque(s) carregado(s).			
4. Fecho das válvulas apropriadas dos tanques de carga e das válvulas interruptoras apropriadas das linhas de carga ao ser concluída a operação de carga (2).			

(1) Esta parte deve ser preenchida para navios petroleiros, incluindo navios de carga combinada e navios de transporte de asfalto, e os registos que sejam aplicáveis serão preenchidos para navios que não sejam petroleiros, construídos e utilizados para transportar hidrocarbonetos a granel, com capacidade total igual ou superior a 200 m³. Não é necessário existir esta parte no Livro de Registo de Hidrocarbonetos emitido para um navio que não seja dos acima mencionados.

(2) As válvulas e os dispositivos semelhantes apropriados são os referidos nas regras 20, parágrafo 2, alínea *a*), *iii*), 23 e 24 do anexo I à Convenção.

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, válvulas de descarga no costado, ligações e interligações dos tanques de carga e encanamentos foram trancadas ao ser concluída a operação de carga de hidrocarbonetos.

Data do registo ...

O Oficial Encarregado ...

O Capitão ...

b) Trasfega interna da carga de hidrocarbonetos durante a viagem

5. Data da trasfega interna.					
6. Identificação do(s) tanque(s)	*i*)	de			
	ii)	para			
7. O(s) tanque(s) mencionado(s) em 6 *i*) ficou (ficaram) vazio(s)?					

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, válvulas de descarga no costado, ligações e interligações dos tanques de carga e encanamentos foram trancadas ao ser concluída a trasfega interna da carga de hidrocarbonetos.

Data do registo ...

O Oficial Encarregado ...

O Capitão ...

c) Descarga de hidrocarbonetos

8. Data e local da descarga.			
9. Identificação do(s) tanque(s) descarregado(s).			
10. O(s) tanque(s) ficou (ficaram) vazios(s)?			
11. Abertura das válvulas apropriadas dos tanques de carga e das válvulas interruptoras apropriadas das linhas de carga antes da descarga (2).			
12. Fecho das válvulas apropriadas dos tanques de carga e das válvulas interruptoras apropriadas das linhas de carga ao ser concluída a operação de descarga (2).			

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, válvulas de descarga no costado, ligações e interligações dos tanques de carga e encanamentos foram trancadas ao ser concluída a operação de descarga de hidrocarbonetos.

Data do registo ...

O Oficial Encarregado ...

O Capitão ...

(2) As válvulas e os dispositivos semelhantes apropriados são os referidos nas regras 20, parágrafo 2, alínea *a*), *iii*), 23 e 24 do anexo I à Convenção.

d) Lastragem dos tanques de carga

13. Identificação do(s) tanque(s) lastrado(s).			
14. Data e posição do navio no início da lastragem.			
15. Se forem utilizadas as válvulas de ligação entre as linhas de carga e os encanamentos de lastro segregado, registar a hora, data e posição do navio em que as válvulas foram: *a*) Abertas; e *b*) Fechadas.			

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, válvulas de descarga no costado, ligações e interligações dos tanques de carga e encanamentos foram trancadas ao ser concluída a operação de lastragem.

Data do registo ...

O Oficial Encarregado ...

O Capitão ...

e) Limpeza dos tanques de carga

16. Identificação do(s) tanque(s) que foi (foram) limpo(s).			
17. Data e duração da limpeza.			

18. Métodos de limpeza (3).			

Data do registo ...

O Oficial Encarregado ...

O Capitão ...

(3) Lavagem manual por jacto de mangueira, lavagem mecânica e/ou limpeza química. Quando se efectuar a limpeza química, especificar o produto químico utilizado e a quantidade.

f) Descarga de lastro sujo

19. Identificação do(s) tanque(s).			
20. Data e posição do navio no início da descarga para o mar.			
21. Data e posição do navio no termo da descarga para o mar.			
22. Velocidade(s) do navio durante a descarga.			
23. Quantidade descarregada para o mar.			
24. Quantidade de água poluída trasfegada para tanque(s) de resíduos. [Identificar o(s) tanque(s) de resíduos.]			
25. Data e porto em que se efectuou a descarga para instalações de recepção em terra (se aplicável).			
26. Foi a descarga parcialmente efectuada durante um período de escuridão? No caso afirmativo, durante quanto tempo?			
27. Foi mantido um controle regular do efluente da superfície da água, na zona da descarga?			
28. Foi observada a existência de hidrocarbonetos na superfície da água, na zona da descarga?			

Data do registo...　　O Oficial Encarregado, ...

O Capitão, ...

g) Descarga da água dos tanques de resíduos

29. Identificação do(s) tanque(s) de resíduos.			
30. Tempo de decantação desde a última entrada de resíduos, ou			
31. Tempo de decantação desde a última descarga.			
32. Data, hora e posição do navio no início da descarga.			
33. Sondagem do conteúdo total no início da descarga.			
34. Sondagem da superfície de separação hidrocarbonetos/água no início da descarga.			
35. Quantidade global descarregada e débito da descarga.			
36. Última quantidade descarregada e débito da descarga.			
37. Data, hora e posição do navio no termo da descarga.			
38. Velocidade(s) do navio durante a descarga.			
39. Sondagem da superfície de separação hidrocarbonetos/água no termo da descarga.			
40. Foi a descarga parcialmente efectuada durante um período de escuridão? No caso afirmativo, durante quanto tempo?			
41. Foi mantido um controle regular do efluente e da superfície da água na zona da descarga?			
42. Foi observada a existência de hidrocarbonetos na superfície da água, na zona da descarga?			

Data do registo...　　O Oficial Encarregado...

O Capitão...

h) Eliminação de resíduos

43. Identificação do(s) tanque(s).			
44. Quantidade eliminada de cada tanque.			
45. Método de eliminação dos resíduos: *a*) Instalações de recepção; *b*) Mistura com a carga; *c*) Trasfega para outro(s) tanque(s) [identificar o(s) tanque(s)]; *d*) Outro método (especificar qual).			

46. Data e porto da eliminação dos resíduos.			

Data do registo... O Oficial Encarregado...
O Capitão...

i) Descarga de lastro limpo contido nos tanques de carga

47. Data e posição do navio no início da descarga de lastro limpo.			
48. Identificação do(s) tanque(s) descarregado(s).			
49. No termo da descarga, o(s) tanque(s) ficou (ficaram) vazio(s)?			
50. Posição do navio no termo da descarga se for diferente de 47.			
51. Foi a descarga parcialmente efectuada durante um período de escuridão? No caso afirmativo, durante quanto tempo?			
52. Foi mantido um controle regular do efluente e da superfície da água na zona da descarga?			
53. Foi observada a existência de hidrocarbonetos na superfície da água, na zona da descarga?			

Data do registo... O Oficial Encarregado...
O Capitão...

j) Descarga no costado das águas dos porões contendo hidrocarbonetos acumulados nas casas das máquinas durante a estadia no porto (4)

54. Porto.			
55. Duração da estadia.			
56. Quantidade eliminada.			
57. Data e local da eliminação.			
58. Método utilizado (especificar se foi utilizado um separador).			

Data do registo... O Oficial Encarregado...
O Capitão...

(4) Quando a bomba for de arranque automático e descarregar sempre através de um separador, será suficiente registar diariamente «descarga automática dos porões através de um separador».

k) Descargas acidentais ou outras descargas excepcionais de hidrocarbonetos

59. Data e hora da ocorrência.			
60. Local ou posição do navio no momento da ocorrência.			
61. Quantidade aproximada e tipo de hidrocarboneto.			
62. Circunstâncias da descarga ou derrame, seus motivos e comentários gerais.			

Data do registo... O Oficial Encarregado...
O Capitão...

l) Durante a descarga no costado, o equipamento monitor da descarga de hidrocarbonetos esteve alguma vez inoperativo? Em caso afirmativo, registar a data e hora da avaria, a data e hora em que foi reposto em funcionamento, confirmar se o facto foi devido a falha do equipamento e especificar a causa, se conhecida

...

Data do registo... O Oficial Encarregado...
O Capitão...

m) Procedimentos operacionais adicionais e observações gerais

...

Para os navios petroleiros de arqueação bruta inferior a 150 t, operando de acordo com a regra 15, parágrafo 4, do anexo I à Convenção, a administração deve elaborar um Livro de Registo de Hidrocarbonetos apropriado.

Para os navios de transporte de asfalto, a administração pode elaborar um Livro de Registo de Hidrocarbonetos próprio, utilizando para tal as secções *a*), *b*), *c*), *e*), *h*), *j*), *k*) e *m*) deste modelo de Livro de Registo de Hidrocarbonetos.

II — Para navios que não sejam navios petroleiros

Nome do navio...
Operações desde... (data) até... (data).

a) Lastragem ou limpeza dos tanques de combustível líquido

1. Identificação do(s) tanque(s) lastrado(s).			
2. Indicar se foram limpos desde a última vez que contiveram combustível e, em caso negativo, qual o tipo de combustível que transportaram.			
3. Data e posição do navio no início da limpeza.			
4. Data e posição do navio no início da lastragem.			

Data do registo... O Oficial Encarregado...
O Capitão...

b) Descarga de lastro sujo ou de água de limpeza dos tanques referidos na secção *a*)

5. Identificação do(s) tanque(s).			
6. Data e posição do navio no início da descarga.			
7. Data e posição do navio no termo da descarga.			
8. Velocidade(s) do navio durante a descarga.			
9. Método de descarga (especificar se a descarga foi feita para instalações de recepção ou através de equipamento instalado a bordo).			
10. Quantidade descarregada.			

Data do registo... O Oficial Encarregado...
O Capitão...

c) Eliminação de resíduos

11. Quantidade de resíduos retidos a bordo.			
12. Métodos de eliminação dos resíduos: *a*) Instalações de recepção; *b*) Mistura com o combustível embarcado a seguir; *c*) Trasfega para outro(s) tranque(s); *d*) Outro método (especificar qual).			
13. Data e porto da eliminação de resíduos.			

Data do registo... O Oficial Encarregado...
O Capitão...

d) Descarga no costado das águas dos porões contendo hidrocarbonetos acumulados nas casas das máquinas durante a estadia no porto (5)

14. Porto.			
15. Duração da estadia.			
16. Quantidade descarregada.			
17. Data e local da descarga.			

(5) Quando a bomba for de arranque automático e descarregar sempre através de um separador, será suficiente registar diariamente «descarga automática dos porões através de um separador».

18. Métodos de descarga: *a*) Através de equipamento separador hidrocarbonetos/água; *b*) Através de um equipamento de filtragem de hidrocarbonetos; *c*) Através de um equipamento separador hidrocarbonetos/água e de um equipamento de filtragem de hidrocarbonetos; *d*) Para instalações de recepção.			

Data do registo... O Oficial Encarregado...
O Capitão...

e) Descargas acidentais ou outras descargas excepcionais de hidrocarbonetos

19. Data e hora da ocorrência.			
20. Local ou posição do navio no momento da ocorrência.			
21. Quantidade aproximada e tipo de hidrocarboneto.			
22. Circunstâncias da descarga ou derrame, seus motivos e comentários gerais.			

Data do registo... O Oficial Encarregado...
O Capitão...

f) Durante a descarga no costado o equipamento monitor da descarga de hidrocarbonetos esteve alguma vez inoperativo? Em caso afirmativo, registar a data e hora da avaria, a data e hora em que foi reposto em funcionamento, confirmar se o facto foi devido a falha do equipamento e especificar a causa, se conhecida.

Data do registo... O Oficial Encarregado...
O Capitão...

g) Navios novos de arqueação bruta igual ou superior a 4000 t: foi transportado lastro sujo nos tanques de combustível líquido?

Sim/Não...

Em caso afirmativo, especificar quais os tanques assim lastrados e o método utilizado na descarga do lastro sujo ...

Data do registo... O Oficial Encarregado...
O Capitão...

h) Procedimentos operacionais adicionais e observações gerais ...

Data do registo... O Oficial Encarregado...
O Capitão...

ANEXO II

Regras para o controle da poluição por substâncias líquidas nocivas transportadas a granel

Regra 1

Definições

Para os fins do presente anexo:

1 — «Navio-tanque para transporte de produtos químicos» significa um navio construído ou adaptado fundamentalmente para transporte de substâncias líquidas nocivas a granel, incluindo qualquer navio petroleiro, tal como definido no anexo I à presente Convenção, quando transporte um carregamento total ou parcial de substâncias líquidas nocivas a granel.

2 — «Lastro limpo» significa o lastro de um tanque que, desde a última vez que transportou uma carga contendo uma substância da categoria A, B, C ou D, tenha sido meticulosamente limpo, os resíduos resultantes da limpeza descarregados e o tanque esgotado em conformidade com os requisitos apropriados do presente anexo.

3 — «Lastro segregado» significa a água de lastro contida num tanque permanentemente destinado ao transporte de lastro ou ao transporte de lastro ou cargas que não sejam hidrocarbonetos ou substâncias líquidas nocivas, de acordo com as diversas definições dadas nos anexos à presente Convenção, e que está completamente separado dos sistemas de carga e de combustível líquido.

4 — «Terra mais próxima» é a definida na regra 1, parágrafo 9, do anexo I à presente Convenção.

5 — «Substâncias líquidas» são aquelas cuja pressão de vapor não excede 2,8 kg/cm^2 à temperatura de 37,8° C.

6 — «Substância líquida nociva» significa qualquer substância indicada no apêndice II ao presente anexo ou provisoriamente classificada, nos termos das disposições da regra 3, parágrafo 4, como pertencendo à categoria A, B, C ou D.

7 — «Área especial» significa uma área do mar em que, por razões técnicas reconhecidas relativamente às suas condições oceanográficas e ecológicas e às características particulares do seu tráfego, é requerida a adopção de métodos especiais obrigatórios para a prevenção da poluição do mar por substâncias líquidas nocivas.

São áreas especiais:

a) A área do mar Báltico; e
b) A área do mar Negro.

8 — «Área do mar Báltico» é a área definida na regra 10, parágrafo 1, alínea *b*), do anexo I à presente Convenção.

9 — «Área do mar Negro» é a área definida na regra 10, parágrafo 1, alínea *c*), do anexo I à presente Convenção.

Regra 2

Âmbito de aplicação

1 — Salvo disposição expressa em contrário, as disposições do presente anexo aplicar-se-ão a todos os navios que transportem substâncias líquidas nocivas a granel.

2 — Quando um navio-tanque para transporte de produtos químicos transportar, num dos seus espaços de carga, substâncias sujeitas às disposições do anexo I à presente Convenção, ser-lhe-ão igualmente aplicáveis os requisitos pertinentes do anexo I.

3 — A regra 13 do presente anexo aplicar-se-á apenas aos navios que transportem substâncias classificadas, para efeito de controle de descargas, na categoria A, B ou C.

Regra 3

Classificação em categorias e lista das substâncias líquidas nocivas

1 — Para os fins das regras do presente anexo, com excepção da regra 13, as substâncias líquidas nocivas dividem-se nas 4 categorias seguintes:

a) Categoria A — Substâncias líquidas nocivas provenientes das operações de limpeza ou deslastragem de tanques que, se descarregadas para o mar, representam um risco grave para os recursos marinhos ou para a saúde humana ou prejudicam gravemente os locais de recreio ou outras utilizações legítimas do mar e justificam, portanto, a aplicação de medidas rigorosas contra a poluição.

b) Categoria B — Substâncias líquidas nocivas provenientes das operações de limpeza ou deslastragem de tanques que, se descarregadas para o mar, representam um risco para os recursos marinhos ou para a saúde humana ou prejudicam os locais de recreio ou outras utilizações legítimas do mar e justificam, portanto, a aplicação de medidas especiais contra a poluição.

c) Categoria C — Substâncias líquidas nocivas provenientes das operações de limpeza ou deslastragem de tanques que, se descarregadas para o mar, representam fraco risco para os recursos marinhos ou para a saúde humana ou prejudicam levemente os locais de recreio ou outras utilizações legítimas do mar e requerem, portanto, condições especiais de operação.

d) Categoria D — Substâncias líquidas nocivas provenientes das operações de limpeza ou deslastragem de tanques que, se descarregadas para o mar, representam um reconhecido risco para os recursos marinhos ou para a saúde humana ou prejudicam minimamente os locais de recreio ou outras utilizações legítimas do mar e requerem, portanto, alguma atenção nas suas condições de operação.

2 — As directivas a seguir para classificar as substâncias líquidas nocivas em categorias constam do apêndice I ao presente anexo.

3 — A lista das substâncias líquidas nocivas transportadas a granel e actualmente classificadas em categorias, que estão sujeitas às disposições do presente anexo, constitui o apêndice II a este anexo.

4 — Sempre que for proposto o transporte de uma substância líquida a granel que não tenha sido classificada numa das categorias, nos termos do parágrafo 1 da presente regra, nem avaliada de acordo com a regra 4, parágrafo 1, deste anexo, os governos das

Partes na Convenção interessados na operação proposta estabelecerão e acordarão numa classificação provisória para essa operação com base nas directivas referidas no parágrafo 2 da presente regra. Enquanto os governos interessados não chegarem a completo acordo, a substância será transportada nas condições mais rigorosas que tenham sido propostas. Logo que possível, mas nunca num prazo superior a 90 dias após a operação de transporte, a administração interessada notificará a Organização e fornecer-lhe-á os dados pormenorizados sobre a substância e a sua classificação provisória, para rápida divulgação a todas as Partes, para informação e apreciação. Os governos das Partes disporão de um período de 90 dias para comunicar os seus comentários à Organização com vista à classificação da substância.

Regra 4

Outras substâncias líquidas

1 — As substâncias enumeradas no apêndice III ao presente anexo foram avaliadas, concluindo-se não serem de incluir nas categorias A, B, C e D, tal como definidas na regra 3, parágrafo 1, deste anexo, porque actualmente se considera que a sua descarga para o mar, proveniente de operações de limpeza ou deslastragem de tanques, não representa qualquer risco para a saúde humana, para os recursos marinhos, para os locais de recreio ou outras utilizações legítimas do mar.

2 — A descarga das águas dos porões, águas de lastro ou de outros resíduos ou misturas que contenham unicamente substâncias mencionadas no apêndice III ao presente anexo não estará sujeita aos requisitos deste anexo.

3 — A descarga para o mar de lastro limpo ou de lastro segregado não estará sujeita aos requisitos do presente anexo.

Regra 5

Descarga de substâncias líquidas nocivas

Substâncias das categorias A, B e C fora das áreas especiais e da categoria D em todas as áreas:

Tendo em consideração as disposições da regra 6 do presente anexo,

1 — Será proibida a descarga para o mar de substâncias da categoria A, tal como definidas na regra 3, parágrafo 1, alínea *a*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, de águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias. Se os tanques que contêm tais substâncias ou misturas forem lavados, os resíduos resultantes dessa operação serão descarregados para uma instalação de recepção até que a concentração da substância no efluente recebido nessa instalação seja igual ou inferior à concentração residual prescrita para essa substância na coluna III do apêndice II ao presente anexo e até que o tanque esteja vazio. Os resíduos que ficarem no tanque, desde que tenham sido posteriormente diluídos pela adição de um volume de água não inferior a 5 % do volume total do tanque, podem ser descarregados para o mar quando forem igualmente satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;
b) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e
c) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

2 — Será proibida a descarga para o mar de substâncias da categoria B, tal como definidas na regra 3, parágrafo 1, alínea *b*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias, excepto quando forem satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;
b) Os métodos e disposições para a descarga são aprovados pela administração. Tais métodos e disposições basear-se-ão em normas elaboradas pela Organização e garantirão que a concentração e o débito de descarga do efluente sejam tais que a concentração da substância na esteira do navio não exceda uma parte por milhão;
c) A quantidade máxima de carga descarregada de cada tanque e dos respectivos encanamentos não excede a quantidade máxima aprovada, em conformidade com os métodos referidos na alínea *b*) do presente parágrafo, a qual não excederá em caso algum a maior das quantidades seguintes: 1 m^3 ou 1/3000 da capacidade do tanque em metros cúbicos;
d) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e
e) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

3 — Será proibida a descarga para o mar de substâncias da categoria C, tal como definidas na regra 3, parágrafo 1, alínea *c*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias, excepto quando forem satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;
b) Os métodos e disposições para a descarga são aprovados pela administração. Tais métodos e disposições basear-se-ão em normas elaboradas pela Organização e garantirão que a

concentração e o débito de descarga do efluente sejam tais que a concentração da substância na esteira do navio não exceda 10 partes por milhão;

c) A quantidade máxima de carga descarregada de cada tanque e dos respectivos encanamentos não excede a quantidade máxima aprovada, em conformidade com os métodos referidos na alínea *b*) do presente parágrafo, a qual não excederá em caso algum a maior das quantidades seguintes: 3 m^3 ou 1/1000 da capacidade do tanque em metros cúbicos;

d) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e

e) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

4 — Será proibida a descarga para o mar de substâncias da categoria D, tal como definidas na regra 3, parágrafo 1, alínea *d*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias, excepto quando forem satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;

b) A concentração de tais misturas não ultrapassa uma parte da substância para 10 partes de água; e

c) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima.

5 — Podem ser utilizados processos de ventilação aprovados pela administração para remover resíduos de carga de um tanque. Estes processos basear-se-ão em normas elaboradas pela Organização. Se for necessário proceder posteriormente à lavagem do tanque, a descarga para o mar das águas de lavagem do tanque efectuar-se-á em conformidade com o parágrafo 1, 2, 3 ou 4 da presente regra, conforme aplicável.

6 — Será proibida a descarga para o mar de substâncias não incluídas em nenhuma categoria nem classificadas provisoriamente ou avaliadas de acordo com a regra 4, parágrafo 1, do presente anexo, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias.

Substâncias das categorias A, B ou C dentro das áreas especiais:

Tendo em consideração as disposições da regra 6 do presente anexo,

7 — Será proibida a descarga para o mar de substâncias da categoria A, tal como definidas na regra 3, parágrafo 1, alínea *a*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias. Se os tanques que contêm tais substâncias ou misturas forem lavados, os resíduos resultantes dessa operação serão descarregados para uma instalação de recepção montada, em conformidade com a regra 7 do presente anexo, pelos Estados ribeirinhos da área especial até que a concentração da substância no efluente recebido nessa instalação seja igual ou inferior à concentração residual prescrita para essa substância na coluna IV do apêndice II ao presente anexo e até que o tanque esteja vazio. Os resíduos que ficarem no tanque, desde que tenham sido posteriormente diluídos pela adição de um volume de água não inferior a 5 % do volume total do tanque, podem ser descarregados para o mar quando forem igualmente satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;

b) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e

c) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

8 — Será proibida a descarga para o mar de substâncias da categoria B, tal como definidas na regra 3, parágrafo 1, alínea *b*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias, excepto quando forem satisfeitas todas as seguintes condições:

a) O tanque, após a operação de descarga, foi lavado com um volume de água não inferior a 0,5 % do volume total do tanque e os resíduos resultantes descarregados para uma instalação de recepção até o tanque ficar vazio;

b) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;

c) Os métodos e disposições para descarga e lavagem são aprovados pela administração. Tais métodos e disposições basear-se-ão em normas elaboradas pela Organização e garantirão que a concentração e o débito de descarga do efluente sejam tais que a concentração da substância na esteira do navio não exceda uma parte por milhão;

d) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e

e) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

9 — Será proibida a descarga para o mar de substâncias da categoria C, tal como definidas na regra 3, parágrafo 1, alínea *c*), do presente anexo, ou das substâncias provisoriamente classificadas como tal, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que conte-

nham tais substâncias, excepto quando forem satisfeitas todas as seguintes condições:

a) O navio segue a sua rota a uma velocidade de pelo menos 7 nós, no caso de navios com propulsão própria, ou de pelo menos 4 nós, no caso de navios sem propulsão própria;

b) Os métodos e disposições para descarga são aprovados pela administração. Tais métodos e disposições basear-se-ão em normas elaboradas pela Organização e garantirão que a concentração e o débito de descarga do efluente sejam tais que a concentração da substância na esteira do navio não exceda uma parte por milhão;

c) A quantidade máxima de carga descarregada de cada tanque e dos respectivos encanamentos não excede a quantidade máxima aprovada, em conformidade com os métodos referidos na alínea *b*) do presente parágrafo, a qual não excederá em caso algum a maior das quantidades seguintes: 1 m^3 ou 1/3000 da capacidade do tanque em metros cúbicos;

d) A descarga é feita abaixo da linha de água, tendo em consideração a localização das aspirações da água do mar; e

e) A descarga é feita a uma distância não inferior a 12 milhas marítimas da terra mais próxima e em águas de profundidade não inferior a 25 m.

10 — Podem ser utilizados processos de ventilação aprovados pela administração para remover resíduos de carga de um tanque. Estes processos basear-se-ão em normas elaboradas pela Organização. Se for necessário proceder posteriormente à lavagem do tanque, a descarga para o mar das águas de lavagem do tanque efectuar-se-á em conformidade com o parágrafo 7, 8 ou 9 da presente regra, conforme aplicável.

11 — Será proibida a descarga para o mar de substâncias não incluídas em nenhuma categoria nem classificadas provisoriamente ou avaliadas de acordo com a regra 4, parágrafo 1, do presente anexo, ou ainda de águas de lastro, águas de lavagem de tanques ou de outros resíduos ou misturas que contenham tais substâncias.

12 — Nada na presente regra proibirá que o navio retenha a bordo resíduos de uma carga da categoria B ou C e que os descarregue para o mar, fora de uma área especial, em conformidade com o parágrafo 2 ou 3 desta regra, respectivamente.

13 — *a*) Os governos das Partes na Convenção cujas costas confinem com determinada área especial acordarão e fixarão, de comum acordo, uma data limite para dar cumprimento aos requisitos da regra 7, parágrafo 1, do presente anexo e a partir da qual serão tornados efectivos os requisitos dos parágrafos 7, 8, 9 e 10 desta regra, no que respeita à área em questão, e notificarão a Organização da data assim fixada, pelo menos com 6 meses de antecedência. A Organização notificará imediatamente todas as outras Partes dessa data.

b) Se a data de entrada em vigor da presente Convenção for anterior à data fixada em conformidade com a alínea *a*) do presente parágrafo, durante o período transitório aplicar-se-ão os requisitos dos parágrafos 1, 2 e 3 desta regra.

Regra 6

Excepções

A regra 5 do presente anexo não se aplicará:

a) À descarga para o mar de substâncias líquidas nocivas ou de misturas que contenham tais substâncias necessária para garantir a segurança de um navio ou para a salvaguarda de vidas humanas no mar; ou

b) Á descarga para o mar de substâncias líquidas nocivas ou de misturas que contenham tais substâncias resultante de avaria no navio ou no seu equipamento:

i) Desde que tenham sido tomadas todas as precauções razoáveis depois da ocorrência da avaria ou da detecção da descarga, a fim de a impedir ou reduzir ao mínimo; e

ii) Salvo se o proprietário ou o capitão tiver agido intencionalmente para provocar a avaria ou negligentemente e consciente da probabilidade da ocorrência da avaria; ou

c) À descarga para o mar de substâncias líquidas nocivas, ou misturas que contenham tais substâncias, aprovada pela administração, quando estas substâncias forem utilizadas para combater incidentes concretos de poluição, a fim de minimizar os prejuízos dela resultantes. Qualquer descarga desta natureza estará sujeita à aprovação do governo com jurisdição na área onde se tencione efectuar a descarga.

Regra 7

Instalações de recepção

1 — Os governos das Partes na Convenção comprometem-se a garantir a montagem de instalações de recepção de acordo com as necessidades dos navios que escalem os seus portos, terminais ou portos de reparação, do seguinte modo:

a) Os portos e terminais de carga e descarga terão instalações adequadas para receber dos navios que transportem substâncias líquidas nocivas, sem atrasos indevidos, os resíduos e misturas contendo tais substâncias, que se encontrem ainda a bordo para eliminação, em consequência da aplicação do presente anexo; e

b) Os portos de reparação em que se reparem navios-tanques para transporte de produtos químicos terão instalações adequadas para receber resíduos e misturas que contenham substâncias líquidas nocivas.

2 — Os governos das Partes determinarão os tipos de instalações a montar para os fins do parágrafo 1 da presente regra, em cada porto de carga e descarga, em cada terminal e em cada porto de reparação situados nos seus territórios e notificarão, em conformidade, a Organização.

3 — As Partes notificarão a Organização, para comunicação às Partes interessadas, de todos os casos em que as instalações requeridas nos termos do parágrafo 1 da presente regra sejam consideradas inadequadas.

Regra 8

Medidas de controle

1 — Os governos das Partes na Convenção nomearão ou autorizarão inspectores para assegurar o cumprimento da presente regra.

Substâncias da categoria A em todas as áreas:

2 — *a*) Quando um tanque for parcial ou totalmente descarregado sem ser limpo, far-se-á o registo apropriado no Livro de Registo de Carga.

b) Até que esse tanque seja limpo, todas as operações de bombagem ou de trasfega respeitantes a esse tanque serão também registadas no Livro de Registo de Carga.

3 — Se o tanque for lavado:

a) O efluente resultante da operação de lavagem do tanque será descarregado do navio para uma instalação de recepção até que a concentração da substância na descarga, verificada pela análise de amostras do efluente recolhidas pelo inspector, desça pelo menos ao valor da concentração residual especificada para essa substância no apêndice II ao presente anexo. Quando a concentração residual requerida for conseguida, as restantes águas de lavagem do tanque continuarão a ser descarregadas para a instalação de recepção até que o tanque esteja vazio. Os registos apropriados destas operações serão feitos no Livro de Registo de Carga e certificados pelo inspector; e

b) Depois de diluídos os resíduos que ficaram no tanque, num volume de água equivalente, pelo menos, a 5 % da capacidade do tanque, a mistura resultante pode ser descarregada para o mar, em conformidade com as disposições do parágrafo 1, alíneas *a*), *b*) e *c*), ou 7, alíneas *a*), *b*) e *c*), da regra 5 do presente anexo, conforme aplicável. Os registos apropriados destas operações serão feitos no Livro de Registo de Carga.

4 — Quando o governo da Parte receptora considere que é impossível medir a concentração da substância no efluente sem causar atraso indevido ao navio, essa Parte pode aceitar um procedimento alternativo como equivalente ao do parágrafo 3, alínea *a*), desde que:

a) A administração tenha aprovado um método de limpeza prévia para esse tanque e para essa substância, baseado em normas elaboradas pela Organização, e que essa Parte considere que tal método permite satisfazer os requisitos do parágrafo 1 ou 7 da regra 5 do presente anexo, conforme aplicável, no que respeita à obtenção das concentrações residuais requeridas;

b) Um inspector, devidamente autorizado por essa Parte, certifique no Livro de Registo de Carga que:

i) O tanque, as suas bombas e encanamentos foram esgotados e que a quantidade de carga que ficou no tanque é igual ou inferior à quantidade em que se baseia o método de limpeza prévia aprovado e mencionado na alínea *ii*) do presente parágrafo;

ii) A limpeza prévia tenha sido realizada em conformidade com o método aprovado pela administração para esse tanque e para essa substância; e

iii) As águas de lavagem do tanque resultantes dessa limpeza prévia tenham sido descarregadas para uma instalação de recepção e que o tanque esteja vazio;

c) A descarga para o mar de quaisquer resíduos que tenham ficado no tanque se efectue em conformidade com as disposições do parágrafo 3, alínea *b*), da presente regra e seja feito o registo apropriado no Livro de Registo de Carga.

Substâncias da categoria B fora das áreas especiais e substâncias da categoria C em todas as áreas:

5 — Tendo em consideração a vigilância e aprovação pelo inspector autorizado ou nomeado pelo governo da Parte, como julgado necessário, o capitão do navio fará cumprir, no que respeita a uma substância da categoria B fora das áreas especiais, ou a uma substância da categoria C em todas as áreas, as seguintes disposições:

a) Quando um tanque for parcial ou totalmente descarregado sem ser limpo, far-se-á o registo apropriado no Livro de Registo de Carga.

b) Se o tanque for limpo no mar:

i) Os encanamentos de carga que servem esse tanque serão drenados e far-se-á o registo apropriado no Livro de Registo de Carga;

ii) A quantidade de substância que fica no tanque não excederá a quantidade máxima dessa substância que pode ser descarregada para o mar, nos termos da regra 5, parágrafo 2, alínea *c*), do presente anexo, fora das áreas especiais no caso de substâncias da categoria B, ou, nos termos da regra 5, parágrafo 3, alínea *c*), e parágrafo 9, alínea *c*), fora e dentro das áreas especiais, respectivamente, no caso de substâncias da categoria C. O registo apropriado será feito no Livro de Registo de Carga;

iii) Se estiver previsto descarregar para o mar a quantidade da substância que fica no tanque, a descarga será efectuada em conformidade com os métodos aprovados e será conseguida a necessária diluição da substância, considerada satisfatória para a descarga. O registo apropriado será feito no Livro de Registo de Carga; ou

iv) Se as águas de lavagem do tanque não forem descarregadas para o mar e for efectuada uma trasfega interna dessas águas, far-se-á o registo apropriado no Livro de Registo de Carga; e

v) Qualquer descarga posterior para o mar dessas águas de lavagem será efectuada em conformidade com os requisitos da regra 5 do presente anexo, para a área apropriada e para a categoria correspondente à substância em causa;

c) Se o tanque for limpo no porto:

i) As águas de lavagem do tanque serão descarregadas para uma instalação de recepção e far-se-á o registo apropriado no Livro de Registo de Carga; ou

ii) As águas de lavagem do tanque serão retidas a bordo e far-se-á o registo apropriado, indicando a sua localização e distribuição, no Livro de Registo de Carga;

d) Se, após a descarga de uma substância da categoria C numa área especial, tiverem de ficar retidos a bordo quaisquer resíduos ou águas de lavagem dos tanques até o navio se encontrar fora dessa área especial, o capitão mencionará o facto por meio de registo apropriado no Livro de Registo de Carga e, neste caso, aplicar-se-ão os procedimentos estabelecidos na regra 5, parágrafo 3, do presente anexo.

Substâncias da categoria B nas áreas especiais:

6 — Tendo em consideração a vigilância e aprovação pelo inspector autorizado ou nomeado pelo governo da Parte, como julgado necessário, o capitão do navio fará cumprir, no que respeita a uma substância da categoria B dentro de uma área especial, as seguintes disposições:

a) Quando um tanque for parcial ou totalmente descarregado sem ser limpo, far-se-á o registo apropriado no Livro de Registo de Carga;

b) Até que esse tanque seja limpo, todas as operações de bombagem ou de trasfega respeitantes a esse tanque serão também registadas no Livro de Registo de Carga;

c) Se o tanque for lavado, o efluente resultante da operação de lavagem do tanque que contenha um volume de água não inferior a 0,5 % do volume total do tanque será descarregado do navio para uma instalação de recepção até que o tanque e as respectivas bombas e encanamentos tenham sido completamente esgotados. O registo apropriado será feito no Livro de Registo de Carga;

d) Se o tanque for em seguida limpo e esgotado no mar, o capitão assegurar-se-á de que:

i) São aplicados os métodos aprovados mencionados na regra 5, parágrafo 8, alínea *c*), do presente anexo, de que são feitos os registos apropriados no Livro de Registo de Carga; e

ii) Qualquer descarga para o mar é efectuada em conformidade com os requisitos da regra 5, parágrafo 8, do presente anexo, de que é feito o registo apropriado no Livro de Registo de Carga;

e) Se, após a descarga de uma substância da categoria B numa área especial, tiverem de ficar retidos a bordo quaisquer resíduos ou águas de lavagem dos tanques até o navio se encontrar fora dessa área especial, o capitão mencionará o facto por meio de registo apropriado no Livro de Registo de Carga e, neste caso, aplicar-se-ão os procedimentos estabelecidos na regra 5, parágrafo 2, do presente anexo.

Substâncias da categoria D em todas as áreas:

7 — O capitão de um navio fará cumprir, no que respeita a uma substância da categoria D, as seguintes disposições:

a) Quando um tanque for parcial ou totalmente descarregado sem ser limpo, far-se-á o registo apropriado no Livro de Registo de Carga;

b) Se o tanque for limpo no mar:

i) Os encanamentos de carga que servem esse tanque serão drenados e far-se-á o registo apropriado no Livro de Registo de Carga;

ii) Se estiver previsto descarregar para o mar a quantidade da substância que fica no tanque, será conseguida a necessária diluição da substância, considerada satisfatória para a descarga. O registo apropriado será feito no Livro de Registo de Carga; ou

iii) Se as águas de lavagem do tanque não forem descarregadas para o mar e for efectuada uma trasfega interna dessas águas, far-se-á o registo apropriado no Livro de Registo de Carga; e

iv) Qualquer descarga posterior para o mar dessas águas de lavagem será efectuada em conformidade com os requisitos da regra 5, parágrafo 4, do presente anexo;

c) Se o tanque for limpo no porto:

i) As águas de lavagem do tanque serão descarregadas para uma instalação de recepção e far-se-á o registo apropriado no Livro de Registo de Carga; ou

ii) As águas de lavagem do tanque serão retidas a bordo e far-se-á o registo apropriado, indicando a sua localização e distribuição, no Livro de Registo de Carga.

Descargas provenientes de um tanque de resíduos:

8 — Quaisquer resíduos, incluindo os dos porões das casas das bombas, retidos a bordo num tanque de resíduos e que contenham uma substância da categoria A ou, no caso de o navio se encontrar numa área especial, uma substância da categoria A ou B serão descarregados para uma instalação de recepção em conformidade com as disposições da regra 5, parágrafos 1, 7 ou 8, do presente anexo, conforme aplicável. O registo apropriado será feito no Livro de Registo de Carga.

9 — Quaisquer resíduos, incluindo os dos porões das casas das bombas, retidos a bordo num tanque de resíduos e que contenham uma substância da categoria B, se o navio se encontrar fora de uma área especial, ou da categoria C, em todas as áreas, em quantidade superior às quantidades máximas especificadas na regra 5, parágrafo 2, alínea *c*), parágrafo 3 ou 9, alínea *c*), do presente anexo, conforme aplicável, serão descarregados para uma instalação de recepção. O registo apropriado será feito no Livro de Registo de Carga.

Regra 9

Livro de Registo de Carga

1 — Todos os navios a que se aplica o presente anexo possuirão um Livro de Registo de Carga, podendo

ou não fazer parte do diário náutico, de acordo com o modelo especificado no apêndice IV a este anexo.

2 — O Livro de Registo de Carga será preenchido, para cada tanque, sempre que se proceda a bordo do navio a qualquer das seguintes operações respeitantes a substâncias líquidas nocivas:

i) Embarque de carga;
ii) Desembarque de carga;
iii) Trasfega de carga;
iv) Trasfega de carga, de resíduos de carga ou de misturas que contenham carga para um tanque de resíduos;
v) Limpeza de tanques de carga;
vi) Trasfega de tanques de resíduos;
vii) Lastragem de tanques de carga;
viii) Trasfega de água de lastro sujo;
ix) Descarga para o mar em conformidade com a regra 5 do presente anexo.

3 — No caso de qualquer descarga, intencional ou acidental, de uma substância líquida nociva ou de uma mistura que contenha tal substância, nas condições previstas no artigo 8 da presente Convenção e na regra 6 deste anexo, será feito o registo no Livro de Registo de Carga, indicando as circunstâncias e as razões da descarga.

4 — Quando um inspector, nomeado ou autorizado pelo governo da Parte na Convenção para fiscalizar quaisquer operações nos termos do presente anexo, tiver inspeccionado um navio, fará o registo apropriado no Livro de Registo de Carga.

5 — Cada uma das operações mencionadas nos parágrafos 2 e 3 da presente regra será imediata e integralmente registada no Livro de Registo de Carga, de modo que fiquem preenchidos no livro todos os registos correspondentes à citada operação. Cada registo será assinado pelo oficial ou oficiais responsáveis pelas referidas operações e, quando o navio tiver tripulação, o capitão assinará todas as páginas. Os registos no Livro de Registo de Carga serão feitos numa língua oficial do Estado de bandeira do navio e, para os navios possuidores de um Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973), em francês ou inglês. No caso de conflito ou divergência, farão fé os registos redigidos numa língua oficial do Estado de bandeira do navio.

6 — O Livro de Registo de Carga será guardado num local de fácil acesso para facilitar a sua inspecção e, salvo no caso de navios a reboque sem tripulação, será mantido a bordo. O livro será conservado durante um período de 2 anos após o último registo.

7 — A autoridade competente do governo de uma Parte pode inspeccionar o Livro de Registo de Carga a bordo de qualquer navio ao qual o presente anexo se aplique, enquanto o navio estiver num dos seus portos, e tirar cópias de qualquer registo desse livro e exigir a sua autenticação pelo capitão do navio. Qualquer cópia assim autenticada pelo capitão do navio será aceite, em caso de processo judicial, como prova dos factos constantes no registo. A inspecção do Livro de Registo de Carga e a obteção de cópias autenticadas pela autoridade competente, nos termos do presente parágrafo, serão efectuadas da forma mais rápida possível e sem causar atrasos indevidos ao navio.

Regra 10

Vistorias

1 — Os navios sujeitos às disposições do presente anexo e que transportem substâncias líquidas nocivas a granel serão vistoriados conforme a seguir se especifica:

a) Uma vistoria inicial antes de o navio entrar ao serviço, ou antes da emissão pela primeira vez do certificado exigido pela regra 11 do presente anexo, que incluirá uma inspecção completa da sua estrutura, equipamento, instalações, disposições e materiais, na medida em que o navio esteja abrangido por este anexo. A vistoria será de modo a assegurar o cumprimento integral dos requisitos aplicáveis do presente anexo.
b) Vistorias periódicas, a intervalos determinados pela administração, mas não excedendo 5 anos, que permitam assegurar que a estrutura, equipamento, instalações, disposições e materiais cumpram integralmente os requisitos aplicáveis do presente anexo. Contudo, quando a validade do Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973) for prorrogada de acordo com as disposições da regra 12, parágrafo 2 ou 4, deste anexo, o intervalo das vistorias periódicas pode ser correspondentemente alargado.
c) Vistorias intermédias, a intervalos determinados pela administração, mas não excedendo 30 meses, que permitam assegurar que os equipamentos e sistemas de bombagem e de encanamentos associados cumpram integralmente os requisitos aplicáveis do presente anexo e estão em boas condições de funcionamento. A vistoria será registada no Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973), emitido em conformidade com a regra 11 deste anexo.

2 — As vistorias a navios para verificação da aplicação das disposições do presente anexo serão efectuadas por funcionários da administração. A administração pode, contudo, delegar a execução das vistorias quer em inspectores nomeados para esse fim quer em organismos por ela reconhecidos. Em qualquer dos casos, a administração interessada garante em absoluto a integral execução e eficiência das vistorias.

3 — Após a execução de qualquer das vistorias previstas na presente regra, não serão efectuadas quaisquer modificações significativas na estrutura, equipamento, instalações, disposições ou materiais inspeccionados sem autorização da administração, com excepção das substituições directas de tal equipamento ou instalações para fins de reparação ou manutenção.

Regra 11

Emissão de certificados

1 — Um Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973) será emitido, após a vistoria efectuada de acordo com as disposições da regra 10 do pre-

sente anexo, para os navios de transporte de substâncias líquidas nocivas que sejam utilizados em viagens para portos ou terminais no mar sob a jurisdição de outras Partes na Convenção.

2 — Tal certificado será emitido pela administração ou por qualquer pessoa ou organismo por ela devidamente autorizado. Em qualquer dos casos, a administração assume plena responsabilidade pelo certificado.

3 — *a*) O governo de uma Parte pode, a pedido da administração, mandar vistoriar um navio e, se entender que as disposições do presente anexo estão a ser cumpridas, emitirá ou autorizará a emissão de um certificado para o navio em conformidade com o presente anexo.

b) Uma cópia do certificado e uma cópia do relatório de vistoria serão enviadas, logo que possível, à administração que pediu a vistoria.

c) Um certificado assim emitido incluirá uma declaração de que foi emitido a pedido da administração, e terá o mesmo valor e igual reconhecimento que um certificado emitido de acordo com o parágrafo 1 da presente regra.

d) Nenhum Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973) será emitido para um navio que arvore a bandeira de um Estado que não seja Parte na Convenção.

4 — O Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973) será redigido numa língua oficial do país que o emite e de acordo com o modelo que consta do apêndice V ao presente anexo. Se a língua utilizada não for nem o francês nem o inglês, o texto incluirá uma tradução numa destas línguas.

Regra 12

Validade do certificado

1 — Um Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973) será emitido por um período de validade determinado pela administração, que não excederá 5 anos a contar da data da emissão, excepto nos casos previstos nos parágrafos 2 e 4 da presente regra.

2 — Se um navio, ao expirar o certificado, não se encontrar num porto ou num terminal no mar sob jurisdição da Parte na Convenção cuja bandeira o navio arvora, o período de validade do certificado pode ser prorrogado pela administração, mas esta prorrogação será concedida apenas com a finalidade de permitir ao navio completar a sua viagem até ao Estado cuja bandeira arvora ou até ao Estado em que irá ser vistoriado, e unicamente nos casos em que a mesma seja considerada oportuna e razoável.

3 — Nenhum certificado será assim prorrogado por um período superior a 5 meses e um navio a que tenha sido concedida tal prorrogação, uma vez chegado ao Estado cuja bandeira arvora ou ao porto em que vai ser vistoriado, não será autorizado a largar deste porto ou a deixar aquele Estado com base em tal prorrogação sem ter obtido um novo certificado.

4 — Um certificado que não tenha sido prorrogado de acordo com as disposições do parágrafo 2 da presente regra pode ser prorrogado pela administração por um período de graça não superior a 1 mês a contar da data em que expira a validade nele indicada.

5 — Um certificado deixará de ser válido se forem introduzidas modificações significativas na estrutura, equipamento, instalações, disposições ou materiais exigidos pelo presente anexo sem a aprovação da administração, à excepção da substituição directa de tal equipamento ou instalações para fins de reparação ou manutenção ou se não tiverem sido efectuadas as vistorias intermédias especificadas pela administração nos termos da regra 10, parágrafo 1, alínea *c*), deste anexo.

6 — Um certificado emitido para um navio deixará de ser válido quando o navio mudar de bandeira, com excepção do disposto no parágrafo 7 da presente regra.

7 — Quando um navio mudar de bandeira, o certificado continuará em vigor por um período que não exceda 5 meses, desde que não expire antes do termo deste período, ou até que a administração emita um certificado de substituição, conforme o caso. Logo que possível, após a mudança de bandeira, o governo da Parte cuja bandeira o navio anteriormente arvorava enviará à administração uma cópia do certificado que o navio possuía antes da mudança e, se possível, uma cópia do correspondente relatório de vistoria.

Regra 13

Requisitos para minimizar a poluição acidental

1 — Os navios para transporte de substâncias líquidas nocivas a granel sujeitos às disposições do presente anexo serão projectados, construídos, equipados e operados de forma a minimizar as descargas incontroladas dessas substâncias para o mar.

2 — Em conformidade com as disposições do parágrafo 1 da presente regra, os governos das Partes emitirão ou mandarão emitir requisitos detalhados relativos ao projecto, construção, equipamento e operação de tais navios.

3 — No que respeita aos navios para transporte de produtos químicos, os requisitos mencionados no parágrafo 2 da presente regra incluirão, pelo menos, todas as disposições previstas no Código para a Construção e Equipamento de Navios para Transporte de Produtos Químicos Perigosos a Granel, adoptado pela Assembleia da Organização na Resolução A.212 (VII) com as eventuais emendas feitas pela Organização, desde que as emendas a esse Código sejam adoptadas e entrem em vigor de acordo com as disposições do artigo 16 da presente Convenção, no que respeita aos procedimentos de emendas a um apêndice a um anexo.

APÊNDICE I

Directivas para classificação em categorias das substâncias líquidas nocivas

Categoria A — Substâncias bioacumuláveis e susceptíveis de causar prejuízos para a vida aquática ou para a saúde humana; ou altamente tóxicas para a vida aquática (com grau de risco 4, definido por um TLm inferior a 1 ppm); e, ainda, outras substâncias moderadamente tóxicas para a vida aquática (com um grau de risco 3, definido por um TLm igual ou superior a 1 ppm mas inferior a 10 ppm), quando se dá particular importância a outros factores de risco que elas apresentam ou às características especiais dessas substâncias.

Categoria B — Substâncias bioacumuláveis com uma persistência curta, da ordem de uma semana ou menos; ou susceptíveis de deteriorar os alimentos de origem marinha; ou moderamente tóxicas para a vida aquática (com um grau de risco 3, definido por um TLm igual ou superior a 1 ppm mas inferior a 10 ppm); e, ainda, outras subs-

tâncias ligeiramente tóxicas para a vida aquática (com um grau de risco 2, definido por um TLm igual ou superior a 10 ppm mas inferior a 100 ppm), quando se dá particular importância a outros factores de risco que elas apresentam ou às características especiais dessas substâncias.

Categoria C — Substâncias ligeiramente tóxicas para a vida aquática (com um grau de risco 2, definido por um TLm igual ou superior a 10 ppm mas inferior a 100 ppm); e, ainda, outras substâncias praticamente não tóxicas para a vida aquática (com um grau de risco 1, definido por um TLm igual ou superior a 100 ppm mas inferior a 1000 ppm), quando se dá particular importância a outros factores de risco que elas apresentam ou às características especiais dessas substâncias.

Categoria D — Substâncias praticamente não tóxicas para a vida aquática (com um grau de risco 1, definido por um TLm igual ou superior a 100 ppm mas inferior a 1000 ppm); ou que formam depósitos no leito do mar com uma carência bioquímica de oxigénio (CBO) elevada; ou que são altamente perigosas para a saúde humana, com um LD_{50} inferior a 5 mg/kg; ou que causam uma redução moderada da utilização dos locais de recreio devido à sua persistência, odor e características venenosas ou irritantes, que são susceptíveis de interferir com a utilização das praias; ou que são moderamente perigosas para a saúde humana, com um LD_{50} igual ou superior a 5 mg/kg mas inferior a 50 mg/kg e que causam uma ligeira redução da utilização dos locais de recreio.

Outras substâncias líquidas (para os fins da regra 4 do presente anexo) — Substâncias que não sejam classificadas nas anteriores categorias A, B, C e D acima referidas.

APÊNDICE II

Lista de substâncias líquidas nocivas transportadas a granel

Substância	Número ONU	Categoria de poluição para descarga operacional	Concentração residual (percentagem em peso)	
		Regra 3 do Anexo II	Regra 5, parágrafo 1, do Anexo II	Regra 5, parágrafo 7, do Anexo II
	I	II	III Fora de áreas especiais	IV Dentro de áreas especiais
Acetato de amilo normal	1104	C		
Acetato de butilo normal	1123	D		
Acetato de butilo secundário	1124	D		
Acetato de etilo	1172	D		
Acetato de etoxi-2-etilo	1173	D		
Acetato de iso-amilo	1104	C		
Acetato de metilo	1231	D		
Acetato de propilo normal (*)	1276	C		
Acetato de vinilo	1301	C		
Acetona	1090	D		
Ácido acético	1842	C		
Ácido acrílico	-	C		
Ácido butírico	-	B		
Ácido cítrico (10%-25%)	-	D		
Ácido clorídrico	1789	D		
Ácido cloroacético	1750	C		
Ácido clorossulfónico	1754	C		
Ácido cresílico	2022	A	0,1	0,05
Ácido fluorídrico (solução aquosa a 40%)	1790	B		
Ácido fórmico	1779	D		
Ácido fosfórico	1805	D		
Ácido heptanóico (*)	-	D		
Ácido láctico	-	D		
Ácido nítrico (90%)	2031 2032	C		
Ácido oxálico (10%-25%)	-	D		
Ácido propiónico	1848	D		
Ácidos nafténicos (*)	-	A	0,1	0,05
Ácido sulfúrico	1830 1831 1832	C		
Ácido sulfúrico fumante	1831	C		
Acrilato de butilo normal	-	D		
Acrilato de etil-2 hexanol	-	D		
Acrilato de etilo	1917	D		
Acrilato de isobutilo	-	D		
Acrilato de metilo	1919	C		
Acrilonitrilo	1093	B		
Acroleína	1092	A	0,1	0,05
Adiponitrilo	-	D		
Aguarrás	1299	B		
Álcool alílico	1098	B		
Álcool amílico normal	-	D		
Álcool benzílico	-	D		
Álcool diacetónico (*)	1148	D		
Álcool furfurílico	-	C		
Álcool metil-amílico	-	D		
Álcool nonílico (*)	-	C		
Álcool propílico normal	1274	D		
Aldeído acético	1089	C		
Aldeído crotónico	1143	B		
Aldeído isobutilo	-	D		
Aldeído propiónico	1275	D		
Alfa-metil-estireno (*)	-	D		
Alquil-benzeno-sulfanatos:				
de cadeia linear	-	C		
de cadeia ramificada	-	B		
Alúmen (solução a 15%)	-	D		
Amino-etil-etanolamina (hidroxi-etil-etilenodiamina) (*)	-	D		
Amónia (soluto aquoso a 28%)	1005	B		
Anidrido acético	1715	C		
Anidrido ftálico (fundido)	-	C		
Anidrido propiónico	-	D		
Anilina	1547	C		
Benzeno	1114	C		
β-propiolactona (*)	-	B		
Butiraldeído normal	1129	B		
Butirato de butilo	-	B		
Cianidrina acetónica	1541	A	0,1	0,05
Cianidrina etilénica (*)	-	D		
Ciclo-hexano	1145	C		
Ciclo-hexanol	-	D		
Ciclo-hexanona	1915	D		
Ciclo-hexilamina (*)	-	D		
Creosote	1334	A	0,1	0,05
Cresóis	2076	A	0,1	0,05
Cloreto de acetilo	1717	C		
Cloreto de alilo	1100	C		
Cloreto de benzilo	1738	B		
Cloreto de metileno	1593	B		
Cloreto de vinilideno (*)	1303	B		
Cloridrina etilénica (cloro-2-etanol)	1135	D		
Cloridrinas (brutas) (*)	-	D		
Clorofórmio	1888	B		
Cloropreno	1991	C		
Cumeno	1918	C		
Deca-hidronaftaleno	1147	D		
Decano (*)	-	D		
Dibromo-etileno	1605	B		
Diclorobenzenos	1591	A	0,1	0,05
Dicloro-etileno	1184	B		
Dicloropropeno/dicloropropano (mistura) (fumigante D. D. para solos)	2047	B		

Substância	Número ONU	Categoria de poluição para descarga operacional	Concentração residual (percentagem em peso)	
		Regra 3 do Anexo II	Regra 5, parágrafo 1, do Anexo II	Regra 5, parágrafo 7, do Anexo II
	I	II	III Fora de áreas especiais	IV Dentro de áreas especiais
Dicromato de sódio (solução)	-	C		
Dieti-benzeno (mistura de isómeros)	2049	C		
Dietilamina	1154	C		
Dietileno-triamina (*)	2079	C		
Di-etil-cetona (pentanona-3)	1156	D		
Di-isobutil-cetona	1157	D		
Di-isobutileno	2050	D		
Di-isocianato de tolueno (*)	2078	B		
Di-isopropanolamina	-	C		
Di-isopropilamina	1158	C		
Dimetilamina (solução aquosa a 40 %)	1160	C		
Dimetil-etanolamina (dimetil 2, amino-etanol) (*)	2051	C		
Dimetilformamida	-	D		
Dioxano 1,4	1165	C		
Dissulforeto de carbono	1131	A	0,01	0,005
Dodecilbenzeno	-	C		
Epicloridrina	2023	B		
Estireno (monómero)	2055	C		
Éter di-benzílico (*)	-	C		
Éter dicloroetílico	1916	B		
Éter dietílico	1155	D		
Éter di-isopropílico (*)	1159	D		
Éter monoetílico do etileno-glicol	1171	D		
Éter mono-etílico do di-etileno-glicol	-	C		
Étil-amil-cetona (*)	-	C		
Etilbenzeno	1175	C		
Etil ciclo hexano	-	D		
Etilenodiamina	1604	C		
Etil-2 hexanol (álcool etil-2 hexílico)	-	C		
Etil-2 propil-3 acroleína	-	B		
Fenol	1671	B		
Formaldeído (solução a 37 %-50 %)	1198	C		
Fosfato de tritolilo (fosfato tricresílico) (*)	-	B		
Fósforo (elemento)	1338	A	0,01	0,005
Glicóis butilénicos	-	D		
Hexametileno-diamina (*)	1783	C		
Hidróxido de cálcio (em solução)	-	D		
Hidróxido de sódio	1824	C		
Isobutanol	1212	D		
Isoforona	-	D		
Iso-octano (*)	-	D		
Isopentano	-	D		
Isopreno	1218	D		
Isopropilamina	1221	C		
Isopropil ciclo hexano	-	D		
Lactado de etilo (*)	1192	D		
Metacrilato de butilo	-	D		
Metacrilato de isobutilo	-	D		
Metacrilato de metilo	1247	D		
Metil-2, etilo, piridina (*)	-	B		
Metil-2 penteno (*)	-	D		
Misturas de difenilo com éter difenílico (*)	-	D		
Monoclorobenzeno	1134	B		
Monoetanolamina	-	D		
Mono-isopropanolamina	-	C		
Mono-isopropilamina	-	C		
Monometil-etanolamina	-	C		
Mono-nitrobenzeno	-	C		
Morfolina (*)	2054	C		
Naftaleno (fundido)	1334	A	0,1	0,05
Nitro-2 propano	-	D		
Nonil-fenol	-	C		
Octanol normal	-	C		
Óleo de cânfora	1130	B		
Orto-nitrotolueno	1664	C		
Óxido de mesitilo (*)	1229	C		
Para-cimeno (isopropil-tolueno) (*)	2046	D		
Para-clorotolueno	-	B		
Pentacloro-etano	1669	B		
Pentaclorofenato de sódio (solução)	-	A	0,1	0,05
Pentano normal	1265	C		
Percloretileno (tetracloreteileno)	1897	B		
Peróxido de hidrogénio (maior do que 60 %)	2015	C		
Piridina	1282	B		
Potassa cáustica (hidróxido de potássio)	1814	C		
Propilamina (normal)	1277	C		
Sebo	-	D		
Tetracloreto de carbono	1846	B		
Tetracloreto de silício	1818	D		
Tetracloreto de titânio	1838	D		
Tetraetilo de chumbo	1649	A	0,1	0,05
Tetra hidrofurano	2056	D		
Tetra hidronaftaleno	1540	C		
Tetrametil-benzeno	-	D		
Tetrametilo de chumbo	1649	A	0,1	0,05
Tolueno	1294	C		
Tricloretano	-	C		
Tricloretileno	1710	B		
Trietanolamina	-	D		
Trietilamina	1296	C		
Trimetilbenzeno (*)	-	C		
Xilenos mistos (xilol)	1307	C		

(*) O asterisco indica que a substância foi provisoriamente incluida nesta lista e que são necessários dados adicionais para completar a avaliação dos seus riscos para o meio ambiente, particularmente em relação aos recursos vivos.

APÊNDICE III

Lista de outras substâncias líquidas transportadas a granel

Acetato de isopropilo
Acetato de metil-amilo
Acetonitrilo (cianeto de metilo)
Água
Álcoois gordos (C_{12}-C_{20})
Álcool amílico normal
Álcool amílico terciário
Álcool decílico normal
Álcool decil-octílico
Álcool etílico
Álcool isodecílico
Álcool isopropílico
Álcool metílico
Azeite
Butirolactona
Cloreto de cálcio (solução)
Dietanolamina
Dietileno-glicol
Dipenteno
Dipropileno-glicol
Enxofre (líquidos)
Éter (di)butílico

Etileno-glicol
Glicerina
Heptano normal
Heptenos mistos
Hexano normal
Leite
Ligroína
Melaço
Metil-etil-cetona (2-butanona)
Óleo de coco
Óleo de fígado de bacalhau
Óleo de rícino
Óxido de propileno
Polipropileno-glicol
Propileno-glicol
Sorbitol
Sumos cítricos
Tetrapopileno
Tridecanol.
Trietileno-glicol.
Trietileno-tetramina.
Tripropileno
Tripropileno-glicol.
Vinho.

APÊNDICE IV

Livro de Registo de Carga para os Navios de Transporte de Substâncias Líquidas Nocivas a Granel

Nome do navio...
Capacidade de carga de cada tanque, em metros cúbicos,...
Viagem de ..... para .....

a) Embarque de carga:

1) Data e local do embarque.
2) Número e categoria da(s) carga(s) embarcada(s).
3) Identificação do(s) tanque(s) carregado(s).

b) Trasfega de carga:

4) Data da trasfega.
5) Identificação do(s) tanque(s):

i) De;
ii) Para.

6) O(s) tanque(s) mencionado(s) em 5, *i*), ficou(ficaram) vazio(s)?
7) Em caso negativo, indicar a quantidade restante.

c) Desembarque da carga:

8) Data e local do desembarque.
9) Identificação do(s) tanque(s) descarregado(s).
10) O(s) tanque(s) ficou(ficaram) vazio(s)?
11) Em caso negativo, indicar a quantidade restante no(s) tanque(s).
12) O(s) tanque(s) foi(foram) limpo(s)?
13) Quantidade trasfegada para o tanque de resíduos.
14) Identificação do tanque de resíduos.

d) Lastragem dos tanques de carga:

15) Identificação do(s) tanque(s) lastrado(s).
16) Data e posição do navio no início da lastragem.

e) Limpeza dos tanques de carga:

Substâncias da categoria A:

17) Identificação do(s) tanque(s) limpo(s).
18) Data e local da limpeza.
19) Método(s) de limpeza.
20) Localização da instalação de recepção utilizada.
21) Concentração do efluente no termo da descarga para a instalação de recepção.
22) Quantidade restante no tanque.
23) Método utilizado e quantidade de água introduzida no tanque na limpeza final.
24) Data e local da descarga para o mar.
25) Método e equipamento utilizados na descarga para o mar.

Substâncias das categorias B, C e D:

26) Método de lavagem utilizado.
27) Quantidade de água utilizada.
28) Data e local da descarga para o mar.
29) Método e equipamento utilizados na descarga para o mar.

f) Trasfega de água de lastro sujo:

30) Identificação do(s) tanque(s).
31) Data e posição do navio no início da descarga para o mar.
32) Data e posição do navio no termo da descarga para o mar.
33) Velocidade(s) do navio durante a descarga.
34) Quantidade descarregada para o mar.
35) Quantidade de água poluída trasfegada para o(s) tanque(s) de resíduos [identificação do(s) tanque(s) de resíduos].
36) Data e porto de descarga para instalações de recepção em terra (se aplicável).

g) Trasfega dos tanques de resíduos/eliminação dos resíduos:

37) Identificação do(s) tanque(s) de resíduos.
38) Quantidade eliminada de cada tanque.
39) Método de eliminação de resíduos:

i) Instalação de recepção.
ii) Mistura com a carga.
iii) Trasfega para outro(s) tanque(s) [identificação do(s) tanque(s)].
iv) Outros métodos.

40) Data e porto da eliminação de resíduos.

h) Descargas acidentais ou excepcionais:

41) Data e hora da ocorrência.
42) Local ou posição do navio no momento da ocorrência.
43) Quantidade aproximada, nome e categoria da substância.
44) Circunstâncias da descarga ou derrame e observações gerais.

* Assinatura do Capitão ...

APÊNDICE V

Modelo de certificado

Certificado Internacional de Prevenção da Poluição para o Transporte de Substâncias Líquidas Nocivas a Granel (1973)

(*Nota.* — No caso de um navio-tanque de produtos químicos, este certificado será completado com o certificado exigido nos termos da regra 13, parágrafo 3, do anexo II à Convenção.)

(Selo oficial)

Emitido de acordo com as disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973, sob a autoridade do Governo de... (designação oficial e completa do país) por... (nome completo da pessoa competente ou designação oficial completa do organismo autorizado, nos termos das disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973).

Nome do navio	Número ou letras do distintivo do navio	Porto de registo	Arqueação bruta

* Deve ser aposta em todas as folhas do certificado.

Certifica-se:

1. Que o navio foi vistoriado de acordo com as disposições da regra 10 do anexo II à Convenção.
2. Que a vistoria demonstrou que o projecto, a construção e o equipamento do navio são de forma a minimizar as descargas incontroladas para o mar de substâncias líquidas nocivas.
3. Que, para o efeito da aplicação da regra 5 do anexo II à Convenção, a administração aprovou as seguintes disposições e procedimentos:

[Segue(m) a(s) folha(s) assinadas(s) e datada(s) junta(s)]

Este certificado é válido até ... sujeito à(s) vistoria(s) intermédia(s) a efectuar a intervalos de...

Emitido em ... (local da emissão do certificado).

.../.../19...

(Assinatura do funcionário devidamente autorizado que emite o certificado)

(Selo branco ou carimbo, conforme apropriado, da autoridade que emite o certificado)

Vistorias intermédias

Certifica-se que na vistoria intermédia exigida pela regra 10, parágrafo 1, alínea *c*), do anexo II à Convenção se verificou que este navio e o estado em que se encontra cumprem as disposições da Convenção.

Assinado...
(Assinatura do funcionário devidamente autorizado)

Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

Assinado...
(Assinatura do funcionário devidamente autorizado)

Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

Nos termos das disposições da regra 12, parágrafos 2 e 4, do anexo à Convenção, a validade deste certificado é prorrogada até...

Assinado...
(Assinatura do funcionário devidamente autorizado)

Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

ANEXO III

Regras para a prevenção da poluição por substâncias prejudiciais transportadas por via marítima em embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas.

Regra 1

Âmbito de aplicação

1 — Salvo disposição expressa em contrário, as regras do presente anexo aplicam-se a todos os navios que transportem substâncias prejudiciais em embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas.

2 — Este transporte de substâncias prejudiciais é proibido, excepto se efectuado em conformidade com as disposições do presente anexo.

3 — Para complementar as disposições do presente anexo, o governo de cada Parte na Convenção publicará ou mandará publicar requisitos detalhados sobre embalagem, marcação e etiquetagem, documentação, armazenagem, limitações de quantidade, excepções e notificação, a fim de prevenir ou minimizar a poluição do meio marinho por substâncias prejudiciais.

4 — Para os fins do presente anexo, embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas vazios que tenham sido previamente usados no transporte de substâncias prejudiciais serão tratados como substâncias prejudiciais, a não ser que tenham sido tomadas precauções adequadas para assegurar que não contêm resíduos perigosos para o meio marinho.

Regra 2

Embalagem

As embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas serão adequados para minimizar os riscos para o meio marinho, tendo em conta o seu conteúdo específico.

Regra 3

Marcação e etiquetagem

As embalagens, quer sejam embarcadas individualmente, quer em unidades ou em contentores, os contentores, os tanques portáteis, os camiões-tanques ou os vagões-cisternas contendo uma substância prejudicial serão marcados de modo indelével com a designação técnica correcta (as designações comerciais não serão usadas em substituição das designações técnicas correctas) e serão ainda identificados por meio de um rótulo característico, ou reprodução desse rótulo, indicando que o seu conteúdo é prejudicial. Esta identificação será complementada, quando possível, por quaisquer outros meios, por exemplo, o número das Nações Unidas.

Regra 4

Documentação

1 — Em todos os documentos relacionados com o transporte de substâncias prejudiciais por via marítima onde aquelas sejam nomeadas usar-se-ão as designações técnicas correctas dessas substâncias (não serão usadas as designações comerciais).

2 — Os documentos de embarque fornecidos pelo expedidor incluirão um certificado ou declaração de que a carga a transportar está devidamente embalada, marcada e etiquetada e em condições adequadas para transporte, de modo a minimizar os riscos para o meio marinho.

3 — Todos os navios que transportem substâncias prejudiciais possuirão uma lista especial ou manifesto indicando as substâncias prejudiciais existentes a bordo e a sua localização. Em vez da lista especial ou manifesto pode ser utilizado um plano detalhado da carga que indique a localização de todas as substâncias prejudiciais existentes a bordo. O armador do navio ou o seu representante ficarão, em terra, com cópias desses documentos, conservando-as até as substâncias prejudiciais serem desembarcadas.

4 — No caso de o navio possuir uma lista especial, um manifesto ou um plano detalhado de carga exigidos para o transporte de cargas perigosas pela Convenção Internacional para a Salvaguarda da Vida Humana no Mar em vigor, os documentos exigidos para os fins do presente anexo podem ser emitidos conjuntamente com os documentos exigidos para o trans-

porte de cargas perigosas. Quando os documentos são assim emitidos, será feita uma distinção clara entre as cargas perigosas e outras substâncias prejudiciais.

Regra 5

Estiva

As substâncias prejudiciais serão correctamente estivadas e peadas de modo a minimizar os riscos para o meio marinho, sem comprometer a segurança do navio e das pessoas embarcadas.

Regra 6

Limitações de quantidade

O transporte de certas substâncias prejudiciais, particularmente perigosas para o meio marinho, devido a sólidas razões científicas e técnicas, necessita ser proibido ou limitada a quantidade máxima a transportar num único navio. Ao definir essa quantidade máxima serão tomadas em devida consideração as dimensões, a construção e o equipamento do navio, bem como a natureza específica dessa substância e o modo como está embalada.

Regra 7

Excepções

1 — É proibido o lançamento pela borda de substâncias prejudiciais transportadas em embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas, salvo quando necessário para garantir a segurança do navio ou a salvaguarda de vidas no mar.

2 — Tendo em consideração as disposições da presente Convenção, e tendo como base as propriedades físicas, químicas e biológicas das substâncias prejudiciais, serão tomadas medidas apropriadas para regular a lavagem para o mar dos derrames dessas substâncias, desde que o cumprimento dessas medidas não comprometa a segurança do navio ou a das pessoas embarcadas.

Regra 8

Notificação

Relativamente a certas substâncias prejudiciais, conforme designação do governo de uma Parte na Convenção, o capitão ou o armador do navio ou seu representante notificarão a autoridade portuária apropriada da intenção de carregar ou descarregar essas substâncias, com uma antecedência de, pelo menos, 24 horas relativamente a essa operação.

ANEXO IV

Regras para a prevenção da poluição por esgotos sanitários dos navios

Regra 1

Definições

Para os fins do presente anexo:

1 — «Navio novo» significa um navio:

a) Cujo contrato de construção foi celebrado, ou, na ausência de um contrato de construção, cuja quilha tenha sido assente ou se encontre numa fase equivalente de construção na data ou após a entrada em vigor deste anexo; ou

b) Cuja entrega seja efectuada 3 ou mais anos após a entrada em vigor do presente anexo.

2 — «Navio existente» significa um navio que não é um navio novo.

3 — «Esgotos sanitários» significa:

a) Águas de drenagem e outros resíduos provenientes de qualquer tipo de casas de banho, urinóis e embornais de retretes;

b) Águas de drenagem provenientes de instalações médicas (dispensários, enfermarias, etc.) através de lavatórios, banheiras e embornais localizados nessas instalações;

c) Águas de drenagem provenientes de compartimentos contendo animais vivos; ou

d) Outras águas residuais, quando misturadas com as águas de drenagem acima referidas.

4 — «Tanque de retenção» significa um tanque utilizado para recolher e armazenar esgotos sanitários.

5 — «Terra mais próxima». — A expressão «da terra mais próxima» significa desde a linha de base a partir da qual é delimitado o mar territorial do território em questão; de acordo com o direito internacional, excepto no que se refere à costa nordeste da Austrália, em que, para os fins da presente Convenção, a expressão «da terra mais próxima» significa desde uma linha traçada a partir de um ponto da costa da Austrália situado na latitude 11° 00′ S, longitude 142° 08′ E, e deste para os seguintes pontos:

Latitude 10° 35′ S, longitude 141° 55′ E;
Latitude 10° 00′ S, longitude 142° 00′ E;
Latitude 9° 10′ S, longitude 143° 52′ E;
Latitude 9° 00′ S, longitude 144° 30′ E;
Latitude 13° 00′ S, longitude 144° 00′ E;
Latitude 15° 00′ S, longitude 146° 00′ E;
Latitude 18° 00′ S, longitude 147° 00′ E;
Latitude 21° 00′ S, longitude 153° 00′ E;

e por fim para um ponto na costa da Austrália situado na latitude 24° 42′ S, longitude 153° 15′ E.

Regra 2

Âmbito de aplicação

As disposições do presente anexo aplicar-se-ão a:

a) *i*) Navios novos de arqueação bruta igual ou superior a 200 t;

ii) Navios novos de arqueação bruta inferior a 200 t, certificados para transportar mais de 10 pessoas;

iii) Navios novos sem arqueação medida, certificados para transportar mais de 10 pessoas; e

b) *i*) Navios existentes de arqueação bruta igual ou superior a 200 t, 10 anos depois da entrada em vigor do presente anexo;

ii) Navios existentes de arqueação bruta inferior a 200 t, certificados para transportar mais de 10 pessoas, 10 anos depois da entrada em vigor do presente anexo; e

iii) Navios existentes sem arqueação medida, certificados para transportar mais de 10 pessoas, 10 anos depois da entrada em vigor do presente anexo.

Regra 3

Vistorias

1 — Todos os navios obrigados a cumprir as disposições do presente anexo e utilizados em viagens para os portos ou terminais no mar sob a jurisdição de outras Partes na Convenção serão sujeitos às vistorias que a seguir se indicam:

a) Uma vistoria inicial antes de o navio entrar ao serviço ou antes de ser emitido pela primeira vez o certificado exigido nos termos da regra 4 do presente anexo, que incluirá uma vistoria do navio de modo a assegurar que:

i) Quando o navio estiver equipado com uma instalação de tratamento de esgotos sanitários, essa instalação satisfará os requisitos operacionais baseados em normas e métodos de teste elaborados pela Organização;

ii) Quando o navio possuir um sistema de desintegração e desinfecção de esgotos sanitários, esse sistema será de um tipo aprovado pela administração;

iii) Quando o navio possuir um tanque de retenção, a capacidade desse tanque será considerada satisfatória pela administração para retenção de todos os esgotos sanitários, tendo em consideração a actividade do navio, o número de pessoas a bordo e outros factores pertinentes. O tanque de retenção possuirá um dispositivo que indique visualmente o nível do seu conteúdo; e

iv) O navio está equipado com um encanamento de descarga para o exterior, adequado à descarga dos esgotos sanitários para uma instalação de recepção, e que esse encanamento possui uma flange universal para ligação a terra, em cumprimento da regra 11 do presente anexo. Esta vistoria será de modo a assegurar que o equipamento, instalações, dispositivos e materiais cumprem integralmente os requisitos aplicáveis do presente anexo;

b) Vistorias periódicas a intervalos determinados pela administração, que não excedam 5 anos, de modo a assegurar que o equipamento, instalações, disposições e materiais cumprem integralmente os requisitos aplicáveis do presente anexo. Contudo, quando a validade do Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) for prorrogada de acordo com o especificado na regra 7, parágrafo 2 ou 4, do presente anexo, o intervalo da vistoria periódica pode ser correspondentemente alargado.

2 — A administração estabelecerá as medidas adequadas para os navios que não estão sujeitos às disposições do parágrafo 1 da presente regra, de modo a garantir que as disposições deste anexo sejam cumpridas.

3 — As vistorias aos navios, no que diz respeito à execução das disposições do presente anexo, serão executadas por funcionários da administração. Contudo, a administração poderá confiar essas vistorias quer a inspectores nomeados para esse efeito, quer a organismos por ela reconhecidos. Em qualquer dos casos a administração interessada garantirá em absoluto a integral execução e eficiência das vistorias.

4 — Após a execução de qualquer das vistorias previstas na presente regra, não serão efectuadas quaisquer modificações significativas no equipamento, instalações, disposições ou materiais inspeccionados sem a aprovação da administração, com excepção das substituições directas de tal equipamento ou instalações.

Regra 4

Emissão de certificados

1 — Um Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) será emitido após a vistoria efectuada de acordo com as disposições da regra 3 do presente anexo, para os navios que sejam utilizados em viagens para portos ou terminais no mar sob a jurisdição de outras Partes na Convenção.

2 — Tal certificado será emitido pela administração ou por qualquer pessoa ou organismo por ela devidamente autorizado. Em qualquer dos casos, a administração assume a plena responsabilidade pelo certificado.

Regra 5

Emissão de um certificado por outro governo

1 — O governo de uma Parte na Convenção pode, a pedido da administração, mandar vistoriar um navio e, se entender que as disposições do presente anexo estão a ser cumpridas, emitirá ou autorizará a emissão de um Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) para o navio, em conformidade com o presente anexo.

2 — Uma cópia do certificado e uma cópia do relatório da vistoria serão enviadas logo que possível à administração que pediu a vistoria.

3 — Um certificado assim emitido incluirá uma declaração de que foi emitido a pedido da administração e terá o mesmo valor e igual reconhecimento que o certificado emitido de acordo com a regra 4 do presente anexo.

4 — Nenhum Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) será emitido para um navio que arvore a bandeira de um Estado que não é Parte na Convenção.

Regra 6

Modelo do certificado

O Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) será redigido numa língua oficial do país que o emite e de acordo com o modelo que consta no apêndice ao presente anexo. Se a língua utilizada não for nem o francês nem o inglês, o texto incluirá uma tradução numa destas línguas.

Regra 7

Validade do certificado

1 — Um Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) será emitido por um período de validade determinado pela administração, que não excederá 5 anos a contar da data de emissão, excepto nos casos previstos nos parágrafos 2, 3 e 4 da presente regra.

2 — Se um navio, ao expirar o certificado, não se encontrar num porto ou num terminal no mar sob jurisdição da Parte na Convenção cuja bandeira o navio arvora, o período de validade do certificado pode ser prorrogado pela administração, mas esta prorrogação será concedida apenas com a finalidade de permitir ao navio completar a sua viagem até ao Estado cuja bandeira arvora ou até ao Estado em que irá ser vistoriado, e unicamente nos casos em que a mesma seja considerada oportuna e razoável.

3 — Nenhum certificado será assim prorrogado por um período superior a 5 meses e um navio a que tenha sido concedida tal prorrogação, uma vez chegado ao Estado cuja bandeira arvora ou ao porto em que vai ser vistoriado, não será autorizado a largar deste porto ou a deixar aquele Estado com base em tal prorrogação, sem ter obtido um novo certificado.

4 — Um certificado que não tenha sido prorrogado de acordo com as disposições do parágrafo 2 da presente regra pode ser prorrogado pela administração por um período de graça não superior a 1 mês, a contar da data em que expira a validade nele indicada.

5 — Um certificado deixará de ser válido se forem introduzidas modificações significativas no equipamento, instalações, disposições ou materiais exigidos, sem a aprovação da administração, à excepção da substituição directa de tal equipamento ou instalações.

6 — Um certificado emitido para um navio deixará de ser válido quando o navio mudar de bandeira, com excepção do disposto no parágrafo 7 da presente regra.

7 — Quando um navio mudar de bandeira, o certificado continuará em vigor por um período que não exceda 5 meses, desde que não expire antes do termo deste período, ou até que a administração emita um certificado de substituição, conforme o caso. Logo que possível, após a mudança de bandeira, o governo da Parte cuja bandeira o navio anteriormente arvorava enviará à administração uma cópia do certificado que o navio possuía antes da mudança e, se possível, uma cópia do correspondente relatório da vistoria.

Regra 8

Descarga dos esgotos sanitários

1 — Tendo em consideração as disposições da regra 9 do presente anexo, será proibida a descarga para o mar de esgotos sanitários, excepto quando:

a) O navio descarregar esgotos sanitários desintegrados e desinfectados, utilizando um sistema aprovado pela administração, em conformidade com a regra 3, parágrafo 1, alínea *a*), a uma distância superior a 4 milhas marítimas da terra mais próxima, ou a mais de 12 milhas marítimas da terra mais próxima se o esgoto sanitário não for desintegrado ou desinfectado, desde que, em qualquer caso, o esgoto sanitário que tenha sido armazenado num tanque de retenção não seja descarregado instantaneamente, mas sim a um débito moderado, quando o navio segue a sua rota a uma velocidade não inferior a 4 nós; o débito de descarga será aprovado pela administração, com base em normas elaboradas pela Organização; ou

b) O navio tenha em funcionamento uma instalação de tratamento de esgotos sanitários certificada pela administração, satisfazendo os requisitos operacionais referidos na regra 3, parágrafo 1, alíneas *a*) e *i*), do presente anexo; e

i) Sejam registados no Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973) os resultados dos testes da instalação;

ii) Adicionalmente, o efluente não produzirá sólidos flutuantes visíveis, nem a descoloração da água circundante; ou

c) O navio esteja em águas sob jurisdição de um Estado e descarregue os esgotos sanitários em conformidade com os requisitos menos severos eventualmente impostos por esse Estado.

2 — Quando os esgotos sanitários forem misturados com resíduos ou água de resíduos sujeitos a requisitos de descarga diferentes, aplicar-se-ão os requisitos mais rigorosos.

Regra 9

Excepções

A regra 8 do presente anexo não se aplicará:

a) À descarga de esgotos sanitários de um navio para garantir a sua segurança e a das pessoas embarcadas ou para a salvaguarda de vidas humanas no mar; ou

b) À descarga dos esgotos sanitários resultantes de avaria no navio ou no seu equipamento, se tiverem sido tomadas todas as precauções razoáveis, antes e depois da ocorrência da avaria, a fim de a impedir ou reduzir ao mínimo.

Regra 10

Instalações de recepção

1 — Os governos das Partes na Convenção comprometem-se a garantir a montagem, nos portos e terminais, de instalações para a recepção dos esgotos sanitários com capacidade suficiente de modo a satisfazer as necessidades dos navios que as utilizem sem lhes causar atrasos indevidos.

2 — Os governos das Partes notificarão a Organização, para comunicação aos governos contratantes interessados, de todos os casos em que as instalações previstas na presente regra sejam consideradas inadequadas.

Regra 11

Uniões universais de descarga

A fim de permitir a ligação entre o encanamento das instalações de recepção e o encanamento de des-

carga do navio, ambos serão equipados com uma união universal de descarga em conformidade com o seguinte quadro:

Dimensões padrão das flanges das uniões de descarga

Descrição	Dimensões
Diâmetro exterior	210 mm
Diâmetro interior	De acordo com o diâmetro exterior do encanamento
Diâmetro do círculo dos pernos	170 mm
Rasgos na flange	4 furos de 18 mm de diâmetro feitos a distâncias iguais, no círculo dos pernos com o diâmetro acima, rasgados até à periferia da flange. Os rasgos terão a largura de 18 mm
Espessura da flange	16 mm
Pernos e porcas: quantidade e diâmetro	4 de 16 mm de diâmetro cada um e de comprimento apropriado
A flange é desenhada para ligar encanamentos com diâmetro interior máximo de 100 mm, será de aço ou outro materiai equivalente e terá superfície plana. Esta flange, bem como uma junta adequada, será apropriada para uma pressão de serviço de 6 kg/cm²	

Para navios de pontal igual ou inferior a 5 m, o diâmetro interior da união de descarga pode ser de 38 mm.

APÊNDICE

Modelo do certificado

Certificado Internacional de Prevenção da Poluição por Esgotos Sanitários (1973)

Emitido de acordo com as disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973, sob a autoridade do Governo de .....
(designação oficial completa do país)

por .....
(nome completo da pessoa competente ou do organismo autorizado nos termos das disposições da Convenção Internacional para a Prevenção da Poluição por Navios, 1973)

Nome do navio	Número ou letras do distintivo do navio	Porto de registo	Arqueação bruta	Número de pessoas que o navio está certificado a transportar

Navio novo/navio existente (*).
Data do contrato de construção...
Data de assentamento da quilha ou em que o navio se encontrava numa fase equivalente de construção...
Data de entrega...

Certifica-se:

1 — Que o navio está equipado com uma instalação de tratamento de esgotos sanitários/desintegrador/tanque de retenção (*) e um encanamento de descarga em cumprimento da regra 3, parágrafo 1, alínea *a*), *i*) a *iv*), do anexo IV à Convenção, como se segue:

(*) *a*) Descrição da instalação de tratamento de esgotos sanitários:

Tipo da instalação de tratamento de esgotos sanitários ...
Nome do fabricante ...
A instalação de tratamento de esgotos sanitários está certificada pela administração de modo a satisfazer a seguinte qualidade do efluente (**) ...

(*) *b*) Descrição do desintegrador:

Tipo de desintegrador ...
Nome do fabricante ...
Características do esgoto sanitário depois da desinfecção ...

(*) *c*) Descrição do equipamento do tanque de retenção:

Capacidade total do tanque de retenção ... m³
Localização ...

d) Um encanamento para descarga de esgoto sanitário para uma instalação de recepção, equipado com uma união universal para ligação à terra.

2 — Que o navio foi vistoriado em conformidade com a regra 3 do anexo IV à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, no que diz respeito à prevenção da poluição por esgotos sanitários, na vistoria verificou-se serem satisfatórias, sob todos os aspectos, as condições do equipamento do navio e o navio cumpre os requisitos aplicáveis ao anexo IV à Convenção.

Este certificado é válido até...
Emitido em ... (local da emissão do certificado).

.../.../19..

....

(Assinatura do funcionário que emite o certificado)

(Selo branco ou carimbo da autoridade, conforme apropriado)

De acordo com as disposições da regra 7, parágrafos 2 e 4, do anexo IV à Convenção, a validade deste certificado é prorrogada até...

.....

(Assinatura do funcionário devidamente autorizado)

Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

(*) Riscar como apropriado.
(**) Devem ser incluídos os parâmetros.

ANEXO V

Regras para a prevenção da poluição por lixo dos navios

Regra 1

Definições

Para os fins do presente anexo:

1 — «Lixo» significa todas as espécies de resíduos de alimentos domésticos e operacionais, excluindo peixe

fresco ou partes de peixe, produzidos durante o funcionamento normal do navio e susceptíveis de serem eliminados contínua ou periodicamente, com excepção das substâncias definidas ou enumeradas noutros anexos à presente Convenção.

2 — «Terra mais próxima». — A expressão «da terra mais próxima» significa desde a linha de base a partir da qual é delimitado o mar territorial do território em questão, de acordo com o direito internacional, excepto no que se refere à costa nordeste da Austrália, em que, para os fins da presente Convenção, a expressão «da terra mais próxima» significa uma linha traçada a partir de um ponto da costa da Austrália situado na latitude 11° 00′ S, longitude 142° 08′ E, e deste para ps seguintes pontos:

Latitude 10° 35′ S, longitude 141° 55′ E;
Latitude 10° 00′ S, longitude 142° 00′ E;
Latitude 9° 10′ S, longitude 143° 52′ E;
Latitude 9° 00′ S, longitude 144° 30′ E;
Latitude 13° 00′ S, longitude 144° 00′ E;
Latitude 15° 00′ S, longitude 146° 00′ E;
Latitude 18° 00′ S, longitude 147° 00′ E;
Latitude 21° 00′ S, longitude 153° 00′ E,

e por fim para um ponto na costa da Austrália situado na latitude 24° 42′ S, longitude 153° 15′ E.

3 — «Área especial» significa uma área do mar em que, por razões técnicas reconhecidas relativamente às suas condições oceanográficas e ecológicas e às características particulares do seu tráfego, é requerida a adopção de métodos especiais obrigatórios para a prevenção da poluição do mar por lixo. Nas áreas especiais incluem-se as referidas na regra 5 do presente anexo.

Regra 2

Âmbito de aplicação

As disposições do presente anexo aplicar-se-ão a todos os navios.

Regra 3

Eliminação do lixo fora das áreas especiais

1 — Tendo em consideração as disposições das regras 4, 5 e 6 do presente anexo:

a) É proibido lançar ao mar todo o tipo de plásticos, incluindo, entre outros, cabos e redes de pesca de material sintético e sacos de plástico para lixo;

b) O lançamento ao mar do lixo a seguir mencionado será feito tão longe quanto possível da terra mais próxima, e, em qualquer caso, é proibido se a distância à terra mais próxima for inferior a:

i) 25 milhas marítimas, para almofadas de estiva, forros e materiais de embalagem que flutuem;

ii) 12 milhas marítimas, para restos de alimentos e todo o outro lixo, incluindo papel, trapos, vidro, metais, garrafas, louças e outros refugos semelhantes;

c) O lançamento ao mar do lixo especificado na alínea *b*), *ii*), da presente regra pode ser autorizado quando esse lixo tiver sido passado por um desintegrador ou triturador e for lançado tão longe quanto possível da terra mais próxima, mas em qualquer caso é proibido se for efectuado a uma distância inferior a 3 milhas marítimas da terra mais próxima. Este lixo desintegrado ou triturado deverá poder passar através de uma grelha com orifícios não superiores a 25 mm.

2 — Quando o lixo estiver misturado com outras descargas sujeitas a requisitos diferentes para eliminação ou descarga, aplicar-se-ão os requisitos mais rigorosos.

Regra 4

Requisitos especiais para a eliminação do lixo

1 — Tendo em consideração as disposições do parágrafo 2 da presente regra, é proibida a eliminação de quaisquer materiais regulados por este anexo quando feita a partir de plataformas fixas ou flutuantes utilizadas na prospecção, exploração e consequente processamento dos recursos minerais do leito do mar e a partir de todos os outros navios quando atracados a ou a menos de 500 m dessas plataformas.

2 — Pode ser autorizado o lançamento ao mar de restos de comida, quando tenham sido passados por um desintegrador ou triturador, a partir de plataformas fixas ou flutuantes, quando situadas a mais de 12 milhas marítimas de terra e de todos os navios atracados a essas plataformas ou que estejam a menos de 500 m das mesmas. Esses restos de comida desintegrados ou triturados deverão poder passar através de uma grelha com orifícios não superiores a 25 mm.

Regra 5

Eliminação do lixo nas áreas especiais

1 — Para os fins do presente anexo, as áreas especiais são a área do mar Mediterrâneo, a área do mar Báltico, a área do mar Negro, a área do mar Vermelho e a «área dos golfos», definidas da seguinte forma:

a) A área do mar Mediterrâneo significa o mar Mediterrâneo propriamente dito, incluindo os seus golfos e mares, e é limitada do lado do mar Negro pelo paralelo 41° N, e a oeste, no estreito de Gibraltar, pelo meridiano 5° 36′ W.

b) A área do mar Báltico significa o mar Báltico propriamente dito, assim como o golfo de Bótnia, o golfo da Finlândia e a entrada do mar Báltico limitada pelo paralelo de Skaw no Skagerrak 57° 44,8′ N.

c) A área do mar Negro significa o mar Negro propriamente dito, limitada do lado do Mediterrâneo pelo paralelo 41° N.

d) A área do mar Vermelho significa o mar Vermelho propriamente dito, incluindo os golfos de Suez e de Aqaba, limitada a sul pela loxodromia que liga Ras si Ane (12° 8,5′ N, 43° 19,6′ E) a Husn Murad (12° 40,4′ N, 43° 30,2′ E).

e) A «área dos golfos» significa a área do mar situada a noroeste da loxodromia ligando Ras al Hadd (22° 30′ N, 59° 48′ E) e Ras al Fasteh (25° 04′ N, 61° 25′ E).

2 — Tendo em consideração as disposições da regra 6 do presente anexo:

a) É proibido o lançamento ao mar de:

i) Todos os objectos plásticos, incluindo, entre outros, cabos e redes de pesca de material sintético e sacos de plástico para lixo; e

ii) Todo o outro lixo, incluindo papel, trapos, vidro, metais, garrafas, louças, almofadas de estiva, forros e materiais de embalagem;

b) Os restos de comida serão lançados ao mar tão longe quanto possível de terra, mas em qualquer caso a não menos de 12 milhas marítimas da terra mais próxima.

3 — Quando o lixo estiver misturado com outras descargas sujeitas a requisitos diferentes para eliminação ou descarga, aplicar-se-ão os requisitos mais rigorosos.

4 — Instalações de recepção nas áreas especiais:

a) Os governos das Partes na Convenção cujas costas confinam com qualquer área especial comprometem-se a garantir, tão cedo quanto possível, a montagem em todos os portos da área especial de instalações de recepção adequadas, em conformidade com a regra 7 do presente anexo, tendo em consideração as necessidades especiais dos navios que operam nessas áreas;

b) Os governos das Partes interessadas notificarão a Organização das medidas tomadas em conformidade com a alínea *a*) da presente regra. Depois de ter recebido um número suficiente de notificações, a Organização fixará a data a partir da qual os requisitos da presente regra relativos à área em questão serão aplicados. A Organização notificará todas as Partes da data assim fixada, com uma antecedência de, pelo menos, 12 meses;

c) A partir desta data todos os navios que escalem portos dessas áreas especiais onde não existam ainda tais instalações cumprirão integralmente os requisitos da presente regra.

Regra 6

Excepções

As regras 3, 4 e 5 do presente anexo não se aplicarão:

a) À eliminação de lixo de um navio necessária para garantir a segurança do navio e das pessoas embarcadas ou para a salvaguarda de vidas humanas no mar; ou

b) Ao derrame de lixo resultante de avaria num navio ou no seu equipamento, desde que tenham sido tomadas todas as precauções razoáveis, antes e depois da ocorrência da avaria, a fim de o impedir ou reduzir ao mínimo; ou

c) À perda acidental de redes de pesca de material sintético ou de materiais sintéticos utilizados na reparação dessas redes, desde que tenham sido tomadas todas as precauções razoáveis para a evitar.

Regra 7

Instalações de recepção

1 — Os governos das Partes na Convenção comprometem-se a garantir a montagem nos portos e terminais de instalações para a recepção de lixo, adequadas às necessidades dos navios que as utilizam, sem lhes causar atrasos indevidos.

2 — Os governos das Partes notificarão a Organização, para comunicação às Partes interessadas, de todos os casos em que as instalações previstas na presente regra sejam consideradas inadequadas.

PROTOCOLO DE 1978 RELATIVO À CONVENÇÃO INTERNACIONAL PARA A PREVENÇÃO DA POLUIÇÃO POR NAVIOS, 1973

As Partes no presente Protocolo:

Reconhecendo que a Convenção Internacional para a Prevenção da Poluição por Navios, 1973, pode contribuir significativamente para a protecção do meio marinho contra a poluição por navios;

Reconhecendo igualmente a necessidade de melhorar ainda mais a prevenção e controle da poluição marinha causada por navios, especialmente navios petroleiros;

Reconhecendo além disso a necessidade de pôr em execução, tão cedo e tão amplamente quanto possível, as regras para a prevenção da poluição por hidrocarbonetos, contidas no anexo I a essa Convenção;

Reconhecendo, contudo, a necessidade de protelar a aplicação do anexo II a essa Convenção até que certos problemas técnicos tenham sido satisfatoriamente resolvidos;

Considerando que estes objectivos podem ser alcançados mais eficazmente pela conclusão de um protocolo relativo a Convenção Internacional para a Prevenção da Poluição por Navios, 1973;

acordaram no seguinte:

ARTIGO I

Obrigações gerais

1 — As Partes no presente Protocolo comprometem-se a cumprir as disposições:

a) Do presente Protocolo e do seu anexo, que constituirá parte integrante deste Protocolo; e

b) Da Convenção Internacional para a Prevenção da Poluição por Navios, 1973 (daqui em diante referida como «a Convenção»), com as alterações e aditamentos contidos no presente Protocolo.

2 — As disposições da Convenção e do presente Protocolo serão lidas e interpretadas em conjunto como um único instrumento.

3 — Qualquer referência ao presente Protocolo constitui simultaneamente uma referência ao seu anexo.

ARTIGO II

Aplicação do anexo II à Convenção

1 — Não obstante o disposto no artigo 14, parágrafo 1, da Convenção, as Partes no presente Proto-

colo acordam que não ficarão vinculadas pelas disposições do anexo II à Convenção durante um período de 3 anos a partir da data da entrada em vigor do presente Protocolo, ou durante um período mais longo que possa ser acordado por uma maioria de dois terços das Partes no presente Protocolo no Comité de Protecção do Meio Marinho (daqui em diante referido como «o Comité») da Organização Marítima Internacional (daqui em diante referida como «a Organização»).

2 — Durante o período estipulado no parágrafo 1 do presente artigo, as Partes no presente Protocolo não ficarão sujeitas a quaisquer obrigações nem terão direito de reivindicar quaisquer privilégios nos termos da Convenção, relativos às matérias respeitantes ao anexo II à Convenção, e todas as referências às Partes na Convenção não incluirão as Partes no presente Protocolo, no que respeita às matérias relacionadas com tal anexo.

ARTIGO III

Comunicação de informações

O texto do artigo 11, parágrafo 1, alínea *b*), da Convenção é substituído pelo seguinte:

> Uma lista de inspectores nomeados ou de organismos reconhecidos que estejam autorizados a actuar em seu nome na condução dos assuntos relacionados com o projecto, construção, equipamento e operação de navios destinados ao transporte de substâncias prejudiciais, de acordo com as disposições das regras, a fim de ser distribuída às Partes para conhecimento dos seus funcionários. A administração notificará, portanto, a Organização das responsabilidades e condições específicas em que a autoridade foi delegada nos referidos inspectores ou organismos reconhecidos.

ARTIGO IV

Assinatura, ratificação, aceitação, aprovação e adesão

1 — O presente Protocolo fica aberto à assinatura, desde 1 de Junho de 1978 até 31 de Maio de 1979, na sede da Organização, continuando a partir daí aberto para adesão. Os Estados podem tornar-se Partes no presente Protocolo mediante:

a) Assinatura sem reserva para ratificação, aceitação ou aprovação; ou
b) Assinatura, sujeita a ratificação, aceitação ou aprovação, seguida de ratificação, aceitação ou aprovação; ou
c) Adesão.

2 — A ratificação, aceitação, aprovação ou adesão é concretizada mediante o depósito do correspondente instrumento junto do secretário-geral da Organização.

ARTIGO V

Entrada em vigor

1 — O presente Protocolo entra em vigor 12 meses após a data em que pelo menos 15 Estados, cujas frotas mercantes combinadas constituam não menos de 50 % da tonelagem de arqueação bruta da marinha mercante mundial, se tenham tornado Partes no presente Protocolo, de acordo com o seu artigo IV.

2 — Qualquer instrumento de ratificação, aceitação, aprovação ou adesão depositado depois da entrada em vigor do presente Protocolo produz efeito 3 meses após a data de depósito.

3 — Depois da data em que uma emenda ao presente Protocolo for considerada como aceite, de acordo com o artigo 16 da Convenção, qualquer instrumento de ratificação, aceitação, aprovação ou adesão depositado aplicar-se-á ao presente Protocolo como emendado.

ARTIGO VI

Emendas

Os procedimentos estabelecidos no artigo 16 da Convenção relativos às emendas aos artigos, a um anexo e a um apêndice a um anexo à Convenção aplicam-se, respectivamente, às emendas aos artigos, ao anexo e a um apêndice ao anexo ao presente Protocolo.

ARTIGO VII

Denúncia

1 — O presente Protocolo pode ser denunciado por qualquer Parte no mesmo, em qualquer momento, após decorridos 5 anos a partir da entrada em vigor do Protocolo para essa Parte.

2 — A denúncia é efectuada mediante o depósito de um instrumento de denúncia junto do secretário-geral da Organização.

3 — Uma denúncia produz efeitos 12 meses após a recepção da sua notificação pelo secretário-geral da Organização, ou após o termo de qualquer outro período mais longo indicado na notificação.

ARTIGO VIII

Depositário

1 — O presente Protocolo é depositado junto do secretário-geral da Organização (daqui em diante referido como «o depositário»).

2 — O depositário:

a) Informará todos os Estados que tenham assinado o presente Protocolo ou a ele aderido:
  i) De cada nova assinatura ou depósito de um instrumento de ratificação, aceitação, aprovação ou adesão e respectiva data;
  ii) Da data de entrada em vigor do presente Protocolo;
  iii) Do depósito de qualquer instrumento de denúncia do presente Protocolo, bem como da data em que foi recebido e da data em que a denúncia produz efeitos;
  iv) De qualquer decisão tomada de acordo com o artigo II, parágrafo 1, do presente Protocolo;

b) enviará cópias autenticadas do presente Protocolo a todos os Estados que o tenham assinado ou a ele aderido.

3 — Logo que o presente Protocolo entre em vigor, será enviada uma cópia autenticada pelo depositário ao

Secretariado das Nações Unidas, para registo e publicação, de acordo com o artigo 102 da Carta das Nações Unidas.

ARTIGO IX

Línguas

O presente Protocolo é redigido em exemplar único, cujos textos em espanhol, francês, inglês e russo fazem igualmente fé. Serão preparadas e depositadas com os originais assinados traduções oficiais em alemão, árabe, italiano e japonês.

Em fé do que os abaixo assinados (*), devidamente autorizados pelos seus respectivos governos para esse efeito, assinaram o presente Protocolo.

Feito em Londres, no dia 17 de Fevereiro de 1978.

(*) Omitidas as assinaturas.

ANEXO

Alterações e aditamentos à Convenção Internacional para a Prevenção da Poluição por Navios, 1973

ANEXO I

Regras para a prevenção da poluição por hidrocarbonetos

Regra 1

Definições

Parágrafos 1 a 7 — *Sem alteração.*

Substituir o texto do parágrafo 8 pelo seguinte:

8 — *a*) «Grande modificação» significa a modificação de um navio existente:

i) Que altera substancialmente as suas dimensões ou capacidade de carga; ou

ii) Que modifica o tipo do navio; ou

iii) Cuja intenção seja, na opinião da administração, prolongar consideravelmente a sua vida; ou

iv) Que de qualquer outra forma altere o navio de modo que, se fosse um navio novo, ficaria sujeito às disposições pertinentes do presente Protocolo que não lhe seriam aplicáveis como navio existente;

b) Não obstante as disposições da alínea *a*) do presente parágrafo, a modificação de um navio petroleiro existente, de porte bruto igual ou superior a 20 000 t, para satisfazer os requisitos da regra 13 deste anexo não será considerada como uma grande modificação para os efeitos do presente anexo.

Parágrafos 9 a 22 — *Sem alteração.*

Substituir o texto do parágrafo 23 pelo seguinte:

23 — «Deslocamento leve» significa o deslocamento de um navio, em toneladas métricas, sem carga, combustível, óleo lubrificante, água de lastro, água doce e água de alimentação de caldeiras nos tanques, materiais de consumo, passageiros e tripulação, e suas bagagens.

Parágrafos 24 e 25 — *Sem alteração.*

Os seguintes parágrafos são incluídos no texto:

26 — Não obstante as disposições do parágrafo 6 da presente regra, para os efeitos das regras 13, 13B, 13E e 18, parágrafo 5, deste anexo, «navio petroleiro novo» significa um navio petroleiro:

a) Cujo contrato de construção foi celebrado depois de 1 de Junho de 1979; ou

b) Na ausência de um contrato de construção, cuja quilha foi assente, ou se encontrava numa fase equivalente de construção, depois de 1 de Janeiro de 1980; ou

c) Cuja entrega foi efectuada depois de 1 de Junho de 1982; ou

d) Que sofreu uma grande modificação:

i) Cujo contrato foi celebrado depois de 1 de Junho de 1979; ou

ii) Na ausência de um contrato, cujos trabalhos foram iniciados depois de 1 de Janeiro de 1980; ou

iii) Cujos trabalhos terminaram depois de 1 de Junho de 1982;

exceptuando que, para os navios petroleiros de porte bruto igual ou superior a 70 000 t, aplicar-se-á a definição contida no parágrafo 6 desta regra para os efeitos da regra 13, parágrafo 1, do presente anexo.

27 — Não obstante as disposições do parágrafo 7 desta regra, para os efeitos das regras 13, 13A, 13B, 13C, 13D e 18, parágrafo 6, do presente anexo, «navio petroleiro existente» significa um navio petroleiro que não é um navio petroleiro novo tal como definido no parágrafo 26 desta regra.

28 — «Petróleo bruto» significa qualquer mistura líquida de hidrocarbonetos existente na terra, tratada ou não para a tornar transportável, e inclui:

a) Petróleo bruto do qual podem ter sido retiradas certas fracções destiladas; e

b) Petróleo bruto ao qual podem ter sido adicionadas certas fracções destiladas.

29 — «Navio-tanque para transporte de petróleo bruto» significa um navio petroleiro utilizado no transporte de petróleo bruto.

30 — «Navio-tanque para o transporte de produtos refinados» significa um navio petroleiro utilizado no transporte de hidrocarbonetos que não sejam petróleo bruto.

Regras 2 e 3

Sem alteração.

Regra 4

Substituir o texto da regra 4 pelo seguinte:

Vistorias e inspecções

1 — Os navios petroleiros de arqueação bruta igual ou superior a 150 t e todos os outros navios

de arqueação bruta igual ou superior a 400 t serão sujeitos às vistorias a seguir especificadas:

a) Uma vistoria inicial antes de o navio entrar ao serviço ou antes da emissão, pela primeira vez, do certificado exigido pela regra 5 do presente anexo, que incluirá uma vistoria completa da sua estrutura, equipamento, sistemas, instalações, disposições e materiais, na medida em que o navio esteja abrangido por este anexo. Esta vistoria será de modo a assegurar que a estrutura, equipamento, sistemas, instalações, disposições e materiais cumpram integralmente os requisitos aplicáveis do presente anexo.

b) Vistorias periódicas, a intervalos determinados pela administração, mas não excedendo 5 anos, que permitam assegurar que a estrutura, equipamento, sistemas, instalações, disposições e materiais cumpram integralmente os requisitos do presente anexo.

c) Pelo menos uma vistoria intermédia durante o período de validade do certificado que permita assegurar que os equipamentos, os sistemas de bombagem e de encanamentos associados, incluindo os monitores de descarga de hidrocarbonetos, sistemas de lavagem com petróleo bruto, os equipamentos separadores hidrocarbonetos/água e os equipamentos de filtragem de hidrocarbonetos cumpram integralmente os requisitos aplicáveis do presente anexo e estão em boas condições de funcionamento. Quando apenas se proceda a uma vistoria intermédia durante qualquer período de validade do certificado, essa vistoria efectuar-se-á no período compreendido entre 6 meses antes e 6 meses depois da data intermédia de validade do referido certificado. Estas vistorias intermédias serão registadas no certificado emitido em conformidade com a regra 5 do presente anexo.

2 — A administração estabelecerá as medidas apropriadas para os navios que não estão sujeitos às disposições do parágrafo 1 desta regra, de modo a garantir o cumprimento das disposições aplicáveis do presente anexo.

3 — *a*) As vistorias a navios, para verificação da aplicação das disposições do presente anexo, serão efectuadas por funcionários da administração. A administração pode, contudo, delegar a execução das vistorias quer em inspectores nomeados para este fim quer em organismos por ela reconhecidos.

b) A administração estabelecerá disposições para a realização de inspecções não programadas durante o período de validade do certificado. Estas inspecções garantirão que o navio e o seu equipamento se mantêm, sob todos os aspectos, em condições satisfatórias para o serviço a que o navio se destina. Estas inspecções podem ser efectuadas pelos seus próprios serviços de inspecção, por inspectores nomeados ou por organismos reconhecidos, ou ainda por outras Partes, a pedido da administração. Quando a administração, de acordo com as disposições do parágrafo 1 da presente regra, estabelecer a realização de vistorias anuais obrigatórias, não serão obrigatórias as inspecções não programadas acima referidas.

c) Qualquer administração que nomeie inspectores ou reconheça organismos para efectuar as vistorias e inspecções, como estabelecido nas alíneas *a*) e *b*) do presente parágrafo, conferirá, pelo menos, poderes ao inspector nomeado ou ao organismo reconhecido para:

i) Exigir a execução de reparações num navio; e

ii) Efectuar vistorias e inspecções, quando solicitadas pelas autoridades apropriadas de um Estado do porto.

A administração notificará a Organização das responsabilidades específicas atribuídas aos inspectores nomeados ou organismos reconhecidos e das condições em que lhes foi delegada a autoridade, a fim de ser comunicada às Partes no presente Protocolo, para informação dos seus funcionários.

d) Quando um inspector nomeado ou um organismo reconhecido verificar que o estado do navio ou do seu equipamento não corresponde substancialmente ao especificado no certificado ou é tal que o navio não está apto a largar para o mar sem que represente uma ameaça inaceitável para o meio marinho, esse inspector ou organismo assegurar-se-á imediatamente de que são tomadas acções correctivas e notificará, em devido tempo, a administração. Se essas acções correctivas não forem tomadas, o certificado será retirado e a administração será imediatamente notificada; e se o navio se encontrar num porto de outra Parte, as autoridades apropriadas do Estado do porto serão também imediatamente notificadas. Quando um funcionário da administração, um inspector nomeado ou um organismo reconhecido tiver notificado as autoridades apropriadas do Estado do porto, o governo desse Estado prestará a esse funcionário, inspector ou organismo a assistência necessária para se desempenhar das suas obrigações nos termos da presente regra. Quando aplicável, o governo do Estado do porto interessado tomará medidas convenientes de modo a garantir que o navio só possa largar para o mar ou sair do porto com o objectivo de se dirigir ao mais próximo e apropriado estaleiro de reparações que esteja disponível, quando não represente uma ameaça inaceitável para o meio marinho.

e) Em qualquer dos casos, a administração interessada garantirá em absoluto a integral execução e a eficiência da vistoria e da inspecção e tomará as disposições necessárias para satisfazer esta obrigação.

4 — *a*) O estado do navio e do seu equipamento será mantido de acordo com as disposições do presente Protocolo, de modo a garantir que o navio se mantenha, em todos os aspectos, apto a largar para o mar sem que represente uma ameaça inaceitável para o meio marinho.

b) Após a execução de qualquer das vistorias previstas no parágrafo 1 da presente regra não serão efectuadas quaisquer modificações na estrutura, equipamento, sistemas, instalações, disposi-

ções ou materiais inspeccionados sem autorização da administração, com excepção da substituição directa de tal equipamento e instalações.

c) Sempre que ocorrer um acidente num navio ou for detectada uma deficiência que afecte substancialmente a integridade do navio ou a eficiência ou integridade do equipamento sujeitos às disposições do presente anexo, o capitão ou o armador do navio participará, na primeira oportunidade, o facto à administração, ao organismo reconhecido ou ao inspector nomeado, responsável pela emissão do respectivo certificado, a quem caberá proceder à investigações para determinar se é necessário efectuar uma vistoria, como requerido pelo parágrafo 1 da presente regra. Se o navio se encontrar num porto de outra Parte, o capitão ou o armador participará também imediatamente o facto às autoridades apropriadas do Estado do porto, e o inspector nomeado ou o organismo reconhecido certificar-se-á de que tal participação foi efectuada.

Regras 5, 6 e 7

No texto destas regras, eliminar todas as referências a «(1973)», relacionadas com o Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos.

Regra 8

Validade do certificado

Substituir o texto da regra 8 pelo seguinte:

1 — Um Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos será emitido por um período de validade determinado pela administração, que não excederá 5 anos a contar da data da emissão, desde que, no caso de um navio petroleiro operando com tanques destinados a lastro limpo por um período limitado como especificado na regra 13, parágrafo 9, do presente anexo, o período de validade do certificado não exceda o período atrás indicado.

2 — Um certificado deixará de ser válido se forem introduzidas modificações significativas na estrutura, equipamento, sistemas, instalações, disposições ou materiais exigidos sem a aprovação da administração, à excepção da substituição directa de tal equipamento ou instalações ou se não tiverem sido efectuadas as vistorias intermédias especificadas pela administração, nos termos da regra 4, parágrafo 1, alínea *c*), do presente anexo.

3 — Um certificado emitido para um navio deixará igualmente de ser válido quando o navio mudar de bandeira. Só será emitido um novo certificado quando o governo que o emitir estiver convencido de que o navio cumpre integralmente os requisitos da regra 4, parágrafo 4, alíneas *a*) e *b*), do presente anexo. No caso de mudança de bandeira entre Partes, o Governo da Parte cuja bandeira o navio arvorava, se para tal for solicitado até 3 meses depois da mudança, enviará à administração uma cópia do certificado que o navio possuía antes da mudança e, se possível, uma cópia do relatório da respectiva vistoria.

Regras 9 a 12

Sem alteração.

O texto da regra 13 é substituído pelas seguintes regras:

Regra 13

Tanques de lastro segregado, tanques destinados a lastro limpo e lavagem com petróleo bruto

Tendo em consideração as disposições das regras 13C e 13D do presente anexo, os navios petroleiros cumprirão os requisitos desta regra.

Navios petroleiros novos de porte bruto igual ou superior a 20 000 t

1 — Todos os navios-tanques novos para transporte de petróleo bruto, de porte bruto igual ou superior a 20 000 t e todos os navios-tanques novos para transporte de produtos refinados de porte bruto igual ou superior a 30 000 t possuirão tanques de lastro segregado e cumprirão as disposições dos parágrafos 2, 3 e 4 ou do parágrafo 5 da presente regra, conforme aplicável.

2 — A capacidade dos tanques de lastro segregado será calculada de forma que o navio possa navegar em lastro com toda a segurança sem ter de recorrer à utilização dos tanques de carga para lastragem com água, salvo nas condições previstas no parágrafo 3 ou 4 da presente regra. Contudo, em qualquer caso, a capacidade mínima dos tanques de lastro segregado permitirá que em todas as condições de lastro que possam ocorrer em qualquer momento da viagem, incluindo a de deslocamento leve apenas com lastro segregado, possam ser satisfeitos todos os seguintes requisitos relativos a calados e caimento do navio:

a) A imersão a meio navio *(dm)* em metros (sem ter em consideração qualquer deformação do navio) não será inferior a:

$$dm = 2{,}0 + 0{,}02\,L$$

b) Os calados nas perpendiculares a vante e a ré terão os valores correspondentes à imersão a meio navio *(dm)*, conforme estabelecido na alínea *a*) do presente parágrafo, com um caimento a ré igual ou inferior a 0,015 *L*; e

c) Em qualquer caso, o calado na perpendicular a ré não será inferior ao calado necessário para assegurar a imersão completa do(s) hélice(s).

3 — Em caso algum será transportada água de lastro nos tanques de carga, excepto nas raras viagens em que as condições meteorológicas sejam de tal modo severas que se torne necessário, na opinião do capitão, transportar água de lastro adicional nos tanques de carga para garantir a segurança do navio. Esta água de lastro adicional será tratada e descarregada em cumprimento da regra 9 e em conformidade com os requisitos da regra 15 do presente anexo, e esta operação registada no

Livro de Registo de Hidrocarbonetos mencionado na regra 20 deste anexo.

4 — No caso de navios-tanques novos para transporte de petróleo bruto, o lastro adicional autorizado no parágrafo 3 da presente regra só será transportado em tanques de carga que tenham sido lavados com petróleo bruto, em conformidade com a regra 13B deste anexo, antes da largada de um porto ou terminal de descarga de hidrocarbonetos.

5 — Não obstante as disposições do parágrafo 2 da presente regra, as condições de lastro segregado para os navios petroleiros de comprimento inferior a 150 m terão de ser consideradas satisfatórias pela administração.

6 — Todos os navios-tanques para transporte de petróleo bruto, de porte bruto igual ou superior a 20 000 t, serão equipados com um sistema de limpeza dos tanques, usando a lavagem com petróleo bruto. A administração tomará as medidas necessárias para garantir que o sistema cumpra integralmente os requisitos da regra 13B do presente anexo, no prazo de 1 ano a partir da data em que o navio-tanque foi utilizado pela primeira vez no transporte de petróleo bruto ou no fim da terceira viagem em que foi transportado petróleo bruto adequado à lavagem com petróleo bruto se esta for posterior. A não ser que o navio petroleiro transporte petróleo bruto que não seja adequado para a lavagem com petróleo bruto, o navio operará aquele sistema em conformidade com os requisitos daquela regra.

Navios-tanques existentes para transporte de petróleo bruto, de porte bruto igual ou superior a 40 000 t

7 — Tendo em consideração as disposições dos parágrafos 8 e 9 da presente regra, todos os navios-tanques existentes para transporte de petróleo bruto, de porte bruto igual ou superior a 40 000 t, possuirão tanques de lastro segregado e cumprirão os requisitos dos parágrafos 2 e 3 desta regra, a partir da entrada em vigor do presente Protocolo.

8 — Os navios-tanques existentes para transporte de petróleo bruto, referidos no parágrafo 7 da presente regra, em vez de possuírem tanques de lastro segregado, podem operar utilizando um procedimento de limpeza dos tanques de carga usando a lavagem com petróleo bruto, em conformidade com a regra 13B deste anexo, excepto se o navio-tanque para transporte de petróleo bruto for destinado ao transporte de petróleo bruto que não seja adequado para a lavagem com petróleo bruto.

9 — Os navios petroleiros existentes para transporte de petróleo bruto referidos no parágrafo 7 ou 8 da presente regra, em vez de possuírem tanques de lastro segregado ou operarem utilizando um procedimento de limpeza dos tanques de carga, usando a lavagem com petróleo bruto, podem operar com tanques destinados a lastro limpo, em conformidade com as disposições da regra 13A deste anexo, durante o seguinte período:

a) Até 2 anos depois da entrada em vigor do presente Protocolo, no caso de navios-tanques para transporte de petróleo bruto de porte bruto igual ou superior a 70 000 t; e

b) Até 4 anos depois da entrada em vigor do presente Protocolo, no caso de navios-tanques para transporte de petróleo bruto de porte bruto igual ou superior a 40 000 t, mas inferior a 70 000 t.

Navios-tanques existentes para transporte de produtos refinados, de porte bruto igual ou superior a 40 000 t

10 — A partir da entrada em vigor do presente Protocolo, todos os navios-tanques existentes para transporte de produtos refinados, de porte bruto igual ou superior a 40 000 t, possuirão tanques de lastro segregado e cumprirão os requisitos dos parágrafos 2 e 3 da presente regra, ou alternativamente operarão com tanques destinados a lastro limpo, em conformidade com as disposições da regra 13A deste anexo.

Navios petroleiros qualificados como navios petroleiros de lastro segregado

11 — Qualquer navio petroleiro que não seja obrigado a possuir tanques de lastro segregado, em conformidade com o parágrafo 1, 7 ou 10 da presente regra, pode, contudo, ser qualificado como navio petroleiro de lastro segregado desde que cumpra os requisitos dos parágrafos 2 e 3 ou do parágrafo 5 deste regra, conforme aplicável.

Regra 13A

Requisitos para navios petroleiros com tanques destinados a lastro limpo

1 — Um navio petroleiro que opere com tanques destinados a lastro limpo, em conformidade com as disposições da regra 13, parágrafo 9 ou 10, do presente anexo, terá tanques com capacidade suficiente, destinados exclusivamente ao transporte de lastro limpo, como definido na regra 1, parágrafo 16 deste anexo, de modo a satisfazer os requisitos da regra 13, parágrafos 2 e 3, do presente anexo.

2 — As disposições e os procedimentos operacionais referentes aos tanques destinados a lastro limpo cumprirão os requisitos estabelecidos pela administração. Tais requisitos incluirão pelo menos todas as disposições das especificações para navios petroleiros com tanques destinados a lastro limpo, adoptadas pela Conferência Internacional sobre Segurança de Navios-Tanques e Prevenção da Poluição, 1978, na Resolução 14, com as eventuais revisões feitas pela Organização.

3 — Um navio petroleiro que opere com tanques destinados a lastro limpo será equipado com um aparelho de medida do teor em hidrocarbonetos de tipo aprovado pela administração, com base nas especificações recomendadas pela Organização (*),

(*) Faz-se referência à Recomendação sobre Especificações Internacionais de Eficiência e Ensaio dos Equipamentos Separadores Hidrocarbonetos/Água e dos Aparelhos de Medida do Teor em Hidrocarbonetos, adoptada pela Organização na Resolução A.393(X).

de modo a permitir o controle do teor em hidrocarbonetos na água de lastro que está a ser descarregada. O aparelho de medida do teor em hidrocarbonetos será instalado, o mais tardar, na primeira entrada programada em estaleiro, depois da entrada em vigor do presente protocolo. Até que esteja instalado o aparelho de medida do teor em hidrocarbonetos, será verificado, mediante exame da água de lastro realizado imediatamente antes da descarga de água dos tanques destinados a lastro limpo, que esta não foi contaminada por hidrocarbonetos.

4 — Todos os navios petroleiros que operem com tanques destinados a lastro limpo possuirão:

a) Um Manual de Operação dos Tanques Destinados a Lastro Limpo, com a descrição detalhada do sistema e dos procedimentos operacionais. Este manual obedecerá às exigências da administração e incluirá todas as informações contidas nas especificações referidas no parágrafo 2 da presente regra. Se for efectuada uma modificação no sistema de tanques destinados a lastro limpo, o manual de operação será revisto em conformidade; e

b) Um suplemento ao Livro de Registo de Hidrocarbonetos, referido na regra 20 do presente anexo, conforme indicado no suplemento 1 ao apêndice III a este anexo. Este suplemento acompanhará sempre o Livro de Registo de Hidrocarbonetos.

Regra 13B

Requisitos para a lavagem com petróleo bruto

1 — Todos os sistemas de lavagem com petróleo bruto cuja instalação seja obrigatória, em conformidade com a regra 13, parágrafos 6 e 8 do presente anexo, cumprirão os requisitos desta regra.

2 — A instalação de lavagem com petróleo bruto, o equipamento associado e a sua disposição cumprirão os requisitos estabelecidos pela administração. Tais requisitos incluirão, pelo menos, todas as disposições das especificações para o projecto, operação e controlo dos sistemas de lavagem com petróleo bruto, adoptadas pela Conferência Internacional sobre Segurança de Navios-Tanques e Prevenção da Poluição, 1978, na Resolução 15, com as eventuais revisões feitas pela Organização.

3 — Todos os tanques de carga e todos os tanques de resíduos serão equipados com um sistema de gás inerte, em conformidade com as regras apropriadas do capítulo II-2 da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, modificada e ampliada pelo Protocolo de 1978 Relativo à Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974.

4 — No respeitante à lastragem dos tanques de carga, antes de cada viagem em lastro serão lavados com petróleo bruto um número suficiente de tanques de carga, para que, tendo em consideração a rota habitual do navio petroleiro e as condições meteorológicas previsíveis, apenas se embarque água para lastro nos tanques de carga que tenham sido lavados com petróleo bruto.

5 — Todos os navios petroleiros que operem com sistemas de lavagem de tanques com petróleo bruto possuirão:

a) Um Manual de Operação e Equipamento com a descrição detalhada do sistema, do equipamento e dos procedimentos operacionais. Este manual obedecerá às exigências da administração e incluirá todas as informações contidas nas especificações referidas no parágrafo 2 da presente regra. Se for efectuada uma modificação no sistema de lavagem com petróleo bruto, o Manual de Operação e Equipamento será revisto em conformidade; e

b) Um suplemento ao Livro de Registo de Hidrocarbonetos, referido na regra 20 do presente anexo, conforme indicado no suplemento 2 ao apêndice III a este anexo. Este suplemento companhará sempre o Livro de Registo de Hidrocarbonetos.

Regra 13C

Navios-tanques existentes utilizados em tráfegos específicos

1 — Tendo em consideração as disposições dos parágrafos 2 e 3 da presente regra, a regra 13, parágrafos 7 a 10,do presente anexo não se aplicará a um navio petroleiro existente utilizado exclusivamente em tráfegos específicos entre:

a) Portos ou terminais de um Estado Parte no presente Protocolo; ou

b) Portos ou terminais de Estados Partes no presente Protocolo, quando:

i) A totalidade da viagem se efectue dentro de uma área especial como definida na regra 10, parágrafo 1, do presente anexo; ou

ii) A totalidade da viagem se efectue dentro de outros limites definidos pela Organização.

2 — As disposições do parágrafo 1 da presente regra aplicar-se-ão apenas quando os portos ou terminais onde se efectue o carregamento no decurso dessas viagens possuírem instalações adequadas para a recepção e tratamento de todo o lastro e água de lavagem de tanques, provenientes de navios petroleiros que os utilizem, e quando forem satisfeitas todas as seguintes condições:

a) Tendo em consideração as excepções previstas na regra 11 do presente anexo, todas as águas de lastro, incluindo água de lastro limpo, e os resíduos da lavagem de tanques são retidos a bordo e trasfegados para as instalações de recepção e o respectivo registo nas secções apropriadas do suplemento ao Livro de Registo de Hidrocarbonetos, referido no parágrafo 3 da presente regra, é visado pela autoridade competente do Estado do porto;

b) Tenha havido acordo entre a administração e os governos dos Estados do porto referidos no parágrafo 1, alínea *a*) ou *b*), da presente regra, relativamente à utilização de um navio petroleiro existente para um tráfego específico;

c) Em conformidade com as disposições pertinentes do presente anexo, as instalações de recepção dos portos ou terminais acima referidas sejam aprovadas, para os efeitos da presente regra, pelos governos dos Estados Partes no presente Protocolo, em cujo território estejam situados esses portos ou terminais; e

d) Esteja mencionado no Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos que o navio petroleiro se destina exclusivamente a esse tráfego específico.

3 — Todos os navios petroleiros utilizados num tráfego específico possuirão um suplemento ao Livro de Registo de Hidrocarbonetos, referido na regra 20 do presente anexo, conforme indicado no suplemento 3 ao apêndice III a este anexo. Este suplemento acompanhará sempre o Livro de Registo de Hidrocarbonetos.

Regra 13D

Navios petroleiros existentes com disposições especiais para lastro

1 — Quando um navio petroleiro existente tenha sido construído ou opere de modo a cumprir permanentemente os requisitos de calado e caimento da regra 13, parágrafo 2, do presente anexo, sem necessidade de recorrer à utilização de água de lastro, será considerado como cumprindo os requisitos relativos a tanques de lastro segregado, referidos na regra 13, parágrafo 7, deste anexo, desde que sejam satisfeitas todas as seguintes condições:

a) Os procedimentos operacionais e as disposições para lastro sejam aprovados pela administração;

b) Exista acordo entre a administração e os governos dos Estados do porto interessados que sejam Partes no presente Protocolo, sempre que os requisitos de calado e caimento sejam satisfeitos mediante um procedimento operacional; e

c) Esteja mencionado no Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos que o navio petroleiro opera com disposições especiais para lastro.

2 — Em caso algum será transportada água de lastro nos tanques de hidrocarbonetos, excepto nas raras viagens em que as condições meteorológicas sejam de tal modo severas que se torne necessário, na opinião do capitão, transportar água de lastro adicional nos tanques de carga para garantir a segurança do navio. Esta água de lastro adicional será tratada e descarregada em cumprimento da regra 9 e em conformidade com os requisitos da regra 15 do presente anexo, e esta operação registada no Livro de Registo de Hidrocarbonetos mencionado na regra 20 deste anexo.

3 — A administração que tenha visado um certificado de acordo com o parágrafo 1, alínea *c*), da presente regra comunicará à Organização os detalhes correspondentes, para informação às Partes no presente Protocolo.

Regra 13E

Localização protectiva dos espaços para lastro segregado

1 — Em todos os navios-tanques novos para transporte de petróleo bruto de porte bruto igual ou superior a 20 000 t e em todos os navios-tanques novos para transporte de produtos refinados de porte bruto igual ou superior a 30 000 t, os tanques de lastro segregado necessários para proporcionar a capacidade que permita cumprir os requisitos da regra 13 do presente anexo, que estejam localizados na zona do comprimento do navio em que se situam os tanques de carga, serão dispostos de acordo com os requisitos dos parágrafos 2, 3 e 4 desta regra, de modo a constituir uma medida de protecção contra o derrame de hidrocarbonetos no caso de encalhe ou de colisão.

2 — Os tanques de lastro segregado e os espaços que não sejam tanques de hidrocarbonetos situados na zona do comprimento do navio em que se situam os tanques de carga (L_t) serão dispostos de modo a cumprir o seguinte requisito:

$$\Sigma PA_c + \Sigma PA_s \geqslant J\ [L_t(B+2D)]$$

onde:

PA_c = área, em metros quadrados, do costado correspondente a cada tanque de lastro segregado ou espaço que não seja um tanque de hidrocarbonetos, calculada com base nas dimensões de traçado;

PA_s = área, em metros quadrados, do fundo do navio, correspondente a cada um desses tanques ou espaços, calculada com base nas dimensões de traçado;

L_t = comprimento, em metros, entre os extremos a vante e a ré dos tanques de carga;

B = boca máxima do navio, em metros, como definida na regra 1, parágrafo 21, do presente anexo;

D = pontal de construção, em metros, medido verticalmente à borda, a meio navio, entre a face superior da quilha e a face superior do vau do convés de bordo livre. Nos navios com trincaniz curvo, o pontal de construção medir-se-á até ao ponto de intercepção do prolongamento das linhas de traçado do convés com a do costado, como se o trincaniz fosse de construção angular;

J = 0,45 para navios petroleiros de porte bruto igual a 20 000 t; 0,30 para navios petroleiros de porte bruto igual ou superior a 200 000 t, tendo em consideração as disposições do parágrafo 3 da presente regra.

Os valores de "*J*", correspondentes a valores de porte bruto intermédio, calcular-se-ão por interpolação linear.

Sempre que os símbolos indicados neste parágrafo apareçam na presente regra têm o significado definido no presente parágrafo.

3 — Para os navios-tanques de porte bruto igual ou superior a 200 000 t, o valor de *J* pode ser reduzido como segue:

$$J \text{ reduzido} = \left[J - \left(a - \frac{O_c + O_s}{4\ O_A}\right)\right]$$

ou 0,2 se este valor for superior, onde:

a = 0,25 para navios petroleiros de porte bruto igual a 200 000 t;

a = 0,40 para os navios petroleiros de porte bruto igual a 300 000 t;

a = 0,50 para navios petroleiros de porte bruto igual ou superior a 420 000 t.

Os valores de *"a"* correspondentes a valores de porte bruto intermédio calcular-se-ão por interpolação linear;

O_c = como definido na regra 23, parágrafo 1, alínea *a*), do presente anexo.

O_s = como definido na regra 23, parágrafo 1, alínea *b*), do presente anexo;

O_A = derrame admissível de hidrocarbonetos como exigido na regra 24, parágrafo 2, do presente anexo.

4 — No cálculo de *"PA_c"* e *"PA_s"*, para os tanques de lastro segregado e espaços que não sejam tanques de hidrocarbonetos, aplicar-se-á o seguinte:

a) A largura mínima de cada tanque ou espaços laterais cuja altura seja igual à altura do costado do navio, ou que se estenda desde o convés até à face superior do duplo fundo, não será inferior a 2 m. Esta largura será medida a partir do costado perpendicularmente ao plano longitudinal do navio. Quando estes tanques ou espaços laterais tenham uma largura menor, não serão tomados em consideração para o cálculo da área de protecção *"PA_c"*; e

b) A altura mínima de cada tanque ou espaço do duplo fundo será de *B/15* ou 2 m, se este valor for inferior. Quando estes tanques ou espaços tenham uma altura menor, não serão tomados em consideração para o cálculo da área de protecção *"PA_s"*.

A largura e a altura mínimas dos tanques laterais e dos tanques de duplo fundo serão medidas não tendo em conta a área do encolamento e, no caso da largura mínima, sem ter em conta a área dos trincanizes curvos.

Regra 14

Sem alteração.

Regra 15

No texto existente desta regra, eliminar a referência a «(1973)» em relação ao Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos.

Regras 16 e 17

Sem alteração.

Regra 18

Sistemas de bombagem, de encanamentos e de descarga nos navios petroleiros

Parágrafos 1 a 4 — *Sem alteração.*

São acrescentados ao texto existente os seguintes parágrafos:

5 — Todos os navios petroleiros novos obrigados a possuir tanques de lastro segregado ou a estar equipados com um sistema de lavagem com petróleo bruto cumprirão os seguintes requisitos:

a) Serão equipados com encanamentos para hidrocarbonetos projectados e instalados de modo que a retenção de hidrocarbonetos nos encanamentos seja minimizada; e

b) Serão instalados meios para drenar todas as bombas de carga e todos os encanamentos para hidrocarbonetos no termo da operação de descarga, se necessário ligando-os a um dispositivo de drenagem forçada. Os resíduos de drenagem dos encanamentos e das bombas poderão ser descarregados quer para terra, quer para um tanque de carga ou de resíduos. Para a descarga para terra será instalado um encanamento especial de diâmetro reduzido ligado a vale das válvulas do colector do navio.

6 — Todos os navios-tanques existentes para o transporte de petróleo bruto obrigados a possuir tanques de lastro segregado ou a estar equipados com um sistema de lavagem com petróleo bruto, ou a operar com tanques destinados a lastro limpo, cumprirão as disposições do parágrafo 5, alínea *b*), da presente regra.

Regra 19

Sem alteração.

Regra 20

No texto desta regra, eliminar a referência a «(1973)» em relação ao Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos.

Regras 21 a 25

APÊNDICE I

Lista de hidrocarbonetos

Sem alteração.

APÊNDICE II

Modelo de certificado

O modelo de certificado é substituído pelo seguinte:

Certificado Internacional de Prevenção da Poluição por Hidrocarbonetos

Emitido de acordo com as disposições do Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, sob a autoridade do Governo de .....

.....

(designação oficial completa do País)

por .....
(nome completo da pessoa competente ou do organismo autorizado, nos termos das disposições do Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973)

Nome do navio	Número ou letras do distintivo do navio	Porto de registo	Arqueação bruta

Tipo de navio:

Navio-tanque para transporte de petróleo bruto (*)
Navio-tanque para transporte de produtos refinados (*)
Navio-tanque para transporte de petróleo bruto/produtos refinados (*)
Outros navios que não sejam petroleiros com tanques de carga abrangidos pela regra 2, parágrafo 2 do anexo I ao Protocolo (*)
Navio que não seja qualquer dos acima mencionados *

Data do contrato de construção ou de grande modificação...
Data de assentamento da quilha ou em que o navio se encontrava numa fase equivalente de construção ou em que foi iniciada uma grande modificação...
Data da entrega do navio ou do termo de uma grande modificação...

* Riscar como apropriado.

PARTE A

Todos os navios

O navio está equipado com:

Para navios de arqueação bruta igual ou superior a 400 t:

a) Equipamento separador de hidrocarbonetos/água (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 100 partes por milhão).
b) Um equipamento de filtragem de hidrocarbonetos (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 100 partes por milhão).

Para navios de arqueação bruta igual ou superior a 10 000 t:

c) Um equipamento monitor da descarga de hidrocarbonetos (*) [adicional a *a*) ou *b*) acima]; ou
d) Equipamento separador de hidrocarbonetos/água e um equipamento de filtragem de hidrocarbonetos (*) (capaz de produzir um efluente com um teor em hidrocarbonetos não excedendo 15 partes por milhão) em vez de *a*) ou *b*) acima.

Pormenores dos requisitos, cuja dispensa é concedida nos termos da regra 2, parágrafos 2 e 4, alínea *a*), do anexo I ao Protocolo:

.....
.....

Observações:

.....

Averbamento para navios existentes (*):

Certifica-se que este navio foi equipado de modo a cumprir os requisitos do Protocolo de 1978 Relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, aplicáveis a navios existentes (**).

Assinado ...

(Assinatura do funcionário devidamente autorizado)

Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

(*) Este averbamento só é necessário no primeiro certificado emitido para um navio.
(**) Os prazos, após a entrada em vigor do Protocolo, para a instalação de equipamento separador hidrocarbonetos/água, equipamento monitor da descarga de hidrocarbonetos, equipamento de filtragem de hidrocarbonetos e/ou disposições de tanques de resíduos, estão indicados nas regras 13A, parágrafo 3; 15, parágrafo 1, e 16, parágrafo 4, do anexo I ao Protocolo.

PARTE B

Navios petroleiros (*)

Capacidade de transporte do navio (m³)	Porte bruto do navio (toneladas métricas)	Comprimento do navio (m)

Certifica-se que este navio foi construído e equipado e deve operar de acordo com o seguinte:

1 — Este navio:

a) Está sujeito aos requisitos de construção da regra 24 do anexo I ao Protocolo e cumpre esses requisitos (**).
b) Não está sujeito aos requisitos de construção da regra 24 do anexo I ao Protocolo (**).
c) Não está sujeito aos requisitos de construção da regra 24 do anexo I ao Protocolo, mas cumpre esses requisitos (**).

2 — Este navio:

a) Está sujeito aos requisitos de construção da regra 13E do anexo I ao Protocolo e cumpre esses requisitos (**).
b) Não está sujeito aos requisitos de construção da regra 13E do anexo I ao Protocolo (**).

(*) Esta parte deve ser preenchida para navios petroleiros, incluindo navios de carga combinada, e os registos que sejam aplicáveis devem ser preenchidos para navios que não sejam navios petroleiros construídos e utilizados para transportar hidrocarbonetos a granel com capacidade total igual ou superior a 200 m³.
(**) Riscar como apropriado.

3 — Este navio:

a) É obrigado a possuir tanques de lastro segregado, em conformidade com os requisitos da regra 13 do anexo I ao Protocolo, e cumpre esses requisitos (*).
b) Não é obrigado a possuir tanques de lastro segregado, em conformidade com os requisitos da regra 13 do anexo I ao Protocolo (*).
c) Não é obrigado a possuir tanques de lastro segregado, em conformidade com os requisitos da regra 13 do anexo I ao Protocolo, mas cumpre esses requisitos (*).
d) Em conformidade com a regra 13C ou 13D do anexo I ao Protocolo e, conforme especificado na parte C deste certificado, está dispensado do cumprimento dos requisitos da regra 13 do anexo I ao Protocolo (*).
e) Está equipado com um sistema de limpeza dos tanques de carga, utilizando a lavagem com petróleo bruto, em conformidade com as disposições da regra 13B do anexo I ao Protocolo, em vez de possuir tanques de lastro segregado (*).
f) Possui tanques destinados a lastro limpo, em conformidade com as disposições da regra 13A do anexo I ao Protocolo, em vez de possuir tanques de lastro segregado ou de estar equipado com um sistema de limpeza de tanques de carga utilizando a lavagem com petróleo bruto (*).

4 — Este navio:

a) É obrigado a estar equipado com um sistema de limpeza dos tanques de carga utilizando a lavagem com petróleo bruto, em conformidade com os requisitos da regra 13, parágrafo 6, do anexo I ao Protocolo e cumpre esses requisitos (*).
b) Não é obrigado a estar equipado com um sistema de limpeza dos tanques de carga utilizando a lavagem com petróleo bruto, em conformidade com os requisitos da regra 13, parágrafo 6, do anexo I ao Protocolo (*).

(*) Riscar como apropriado.

Tanques de lastro segregado (*)

A distribuição dos tanques de lastro segregado é a seguinte:

Tanque	Volume (m³)	Tanque	Volume (m³)

Tanques destinados a lastro limpo (*)

Este navio opera utilizando tanques de lastro limpo até ... (data), em conformidade com os requisitos da regra 13A do anexo I ao Protocolo.

A designação dos tanques destinados a lastro limpo é a seguinte:

Tanque	Volume (m³)	Tanque	Volume (m³)

(*) Riscar se não for aplicável.

Manual (*)

Certifica-se que este navio possui:

a) Um Manual de Operação dos Tanques Destinados a Lastro Limpo, actualizado em conformidade com a regra 13A do anexo I ao Protocolo (**).

b) Um Manual de Operação e Equipamento do Sistema de Lavagem com Petróleo Bruto, actualizado em conformidade com a regra 13B do anexo I ao Protocolo (**).

Identificação do exemplar actualizado do manual...

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

Identificação do exemplar actualizado do manual...

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...
(Selo branco ou carimbo da autoridade, conforme apropriado)

(*) Riscar se não for aplicável.
(**) Riscar como apropriado.

PARTE C

Dispensas (*)

Certifica-se que este navio:

a) É destinado somente ao tráfego entre ... e ..., em conformidade com a regra 13C do anexo I ao Protocolo (**); ou

b) Opera com uma disposição especial de lastro, em conformidade com a regra 13D do anexo I ao Protocolo (**);

estando por isso dispensado do cumprimento dos requisitos da regra 13 do anexo I ao Protocolo.

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...

(Selo branco ou carimbo da autoridade, conforme apropriado)

(*) Riscar se não for aplicável.
(**) Riscar como apropriado.

Certifica-se:

Que o navio foi vistoriado em conformidade com a regra 4 do anexo I ao Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, no que respeita à prevenção da poluição por hidrocarbonetos; e que nessa vistoria se verificou serem satisfatórias, sob todos os aspectos, as condições da estrutura, equipamento, sistemas, instalações, disposições e materiais do navio e que o navio cumpre os requisitos aplicáveis do anexo I ao Protocolo.

Este certificado é válido até ... sujeito à(s) vistoria(s) intermédia(s) a intervalos de...
Emitido em... (local da emissão do certificado).
.../.../19..

Assinado ...
(Assinatura do funcionário devidamente autorizado)

(Selo branco ou carimbo da autoridade, conforme apropriado)

Vistoria intermédia

Certifica-se que na vistoria intermédia exigida pela regra 4, *parágrafo 1, alínea c), do anexo I ao Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973*, se verificou que este navio e o estado em que se encontra cumprem as disposições pertinentes deste Protocolo.

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...
A próxima vistoria intermédia deve realizar-se em...
(Selo branco ou carimbo da autoridade, conforme apropriado)

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...
A próxima vistoria intermédia deve realizar-se em...
(Selo branco ou carimbo da autoridade, conforme apropriado)

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...
A próxima vistoria intermédia deve realizar-se em...
(Selo branco ou carimbo da autoridade, conforme apropriado)

Assinado...
(Assinatura do funcionário devidamente autorizado)
Local...
Data...
(Selo branco ou carimbo da autoridade, conforme apropriado)

APÊNDICE III

Modelo do Livro de Registo de Hidrocarbonetos

São acrescentados ao modelo existente os seguintes modelos de suplementos ao Livro de Registo de Hidrocarbonetos:

Suplemento 1

Modelo de Suplemento ao Livro de Registo de Hidrocarbonetos para navios petroleiros que operam com tanques destinados a lastro limpo (*)

Nome do navio...
Número ou letras do *distintivo do navio*...
Capacidade total de transporte de carga ... m³
Capacidade total dos tanques destinados a lastro limpo ... m³
Os tanques seguintes são designados como tanques destinados a lastro limpo:

Tanque	Volume (m³)	Tanque	Volume (m³)

Nota. — Os períodos abrangidos pelo suplemento devem corresponder aos períodos abrangidos pelo Livro de Registo de Hidrocarbonetos.

(*) Este Suplemento deve acompanhar o Livro de Registo de Hidrocarbonetos para navios petroleiros que operem com tanques destinados a lastro limpo, em conformidade com a regra 13A do anexo I ao Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973. As restantes informações requeridas devem ser registadas no Livro de Registo de Hidrocarbonetos.

A) Lastragem dos tanques destinados a lastro limpo

101	Identificação do(s) tanque(s) lastrado(s)			
102	Data e posição do navio no momento em que foi embarcada água no(s) tanque(s) destinado(s) a lastro limpo, para limpeza por jacto de água ou para lastragem do navio no porto			
103	Data e posição do navio no momento em que a(s) bomba(s) e encanamentos foram lavados com água e o seu conteúdo descarregado para um tanque de resíduos			
104	Data e posição do navio no momento em que foi embarcada água de lastro adicional no(s) tanque(s) destinado(s) a lastro limpo			
105	Data, hora e posição do navio no momento em que foram fechadas: *a*) As válvulas do tanque de resíduos; *b*) As válvulas dos tanques de carga; *c*) Outras válvulas relacionadas com o sistema de lastro limpo			
106	Quantidade de lastro limpo embarcado			

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, ligações dos tanques de carga e dos encanamentos, bem como as ligações entre tanques ou interligações dos tanques, foram bem fechadas e trancadas no termo da lastragem dos tanques destinados a lastro limpo.

Data do registo...

O Oficial Encarregado...
O Capitão...

B) Descarga de lastro limpo

107	Identificação do(s) tanque(s)			
108	Data, hora e posição do navio no início da descarga de lastro limpo: *a*) Para o mar; ou *b*) Para uma instalação de recepção			
109	Data, hora e posição do navio no termo da descarga para o mar			
110	Quantidade descarregada: *a*) Para o mar; ou *b*) Para a instalação de recepção			
111	Foi verificado se antes da descarga a água de lastro estava poluída por hidrocarbonetos?			
112	Durante a descarga foi controlado o efluente por meio de um aparelho de medida do teor em hidrocarbonetos?			
113	Observou-se algum indício de poluição por hidrocarbonetos da água de lastro, antes ou durante a descarga?			
114	Data e posição do navio no momento em que as bombas e encanamentos foram lavados com água, depois da operação de carga			
115	Data, hora e posição do navio no momento em que foram fechadas: *a*) As válvulas dos tanques de resíduos; *b*) As válvulas dos tanques de carga; *c*) Outras válvulas relacionadas com o sistema de lastro limpo			
116	Quantidade de água poluída trasfegada para o(s) tanque(s) de resíduos [identificar o(s) tanque(s) de resíduos]			

O abaixo assinado certifica que, adicionalmente ao registo supra, todas as válvulas de fundo, válvulas de descarga para o mar, ligações dos tanques de carga e encanamentos, bem como as ligações entre tanques ou interligações dos tanques, foram fechadas e trancadas no termo da descarga de lastro limpo e que a(s) bomba(s) e os encanamentos destinados às operações com lastro limpo foram devidamente limpos após a descarga de lastro limpo.

Data do registo...

O Oficial Responsável...
O Capitão...

Suplemento 2

Modelo do Suplemento ao Livro de Registo de Hidrocarbonetos dos navios-tanques para transporte de petróleo bruto que operam com o processo de limpeza dos tanques de carga utilizando a lavagem com petróleo bruto (*)

Nome do navio...
Número ou letras do distintivo do navio...
Capacidade total de carga ... m³
Viagem de ... para ...
[Porto(s)]... (data)... [Porto(s)]... (data)...

Notas — Os períodos abrangidos pelo suplemento devem corresponder aos períodos abrangidos pelo Livro de Registo de Hidrocarbonetos.

Os tanques de carga lavados com petróleo bruto devem ser os indicados no Manual de Operação e Equipamento, exigido pela regra 13B, parágrafo 5, alínea *a*), do Protocolo.

Deve ser utilizada uma coluna separada para cada tanque lavado com petróleo bruto ou enxaguado com água.

A) Lavagem com petróleo bruto

201	Data e porto onde foi efectuada a lavagem com petróleo bruto ou posição do navio, se aquela tiver sido efectuada entre dois portos de descarga			
202	Identificação do(s) tanque(s) lavado(s) (ver Nota 1)			
203	Número de máquinas utilizadas			
204	Início da lavagem: *a*) Data e hora; *b*) Capacidade residual do tanque			
205	Método de lavagem utilizado (ver Nota 2)			

(*) Este Suplemento deverá estar apenso ao Livro de Registo de Hidrocarbonetos dos navios-tanques para transporte de petróleo bruto que operem com o processo de limpeza dos tanques de carga utilizando a lavagem com petróleo bruto, em conformidade com a regra 13B do anexo I ao Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, e destina-se a substituir a secção e) do Livro de Registo de Hidrocarbonetos. Os pormenores das operações de lastragem e de deslastragem e outras informações requeridas devem ser registados no Livro de Registo de Hidrocarbonetos.

206	Pressão nos encanamentos de lavagem			
207	Termo ou interrupção da lavagem: *a*) Data e hora; *b*) Capacidade residual do tanque			
208	Observações			

Os tanques foram lavados de acordo com os programas indicados no Manual de Operação e Equipamento (ver Nota 3), tendo sido verificado no termo da operação que estavam secos.

Data do registo...

O Oficial Responsável...
O Capitão...

Nota 1. — Quando um determinado tanque tiver um número de máquinas superior ao que pode ser utilizado simultaneamente, tal como descrito no Manual de Operação e Equipamento, deve ser identificada a secção lavada com petróleo bruto, por exemplo n.° 2 centro, secção de vante.

Nota 2. — De acordo com o Manual de Operação e Equipamento, registar se foi utilizado um método de lavagem de uma ou várias fases. Se tiver sido utilizado um método multifase, indicar o arco vertical varrido pelas máquinas e o número de vezes que esse arco é varrido nessa fase particular do programa.

Nota 3. — Se não forem seguidos os programas indicados no Manual de Operação e Equipamento, no espaço destinado a «Observações» serão registados os detalhes da operação efectuada.

B) Enxaguamento com água, ou limpeza com água, do fundo dos tanques

209	Data e posição do navio no momento em que se efectuou o enxaguamento com água ou a limpeza com água			
210	Identificação do(s) tanque(s) e data			
211	Volume de água utilizado			
212	Trasfega para: *a*) Instalações de recepção; *b*) Tanque(s) de resíduos [identificar o(s) tanque(s) de resíduos]			

Data do registo...

O Oficial Responsável...
O Capitão...

Suplemento 3

Modelo do Suplemento ao Livro de Registo de Hidrocarbonetos para os navios petroleiros utilizados em tráfegos específicos (*)

Nome do navio...
Número ou letras do distintivo do navio...
Capacidade total de carga ... m³
Capacidade total de água de lastro requerida para cumprimento da regra 13, parágrafos 2 e 3, do anexo I ao Protocolo ... m³
Viagens de ... [Porto(s)] para ... [Porto(s)] ...

Nota. — Os períodos abrangidos pelo Suplemento devem corresponder aos períodos abrangidos pelo Livro de Registo de Hidrocarbonetos.

(*) Este Suplemento deve estar apenso ao Livro de Registo de Hidrocarbonetos para navios petroleiros utilizados em tráfegos específicos, em conformidade com a regra 13C do anexo I ao Protocolo de 1978 relativo à Convenção Internacional para a Prevenção da Poluição por Navios, 1973, e destina-se a substituir as secções *d*), *f*), *g*) e *i*) do Livro de Registo de Hidrocarbonetos. As restantes informações requeridas devem ser registadas no Livro de Registo de Hidrocarbonetos.

A) Embarque de água de lastro

301	Identificação do(s) tanque(s) lastrado(s)			
302	Data e posição do navio no momento da lastragem			
303	Quantidade total de lastro embarcado (m³)			
304	Método de cálculo da quantidade de lastro			
305	Observações			
306	Data e assinatura do oficial encarregado			
307	Data e assinatura do Capitão			

B) Redistribuição da água de lastro a bordo

308	Motivo da redistribuição			
309	Data e assinatura do oficial encarregado			
310	Data e assinatura do Capitão			

C) Descarga da água de lastro para instalação de recepção

311	Data(s) e porto(s) onde a água de lastro foi descarregada			
312	Nome ou designação da instalação de recepção			
313	Quantidade total da água de lastro descarregada (m³)			
314	Método de cálculo da quantidade de lastro			
315	Data e assinatura do oficial encarregado			
316	Data e assinatura do Capitão			
317	Data, assinatura e carimbo do funcionário da autoridade portuária			

ANEXO II

Regras para o controle da poluição por substâncias líquidas nocivas transportadas a granel

Sem alteração.

ANEXO III

Regras para a prevenção da poluição por substâncias prejudiciais transportadas por via marítima em embalagens, contentores, tanques portáteis, camiões-tanques e vagões-cisternas.

Sem alteração.

ANEXO IV

Regras para a prevenção da poluição por esgotos sanitários dos navios

Sem alteração.

ANEXO V

Regras para a prevenção da poluição por lixo dos navios

Sem alteração.

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

The Parties to the Convention,

Being conscious of the need to preserve the human environment in general and the marine environment in particular,

Recognizing that deliberate, negligent or accidental release of oil and other harmful substances from ships constitutes a serious source of pollution,

Recognizing also the importance of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as being the first multilateral instrument to be concluded with the prime objective of protecting the environment, and appreciating the significant contribution which that Convention has made in preserving the seas and costal environment from pollution,

Desiring to achieve the complete elimination of intentional pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances,

Considering that this object may best be achieved by establishing rules not limited to oil pollution having a universal purport,

Have agreed as follows:

ARTICLE 1

General Obligations under the Convention

(1) The Parties to the Convention undertake to give effect to the provisions of the present Convention and those Annexes thereto by which they are bound, in order to prevent the pollution of the marine environment by the discharge of harmful substances or effluents containing such substances in contravention of the Convention.

(2) Unless expressly provided otherwise, a reference to the present Convention constitutes at the same time a reference to its Protocols and to the Annexes.

ARTICLE 2

Definitions

For the purposes of present Convention, unless expressly provided otherwise:

(1) «Regulations» means the Regulations contained in the Annexes to the present Convention.

(2) «Harmful substance» means any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea, and includes any substance subject to control by the present Convention.

(3) (*a*) «Discharge», in relation to harmful substances or effluents containing such substances, means any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying;

(*b*) «Discharge» does not include:

(*i*) dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972; or

(*ii*) release of harmful substances directly arising from the exploration, exploitation and associated off-shore processing of sea-bed mineral resources; or

(*iii*) release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.

(4) «Ship» means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms.

(5) «Administration» means the Government of the State under whose authority the ship is operating. With respect to a ship entitled to fly a flag of any State, the Administration is the Government of that State. With respect to fixed or floating platforms engaged in exploration and exploitation of the sea-bed and subsoil thereof adjacent to the coast over which the coastal State exercises sovereign rights for the purposes of exploration and exploitation of their natural resources, the Administration is the Government of the coastal State concerned.

(6) «Incident» means an event involving the actual or probable discharge into the sea of a harmful substance, or effluents containing such a substance.

(7) «Organization» means the International Maritime Organization.

ARTICLE 3

Application

(1) The present Convention shall apply to:

(*a*) ships entitled to fly the flag of a Party to the Convention; and

(*b*) ships not entitled to fly the flag of a Party but which operate under the authority of a Party.

(2) Nothing in the present Article shall be construed as derogating from or extending the sovereign rights of the Parties under international law over the sea-bed and subsoil thereof adjacent to their coasts for the purposes of exploration and exploitation of their natural resources.

(3) The present Convention shall not apply to any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service. However, each

Party shall ensure by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable land praticable, with the present Convention.

ARTICLE 4

Violation

(1) Any violation of the requirements of the present Convention shall be prohibited and sanctions shall be established therefor under the law of the Administration of the ship concerned wherever the violation occurs. If the Administration is informed of such a violation and is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken as soon as possible, in accordance with its law.

(2) Any violation of the requirements of the present Convention within the jurisdiction of any Party to the Convention shall be prohibited and sanctions shall be established therefor under the law of that Party. Whenever such a violation occurs, that Party shall either:

(*a*) cause proceedings to be taken in accordance with its law; or

(*b*) furnish to the Administration of the ship such information and evidence as may be in its possession that a violation has occurred.

(3) Where information or evidence with respect to any violation of the present Convention by a ship is furnished to the Administration of that ship, the Administration shall promptly inform the Party which has furnished the information or evidence, and the Organization, of the action taken.

(4) The penalties specified under the law of a Party pursuant to the present Article shall be adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur.

ARTICLE 5

Certificates and Special Rules on Inspection of Ships

(1) Subject to the provisions of paragraph (2) of the present Article a certificate issued under the authority of a Party to the Convention in accordance with the provisions of the Regulations shall be accepted by the other Parties and regarded for all purposes covered by the present Convention as having the same validity as a certificate issued by them.

(2) A ship required to hold a certificate in accordance with the provisions of the Regulations is subject, while in the ports or off-shore terminals under the jurisdiction of a Party, to inspection by officers duly authorized by that Party. Any such inspection shall be limited to verifying that there is on board a valid certificate, unless there are clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of that certificate. In that case, or if the ship does not carry a valid certificate, the Party carrying out the inspection shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without presenting an unreasonable threat of harm to the marine environment. That Party may, however, grant such a ship permission to leave the port or off-shore terminal for the purpose of proceeding to the nearest appropriate repair yard available.

(3) If a Party denies a foreign ship entry to the ports or off-shore terminals under its jurisdiction or takes any action against such a ship for the reason that the ship does not comply with the provisions of the present Convention, the Party shall immediately inform the consul or diplomatic representative of the Party whose flag the ship is entitled to fly, or if this is not possible, the Administration of the ship concerned. Before denying entry or taking such action the Party may request consultation with the Administration of the ship concerned. Information shall also be given to the Administration when a ship does not carry a valid certificate in accordance with provisions of the Regulations.

(4) With respect to the ships of non-Parties to the Convention, Parties shall aply the requirements of the present Convention as may be necessary to ensure that no more favourable treatment is given to such ships.

ARTICLE 6

Detection of Violations and Enforcement of the Convention

(1) Parties to the Convention shall co-operate in the detection of violations and the enforcement of the provisions of the present Convention, using all appropriate and practicable measures of detection and environmental monitoring, adequate procedures for reporting and accumulation of evidence.

(2) A ship to which the present Convention applies may, in any port or off-shore terminal of a Party, be subject to inspection by officers appointed or authorized by that Party for the purpose of verifying whether the ship has discharged any harmful substances in violation of the provisions of the Regulations. If an inspection indicates a violation of the Convention, a report shall be forwarded to the Administration for any appropriate action.

(3) Any Party shall furnish to the Administration evidence, if any, that the ship has discharged harmful substances or effluents containing such substances in violation of the provisions of the Regulations. If it is practicable to do so, the competent authority of the former Party shall notify the Master of the ship of the alleged violation.

(4) Upon receiving such evidence, the Administration so informed shall investigate the matter, and may request the other Party to furnish further or better evidence of the alleged contravention. If the Administration is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken in accordance with its law as soon as possible. The Administration shall promptly inform the Party which has reported the alleged violation, as well as the Organization, of the action taken.

(5) A Party may also inspect a ship to which the present Convention applies when it enters the ports or off-shore terminals under its jurisdiction, if a request for an investigation is received from any Party together with sufficient evidence that the ship has discharged

harmful substances or effluents containing such substances in any place. The report of such investigation shall be sent to the Party requesting it and to the Administration so that the appropriate action may be taken under the present Convention.

ARTICLE 7

Undue Delay to Ships

(1) All possible efforts shall be made to avoid a ship being unduly detained or delayed under Article 4, 5 or 6 of the present Convention.

(2) When a ship is unduly detained or delayed under Article 4, 5 or 6 of the present Convention, it shall be entitled to compensation for any loss or damage suffered.

ARTICLE 8

Reports on Incidents Involving Harmful Substances

(1) A report of an incident shall be made without delay to the fullest extent possible in accordance with the provisions of Protocol I to the present Convention.

(2) Each Party to the Convention shall:

(*a*) make all arrangements necessary for an appropriate officer or agency to receive and process all reports on incidents; and

(*b*) notify the Organization with complete details of such arrangements for circulation to other Parties and Member States of the Organization.

(3) Whenever a Party receives a report under the provisions of the present Article, that Party shall relay the report without delay to:

(*a*) the Administration of the ship involved; and

(*b*) any other State which may be affected.

(4) Each Party to the Convention undertakes to issue instructions to its maritime inspection vessels and aircraft and to other appropriate services, to report to its authorities any incident referred to in Protocol I to the present Convention. That Party shall, if it considers it appropriate, report accordingly to the Organization and to any other Party concerned.

ARTICLE 9

Other Treaties and Interpretation

(1) Upon its entry into force, the present Convention supersedes the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended, as between Parties to that Convention.

(2) Nothing in the present Convention shall prejudice the codification and development of the law of the sea by the United Nations Conference on the Law of the Sea convened pursuant to Resolution 2750 C (XXV) of the General Assembly of the United Nations nor the present or future claims and legal views of any State concerning the law of the sea and the nature and extent of coastal and flag State jurisdiction.

(3) The term «jurisdiction» in the present Convention shall be construed in the light of international law in force at the time of application or interpretation of the present Convention.

ARTICLE 10

Settlement of Disputes

Any dispute between two or more Parties to the Convention concerning the interpretation or application of the present Convention shall, if settlement by negotiation between the Parties involved has not been possible, and if these Parties do not otherwise agree, be submitted upon request of any of them to arbitration as set out in Protocol II to the present Convention.

ARTICLE 11

Communication of Information

(1) The Parties to the Convention undertake to communicate to the Organization:

(*a*) the text of laws, orders, decrees and regulations and other instruments which have beer promulgated on the various matters within the scope of the present Convention;

(*b*) a list of non-governmental agencies which are authorized to act on their behalf in matters relating to the design, construction and equipment of ships carrying harmful substances in accordance with the provisions of the Regulations;

(*c*) a sufficient number of specimens of their certificates issued under the provisions of the Regulations;

(*d*) a list of reception facilities including their location, capacity and available facilities and other characteristics;

(*e*) official reports or summaries of official reports in so far as they show the results of the application of the present Convention; and

(*f*) an annual statistical report, in a form standardized by the Organization, of penalties actually imposed for infringement of the present Convention.

(2) The Organization shall notify Parties of the receipt of any communications under the present Article and circulate to all Parties any information communicated to it under sub-paragraphs (1) (*b*) to (*f*) of the present Article.

ARTICLE 12

Casualties to Ships

(1) Each Administration undertakes to conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the Regulations if such casualty has produced a major deleterious effect upon the marine environment.

(2) Each Party to the Convention undertakes to supply the Organization with information concerning the findings of such investigation, when it judges that such information may assist in determining what changes in the present Convention might be desirable.

ARTICLE 13

Signature, Ratification, Acceptance, Approval and Accession

(1) The present Convention shall remain open for signature at the Headquarters of the Organization from 15 January 1974 until 31 December 1974 and shall thereafter remain open for accession. States may become Parties to the present Convention by:

(*a*) signature without reservation as to ratification, acceptance or approval; or
(*b*) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
(*c*) accession.

(2) Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.

(3) The Secretary-General of the Organization shall inform all States which have signed the present Convention or acceded to it of any signature or of the deposit of any new instrument of ratification, acceptance, approval or accession and the date of its deposit.

ARTICLE 14

Optional Annexes

(1) A State may at the time of signing, ratifying, accepting, approving or acceding to the present Convention declare that it does not accept any one or all of Annexes III, IV and V (hereinafter referred to as «Optional Annexes») of the present Convention. Subject to the above, Parties to the Convention shall be bound by any Annex in its entirety.

(2) A State which has declared that it is not bound by an Optional Annex may at any time accept such Annex by depositing with the Organization an instrument of the kind referred to in Article 13 (2).

(3) A State which makes a declaration under paragraph (1) of the present Article in respect of an Optional Annex and which has not subsequently accepted that Annex in accordance with paragraph (2) of the present Article shall not be under any obligation nor entitled to claim any privileges under the present Convention in respect of matters related to such Annex and all references to Parties in the present Convention shall not include that State in so far as matters related to such Annex are concerned.

(4) The Organization shall inform the States which have signed or acceded to the present Convention of any declaration under the present Article as well as the receipt of any instrument deposited in accordance with the provisions of paragraph (2) of the present Article.

ARTICLE 15

Entry into Force

(1) The present Convention shall enter into force twelve months after the date on which not less than 15 States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with Article 13.

(2) An Optional Annex shall enter into force twelve months after the date on which the conditions stipulated in paragraph (1) the present Article have been satisfied in relation to that Annex.

(3) The Organization shall inform the States which have signed the present Convention or acceded to it of the date on which it enters into force and of the date on which an Optional Annex enters into force in accordance with paragraph (2) of the presente Article.

(4) For States which have deposited an instrument of ratification, acceptance, approval or accession in respect of the present Convencion or any Optional Annex after the requirements for entry into force thereof have been met but prior to the date of entry into force, the ratification, acceptance, approval or accession shall take effect on the date of entry into force of the Convention or such Annex or three months after the date of deposit of the instrument whichever is the later date.

(5) For States which have deposited an instrument of ratification, acceptance, approval or accession after the date on which the Convention or an Optional Annex entered into force, the Convention or the Optional Annex shall become effective three months after the date of deposit of the instrument.

(6) After the date on which all the conditions required under Article 16 to bring an amendment to the present Convention or an Optional Annex into force have been fulfilled, any instrument of ratification, acceptance, approval or accession deposited shall apply to the Convention or Annex as amended.

ARTICLE 16

Amendments

(1) The present Convention may be amended by any of the procedures specified in the following paragraphs.

(2) Amendments after consideration by the Organization:

(*a*) any amendment proposed by a Party to the Convention shall be submitted to the Organization and circulated by its Secretary-General to all Members of the Organization and all Parties at least six months prior to its consideration;
(*b*) any amendment proposed and circulated as above shall be submitted to an appropriate body by the Organization for consideration;
(*c*) Parties to the Convention, whether or not Members of the Organization, shall be entitled to participate in the proceedings of the appropriate body;
(*d*) amendments shall be adopted by a two-thirds majority of only the Parties to the Convention present and voting;
(*e*) if adopted in accordance with subparagraph (*d*) above, amendments shall be communicated by the Secretary-General of the Organization to all the Parties to the Convention for acceptance;
(*f*) an amendment shall be deemed to have been accepted in the following circumstances:

(*i*) an amendment to an Article of the Convention shall be deemed to have

been accepted on the date on which it is accepted by two-thirds of the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet;

(*ii*) an amendment to an Annex to the Convention shall be deemed to have been accepted in accordance with the procedure specified in sub-paragraph (*f*) (*iii*) unless the apropriate body, at the time of its adoption, determines that the amendment shall be deemed to have been accepted on the date on which it is accepted by two-thirds of the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet. Nevertheless, at any time before the entry into force of an amendment to an Annex to the Convention, a Party may notify the Secretary-General of the Organization that its express approval will be necessary before the amendment enters into force for it. The latter shall bring such notification and the date of its receipt to the notice of Parties;

(*iii*) an amendment to an Appendix to an Annex to the Convention shall be deemed to have been accepted at the end of a period to be determined by the apropriate body at the time of its adoption, which period shall be not less than ten months, unless within that period an objection is communicated to the Organization by not less than one-third of the Parties or by the Parties the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet whichever condition is fulfilled;

(*iv*) an amendment to Protocol I to the Convention shall be subject to the same procedures as for the amendments to the Annexes to the Convention, as provided for in sub-paragraphs (*f*) (*ii*) or (*f*) (*iii*) above;

(*v*) an amendment to Protocol II to the Convention shall be subject to the same procedures as for the amendments to an Article of the Convention, as provided for in sub-paragraph (*f*) (*i*) above;

(*g*) the amendment shall enter into force under the following conditions:

(*i*) in the case of an amendment to an Article of the Convention, to Protocol II, or to Protocol I or to an Annex to the Convention not under the procedure specified in sub-paragraph (*f*) (*iii*), the amendment accepted in conformity with the foregoing provisions shall enter into force six months after the date of its acceptance with respect to the Parties which have declared that they have accepted it;

(*ii*) in the case of an amendment to Protocol I, to an Appendix to an Annex or to an Annex to the Convention under the procedure specified in sub-paragraph (*f*) (*iii*), the amendment deemed to have been accepted in accordance with the foregoing conditions shall enter into force six months after its acceptance for all the Parties with the exception of those which, before that date, have made a declaration that they do not accept it or a declaration under sub-paragraph (*f*) (*ii*), that their express approval is necessary.

(3) Amendment by a conference:

(*a*) Upon the request of a Party, concurred in by at least one-third of the Parties, the Organization shall convene a Conference of Parties to the Convention to consider amendments to the present Convention.

(*b*) Every amendment adopted by such a Conference by a two-thirds majority of those present and voting of the Parties shall be communicated by the Secretary-General of the Organization to all Contracting Parties for their acceptance.

(*c*) Unless the Conference decides otherwise, the amendment shall be deemed to have been accepted and to have entered into force in accordance with the procedures specified for that purpose in paragraph (2) (*f*) and (*g*) above.

(4) (*a*) In the case of an amendment to an Optional Annex, a reference in the present Article to a «Party to the Convention» shall be deemed to mean a reference to a Party bound by that Annex.

(*b*) Any Party which has declined to accept an amendment to an Annex shall be treated as a non-Party only for the purpose of application of that Amendment.

(5) The adoption and entry into force of a new Annex shall be subject to the same procedures as for the adoption and entry into force of an amendment to an Article of the Convention.

(6) Unless expressly provided otherwise, any amendment to the present Convention made under this Article, which relates to the structure of a ship, shall apply only to ships for which the building contract is placed, or in the absence of a building contract, the keel of which is laid, on or after the date on which the amendment comes into force.

(7) Any amendment to a Protocol or to an Annex shall relate to the substance of that Protocol or Annex and shall be consistent with the Articles of the present Convention.

(8) The Secretary-General of the Organization shall inform all Parties of any amendments which enter into force under the present Article, together with the date on which each such amendment enters into force.

(9) Any declaration of acceptance or of objection to an amendment under the present Article shall be notified in writing to the Secretary-General of the Or-

ganization. The latter shall bring such notification and the date of its receipt to the notice of the Parties to the Convention.

ARTICLE 17

Promotion of Technical Co-Operation

The Parties of the Convention shall promote, in consultation with the Organization and other international bodies, with assistance and co-ordination by the Executive Director of the United Nations Environment Programme, support for those Parties which request technical assistance for:

(*a*) the training of scientific and technical personnel;
(*b*) the supply of necessary equipment and facilities for reception and monitoring;
(*c*) the facilitation of other measures and arrangements to prevent or mitigate pollution of the marine environment by ships; and
(*d*) the encouragement of research;

preferably within the countries concerned, so furthering the aims and purposes of the present Convention.

ARTICLE 18

Denunciation

(1) The present Convention or any Optional Annex may be denounced by any Parties to the Convention at any time after the expiry of five years from the date on which the Convention or such Annex enters into force for that Party.

(2) Denunciation shall be effected by notification in writing to the Secretary-General of the Organization who shall inform all the other Parties of any such notification received and of the date of its receipt as well as the date on which such denunciation takes effect.

(3) A denunciation shall take effect twelve months after receipt of the notification of denunciation by the Secretary-General of the Organization or after the expiry of any other longer period which may be indicated in the notification.

ARTICLE 19

Deposit and Registration

(1) The present Convention shall be deposited with the Secretary-General of the Organization who shall transmit certified true copies thereof to all States which have signed the present Convention or acceded to it.

(2) As soon as the present Convention enters into force, the text shall be transmitted by the Secretary-General of the Organization to the Secretary-General of the United Nations for registration and publication, in accordance with Article 102 of the Charter of the United Nations.

ARTICLE 20

Languages

The present Convention is established in a single copy in the English, French, Russian and Spanish languages, each text being equality authentic. Official translations in the Arabic, German, Italian and Japanese languages shall be prepared and deposited with the signed original.

In witness whereof the undersigned * being duly authorized by their respective Governments for that purpose have signed the present Convention.

Done at London this second day of November, one thousand nine hundred and seventy-three.

---

* Signatures omitted.

PROTOCOL I

Provisions Concerning Reports on Incidents Involving Harmful Substances

(in accordance with Article 8 of the Convention)

ARTICLE I

Duty to Report

(1) The master of a ship involved in an incident referred to in Article III of this Protocol, or other person having charge of the ship, shall report the particulars of such incident without delay and to the fullest extent possible in accordance with the provisions of this Protocol.

(2) In the event of the ship referred to in paragraph (1) of the present Article being abandoned, or in the event of a report from such ship being incomplete or unobtainable, the owner, charterer, manager or operator of the ship, or their agents shall, to the fullest extent possible assume the obligations placed upon the Master under the provisions of this Protocol.

ARTICLE II

Methods of Reporting

(1) Each report shall be made by radio whenever possible, but in any case by the fastest channels available at the time the report is made. Reports made by radio shall be given the highest possible priority.

(2) Reports shall be directed to the appropriate officer or agency specified in paragraph (2) (*a*) of Article 8 of the Convention.

ARTICLE III

When to make Reports

The report shall be made whenever an incident involves:

(*a*) a discharge other than as permitted under the present Convention; or
(*b*) a discharge permitted under the present Convention by virtue of the fact that:
  (*i*) it is for the purpose of securing the safety of a ship or saving life at sea; or
  (*ii*) it results from damage to the ship or its equipment; or

(*c*) a discharge of a harmful substance for the purpose of combating a specific pollution incident or for purposes of legitimate scientific research into pollution abatement or control; or

(*d*) the probability of a discharge referred to in sub-paragraphs (*a*), (*b*) or (*c*) of this Article.

ARTICLE IV

Contents of Report

(1) Each report shall contain in general:

(*a*) the identity of the ship;
(*b*) the time and date of the occurrence of the incident;
(*c*) the geographic position of the ship when the incident occurred;
(*d*) the wind and sea conditions prevailing at the time of the incident; and
(*e*) relevant details respecting the condition of the ship.

(2) Each report shall contain, in particular:

(*a*) a clear indication or description of the harmful substances involved, including, if possible, the correct technical names of such substances (trade names should not be used in place of the correct technical names);
(*b*) a statement of estimate of the quantities, concentrations and likely conditions of harmful substances discharged or likely to be discharged into the sea;
(*c*) where relevant, a description of the packaging and identifying marks; and
(*d*) if possible, the name of the consignor, consignee or manufacturer.

(3) Each report shall clearly indicate whether the harmful substance discharged, or likely to be discharged is oil, a noxious liquid substance, a noxious solid substance or a noxious gaseous substance and whether such substance was or is carried in bulk or contained in packaged form, freight containers, portable tanks, or road and rail tank wagons.

(4) Each report shall be supplemented as necessary by any other relevant information requested by a recipient of the report or which the person sending the report deems appropriate.

ARTICLE V

Supplementary Report

Any person who is obliged under the provisions of this Protocol to send a report shall, when possible:

(*a*) supplement the initial report, as necessary, with information concerning further developments; and
(*b*) comply as fully as possible with requests from affected States for additional information concerning the incident.

PROTOCOL II

Arbitration

(in accordance with Article 10 of the Convention)

ARTICLE I

Arbitration procedure, unless the Parties to the dispute decide otherwise, shall be in accordance with the rules set out in this Protocol.

ARTICLE II

(1) An Arbitration Tribunal shall be established upon the request of one Party to the Convention addressed to another in application of Article 10 of the present Convention. The request for arbitration shall consist of a statement of the case together whith any supporting documents.

(2) The requesting Party shall inform the Secretary-General of the Organization of the fact that it has applied for the establishment of a Tribunal, of the names of the Parties to the dispute, and of the Articles of the Convention or Regulations over which there is in its opinion disagreement concerning their interpretation or application. The Secretary-General shall transmit this information to all Parties.

ARTICLE III

The Tribunal shall consist of three members: one Arbitrator nominated by each Party to the dispute and a third Arbitrator who shall be nominated by agreement between the two first named, and shall act as its Chairman.

ARTICLE IV

(1) If, at the end of a period of sixty days from the nomination of the second Arbitrator, the Chairman of the Tribunal shall not have been nominated, the Secretary-General of the Organization upon request of either Party shall within a further period of sixty days proceed to such nomination, selecting him from a list of qualified persons previously drawn up by the Council of the Organization.

(2) If, within a period of sixty days from the date of the receipt of the request, one of the Parties shall not have nominated the member of the Tribunal for whose designation it is responsible, the other Party may directly inform the Secretary-General of the Organization who shall nominate the Chairman of the Tribunal within a period of sixty days, selecting him from the list prescribed in paragraph (1) of the present Article.

(3) The Chairman of the Tribunal shall, upon nomination, request the Party which has not provided an Arbitrator, to do so in the same manner and under the same conditions. If the Party does not make the required nomination, the Chairman of the Tribunal shall request the Secretary-General of the Organization to make the nomination in the form and conditions prescribed in the preceding paragraph.

(4) The Chairman of the Tribunal, if nominated under the provisions of the present Article, shall not be or have been a national of one of the Parties concerned, except with the consent of the other Party.

(5) In the case of the decease or default of an Arbitrator for whose nomination one of the Parties is responsible, the said Party shall nominate a replacement within a period of sixty days from the date of decease or default. Should the said Party not make the nomination, the arbitration shall proceed under the remaining Arbitrators. In case of the decease or default of the Chairman of the Tribunal, a replacement shall be nominated in accordance with the provisions of Article III above, or in the absence of agreement between the members of the Tribunal within a period of sixty days of the decease or default, according to the provisions of the present Article.

ARTICLE V

The Tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

ARTICLE VI

Each Party shall be responsible for the remuneration of its Arbitrator and connected costs and for the costs entailed by the preparation of its own case. The remuneration of the Chairman of the Tribunal and of all general expenses incurred by the Arbitration shall be borne equally by the Parties. The Tribunal shall keep a record of all its expenses and shall furnish a final statement thereof.

ARTICLE VII

Any Party to the Convention which has an interest of a legal nature and which may be affected by the decision in the case may, after giving written notice to the Parties which have originally initiated the procedure, join the arbitration procedure with the consent of the Tribunal.

ARTICLE VIII

Any Arbitration Tribunal established under the provisions of the present Protocol shall decide its own rules of procedure.

ARTICE IX

(1) Decisions of the Tribunal both as to its procedure and its place of meeting and as to any question laid before it, shall be taken by majority votes of its members; the absence or abstention of one of the members of the Tribunal for whose nomination the Parties were responsible, shall not constitute an impediment to the Tribunal reaching a decision. In cases of equal voting, the vote of the Chairman shall be decisive.

(2) The Parties shall facilitate the work of the Tribunal and in particular, in accordance with their legislation, and using all means at their disposal:

(*a*) provide the Tribunal with the necessary documents and information;

(*b*) enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.

(3) Absence or default of one Party shall not constitute an impediment to the procedure.

ARTICLE X

(1) The Tribunal shall render its award within a period of five months from the time it is established unless it decides, in the case of necessity, to extend the time limit for a further period not exceeding three months. The award of the Tribunal shall be accompanied by a statement of reasons. It shall be final and without appeal and shall be communicated to the Secretary-General of the Organization. The Parties shall immediately comply with the award.

(2) Any controversy which may arise between the Parties as regards interpretation or execution of the award may be submitted by either Party for judgment to the Tribunal which made the award, or, if it is not available to another Tribunal constituted for this purpose, in the same manner as the original Tribunal.

ANNEX I

Regulations for the Prevention of Pollution by Oil

CHAPTER I

General

Regulation 1

Definitions

For the purposes of this Annex:

(1) «Oil» means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (other than petrochemicals which are subject to the provisions of Annex II of the present Convention) and, without limiting the generality of the foregoing, includes the substances listed in Appendix I to this Annex.

(2) «Oil mixture» means a mixture with any oil content.

(3) «Oil fuel» means any oil used as fuel in connexion with the propulsion and auxiliary machinery of the ship in which such oil is carried.

(4) «Oil tanker» means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers and any «chemical tanker» as defined in Annex II of the present Convention when it is carrying a cargo or part cargo of oil in bulk.

(5) «Combination carrier» means a ship designed to carry either oil or solid cargoes in bulk.

(6) «New ship» means a ship:

(*a*) for which the building contract is placed after after 31 December 1975; or

(*b*) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction after 30 June 1976; or

(*c*) the delivery of which is after 31 December 1979; or

(*d*) which has undergone a major conversion:

(*i*) for which the contract is placed after 31 December 1975; or

(*ii*) in the absence of a contract, the construction work of which is begun after 30 June 1976; or

(*iii*) which is completed after 31 December 1979.

(7) «Existing ship» means a ship which is not a new ship.

(8) «Major conversion» means a conversion of an existing ship:

(*a*) which substantially alters the dimensions or carrying capacity of the ship; or

(*b*) which changes the type of the ship; or

(*c*) the intent of which in the opinion of the Administration is substantially to prolong its life; or

(*d*) which otherwise so alters the ship that if it were a new ship, it would become subject to relevant provisions of the present Convention not applicable to it as an existing ship.

(9) «Nearest land». The term «from the nearest land» means from the baseline from which the territorial sea of the territory in question is established in accordance with international law, except that, for the purposes of the present Convention «from the nearest land» off the north eastern cost of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude 11°00′ South, longitude 142°08′ East to a point in latitude 10°35′ South,
Longitude 141°55′ East—thence to a point latitude 10°00′ South,
longitude 142°00′ East, thence to a point latitude 9°10′ South,
longitude 143°52′ East, thence to a point latitude 9°00′ South,
longitude 144°30′ East, thence to a point latitude 13°00′ South,
longitude 144°00′ East, thence to a point latitude 15°00′ South,
longitude 146°00′ East, thence to a point latitude 18°00′ South,
longitude 147°00′ East, thence to a point latitude 21°00′ South,
longitude 153°00′ East, thence to a point on the coast of Australia in latitude 24°42′ South, longitude 153°15′ East.

(10) «Special area» means a sea area where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by oil is required. Special areas shall include those listed in Regulation 10 of this Annex.

(11) «Instantaneous rate of discharge of oil content» means the rate of discharge of oil in litres per hour at any instant divided by the speed of the ship in knots at the same instant.

(12) «Tank» means an enclosed space which is formed by the permanent structure of a ship and which is designed for the carriage of liquid in bulk.

(13) «Wing tank» means any tank adjacent to the side shell plating.

(14) «Centre tank» means any tank inboard of a longitudinal bulkhead.

(15) «Slop tank» means a tank specifically designated for the collection of tank drainings, tank washings and other oily mixtures.

(16) «Clean ballast» means the ballast in a tank which since oil was last carried therein, has been so cleaned that effluent therefrom if it were discharged from a ship which is stationary into clean calm water on a clear day would not produce visible traces of oil on the surface of the water or on adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. If the ballast is discharged through an oil discharge monitoring and control system approved by the Administration, evidence based on such a system to the effect that the oil content of the effluent did not exceed 15 parts per million shall be determinative that the ballast was clean, notwithstanding the presence of visible traces.

(17) «Segregated ballast» means the ballast water introduced into a tank which is completely separated from the cargo oil and oil fuel system and which is permanently allocated to the carriage of ballast or to the carriage of ballast or cargoes other than oil or noxious substances as variously defined in the Annexes of the present Convention.

(18) «Length» (*L*) means 96 per cent of the total lenght on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline. The length (*L*) shall be measured in metres.

(19) «Forward and after perpendiculars» shall be taken at the forward and after ends of the length (*L*). The forward perpendicular shall coincide with the foreside of the stem on the waterline on which the length is measured.

(20) «Amidships» is at the middle of the length (*L*).

(21) «Breadth» (*B*) means the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material. The breadth (*B*) shall be measured in metres.

(22) «Deadweight» (*DW*) means the difference in metric tons between the displacement of a ship in water of a specific gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.

(23) «Lightweight» means the displacement of a ship in metric tons without cargo, oil fuel, lubricating oil, ballast water, fresh water and feedwater in tanks, consumable stores, passengers and their effects.

(24) «Permeability» of a space means the ratio of the volume within that space which is assumed to be occupied by water to the total volume of that space.

(25) «Volumes» and «areas» in a ship shall be calculated in all cases to moulded lines.

Regulation 2

Application

(1) Unless expressly provided otherwise, the provisions of this Annex shall apply to all ships.

(2) In ships other than oil tankers fitted with cargo spaces which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or more, the requirements of Regulations 9, 10, 14, 15 (1), (2) and (3), 18, 20 and 24 (4) of this Annex for oil tankers shall also apply to the construction and operation of those spaces, except that where such aggregate capacity is less than 1,000 cubic metres the requirements of Regulation 15 (4) of this Annex may apply in lieu of Regulation 15 (1), (2) and (3).

(3) Where a cargo subject to the provisions of Annex II of the present Convention is carried in a cargo space of an oil tanker, the appropriate requirements of Annex II of the present Convention shall also apply.

(4) (*a*) Any hydrofoil, air-cushion vehicle and other new type of vessel (near-surface craft, submarine craft, etc.) whose constructional features are such as to render the application of any of the provisions of Chapters II and III of this Annex relating to construction and equipment unreasonable or impracticable may be exempted by the Administration from such

provisions, provided that the construction and equipment of that ship provides equivalent protection against pollution by oil, having regard to the service for which it is intended.

(*b*) Particulars of any such exemption granted by the Administration shall be indicated in the Certificate referred to in Regulation 5 of this Annex.

(*c*) The Administration which allows any such exemption shall, as soon as possible, but not more than ninety days thereafter, communicate to the Organization particulars of same and the reasons therefor, which the Organization shall circulate to the Parties to the Convention for their information and appropriate action, if any.

Regulation 3

Equivalents

(1) The Administration may allow any fitting, material, appliance or apparatus to be fitted in a ship as an alternative to that required by this Annex if such fitting, material, appliance or apparatus is at least as effective as that required by this Annex. This authority of the Administration shall not extend to substitution of operational methods to effect the control of discharge of oil as equivalent to those design and construction features which are prescribed by Regulations in this Annex.

(2) The Administration which allows a fitting, material, appliance or apparatus, as an alternative to that required by this Annex shall communicate to the Organization for circulation to the Parties to the Convention particulars thereof, for their information and appropriate action, if any.

Regulation 4

Surveys

(1) Every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:

(*a*) An initial survey before the ship is put in service or before the Certificate required under Regulation 5 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(*b*) Periodical surveys at intervals specified by the Administration, but not exceeding five years, which shall be such as to ensure that the structure, equipment, fittings, arrangements and material fully comply with the applicable requeriments of this Annex. However where the duration of the International Oil Pollution Prevention Certificate (1973) is extended as specified in Regulation 8 (3) or (4) of this Annex, the interval of the periodical survey may be extended correspondingly.

(*c*) Intermediate surveys at intervals specified by the Administration but not exceeding thirty months, which shall be such as to ensure that the equipment and associated pump and piping systems, including oil discharge monitoring and control systems, oily-water separating equipment and oil filtering systems, fully comply with the applicable requirements of this Annex and are in good working order. Such intermediate surveys shall be endorsed on the International Oil Pollution Prevention Certificate (1973) issued under Regulation 5 of this Annex.

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this Regulation in order to ensure that the applicable provisions of this Annex are complied with.

(3) Surveys of the ship as regards enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned fully guarantees the completeness and efficiency of the surveys.

(4) After any survey of the ship under this Regulation has been completed, no significant change shall be made in the structure, equipment, fittings, arrangements or material covered by the survey without the sanction of the Administration, except the direct replacement of such equipment or fittings.

Regulation 5

Issue of Certificate

(1) An International Oil Pollution Prevention Certificate (1973) shall be issued, after survey in accordance with the provisions of Regulation 4 of this Annex, to any oil tanker of 150 tons gross tonnage and above and any other ships of 400 tons gross tonnage and above which are engaged in voyages to ports or off-shore terminals under the jurisdiction of other Parties to the Convention. In the case of existing ships this requirement shall apply twelve months after the date of entry into force of the present Convention.

(2) Such Certificate shall be issued either by the Administration or by any persons or organization duly authorized by it. In every case the Administration assumes full responsibility for the Certificate.

Regulation 6

Issue of a Certificate by another Government

(1) The Government of a Party to the Convention may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the provisions of this Annex are complied with, shall issue or authorize the issue of an International Oil Pollution Prevention Certificate (1973) to the ship in accordance with this Annex.

(2) A copy of the Certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.

(3) A Certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as the Certificate issued under Regulation 5 of this Annex.

(4) No International Oil Pollution Prevention Certificate (1973) shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.

Regulation 7

Form of Certificate

The International Oil Pollution Prevention Certificate (1973) shall be drawn up in an official language of the issuing country in the form corresponding to the model given in Appendix II to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 8

Duration of Certificate

(1) An International Oil Pollution Prevention Certificate (1973) shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, except as provided in paragraphs (2), (3) and (4) of this Regulation.

(2) If a ship at the time when the Certificate expires is not in a port or off-shore terminal under the jurisdiction of the Party to the Convention whose flag the ship is entitled to fly, the Certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the State whose flag the ship is entitled to fly or in which it is to be surveyed and then only in cases where it appears proper and reasonable to do so.

(3) No Certificate shall be thus extended for a period longer than five months and a ship to which such extension is granted shall not on its arrival in the State whose flag it is entitled to fly or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or State without having obtained a new Certificate.

(4) A Certificate which has not been extended under the provisions of paragraph (2) of this Regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

(5) A Certificate shall cease to be valid if significant alterations have taken place in the construction, equipment, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment or fittings, or if intermediate surveys as specified by the Administration under Regulation 4 (1) (*c*) of this Annex are not carried out.

(6) A Certificate issued to a ship shall cease to be valid upon transfer of such a ship to the flag of another State, except as provided in paragraph (7) of this Regulation.

(7) Upon transfer of a ship to the flag of another Party, the Certificate shall remain in force for a period not exceeding five months provided that it would not have expired before the end of that period, or until the Administration issues a replacement Certificate, whichever is earlier. As soon as possible after the transfer has taken place the Government of the Party whose flag the ship was formerly entitled to fly shall transmit to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

CHAPTER II

Requirements for Control of Operational Pollution

Regulation 9

Control of Discharge of Oil

(1) Subject to the provisions of Regulations 10 and 11 of this Annex and paragraph (2) of this Regulation, any discharge into the sea of oil or oily mixtures from ships to which this Annex applies shall be prohibited except when all the following conditions are satisfied:

(*a*) for an oil tanker, except as provided for in sub-paragraph (*b*) of this paragraph:

(*i*) the tanker is not within a special area;
(*ii*) the tanker is more than 50 nautical miles from the nearest land;
(*iii*) the tanker is proceeding en route;
(*iv*) the instantaneous rate of discharge of oil content does not exceed 60 litres per nautical mile;
(*v*) the total quantity of oil discharged into the sea does not exceed for existing tankers 1/15,000 of the total quantity of the particular cargo of which the residue formed a part, and for new tankers 1/30,000 of the total quantity of the particular cargo of which the residue formed a part; and
(*vi*) the tanker has in operation, except as provided for in Regulation 15 (5) and (6) of this Annex, an oil discharge monitoring and control system and a slop tank arrangement as required by Regulation 15 of this Annex;

(*b*) from a ship of 400 tons gross tonnage and above other than an oil tanker and from machinery space bilges excluding cargo pump room bilges of an oil tanker unless mixed with oil cargo residue:

(*i*) the ship is not within a special area;
(*ii*) the ship is more than 12 nautical miles from the nearest land;
(*iii*) the ship is proceeding en route;
(*iv*) the oil content of the effluent is less than 100 parts per million; and
(*v*) the ship has in operation an oil discharge monitoring and control system, oily-water separating equipment, oil filtering system or other instalation as required by Regulation 16 of this Annex.

(2) In the case of a ship of less than 400 tons gross tonnage other than an oil tanker whilst outside the special area, the Administration shall ensure that it is

equipped as far as practicable and reasonable with installations to ensure the storage of oil residues on board and their discharge to reception facilities or into the sea in compliance with the requirements of paragraph (1) (*b*) of this Regulation.

(3) Whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or its wake, Governments of Parties to the Convention should, to the extent they are reasonably able to do so, promptly investigate the facts bearing on the issue of whether there has been a violation of the provisions of this Regulation or Regulation 10 of this Annex. The investigation should include, in particular, the wind and sea conditions, the track and speed of the ship, other possible sources of the visible traces in the vicinity, and any relevant oil discharge records.

(4) The provisions of paragraph (1) of this Regulation shall not apply to the discharge of clean or segregated ballast. The provisions of sub-paragraph (1) (*b*) of this Regulation shall not apply to the discharge of oily mixture which without dilution has an oil content not exceeding 15 parts per million.

(5) No discharge into the sea shall contain chemicals or other substances in quantities or concentrations which are hazardous to the marine environment or chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this Regulation.

(6) The oil residues which cannot be discharged into the sea in compliance with paragraphs (1), (2) and (4) of this Regulation shall be retained on board or discharged to reception facilities.

Regulation 10

Methods for the Prevention of Oil Pollution from Ships while operating in Special Areas

(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area and the «Gulfs area» which are defined as follows:

(*a*) The Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Blak Sea constituted by the 41° N parallel and bounded to the west by the Straits of Gibraltar at the meridian of 5°36′W.

(*b*) The Baltic Sea area means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by he parallel of the Skaw in the Skagerrak at 57°44.8′N.

(*c*) The Black Sea area means he Black Sea proper with the boundary between the Mediterranean and the Black Sea constituted by the parallel 41° N.

(*d*) The Red Sea area means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane (12°8.5′N, 43°19.6′E) and Husn Murad (12°40.4′N, 43°30.2′E).

(*e*) The Gulfs area means the sea area located north west of the rhumb line between Ras al Hadd (22°30′N, 59°48′E) and Ras al Fasteh (25°04′N, 61°25′E).

(2) (*a*) Subject to the provisions of Regulation 11 of this Annex, any discharge into the sea of oil or oily mixture from any oil tanker and any ship of 400 tons gross tonnage and above other than an oil tanker shall be prohibited, while in a special area.

(*b*) Such ships while in a special area shall retain on board all oil drainage and sludge, dirty ballast and tank washing waters and discharge them only to reception facilities.

(3) (*a*) Subject to the provisions of Regulation 11 of this Annex, any discharge into the sea of oil or oily mixture from a ship of less than 400 tons gross tonnage, other than an oil tanker, shall be prohibited while in a special area, except when the oil content of the effluent without dilution does not exceed 15 parts per million or alternatively when all of the following conditions are satisfied:

(*i*) the ship is proceeding en route;

(*ii*) the oil content of the effluent is less than 100 parts per million; and

(*iii*) the discharge is made as far as practicable from the land, but in no case less than 12 nautical miles from the nearest land.

(*b*) No discharge into the sea shall contain chemicals or other substances in quantities or concentrations which are hazardous to the marine environment or chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this Regulation.

(*c*) The oil residues which cannot be discharged into the sea in compliance with sub-paragraph (*a*) of this paragraph shall be retained on board or discharged to reception facilities.

(4) The provisions of this Regulation shall not apply to the discharge of clean or segregated ballast.

(5) Nothing in this Regulation shall prohibit a ship on a voyage only part of which is in a special area from discharging outside the special area in accordance with Regulation 9 of this Annex.

(6) Whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or its wake, the Governments of Parties to the Convention should, to the extent they are reasonably able to do so, promptly investigate the facts bearing on the issue of whether there has been a violation of the provisions of this Regulation or Regulation 9 of this Annex. The investigation should include, in particular, the wind and sea conditions, the track and speed of the ship, other possible sources of the visible traces in the vicinity, and any relevant oil discharge records.

(7) Reception facilities within special areas:

(*a*) Mediterranean Sea, Black Sea and Baltic Sea areas:

(*i*) The Government of each Party to the Convention, the coastline of which borders on any given special area undertakes to ensure that not later than 1 January 1977 all oil loading terminals

and repair ports within the special area are provided with facilities adequate for the reception and treatment of all the dirty ballast and tank washing water from oil tankers. In addition all ports within the special area shall be provided with adequate reception facilities for other residues and oily mixtures from all ships. Such facilities shall have adequate capacity to meet the needs of the ships using them without causing undue delay.

(*ii*) The Government of each Party having under its jurisdiction entrances to seawater courses with low depth contour which might require a reduction of draught by the discharge of ballast undertakes to ensure the provision of the facilities referred to in subparagraph (*a*) (*i*) of this paragraph but with the proviso that ships required to discharge slops or dirty ballast could be subject to some delay.

(*iii*) During the period between the entry into force of the present Convention (if earlier than 1 January 1977) and 1 January 1977 ships while navigating in the special areas shall comply with the requirements of Regulation 9 of this Annex. However, the Governments of Parties the coastlines of which border any of the special areas under this subparagraph may establish a date earlier than 1 January 1977, but after the date of entry into force of the present Convention, from which the requirements of this Regulation in respect of the special areas in question shall take effect:

(1) if all the reception facilities required have been provided by the date so established; and

(2) provided that the Parties concerned notify the Organization of the date so established at least six months in advance, for circulation to other Parties.

(*iv*) After 1 January 1977, or the date established in accordance with subparagraph (*a*) (*iii*) of this paragraph if earlier, each Party shall notify the Organization for transmission to the Contracting Governments concerned of all cases where the facilities are alleged to be inadequate.

(*b*) Red Sea area and Gulfs area:

(*i*) The Government of each Party the coastline of which borders on the special areas undertakes to ensure that as soon as possible all oil loading terminals and repair ports within these special areas are provided with facilities adequate for the reception and treatment of all the dirty ballast and tank washing water from tankers. In addition all ports within the special area shall be provided with adequate reception facilities for other residues and oily mixtures from all ships. Such facilities shall have adequate capacity to meet the needs of the ships

(*ii*) The Government of each Party having under its jurisdiction entrances to seawater courses with low depth contour which might require a reduction of draught by the discharge of ballast shall undertake to ensure the provision of the facilities referred to in subparagraph (*b*) (*i*) of this paragraph but with the proviso that ships required to discharge slops or dirty ballast could be subject to some delay.

(*iii*) Each Party concerned shall notify the Organization of the measures taken pursuant to provisions of subparagraph (*b*) (*i*) and (*ii*) of this paragraph. Upon receipt of sufficient notifications the Organization shall establish a date from which the requirements of this Regulation in respect of the area in question shall take effect. The Organization shall notify all Parties of the date so established no less than twelve months in advance of that date.

(*iv*) During the period between the entry into force of the present Convention and the date so established, ships while navigating in the special area shall comply with the requirements of Regulation 9 of this Annex.

(*v*) After such date oil tankers loading in ports in these special areas where such facilities are not yet available shall also fully comply with the requirements of this Regulation. However, oil tankers entering these special areas for the purpose of loading shall make every effort to enter the area with only clean ballast on board.

(*vi*) After the date on which the requirements for the special area in question take effect, each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities are alleged to be inadequate.

(*vii*) At least the reception facilities as prescribed in Regulation 12 of this Annex shall be provided by 1 January 1977 or one year after the date of entry into force of the present Convention, whichever occurs later.

Regulation 11

Exceptions

Regulations 9 and 10 of this Annex shall not apply to:

(*a*) the discharge into the sea of oil or oily mixture necessary for the purpose of securing safety of a ship or saving life at sea; or

(*b*) the discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment:

(*i*) provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and

(*ii*) except if the owner or the Master acted either with intent to cause damage, or recklessey and with knowledge that damage would probably result; or

(*c*) the discharge into the sea of substances containing oil, approved by the Administration, when being used for the purpose of combating specific pollution incidents in order to minimize the damage from pollution. Any such discharge shall be subject to the approval of any Government in whose jurisdiction it is contemplated the discharge will occur.

Regulation 12

Reception Facilities

(1) Subject to the provisions of Regulation 10 of this Annex, the Government of each Party undertakes to ensure the provision at oil loading terminals, repair ports, and in other ports in which ships have oily residues to discharge, of facilities for the reception of such residues and oily mixtures as remain from oil tankers and other ships adequate to meet the needs of the ships using them without causing undue delay to ships.

(2) Reception facilities in accordance with paragraph (1) of this Regulation shall be provided in:

(*a*) all ports and terminals in which crude oil is loaded into oil tankers where such tankers have immediately prior to arrival completed a ballast voyage of not more than 72 hours or not more than 1,200 nautical miles;

(*b*) all ports and terminals in which oil other than crude oil in bulk is loaded at an average quantity of more than 1,000 metric tons per day;

(*c*) all ports having ship repair yards or tank cleaning facilities;

(*d*) all ports and terminals which handle ships provided with the sludge tank(s) required by Regulation 17 of this Annex;

(*e*) all ports in respect of oily bilge waters and other residues, which cannot be discharged in accordance with Regulation 9 of this Annex; and

(*f*) all loading ports for bulk cargoes in respect of oil residues from combination carriers which cannot be discharged in accordance with Regulation 9 of this Annex.

(3) The capacity for the reception facilities shall be as follows:

(*a*) Crude oil loading terminals shall have sufficient reception facilities to receive oil and oily mixtures which cannot be discharged in accordance with the provisions of Regulation 9 (1) (*a*) of this Annex from all oil tankers on voyages as described in paragraph (2) (*a*) of this Regulation.

(*b*) Loading ports and terminals referred to in paragraph (2) (*b*) of this Regulation shall have sufficient reception facilities to receive oil and oil mixtures which cannot be discharged in accordance with the provisions of Regulation 9 (1) (*a*) of this Annex from oil tankers which load oil other than crude oil in bulk.

(*c*) All ports having ship repair yards or tank cleaning facilities shall have sufficient reception facilities to receive all residues and oily mixtures which remain on board for disposal from ships prior to entering such yards or facilities.

(*d*) All facilities provided in ports and terminals under paragraph (2) (*d*) of this Regulation shall be sufficient to receive all residues retained according to Regulation 17 of this Annex from all ships that may reasonably by expected to call at such ports and terminals.

(*e*) All facilities provided in ports and terminals under this Regulation shall be sufficient to receive oily bilge waters and other residues which cannot be discharged in accordance with Regulation 9 of this Annex.

(*f*) The facilities provided in loading ports for bulk cargoes shall take into account the special problems of combination carriers as appropriate.

(4) The reception facilities prescribed in paragraphs (2) and (3) of this Regulation shall be made available no later than one year from the date of entry into force of the present Convention or by 1 January 1977, whichever occurs later.

(5) Each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities provided under this Regulation are alleged to be inadequate.

Regulation 13

Segregated Ballast Oil Tankers

(1) Every new oil tanker of 70,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of this Regulation.

(2) The capacity of the segregated ballast tanks shall be so determined that the ship may operate safely on ballast voyages without recourse to the use of oil tanks for water ballast except as provided for in paragraph (3) of this Regulation. In all cases, however, the capacity of segregated ballast tanks shall be at least such that in any ballast condition at any part of the voyage, including the conditions consisting of lightweight plus segregated ballast only, the ship's draughts and trim can meet each of the following requirements:

(*a*) the moulded draught amidships (*dm*) in metres (without taking into account any ship's deformation) shall not be less than:

$$dm = 2.0 + 0.02\ L;$$

(*b*) the draughts at the forward and after perpendiculars shall correspond to those determined by the draught amidships (*dm*), as specified in sub-paragraph (*a*) of this paragraph, in association with the trim by the stern of not greater than 0.015 *L*; and

(*c*) in any case the draught at the after perpendicular shall not be less than that which is necessary to obtain full immersion of the propeller(s).

(3) In no case shall ballast water be carried in oil tanks except in weather conditions so severe that, in the opinion of the Master, it is necessary to carry additional ballast water in oil tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 9 and in accordance with the requirements of Regulation 15 of this Annex, and entry shall be made in the Oil Record Book referred to in Regulation 20 of this Annex.

(4) Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraph (1) of this Regulation may, however, be qualified as a segregated ballast tanker, provided that in the case of an oil tanker of 150 metres in length and above it fully complies with the requirements of paragraphs (2) and (3) of this Regulation and in the case of an oil tanker of less than 150 metres in length the segregated ballast conditions shall be to the satisfaction of the Administration.

Regulation 14

Segregation of Oil and Water Ballast

(1) Except as provided in paragraph (2) of this Regulation, in new ships of 4,000 tons gross tonnage and above other than oil tankers, and in new oil tankers of 150 tons gross tonnage and above, no ballast water shall be carried in any oil fuel tank.

(2) Where abnormal conditions or the need to carry large quantities of oil fuel render it necessary to carry ballast water which is not a clean ballast in any oil fuel tank, such ballast water shall be discharged to reception facilities or into the sea in compliance with Regulation 9 using the equipment specified in Regulation 16 (2) of this Annex, and an entry shall be made in the Oil Record Book to this effect.

(3) All other ships shall comply with kthe requirements of paragraph (1) of this Regulation as far as reasonable and practicable.

Regulation 15

Retention of Oil on Board

(1) Subject to the provisions of paragraphs (5) and (6) of this Regulation, oil tankers of 150 tons gross tonnage and above shall be provided with arrangements in accordance with the requirements of paragraphs (2) and (3) of this Regulation, provided that in the case of existing tankers the requirements for oil discharge monitoring and control systems and slop tank arrangements shall apply three years after the date of entry into force of the present Convention.

(2) (*a*) Adequate means shall be provided for cleaning the cargo tanks and transferring the dirty ballast residue and tank washings from the cargo tanks into a slop tank approved by the Administration. In existing oil tankers, any cargo tank may be designated as a slop tank.

(*b*) In this system arrangements shall be provided to transfer the oily waste into a slop tank or combination of slop tanks in such a way any effluent discharged into the sea will be such as to comply with the provisions of Regulation 9 of this Annex.

(*c*) The arrangements of the slop tank or combination of slop tanks shall have a capacity necessary to retain the slops generated by tank washing, oil residues and dirty ballast residues but the total shall be not less than 3 per cent of the oil carrying capacity of the ship, except that, where segregated ballast tanks are provided in accordance with Regulation 13 of this Annex, or where arrangements such as eductors involving the use of water additional to the washing water are not fitted, the Administration may accept 2 per cent. New oil tankers over 70,000 tons deadweight shall be provided with at least two slop tanks.

(*d*) Slop tanks shall be so designed particularly in respect of the position of inlets, outlets, baffles or weirs where fitted, so as to avoid excessive turbulence and entrainment of oil or emulsion with the water.

(3) (*a*) An oil discharge monitoring and control system approved by the Administration shall be fitted. In considering the design of the oil content meter to be incorporated in the system, the Administration shall have regard to the specification recommended by the Organization *. The system shall be fitted with a recording device to provide a continuous record of the discharge in litres per nautical mile and total quantity discharged, or the oil content and rate of discharge. This record shall be identifiable as to time and date and shall be kept for at least three years. The oil discharge monitor and control system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the instantaneous rate of discharge of oil exceeds that permitted by Regulation 9 (1) (*a*) of this Annex. Any failure of this monitoring and control system shall stop the discharge and be noted in the Oil Record Book. A manually operated alternative method shall be provided and may be used in the event of such failure, but the defective unit shall be made operable before the oil tanker commences its next ballast voyage unless it is proceeding to a repair port. Existing oil tankers shall comply with all of the provisions specified above except that the stopping of the discharge may be performed manually and the rate of discharge may be estimated from the pump characteristic.

(*b*) Effective oil/water interface detectors approved by the Administration shall be provided for a rapid and accurate determination of

---

* Reference is made to the Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by Resolution A.233 (VII).

the oil/water interface in slop tanks and shall be available for use in other tanks where the separation of oil and water is effected and from which it is intended to discharge effluent direct to the sea.

(*c*) Instructions as to the operation of the system shall be in accordance with an operational manual approved by the Administration. They shall cover manual as well as automatic operations and shall be intended to ensure that at no time shall oil be discharged except in compliance with the conditions specified in Regulation 9 of this Annex *.

(4) The requirements of paragraphs (1), (2) and (3) of this Regulation shall not apply to oil tankers of less than 150 tons gross tonnage, for which the control of discharge of oil under Regulation 9 of this Annex shall be effected by the retention of oil on board with subsequent discharge of all contaminated washings to reception facilities. The total quantity of oil and water used for washing and returned to a storage tank shall be recorded in the Oil Record Book. This total quantity shall be discharged to reception facilities unless adequate arrangements are made to ensure that any effluent which is allowed to be discharged into the sea is effectively monitored to ensure that the provisions of Regulation 9 of this Annex are complied with.

(5) The Administration may waive the requirements of paragraphs (1), (2) and (3) of this Regulation for any oil tanker which engages exclusively on voyages both of 72 hours or less in duration and within 50 miles from the nearest land, provided that the oil tanker is not required to hold and does not hold an International Oil Pollution Prevention Certificate (1973). Any such waiver shall be subject to the requirement that the oil tanker shall retain on board all oily mixtures for subsequent disccharge to reception facilities and to the determination by the Administration that facilities available to receive such oily mixtures are adequate.

(6) Where in the view of the Organization equipment required by Regulation 9 (1) (*a*) (*vi*) of this Annex and specified in sub-paragraph (3) (*a*) of this Regulation is not obtainable for the monitoring of discharge of light refined products (white oils), the Administration may waive compliance with such requirement, provided that discharge shall be permitted only in compliance with procedures established by the Organization which shall satisfy the conditions of Regulation (9) (1) (*a*) of this Annex except the obligation to have an oil discharge monitoring and control system in operation. The Organization shall review the availability of equipment at intervals not exceeding twelve months.

(7) The requirements of paragraphs (1), (2) and (3) of this Regulation shall not apply to oil tankers carrying, asphalt, for which the control of discharge of asphalt under Regulation 9 of this Annex shall be effected by the retention of asphalt residues on board with discharge of all contaminated washings to reception facilities.

* Reference is made to *Clean Seas Guide for Oil Tankers*, published by the International Chamber of Shipping and the Oil Companies International Marine Forum.

Regulation 16

Oil Discharge Monitoring and Control System and Oily-Water Separating Equipment

(1) Any ship of 400 tons gross tonnage and above shall be fitted with an oily-water separating equipment or filtering system complying with the provisions of paragraph (6) of this Regulation. Any such ship which carries large quantities of oil fuel shall comply with paragraph (2) of this Regulation or paragraph (1) of Regulation 14.

(2) Any ship of 10,000 tons gross tonnage and above shall be fitted:

(*a*) in addition to the requirements of paragraph (1) of this Regulation with an oil discharge monitoring and control system complying with paragraph (5) of this Regulation; or

(*b*) as an alternative to the requirements of paragraph (1) and sub-paragraph (2) (*a*) of this Regulation, with an oily-water separating equipment complying with paragraph (6) of this Regulation and an effective filtering system, complying with paragraph (7) of this Regulation.

(3) The Administration shall ensure that ships of less than 400 tons gross tonnage are equipped, as far as practicable, to retain on board oil or oily mixtures or discharge them in accordance with the requirements of Regulation (9) (1) (*b*) of this Annex.

(4) For existing ships the requirements of paragraphs (1) (2) and (3) of this Regulation shall apply three years after the date of entry int force of the present Convention.

(5) An oil discharge monitoring and control system shall be of a design approved by the Administration. In considering the design of the oil content meter to be incorporated into the system, the Administration shall have regard to the specification recommended by the Organization *. The system shall be fitted with a recording device to provide a continuous record of the oil content in parts per million. This record shall be identifiable as to time and date and shall be kept for at least three years. The monitoring and control system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the oil content of effluent exceeds that permitted by Regulation (9) (1) (*b*) of this Annex. Any failure of this monitoring and control system shall stop the discharge and be noted in the Oil Record Book. The defective unit shall be made operable before the ship commences its next voyage unless it is proceeding to a repair port. Existing ships shall comply with all of the provisions specified above except that the stopping of the discharge may be performed manually.

(6) Oily-water separating equipment or an oil filtering system shall be of a design approved by the Administration and shall be such as will ensure that any oily mixture discharged into the sea after passing through the separator or filtering systems shall have an

* Reference is made to the Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by Resolution A. 233 (VII).

oil content of less than 100 parts per million. In considering the design of such equipment, the Administration shall have regard to the specification recommended by the Organization *.

(7) The oil filtering system referred to in paragraph (2) (*b*) of this Regulation shall be of a design approved by the Administration and shall be such that it will accept the discharge from the separating system and produce an effluent the oil content of which does not exceed 15 parts per million. It shall be provided with alarm arrangements to indicate when this level cannot be maintained.

Regulation 17

Tanks for Oil Residues (Sludge)

(1) Every ship of 400 tons gross tonnage and above shall be provided with a tank or tanks of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oily residues (sludges) which cannot be dealt with otherwise in accordance with the requirements of this Annex, such as those resulting from the purification of fuel and lubricating oils and oil leakages in the machinery spaces.

(2) In new ships, such tanks shall be designed and constructed so as to facilitate their cleaning and the discharge of residues to reception facilities. Existing ships shall comply with this requirement as far as is reasonable and practicable.

Regulation 18

Pumping, Piping and Discharge Arrangements of Oil Tankers

(1) In every oil tanker, a discharge manifold for connexion to reception facilities for the discharge of dirty ballast water or oil contaminated water shall be located on the open deck on both sides of the ship.

(2) In every oil tanker, pipelines for the discharge to the sea of effluent which may be permitted under Regulation 9 of this Annex shall be led to the open deck or to the ship's side above the waterline in the deepest ballast condition. Different piping arrangements to permit operation in the manner permitted in subparagraphs (4) (*a*) and (*b*) of this Regulation may be accepted.

(3) In new oil tankers means shall be provided for stopping the discharge of effluent into the sea from a position on upper deck or above located so that the manifold in use referred to in paragraph (1) of this Regulation and the effluent from the pipelines referred to in paragraph (2) of this Regulation may be visually observed. Means for stopping the discharge need not be provided at the observation position if a positive communication system such as telephone or radio system is provided between the observation position and the discharge control position.

(4) All discharges shall take place above the waterline except as follows:

(*a*) Segregated ballast and clean ballast may be discharged below the waterline in ports or at offshore terminals.

(*b*) Existing ships which, without modification, are not capable of discharging segregated ballast above the waterline may discharge segregated ballast below the waterline provided that an examination of the tank immediately before the discharge has established that no contamination with oil has taken place.

Regulation 19

Standard Discharge Connection

To enable pipes of reception facilities to be connected with the ship's discharge pipeline for residues from machinery bilges, both lines shall be fitted with a standard discharge connection in accordance with the following table:

Standard Dimensions of Flanges for Discharge Connections

Description	Dimension
Outside diameter	215 mm
Inner diameter	According to pipe outside diameter
Bolt circle diameter	183 mm
Slots in flange	6 holes 22 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 22 mm
Flange thickness	20 mm
Bolts and nuts: quantity, diameter	6, each of 20 mm in diameter and of suitable length
The flange is designed to accept pipes up to a maximum internal diameter of 125 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a gasket of oilproof material, shall be suitable for a service pressure of 6 kg/cm^2.	

Regulation 20

Oil Record Book

(1) Every oil tanker of 150 tons gross tonnage and above and every ship of 400 tons gross tonnage and above other than an oil tanker shall be provided with an Oil Record Book, whether as part of the ship's official log book or otherwise, in the form specified in Appendix III to this Annex.

(2) The Oil Record Book shall be completed on each occasion, on a tank-to-tank basis, whenever any of the following operations take place in the ship:

(*a*) For oil tankers

(*i*) loading of oil cargo;

(*ii*) internal transfer of oil cargo during voyage;

(*iii*) opening or closing before and after loading and unloading operations of valves or similar devices which inter-connect cargo tanks;

* Reference is made to the Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by Resolution A. 233 (VII).

(iv) opening or closing of means of communication between cargo piping and seawater ballast piping;
(v) opening or closing of ships' side valves before, during and after loading and unloading operations;
(vi) unloading of oil cargo;
(vii) ballasting of cargo tanks;
(viii) cleaning of cargo tanks;
(ix) discharge of ballast except from segregated ballast tanks;
(x) discharge of water from slop tanks;
(xi) disposal of residues;
(xii) discharge overboard of bilge water which has accumulated in machinery spaces whilst in port, and the routine discharge at sea of bilge water which has accumulated in machinery spaces.

(b) For ships other than oil tankers

(i) ballasting or cleaning of fuel oil tanks or oil cargo spaces;
(ii) discharge of ballast or cleaning water from tanks referred to under (i) of this sub-paragraph;
(iii) disposal of residues;
(iv) discharge overboard of bilge water which has accumulated in machinery spaces whilst in port, and the routine discharge at sea of bilge water which has accumulated in machinery spaces.

(3) In the event of such discharge of oil or oily mixture as is referred to in Regulation 11 of this Annex or in the event of accidental or other exceptional discharge of oil not excepted by that Regulation, a statement shall be made in the Oil Record Book of the circumstances of, and the reasons for, the discharge.

(4) Each operation described in paragraph (2) of this Regulation shall be fully recorded without delay in the Oil Record Book so that all the entries in the book appropriate to that operation are completed. Each section of the book shall be signed by the officer or officers in charge of the operations concerned and shall be countersigned by the Master of the ship. The entries in the Oil Record Book shall be in an official language of the State whose flag the shiph is entitled to fly, and, for ships holding an International Oil Pollution Prevention Certificate (1973), in English or French. The entries in an official national language of the State whose flag the ship is entitled to fly shall prevail in case of a dispute or discrepancy.

(5) The Oil Record Book shall be kept in such a place as to be readily available for inspection at all reasonable times and, except in the case of unmanned ships under tow, shall be kept on board the ship. It shall be preserved for a period of three years after the last entry has been made.

(6) The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book on board any ship to which this Annex applies while the ship is in its port or offshore terminals and may make a copy of any entry in that book and may require the Master of the ship to certify that the copy is a true copy of such entry. Any copy so made which has been certified by the Master of the ship as a true copy of an entry in the ship's Oil Record Book shall be made admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book and the taking of a certified copy by the competent authority under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

Regulation 21

Special Requirements for Drilling Rigs and other Platforms

Fixed and floating drilling rigs when engaged in the exploration, exploitation and associated offshore processing of sea-bed mineral resources and other platforms shall comply with the requirements of this Annex applicable to ships of 400 tons gross tonnage and above other than oil tankers, except that:

(a) they shall be equipped as far as practicable with the installations required in Regulation 16 and 17 of this Annex;
(b) they shall keep a record of all operations involving oil or oily mixture discharges, in a form approved by the Administration; and
(c) in any special area and subject to the provisions of Regulation 11 of this Annex, the discharge into the sea of oil or oily mixture shall be prohibited except when the oil content of the discharge without dilution does not exceed 15 parts per million.

CHAPTER III

Requirements for Minimizing Oil Pollution from Oil Tankers Due to Side and Bottom Damages

Regulation 22

Damage Assumptions

(1) For the purpose of calculating hypothetical oil outflow from oil tankers, three dimensions of the extent of damage of a parallelepiped on the side and bottom of the ship are assumed as follows. In the case of bottom damages two conditions are set forth to be applied individually to the stated portions of the oil tanker.

(a) Side damage

i) Longitudinal extent (ℓ_c):	$\frac{1}{3}\sqrt[2]{L^3}$ or 14.5 metres, whichever is less
ii) Transverse extent (t_c): (inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned *summer freeboard*):	$\frac{B}{5}$ or 11.5 metres, whichever is less
iii) Vertical extent (v_c):	from the base line upwards without limit

(b) Bottom damage

	For 0.3 L from the forward perpendicular of the ship	Any other part of the ship
(i) Longitudinal extent (ℓ_s):	$\frac{L}{10}$	$\frac{L}{10}$ or 5 metres, whichever is less
(ii) Transverse extent (t_s):	$\frac{B}{6}$ or 10 metres, whichever is less but not less than 5 metres	5 metres

(iii) Vertical extent from the base line (v_s): $\frac{B}{15}$ or 6 metres, whichever is less

(2) Wherever the symbols given in this Regulation appear in this Chapter, they have the meaning as defined in this Regulation.

Regulation 23

Hypothetical Outflow of Oil

(1) The hypothetical outflow of oil in the case of side damage (O_c) and bottom damage (O_s) shall be calculated by the following formulae with respect to compartments breached by damage to all conceivable locations along the length of the ship to the extent as defined in Regulation 22 of this Annex.

(a) for side damages:

$$O_c = \Sigma W_i + \Sigma K_i C_i \qquad (I)$$

(b) for bottom damages:

$$O_s = \frac{1}{3}(\Sigma Z_i W_i + \Sigma Z_i C_i) \qquad (II)$$

where: W_i = volume of a wing tank in cubic metres assumed to be breached by the damage as specified in Regulation 22 of this Annex; W_i for a segregated ballast tank may be taken equal to zero,

C_i = volume of a centre tank in cubic metres assumed to be breached by the damage as specified in Regulation 22 of this Annex; C_i for a segregated ballast tank may be taken equal to zero,

$K_i = 1 - \frac{b_i}{t_c}$ when b_i is equal to or greater than t_c, K_i shall be taken equal to zero,

$Z_i = 1 - \frac{h_i}{v_s}$ when h_i is equal to or greater than v_s, Z_i shall be taken equal to zero,

b_i = width of wing tank in metres under consideration measured inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned summer freeboard,

h_i = minimum depht of the bottom in metres under consideration; where no double bottom is fitted h_i shall be taken equal to zero.

Whenever symbols given in this paragraph appear in this Chapter, they have the meaning as defined in this Regulation.

(2) If a void space or segregated ballast tank of a length less than ℓ_c as defined in Regulation 22 of this Annex is located between wing oil tanks, O_c in formula (I) may be calculated on the basis of volume W_i being the actual volume of one such tank (where they are of equal capacity) or the smaller of the two tanks (if they differ in capacity) adjacent to such space, multiplied by S_i as defined below and taking for all other wing tanks involved in such a collision the value of the actual full volume.

$$S_i = 1 - \frac{\ell_i}{\ell_c}$$

where ℓ_i = length in metres of void space or segregated ballast tank under consideration.

(3) (a) Credit shall only be given in respect of double bottom tanks which are either empty or carrying clean water when cargo is carried in the tanks above.

(b) Where the double bottom does not extend for the full length and width of the tank involved, the double bottom is considered non-existent and the volume of the tanks above the area of the bottom damage shall be included in formula (II) even if the tank is not considered breached because of the installation of such a partial double bottom.

(c) Suction wells may be neglected in the determination of the value h_i provided such wells are not excessive in area and extend below the tank for a minimum distance and in no case more than half the height of the double bottom. If the depth of such a well exceeds half the height of the double bottom, h_i shall be taken equal to the double bottom height minus the well height.

Piping serving such wells if installed within the double bottom shall be fitted with valves or other closing arrangements located at the point of connexion to the tank served to prevent oil outflow in the event of damage to the piping. Such piping shall be installed as high from the bottom shell as possible. These valves shall be kept closed at sea at any time when the tank contains oil cargo, except that they may be opened only for cargo transfer needed for the purpose of trimming of the ship.

(4) In the case where bottom damage simultaneously involves four centre tanks, the value of O_s may be calculated according to the formula

$$O_s = \frac{1}{4}(\Sigma Z_i W_i + \Sigma Z_i C_i) \qquad (III)$$

(5) An Administration may credit as reducing oil outflow in case of bottom damage, an installed cargo transfer system having an emergency high suction in each cargo oil tank, capable of transferring from a breached tank or tanks to segregated ballast tanks or to available cargo tankage if it can be assured that such tanks will have sufficient ullage. Credit for such a system would be governed by ability to transfer in two hours of operation oil equal to one half of the largest of the breached tanks involved and by availability of equivalent receiving capacity in ballast or cargo tanks. The credit shall be confined to permitting calculation of O_s according to formula (III). The pipes for such suctions shall be installed at least at a height not less than the vertical extent of the bottom damage v_s. The Administration shall supply the Organization with the information concerning the arrangements accepted by it, for circulation to other Parties to the Convention.

Regulation 24

Limitation of Size and Arrangement of Cargo Tanks

(1) Every new oil tanker shall comply with the provisions of this Regulation. Every existing oil tanker shall be required, within two years after the date of entry into

force of the present Convention, to comply with the provisions of this Regulation if such a tanker falls into either of the following categories:

(*a*) a tanker, the delivery of which is after 1 January 1977; or

(*b*) a tanker to which both the following conditions apply:

(*i*) delivery is not later than 1 January 1977; and

(*ii*) the building contract is placed after 1 January 1974, or in cases where no building contract has previously been placed, the keel is laid or the tanker is at a similar stage of construction after 30 June 1974.

(2) Cargo tanks of oil tankers shall be of such size and arrangements that the hypothetical outflow O_c or O_s calculated in accordance with the provisions of Regulation 23 of this Annex anyhere in the lenght of the ship does not exceed 30,000 cubic metres or 400 $\sqrt[3]{DW}$, whichever is the greater, but subject to a maximum of 40,000 cubic metres.

(3) The volume of any one wing cargo oil tank of an oil tanker shall not exceed seventy-five per cent of the limits of the hypothetical oil outflow referred to in paragraph (2) of this Regulation. The volume of any one centre cargo oil tank shall not exceed 50,000 cubic metres. However, in segregated ballast oil tankers as defined in Regulation 13 of this Annex, the permitted volume of a wing cargo oil tank situated between two segregated ballast tanks, each exceeding ℓ_c in lengt, may be increased to the maximum limit of hypothetical oil outflow provided that the width of the wing tanks exceeds t_c.

(4) The length of each cargo tank shall not exceed 10 metres or one of the following values, wichever'is the greater:

(*a*) where no longitudinal bulkhead is provided:
$0.1\ L$

(*b*) where a longitudinal bulkhead is provided at the centreline only:
$0.15\ L$

(*c*) where two or more longitudinal bulkheads are provided:

(*i*) for wing tanks:
$0.2\ L$

(*ii*) for centre tanks:

(1) if $\frac{b_i}{B}$ is equal to or greater than $\frac{1}{5}$:
$0.2\ L$

(2) if $\frac{b_i}{B}$ is less than $\frac{1}{5}$:

— where no centreline longitudinal bulkhead is provided:

$$(0.5\ \frac{b_i}{B} + 0.1)\ L$$

— where a centreline longitudinal bulkhead is provided:

$$(0.25\ \frac{b_i}{B} + 0.15)\ L$$

(5) In order not to exceed the volume limits established by paragraphs (2), (3) and (4) of this Regulation and irrespective of the accepted type of cargo transfer system installed, when such system inter-connects two or more cargo tanks, valves or other similar closing devices shall be provided for separating the tanks from each other. These valves or devices shall be closed when the tanker is at sea.

(6) Lines of piping which run through cargo tanks in a position less than t_c from the ship's side or less than v_c from the ship's bottom shall be fitted with valves or similar closing devices at the point at which they open into any cargo tank. These valves shall be kept closed at sea at any time when the tanks contain cargo oil, except that they may be opened only for cargo transfer needed for the purpose of trimming of the ship.

Regulation 25

Subdivision and Stability

(1) Every new oil tanker shall comply with the subdivision and damage stability criteria as specified in paragraph (3) of this Regulation, after the assumed side or bottom damage as specified in paragraph (2) of this Regulation, for any operating draught reflecting actual partial or full load conditions consistent with trim and strength of the ship as well as specific gravities of the cargo. Such damage shall be applied to all conceivable locations along the length of the ship as follows:

(*a*) in tankers of more than 225 metres in lenght, anywhere in the ship's length;

(*b*) in tankers of more than 150 metres, but not exceeding 225 metres in length, anywhere in the ship's length except involving either after or forward bulkhead bounding the machinery space located aft. The machinery space shall be treated as a single floodable compartment;

(*c*) in tankers not exceeding 150 metres in length, anywhere in the ship's length between adjacent transverse bulkheads with the exception of the machinery space. For tankers of 100 metres or less in length where all requirements of paragraph (3) of this Regulation cannot be fulfilled without materially impairing the operational qualities of the ship, Administrations may allow relaxations from these requirements.

Ballast conditions where the tanker is not carrying oil in cargo tanks excluding any oil residues, shall not be considered.

(2) The following provisions regarding the extent and the character of the assumed damage shall apply:

(*a*) The extent of side or bottom damage shall be as specified in Regulation 22 of this Annex, except that the longitudinal extent of bottom damage within $0.3\ L$ from the forward perpendicular shall be the same as for side, damage, as specified in Regulation (22) (1) (*a*) (*i*) of this Annex. If any damage of lesser extent results in a more severe condition such damage shall be assumed.

(*b*) Where the damage involving transverse bulkheads is envisaged as specified in subparagraphs (1) (*a*) and (*b*) of this Regulation, transverse watertight bulkheads shall be spaced at least at a distance equal to the longitudinal extent of assumed damage specified in sub-

paragraph (*a*) of this paragraph in order to be considered effective. Where transverse bulkheads are spaced at a lesser distance, one or more of these bulkheads within such extent of damage shall be assumed as non-existent for the purpose of determining flooded compartments.

(*c*) Where the damage between adjacent transverse watertight bulkheads is envisaged as specified in sub-paragraph (1) (*c*) of this Regulation, no main transverse bulkhead or a transverse bulkhead bounding side tanks or double bottom tanks shall be assumed damaged, unless:

(*i*) the spacing of the adjacent bulkheads is less than the longitudinal extent of assumed damage specified in subparagraph (*a*) of this paragraph; or

(*ii*) there is a step or a recess in a transverse bulkhead of more than 3.05 metres in length, located within the extent of penetration of assumed damage. The step formed by the after peak bulkhead and after peak tank top shall not be regarded as a step for the purpose of this Regulation;

(*d*) If pipes, ducts or tunnels are situated within the assumed extent of damage, arrangements shall be made so that progressive flooding cannot thereby extend to compartments other than those assumed to be floodable for each case of damage.

(3) Oil tankers shall be regarded as complying with the damage stability criteria if the following requirements are met:

(*a*) The final waterline, taking into account sinkage, heel and trim, shall be below the lower edge of any opening through which progressive flooding may take place. Such openings shall include air pipes and those which are closed by means of weathertight doors or hatch covers and may exclude those openings closed by means of watertight manhole covers and flush scuttles, small watertight cargo tank hatch covers which maintain the high integrity of the deck, remotely operated watertight sliding doors, and side scuttles of the non-opening type.

(*b*) In the final stage of flooding, the angle of heel due to unsymmetrical flooding shall not exceed 25 degrees, provided that this angle may be increased up to 30 degrees if no deck edge immersion occurs.

(*c*) The stability in the final stage of flooding shall be investigated and may be regarded as sufficient if the righting lever curve has at least a range of 20 degrees beyond the position of equilibrium in association with a maximum residual righting lever of at least 0.1 metre. The Administration shall give consideration to the potential hazard presented by protected or unprotected openings which may become temporarily immersed within the range of residual stability.

(*d*) The Administration shall be satisfied that the stability is sufficient during intermediate stages of flooding.

(4) The requirements of paragraph (1) of this Regulation shall be confirmed by calculations which take into consideration the design characteristics of the ship, the arrangements, configuration and contents of the damaged compartments; and the distribution, specific gravities and the free surface effect of liquids. The calculations shall be based on the following:

(*a*) Account shall be taken of any empty or partially filled tank, the specific gravity of cargoes carried, as well as any outflow of liquids from damaged compartments.

(*b*) The permeabilities are assumed as follows:

Spaces	Permeability
Appropriated to stores	0.60
Occupied by accommodation	0.95
Occupied by machinery	0.85
Voids	0.95
Intended for consumable liquids	0 or 0.95 *
Intended for other liquids	0 to 0.95 **

* Whichever results in the more severe requirements.
** The permeability of partially filled compartments shall be consistent with the amount of liquid carried.

(*c*) The buoyancy of any superstructure directly above the side damage shall be disregarded. The unflooded parts of superstructures beyond the extent of damage, however, may be taken into consideration provided that they are separated from the damaged space by watertight bulkheads and the requirements of subparagraph (3) (*a*) of this Regulation in respect of these intact spaces are complied with. Hinged watertight doors may be acceptable in watertight bulkheads in the superstructure.

(*d*) The free surface effect shall be calculated at an angle of heel of 5 degrees for each individual compartment. The Administration may require or allow the free surface corrections to be calculated at an angle of heel greater than 5 degrees for partially filled tanks.

(*e*) In calculating the effect of free surfaces of consumable liquids it shall be assumed that, for each type of liquid at least one transverse pair or a single centreline tank has a free surface and the tank or combination of tanks to be taken into account shall be those where the effect of free surfaces is the greatest.

(5) The Master of every oil tanker and the person in charge of a non-self-propelled oil tanker to which this Annex applies shall be supplied in an approved form with:

(*a*) information relative to loading and distribution of cargo necessary to ensure compliance with the provisions of this Regulation; and

(*b*) data on the ability of the ship to comply with damage stability criteria as determined by this Regulation, including the effect of relaxations that may have been allowed under subparagraph (1) (*c*) of this Regulation.

APPENDIX I

List of oils *

Asphalt solutions

Blending Stocks
Roofers Flux
Straight Run Residue

Oils

Clarified
Crude Oil
Mixtures containing crude oil
Diesel Oil
Fuel Oil No. 4
Fuel Oil No. 5
Fuel Oil No. 6
Residual Fuel Oil
Road Oil
Transformer Oil
Aromatic Oil (excluding vegetable oil)
Lubricating Oils and Blending Stocks
Mineral Oil
Motor Oil
Penetrating Oil
Spindle Oil
Turbine Oil

Distillates

Straight Run
Flashed Feed Stocks

Gas oil

Cracked

Gasoline Blending Stocks

Alkylates — fuel
Reformates
Polymer — fuel

Gasolines

Casinghead (natural)
Automotive
Aviation
Straight Run
Fuel Oil No. 1 (Kerosene)
Fuel Oil No. 1-D
Fuel Oil No. 2
Fuel Oil No. 2-D

Jet Fuels

JP-1 (Kerosene)
JP-3
JP-4
JP-5 (Kerosene, Heavy)
Turbo Fuel
Kerosene
Mineral Spirit

Naphtha

Solvent
Petroleum
Heartcut Distillate Oil

---

* The list of oils shall not necessarily be considered as comprehensive.

APPENDIX II

Form of certificate

International Oil Pollution Prevention Certificate (1973)

Issued under the Provisions of the International Convention for the Prevention of Pollution from Ships, 1973, under the Authority of the Government of .....
(full designation of the country)

by .....
(full designation of the competent person or organization authorized under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973)

Name of Ship	Distinctive Number or Letter	Port of Registry	Gross Tonnage

Type of ship:

Oil tanker, including combination carrier *
Asphalt carrier *
Ship other than an oil tanker with cargo tanks coming under Regulation 2 (2) of Annex I of the Convention *
Ship other than any of the above *

New/existing ship *
Date of building or major conversion contract .....
Date on which keel was laid or ship was at a similar stage of construction or on which major conversion was commenced .....
Date of delivery or completion of major conversion .....

PART A — ALL SHIPS

The ship is equipped with:

for ships of 400 tons gross tonnage and above:

(*a*) oily-water separating equipment * (capable of producing the effluent with an oil content not exceeding 100 parts per million) or
(*b*) an oil filtering system * (capable of producing the effluent with an oil content not exceeding 100 parts per million)

for ships of 10,000 tons gross tonnage and above:

(*c*) an oil discharge monitoring and control system * [additional to (*a*) or (*b*) above] or
(*d*) oily-water separating equipment and an oil filtering system * (capable of producing the effluent with an oil content not exceeding 15 parts per million) in lieu of (*a*) or (*b*) above.

Particulars of requirements from which exemption is granted under Regulation 2 (2) and 2 (4) (*a*) of Annex I of the Convention:
.....
.....
Remarks:

PART B — OIL TANKER [1] [2]

Deadweight ... metric tons. Length of ship ... metres
It is certified that this ship is:

(*a*) required to be constructed according to and complies with*
(*b*) not required to be constructed according to*
(*c*) not required to be constructed according to, but complies with*

the requirements of Regulation 24 of Annex I of the Convention.
The capacity of segregated ballast tanks is ... cubic metres and complies with the requirements of Regulation 13 of Annex I of the Convention.

The segregated ballast is distributed as follows:

Tank	Quantity	Tank	Quantity

* Delete as appropriate.

[1] This Part should be completed for oil tankers including combination carriers and asphalt carriers, and those entries which are applicable should be completed for ships other than oil tankers which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or above.

[2] This page need not be reproduced on a Certificate issued to any ship other than those referred to in footnote [1].

This is to Certify:

That the ship has been surveyed in accordance with Regulation 4 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, concerning the prevention of pollution by oil; and

That the survey shows that the structure, equipment, fittings, arrangement and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of the Convention.

This Certificate is valid until .....
subject to intermediate survey(s) at intervals of .....

Issued at .....
(place of issue of certificate)

..... 19... .....
(Signature of duly anthorized official issuing the Certificate)

(Seal or stamp of the issuing authority, as appropriate)

Endorsement for existing ships*:

This is to certify that this ship has been so equipped as to comply whith the requirements of the International Convention for the Prevention of Pollution from Ships, 1973, as relating to existing ships three years from the date of entry into force of the Convention.

Signed.....
(Signature of duly authorized official)

Place of endorsement .....
Date of endorsement .....

(Seal or stamp of Authority, as appropriate)

Intermediate survey

This is to certify that at an intermediate survey required by Regulation (4) (1) (*c*) of Annex I of the Convention, this ship and the condition thereof are found to comply with the relevant provisions of the Convention.

Signed.....
(Signature of duly authorized official)

Place.....
Date .....

(Seal or stamp of the authority, as appropriate)

Signed.....
(Signature of duly authorized official)

Place.....
Date .....

Under the provisions of Regulation 8 (2) and (4) of Annex I of the Convention, the validity of this Certificate is extended until .....

Signed.....
(Signature of duly authorized official)

Place.....
Date .....

(Seal or stamp of the Authority, as appropriate)

* This entry need not be reproduced on a certificate other than the first certificate issued to any ship.

APPENDIX III

Form of Oil Record Book

Oil Record Book

I — For Oil Tankers [1]

Name of ship .....
Total cargo carrying capacity of ship in cubic metres .....
Voyage from ... (date) ... to ... (date) .....

[1] This Part should be completed for oil tankers including combination carriers and asphalt carriers, and those entries which are applicable shall be completed for ships other than oil tankers which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or above. This Part need not be reproduced on an Oil Record Book issued to any ship other than those referred to above.

(*a*) Loading of oil cargo

1. Date and place of loading			
2. Types of oil loaded			
3. Identity of tank(s) loaded			
4. Closing of applicable cargo tank valves and applicable line cut-off valves on completion of loading [1]			

The undersigned certifies that in addition to the above all sea valves, overboard discharge valves, cargo tank and pipeline connections and inter-connections, were secured on completion of loading oil cargo.

Date of entry ..... Officer in charge .....
Master .....

(*b*) Internal transfer of oil cargo during voyage

5. Date of internal transfer					
6. Identity of tank(s)	(*i*)	From			
	(*ii*)	To			
7. Was (were) tank(s) in 6 (*i*) emptied?					

The undersigned certifies that in addition to the above all sea valves, overboard discharge valves, cargo tank and pipeline connections and inter-connections, were secured on completion of internal transfer of oil cargo.

Date of entry ..... Officer in charge .....
Master .....

(*c*) Unloading of oil cargo

8. Date and place of unloading			
9. Identity of tank(s) unloaled			
10. Was (were) tank(s) emptied?			
11. Opening of applicable cargo tank valves and applicable line cut-off valves prior to cargo unloading [1]			
12. Closing of applicable cargo tank valves and applicable line cut-off valves on completion of unloading [1]			

The undersigned certifies that in addition to the above all sea valves, overboard discharge valves, cargo tank and pipeline connections and inter-connections, were secured on completion of loading oil cargo.

Date of entry ..... Officer in charge .....
Master .....

[1] Applicable valves and similar devices are those referred to in Regulations 20 (2) (*a*) (*iii*), 23 and 24 of Annex I of the Convention.

(*d*) Ballasting of cargo tanks

13. Identity of tank(s) ballasted			
14. Date and position of ship at start of ballasting			
15. If valves connecting cargo lines and segregated ballast lines were used give time, date and position of ship when valves were (*a*) opened, and (*b*) closed.			

The undersigned certifies that in addition to the above all sea valves, overboard discharge valves, cargo tank and pipeline connections and inter-connections, were secured on completion of ballasting

Date of entry ..... Officer in charge .....
Master .....

(*e*) Cleaning of cargo tanks

16. Identity of tank(s) cleaned			
17. Date and duration of cleaning			
18. Methods of cleaning [1]			

Date of entry ..... Officer in charge .....
Master .....

(*f*) Discharge of dirty ballast

19. Identity of tank(s)			
20. Date and position of ship at start of discharge to sea			
21. Date and position of ship at finish of discharge to sea			
22. Ship's speed(s) during discharge			
23. Quantity discharged to sea			
24. Quantity of polluted water transferred to slop tank(s) [identify slop tank(s)]			
25. Date and port of discharge into shore reception facilities (if applicable)			
26. Was any part of the discharge conducted during darkness, if so, for how long?			
27. Was a regular check kept on the effluent and the surface of the water in the locality of the discharge?			
28. Was any oil observed on the surface of the water in the locality of the discharge?			

Date of entry ..... Officer in charge .....
Master .....

(*g*) Discharge of water from slop tanks

29. Identity of slop tank(s)			
30. Time of settling from last entry of residues, or			
31. Time of settling from last discharge			
32. Date, time and position of ship at start of discharge			
33. Sounding of total contents at start of discharge			
34. Sounding of oil/water interface at start of discharge			
35. Bulk quantity discharged and rate of discharge			
36. Final quantity discharged and rate of discharge			
37. Date, time and position of ship at end of discharge			
38. Slip's speed(s) during discharge			
39. Sounding of oil/water interface at end of discharge			
40. Was any part of the discharge conducted during darkness, if so, for how long?			
41. Was a regular check kept on the effluent and the surface of the water in the locality of the discharge?			
42. Was any oil observed on the surface of the water in the locality of the discharge?			

Date of entry ..... Officer in charge .....
Master .....

(*h*) Disposal of residues

43. Identity of tank(s)			
44. Quantity disposed from each tank			

[1] Hand hosing, machine washing and/or chemical cleaning. Where chemically cleaned, the chemical concerned and the amount used should be stated.

45. Method of disposal of residue: (*a*) reception facilities (*b*) mixed with cargo (*c*) transferred to another (other) tank(s) [identify tank(s)] (*d*) other method (state which).			
46. Date and port of disposal of residue			

Date of entry..... Officer in charge.....

Master .....

(*i*) Discharge of clean ballast contained in cargo tanks

47. Date and position of ship at commencement of discharge of clean ballast			
48. Identity of tank(s) discharged			
49. Was (were) the tank(s) empty on completion?			
50. Position of vessel on completion if different from 47			
51. Was any part of the discharge conducted during darkness, if so, for how long?			
52. Was a regular check kept on the effluent and the surface of the water in the locality of the discharge?			
53. Was any oil observed on the surface of the water in the locality of the discharge?			

Date of entry..... Officer in charge.....

Master .....

(*j*) Discharge overboard of bilge water containing oil which has accumulated in machinery speces whilst in port [1]

54. Port			
55. Duration of stay			
56. Quantity disposed			
57. Date and place of disposal			
58. Method of disposal (state whether a separator was used)			

Date of entry..... Officer in charge.....

Master .....

[1] Where the pump starts automatically and discharges through a separator at all times it will be sufficient to enter each day «Automatic discharge from bilges through a separator».

(*k*) Accidental or other exceptional discharges of oil

59. Date and time of occurrence			
60. Place or position of ship at time of occurrence			
61. Approximate quantity and type of oil			
62. Circumstances of discharge or escape, the reasons therefor and general remarks			

Date of entry..... Officer in charge.....

Master .....

(*l*) Has the oil monitoring and control system been out of operation at any time when discharging overboard? If so, give time and date of failure and time and date of restoration and confirm that this was due to equipment failure and state reason, if known.....

.....

Date of entry..... Officer in charge.....

Master .....

(*m*) Additional operational procedures and general remarks

.....

.....

For oil tankers of less than 150 tons gross tonnage operating in accordance with Regulation 15 (4) of Annex I of the Convention, an appropriate oil record book should be developed by the Administration.

For asphalt carriers, a separate oil record book may be developed by the Administration utilizing sections (*a*), (*b*), (*c*), (*e*), (*h*), (*j*), (*k*) and (*m*) of this form of oil record book.

II — For Ships Other than Oil Tankers

Name of ship...
Operations from... (date), to... (date)

(*a*) Ballasting or cleaning of oil fuel tanks

1. Identity of tank(s) ballasted			
2. Whether cleaned since they last contained oil and, if not, type of oil previously carried			
3. Date and position of ship at start of cleaning			
4. Date and position of ship at start of ballasting			

Date of entry..... Officer in charge.....

Master .....

(*b*) Discharge of dirty ballast or cleaning water from tanks referred to under section (*a*)

5. Identity of tank(s)			

6. Date and position of ship at start of discharge			
7. Date and position of ship at finish of discharge			
8. Ship's speed(s) during discharge			
9. Method of discharge (state whether to reception facility or through installed equipment)			
10. Quantity discharged			

Date of entry..... Officer in charge.....
Master .....

(c) Disposal of residues

11. Quantity of residue retained on board			
12. Methods of disposal of residue: (a) reception facilities (b) mixed with next bunkering (c) transferred to another (other) tank(s) (d) other method (state which)			
13. Date and port of disposal of residue			

Date of entry..... Officer in charge.....
Master .....

(d) Discharge overboard of bilge water containing oil which has accumulated in machinery speces whilst in port [1]

14. Port			
15. Duration of stay			
16. Quantity discharged			
17. Date and place of discharge			
18. Method of discharge: (a) through oily-water separating equipment; (b) through oil filtering system; (c) through oily-water separating equipment and an oil filtering system; (d) To reception facilities			

Date of entry..... Officer in charge.....
Master .....

[1] Where the pump starts automatically and discharges through a separator at all times it will be sufficient to enter each day «Automatic discharge from bilges through a separator».

(e) Accidental or other exceptional discharges of oil

19. Date and time of occurrence			
20. Place or position of ship at time of occurrence			
21. Approximate quantity and type of oil			
22. Circumstances of discharge or escape, the reasons therefor and general remarks			

Date of entry..... Officer in charge.....
Master .....

(f) Has the required oil monitoring and control system been out of operation at any time when discharging overboard? If so, state time and date of failure and time and date of restoration, and confirm that this was due to equipment failure, and state reason if known

Date of entry..... Officer in charge.....
Master .....

(g) New ships of 4,000 tons gross tonnage and above: has dirty ballast been carried in oil fuel tanks?

Yes/No...

If so, state which tanks were so ballasted and method of discharge of the dirty ballast

.....

Date of entry..... Officer in charge.....
Master .....

h) Additional operational procedures and general remarks

.....

Date of entry..... Officer in charge.....

Master .....

ANNEX II

Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk

Regulation 1

Definitions

For the purposes of this Annex:

(1) «Chemical tanker» means a ship constructed or adapted primarily to carry a cargo of noxious liquid substances in bulk and includes an «oil tanker» as defined in Annex I of the present Convention when carrying a cargo or part cargo of noxious liquid substances in bulk.

(2) «Clean ballast» means ballast carried in a tank which, since it was last used to carry a cargo containing a substance in Category A, B, C or D has been thoroughly cleaned and the residues resulting therefrom have been discharged and the tank emptied in accordance with the appropriate requirements of this Annex.

(3) «Segregated ballast» means ballast water introduced into a tank permanently allocated to the carriage of ballast or to the carriage of ballast or cargoes

other than oil or noxious liquid substances as variously defined in the Annexes of the present Convention; and which is completely separated from the carg and oil fuel system.

(4) «Nearest land» is as defined in Regulation 1 (9) of Annex I of the present Convention.

(5) «Liquid substances» are those having a vapour pressure not exceeding 2.8 kp/cm² at a temperature of 37.8 ° C.

(6) «Noxious liquid substance» means any substance designated in Appendix II to this Annex or provisionally assessed under the provisions of Regulation 3 (4), as falling into Category A, B, C or D.

(7) «Special area» means a sea area where for recognized technical reasons in relation to its oceanographic and ecological condition and to its peculiar transportation traffic the adoption of special mandatory methods for the prevention of sea pollution by noxious liquid substances is required.

Special areas shall be:

(*a*) The Baltic Sea Area, and
(*b*) The Black Sea Area.

(8) «Baltic Sea Area» is as defined in Regulation 10 (1) (*b*), of Annex I of the present Convention.

(9) «Black Sea Area» is as defined in Regulation 10 (1) (*c*), of Annex I of the present Convention.

Regulation 2

Aplications

(1) Unless expressly provided otherwise the provisions of this Annex shall apply to all ships carrying noxious liquid substances in bulk.

(2) Where a cargo subject to the provisions of Annex I of the present Convention is carried in a cargo space of a chemical tanker, the appropriate requirements of Annex I of the present Convention shall also apply.

(3) Regulation 13 of this Annex shall apply only to ships carrying substances which are categorized for discharge control purposes in Category A, B or C.

Regulation 3

Categorization and Listing of Noxious Liquid Substances

(1) For the purpose of the Regulations of this Annex, except Regulation 13, noxious liquid substances shall be divided into four categories as follows:

(*a*) Category A — Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a major hazard to either marine resources or human health or cause serious harm to amenities or other legitimate uses of the sea and therefore justify the application of stringent anti-pollution measures.

(*b*) Category B — Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify the application of special anti-pollution measures.

(*c*) Category C — Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a minor hazard to either marine resources or human health or cause minor harm to amenities or other legitimate uses of the sea and therefore require special operational conditions.

(*d*) Category D — Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a recognizable hazard to either marine resources or human health or cause minimal harm to amenities or other legitimate uses of the sea and therefore require some attention in operational conditions.

(2) Guidelines for use in the categorization of noxious liquid substances are given in Appendix I to this Annex.

(3) The list of noxious liquid substances carried in bulk and presently categorized which are subject to the provisions of this Annex is set out in Appendix II to this Annex.

(4) Where it is proposed to carry a liquid substance in bulk which has not been categorized under paragraph (1) of this Regulation or evaluated as referred to in regulation 4 (1) of this Annex, the Governments of Parties to the Convention involved in the proposed operation shall establish and agree on a provisional assessment for the proposed operation on the basis of the guidelines referred to in paragraph (2) of this Regulation. Until full agreement between the Governments involved has been reached, the substance shall be carried under the most severe conditions proposed. As soon as possible, but not later than ninety days after its first carriage, the Administration concerned shall notify the Organization and provide details of the substance and the provisional assessment for prompt circulation to all Parties for their information and consideration. The Government of each Party shall have a period of ninety days in which to forward its comments to the Organization, with a view to the assessment of the substance.

Regulation 4

Other Liquid Substances

(1) The substances listed in Appendix III to this Annex have been evaluated and found to fall outside the Categories A, B, C and D, as defined in Regulation 3 (1) of this Annex because they are presently considered to present no harm to human health, marine resources, amenities or other legitimate uses of the sea, when discharge into the sea from tank cleaning or deballasting operations.

(2) The discharge of bilge or ballast water or other residues or mixtures containing only substances listed in Appendix III to this Annex shall not be subject to any requirement of this Annex.

(3) The discharge into the sea of clean ballast or segregated ballast shall not be subject to any requirement of this Annex.

Regulation 5

Discharge of Noxious Liquid Substances

Categories A, B and C Substances outside Special Areas and Category D Substances in all Areas:

Subject to the provisions of Regulation 6 of this Annex,

(1) The discharge into the sea of substances in Category A as defined in Regulation 3 (1) (*a*) of this Annex or of those provisionally assessed as such or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited. If tanks containing such substances or mixtures are to be washed, the resulting residues shall be discharged to a reception facility until the concentration of the substance in the effluent to such facility is at or below the residual concentration prescribed for that substance in column III of Appendix II to this Annex and until the tank is empty. Provided that the residue then remaining in the tank is subsequently diluted by the addition of a volume of water of not less than 5 per cent of the total volume of the tank, it may be discharged into sea when all the following conditions are also satisfied:

(*a*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

(*b*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and

(*c*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(2) The discharge into the sea of substances in Category B as defined in Regulation 3 (1) (*b*) of this Annex or of those provisionally assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited except when all the following conditions are satisfied:

(*a*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

(*b*) the procedures and arrangements for discharge are approved by the Administration. Such procedures and arrangements shall be based upon standards developed by the Organization and shall ensure that the concentration and rate of discharge of the effluent is such that the concentration of the substance in the wake astern of the ship does not exceed 1 part per million;

(*c*) the maximum quantity of cargo discharged from each tank and its associated piping system does not exceed the maximum quantity approved in accordance with the procedures referred to in sub-paragraph (*b*) of this paragraph, which shall in no case exceed the greater of 1 cubic metre or 1/3,000 of the tank capacity in cubic metres;

(*d*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and

(*e*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(3) The discharge into the sea of substances in Category C as defined in Regulation 3 (1) (*c*) of this Annex or of those provisionally assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited except when all the following conditions are satisfied:

(*a*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

(*b*) the procedures and arrangements for discharge are approved by the Administration. Such procedures and arrangements shall be based upon standards developed by the Organization and shall ensure that the concentration and rate of discharge of the effluent is such that the concentration of the substance in the wake astern of the ship does not exceed 10 parts per million;

(*c*) the maximum quantity of cargo discharged from each tank and its associated piping system does not exceed the maximum quantity approved in accordance with the procedures referred to in sub-paragraph (*b*) of this paragraph, which shall in no case exceed the greater of 3 cubic metres or 1/1,000 of the tank capacity in cubic metres;

(*d*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and

(*e*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(4) The discharge into the sea of substances in Category D as defined in Regulation 3 (1) (*d*) of this Annex, or of those provisionally assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited except when all the following conditions are satisfied:

(*a*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

(*b*) such mixtures are of a concentration not greater than one part of the substance in ten parts of water; and

(*c*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land.

(5) Ventilation procedures approved by the Administration may be used to remove cargo residues from a tank. Such procedures shall be based upon standards developed by the Organization. If subsequent washing of the tank is necessary, the discharge into the sea of the resulting tank washings shall be made in accordance with paragraph (1), (2), (3) or (4) of this Regulation, whichever is applicable.

(6) The discharge into the sea of substances which have not been categorized, provisionally assessed, or

evaluated as referred to in Regulation 4 (1) of this Annex, or of ballast water, tank washings or other residues or mixtures containing such substances shall be prohibited.

Categories A, B and C Substances within Special Areas:

Subject to the provisions of Regulation 6 of this Annex:

(7) The discharge into the sea of substances in Category A as defined in Regulation 3 (1) (*a*) of this Annex or of those provisionally assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited. If tanks containing such substances or mixtures are to be washed the resulting residues shall be descharged to a reception facility which the States bordering the special area shall provide in accordance with Regulation 7 of this Annex, until the concentration of the substance in the effluent to such facility is at or below the residual concentration pescribed for that substance in column IV of Appendix II to this Annex and until the tank is empty. Provided that the residue then remaining in the tank is subsequently diluted by the addition of a volume of water of not less than 5 per cent of the total volume of the tank, it may be discharged into the sea when all the following conditions are also satisfied:

(*a*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;
(*b*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and
(*c*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(8) The discharge into the sea of substances in Category B as defined in Regulation 3 (1) (*b*) of this Annex or of those provisionally assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited except when all the following conditions are satisfied:

(*a*) the tank has been washed after unloadind with a volume of water of not less than 0,5 per cent of the total volume of the tank, and the resulting residues have been discharged to a reception facility until the tank is empty;
(*b*) the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of which are not self-propelled;
(*c*) the procedures and arrangements for discharge and washings are approved by the Administration. Such procedures and arrangements shall be based upon standards developed by the Organization and shall ensure that the concentration and rate of discharge of the effluent is such that the concentration of the substance in the wake astern of the ship does not exceed 1 part per million;
(*d*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and
(*e*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(9) The discharge into the sea of substances in Category C as defined in Regulation 3 (1) (*c*) of this Annex or of those provisionaly assessed as such, or ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited except when all the following conditions are satisfied:

(*a*) the ship is procceding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;
(*b*) the procedures and arrangements for discharge are approved by the Administration. Such procedures and arrangements shall be based upon standards developed by the Organization and shall ensure that the concentration and rate of discharge of the effluent is such that the concentration of the substance in the wake astern of the ship does not exceed 1 part per million;
(*c*) the maximum quantity of cargo discharged from each tank and its associated piping system does not exceed the maximum quantity approved in accordance with procedures referred to in sub-paragraph (*b*) of this paragraph which shall in no case exceed the greater of 1 cubic metre or 1/3,000 of the tank capacity in cubic metres;
(*d*) the discharge is made below the waterline, taking into account the location of the seawater intakes; and
(*e*) the discharge is made at a distance of not less than 12 nautical miles from the nearest land and in a depth of water of not less than 25 metres.

(10) Ventilation procedures approved by the Administration may be used to remove cargo residues from a tank. Such procedures shall be based upon standards developed by the Organization. If subsequent washing of the tank is necessary, the discharge into the sea of the resulting tank washings shall be made in accordance with paragraph (7), (8) or (9) of this Regulation, whichever is applicable.

(11) The discharge into the sea of substances which have not been categorized, provisionally assessed or evaluated as referred to in Regulation 4 (1) of this Annex, or of ballast water, tank washings, or other residues or mixtures containing such substances shall be prohibited.

(12) Nothing in this Regulation shall prohibit a ship from retaining on board the residues from a Category B or C cargo and discharging such residues into the sea outside a special area in accordance with paragraph (2) or (3) of this Regulation, respectively.

(13) (*a*) The Governments of Parties to the Convention, the coastlines of which border on any given special area, shall collectively agree and establish a date by which time the requirement of Regulation 7 (1) of this Annex will be fulfilled and from which the requirements of paragraphs (7), (8), (9) and (10) of this Regulation in respect of that

area shall take effect and notify the Organization of the date so established at least six months in advance of that date. The Organization shall then promptly notify all Parties of that date.

b) If the date of entry into force of the present Convention is earlier than the date established in accordance with sub-paragraph (*a*) of this paragraph, the requirements of paragraphs (1), (2) and (3) of this Regulation shall apply during the interim period.

Regulation 6

Exceptions

Regulation 5 of this Annex shall not apply to:

(*a*) the discharge into the sea of noxious liquid substances or mixtures containing such substances necessary for the purpose of securing the safety of a ship or saving life at sea; or

(*b*) the discharge into the sea of noxious liquid substances or mixtures containing such substances resulting from damage to a ship or its equipment:

(*i*) provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and

(*ii*) except if the owner or the Master acted either with intent to cause damage, or recklessly and with knowledge that damage would probably result; or

(*c*) the discharge into the sea of noxious liquid substances or mixtures containing such substances, approved by the Administration, when being used for the purpose of combating specific pollution incidents in order to minimize the damage from pollution. Any such discharge shall be subject to the approval of any Government in whose jurisdiction it is contemplated the discharge will occur.

Regulation 7

Reception Facilities

(1) The Government of each Party to the Convention undertakes to ensure the provision of reception facilities according to the needs of ships using its ports, terminals or repair ports as follows:

(*a*) cargo loading and unloading ports and terminals shall have facilities adequate for reception without undue delay to ships of such residues and mixtures containing noxious liquid substances as would remain for disposal from ships carrying them as a consequence of the application of this Annex; and

(*b*) ship repair ports undertaking repairs to chemical tankers shall have facilities adequate for the reception of residues and mixtures containing noxious liquid substances.

(2) The Government of each Party shall determine the types of facilities provided for the purpose of paragraph (1) of this Regulation at each cargo loading and unloading port, terminal and ship repair port in its territories and notify the Organization thereof.

(3) Each Party shall notify the Organization, for transmission to the Parties concerned, of any case where facilities required under paragraph (1) of this Regulation are alleged to be inadequate.

Regulation 8

Measures of Control

(1) The Government of each Party to the Convention shall appoint or authorize surveyors for the purpose of implementing this Regulation.

Category A Substances in all Areas:

(2) (*a*) If a tank is partially unloaded or unloaded but not cleaned, an appropriate entry shall be made in the Cargo Record Book.

(*b*) Until that tank is cleaned every subsequent pumping or transfer operation carried out in connexion with that tank shall also be entered in the Cargo Record Book.

(3) If the tank is to be washed:

(*a*) the effluent from the tank washing operation shall be discharged from the ship to a reception facility at least until the concentration of the substance in the discharge, as indicated by analyses of samples of the effluent taken by the surveyor, has fallen to the residual concentration specified for that substance in Appendix II to this Annex. When the required residual concentration has been achieved, remaining tank washings shall continue to be discharged to the reception facility until the tank is empty. Appropriate entries of these operations shall be made in the Cargo Record Book and certified by the surveyor; and

(*b*) after diluting the residue then remaining in the tank with at least 5 per cent of the tank capacity of water, this mixture may be discharged into the sea in accordance with the provisions of sub-paragraphs 1 (*a*), (*b*) and (*c*) or 7 (*a*), (*b*) and (*c*), whichever is applicable, of Regulation 5 of this Annex. Appropriate entries of these operations shall be made in the Cargo Record Book.

(4) Where the Government of the receiving Party is satisfied that it is impracticable to measure the concentration of the substance in the effluent without causing undue delay to the ship, that Party may accept an alternative procedure as being equivalent to sub-paragraph (3) (*a*), provided that:

(*a*) a precleaning procedure for that tank and that substance, based on standards developed by the Organization, is approved by the Administration and that Party is satisfied that such procedure will fulfil the requirements of paragraph (1) or (7), whichever is applicable, of Regulation 5 of this Annex with respect to the attainment of the prescribed residual concentrations;

(*b*) a surveyor duly authorized by that Party shall certify in the Cargo Record Book that:

(*i*) the tank, its pump and piping system have been emptied, and that the quantity of cargo remaining in the tank is at or below the quantity on which the approved precleaning procedure referred to in sub-paragraph (*ii*) of this paragraph has been based;

(*ii*) precleaning has been carried out in accordance with the precleaning procedure approved by the Administration for that tank and that substance; and

(*iii*) the tank washings resulting from such precleaning have been discharged to a reception facility and the tank is empty;

(*c*) the discharge into the sea of any remaining residues shall be in accordance with the provision of paragraph (3) (*b*) of this Regulation and an appropriate entry is made in the Cargo Record Book.

Category B Substances outside Special Areas and Category C Substances in all Areas:

(5) Subject to such surveillance and approval by the authorized or appointed surveyor as may be deemed necessary by the Government of the Party, the Master of a ship shall, with respect to a Category B substance outside special areas or a Category C substance in all areas, ensure compliance with the following:

(*a*) If a tank is partially unloaded or unloaded but not cleaned, an appropriate entry shall be made in the Cargo Record Book.

(*b*) If the tank is to be cleaned at sea:

(*i*) the cargo piping system serving that tank shall be drained and an appropriate entry made in the Cargo Record Book;

(*ii*) the quantity of substance remaining in the tank shall not exceed the maximum quantity which may be discharged into the sea for that substance under Regulation 5 (2) (*c*) of this Annex outside special areas in the case of Category B substances, or under Regulations 5 (3) (*c*) and 5 (9) (*c*) outside and within special areas respectively in the case of Category C substances. An appropriate entry shall be made in the Cargo Record Book;

(*iii*) where it is intended to discharge the quantity of substance remaining into the sea the approved procedures shall be complied with, and the necessary dilution of the substance satisfactory for such a discharge shall be achieved. An appropriate entry shall be made in the Cargo Record Book; or

(*iv*) where the tank washings are not discharged into the sea, if any internal transfer of tank washings takes place from that tank an appropriate entry shall be made in the Cargo Record Book; and

(*v*) any subsequent discharge into the sea of such tank washings shall be made in accordance wit the requirements of Regulation 5 of this Annex for the appropriate area and Category of substance involved.

(*c*) If the tank is to be cleaned in port:

(*i*) the tank washings shall be discharged to a reception facility and an appropriate entry shall be made in the Cargo Record Book; or

(*ii*) the tank washings shall be retained on board the ship and an appropriate entry shall be made in the Cargo Record Book indicating the location and disposition of the tank washings.

(*d*) If after unloading a Category C substance within a special area, any residues or tank washings are to be retained on board until the ship is outside the special area, the Master shall so indicate by an appropriate entry in the Cargo Record Book and in this case the procedures set out in Regulation 5 (3) of this Annex shall be applicable.

Category B Substances within Special Areas

(6) Subject to such surveillance and approval by the authorized or appointed surveyor as may be deemed necessary by the Government of the Party, the Master of a ship shall, with respect to a Category B substance within a special area, ensure compliance with the following:

(*a*) If a tank is partially unloaded or unloaded but not cleaned, an appropriate entry shall be made in the Cargo Record Book.

(*b*) Until that tank is cleaned every subsequent pumping or transfer operation carried out in connexion with that tank shall also be entered in the Cargo Record Book.

(*c*) If the tank is to be washed, the effluent from the tank washing operation, which shall contain a volume of water not less than 0.5 per cent of the total volume of the tank, shall be discharged from the ship to a reception facility until the tank, its pump and piping system are empty. An appropriate entry shall be made in the Cargo Record Book.

(*d*) If the tank is to be further cleaned and emptied at sea, the Master shall:

(*i*) ensure that the approved procedures referred to in Regulation 5 (8) (*c*) of this Annex are complied with and that the appropriate entries are made in the Cargo Record Book; and

(*ii*) ensure that any discharge into the sea is made in accordance with the requirements of Regulation 5 (8) of this Annex an appropriate entry made in the Cargo Record Book.

(*e*) If after unloading a Category B substance within a special area, any residues or tank washings are to be retained on board until the ship is outside the special area, the Master shall so

indicate by an appropriate entry in the Cargo Record Book and in this case the procedures set out in Regulation 5 (2) of this Annex shall be applicable.

Category D Substances in all Areas:

(7) The Master of a ship shall, with respect to a Category D substance, ensure compliance with the following:

(*a*) If a tank is partially unloaded or unloaded but not cleaned, an appropriate entry shall be made in the Cargo Record Book.

(*b*) If the tank is to be cleaned at sea:

(*i*) the cargo piping system serving that tank shall be drained and an appropriate entry made in the Cargo Record Book;

(*ii*) where it is intended to discharge the quantity of substance remaining into the sea, the necessary dilution of the substance satisfactory for such a discharge shall be achieved. An appropriate entry shall be made in the Cargo Record Book; or

(*iii*) where the tank washings are not discharged into the sea, if any internal transfer of tank washings takes place from that tank an appropriate entry shall be made in the Cargo Record Book; and

(*iv*) any subsequent discharge into the sea of such tank washings shall be made in accordance with the requirements of Regulation 5 (4) of this Annex;

(*c*) If the tank is to be cleaned in port:

(*i*) the tank washings shall be discharged to a reception facility and an appropriate entry shall be made in the Cargo Record Book; or

(*ii*) the tank washings shall be retained on board the ship and an appropriate entry shall be made in the Cargo Record Book indicating the location and disposition of the tank washings.

Discharge from a Slop Tank:

(8) Any residues retained on board in a slop tank, including those from pump room bilges, which contain a Category A substance, or within a special area either a Category A or a Category B substance, shal be discharged to a reception facility in accordance with the provisions of Regulation 5 (1), (7) or (8) of this Annex, whichever is applicable. An appropriate entry shall be made in the Cargo Record Book.

(9) Any residues retained on board in a slop tank, including those from pump room bilges, which contain a quantity of a Category B substance outside a special area or a Category C substance in all areas in excess of the aggregate of the maximum quantities specified in Regulation 5 (2) (*c*) (3) (*c*) or (9) (*c*) of this Annex, whichever is applicable, shall be discharged to a reception facility. An appropriate entry shall be made in the Cargo Record Book.

Regulation 9

Cargo Record Book

(1) Every ship to which this Annex applies shall be provided with a Cargo Record Book, whether as part of the ship's official log book or otherwise, in the form specified in Appendix IV to this Annex.

(2) The Cargo Record Book shall be completed, on a tank-to-tank basis, whenever any of the following operations with respect to a noxious liquid substance take place in the ship:

(*i*) loading of cargo;
(*ii*) unloading of cargo;
(*iii*) transfer of cargo;
(*iv*) transfer of cargo, cargo residues or mixtures containing cargo to a slop tank;
(*v*) cleaning of cargo tanks;
(*vi*) transfer from slop tanks;
(*vii*) ballasting of cargo tanks;
(*viii*) transfer of dirty ballast water;
(*ix*) discharge into the sea in accordance with Regulation 5 of this Anex.

(3) In the event of any discharge of the kind referred to in Article 8 of the present Convention and Regulation 6 of this Annex of any noxious liquid substance or mixture containing such substance, whether intentional or accidental, an entry shall be made in the Cargo Record Book stating the circumstances of, and the reason for, the discharge.

(4) When a surveyor appointed or authorized by the Government of the Party to the Convention to supervise any operations under this Annex has inspected a ship, then that surveyor shall make an appropriate entry in the Cargo Record Book.

(5) Each operation referred to in paragraphs (2) and (3) of this Regulation shall be fully recorded without delay in the Cargo Record Book so that all the entries in the Book appropriate to that operation are completed. Each entry shall be signed by the officer or officers in charge of the operation concerned and, when the ship is manned, each page shall be signed by the Master of the ship. The entries in the Cargo Record Book shall be in an official language of the State whose flag the ship is entitled to fly, and, for ships holding an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) in English or French. The entries in an official national language of the State whose flag the ship is entitled to fly shall prevail in case of a dispute or discrepancy.

(6) The Cargo Record Book shall be kept in such a place as to be readily available for inspection and, except in the case of unmanned ships under tow, shall be kept on board the ship. It shall be retained for a period of two years after the last entry has been made.

(7) The competent authority of the Government of a Party may inspect the Cargo Record Book on board any ship to which this Annex applies while the ship is in its port, and may make a copy of any entry in that book and may require the Master of the ship to certify that the copy is a true copy of such entry. Any copy so made which has been certified by the Master of the ship as a true copy of an entry in the ship's Cargo Record Book shall be made admissible in any judicial proceedings as evidence of the facts stated in the en-

try. The inspection of a Cargo Record Book and the taking of a certified copy by the competent authority under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

Regulation 10

Surveys

(1) Ships which are subject to the provisions of this Annex and which carry noxious liquid substances in bulk shall be surveyed as follows:

(*a*) An initial survey before a ship is put into service or before the certificate required by Regulation 11 of this Annex is issued for the first time, which shall include a complete inspection of its structure, equipment, fittings, arrangements and material in so far as the ship is covered by this Annex. The survey shall be such as to ensure full compliance with the applicable requirements of this Anex.

(*b*) Periodical surveys at intervals specified by the Administration which shall not exceed five years and which shall be such as to ensure that the structure, equipment, fittings, arrangements and material fully comply with the applicable requirements of this Annex. However, where the duration of the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) is extended as specified in Regulation 12 (2) or (4) this Annex, the interval of the periodical survey may be extended correspondingly;

(*c*) Intermediate surveys at intervals specified by the Administration which shall not exceed thirty months and which shall be such as to ensure that the equipment and associated pump and piping systems, fully comply with the applicable requirements of this Annex and are in good working order. The survey shall be endorsed on the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) issued under Regulation 11 of this Annex.

(2) Surveys of a ship with respect to the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned shall fully guarantee the completeness and efficiency of the surveys.

(3) After any survey of a ship under this Regulation has been completed, no significant change shall be made in the structure, equipment, fittings, arrangements or material, covered by the survey without the sanction of the Administration, except the direct replacement of such equipment and fittings for the purpose of repair or maintenance.

Regulation 11

Issue of Certificate

(1) An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) shall be issued to any ship carrying noxious liquid substances which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention after survey of such ship in accordance with the provisions of Regulation 10 of this Annex.

(2) Such Certificate shall be issued either by the Administration or by a person or organization duly authorized by it. In every case the Administration shall assume full responsibility for the Certificate.

(3) (*a*) The Government of a Party may, at the request of the Administration, cause a ship to be surveyed and if satisfied that the provisions of this Annex are complied with shall issue or authorize the issue of a Certificate to the ship in accordance with this Annex.

(*b*) A copy of the Certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.

(*c*) A Certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and shall have the same force and receive the same recognition as a certificate issued under paragragh (1) of this Regulation.

(*d*) No International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) shall be issued to any ship which is entitled to fly the flag of a State which is not a Party.

(4) The Certificate shall be drawn up in an official language of the issuing country in a form corresponding to the model given in Appendix V to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 12

Duration of Certificate

(1) An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973) shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, except as provided in paragraphs (2) and (4) of this Regulation.

(2) If a ship at the time when the Certificate expires is not in a port or offshore terminal under the jurisdiction of the Party to the Convention whose flag the ship is entitled to fly, the Certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the State whose flag the ship is entitled to fly or in which it is to be surveyed and then only in cases where it appears proper and reasonable to do so.

(3) No Certificate shall be thus extended for a period longer than five months and a ship to which such extension is granted shall not on its arrival in the State whose flag it is entitled to fly or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or State without having obtained a new Certificate.

(4) A Certificate which has not been extended under the provisions of paragraph (2) of this Regulation

may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

(5) A Certificate shall cease to be valid if significant alterations have taken place in the structure, equipment, fittings, arrangements and material required by this Annex without the sanction of the Administration, except the direct replacement of such equipment or fitting for the purpose of repair or maintenance or if intermediate surveys as specified by the Administration under Regulation 10 (1) (*c*) of this Annex are not carried out.

(6) A Certificate issued to a ship shall cease to be valid upon transfer of such a ship to the flag of another State, except as provided in paragraph (7) of this Regulation.

(7) Upon transfer of a ship to the flag of another Party, the Certificate shall remain in force for a period not exceeding five months provided that it would not have expired before the end of that period, or until the Administration issues a replacement Certificate, whichever is earlier. As soon as possible after the transfer has taken place the Government of the Party whose flag the ship was formerly entitled to fly shall transmit to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulation 13

Requirements for Minimizing Accidental Pollution

(1) The design, construction, equipment and operation of ships carrying noxious liquid substances in bulk which are subject to the provisions of this Annex shall be such as to minimize the uncontrolled discharge into the sea of such substances.

(2) Pursuant to the provisions of paragraph (1) of this Regulation, the Government of each Party shall issue, or cause to be issued, detailed requirements on the design, construction, equipment and operation of such ships.

(3) In respect of chemical tankers, the requirements referred to in paragraph (2) of this Regulation shall contain at least all the provisions given in the Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk adopted by the Assembly of the Organization in Resolution A.212 (VII) and as may be amended by the Organization, provided that the amendments to that Code are adopted and brought into force in accordance with the provisions of Article 16 of the present Convention for amendment procedures to an Appendix to an Annex.

APPENDIX I

Guidelines for the Categorization of Noxious Liquid Substances

Category A — Substances which are bioaccumulated and liable to produce a hazard to aquatic life or human health; or which are highly toxic to aquatic life (as expressed by a Hazard Rating 4, defined by a TLm less than 1 ppm); and additionally certain substances which are moderately toxic to aquatic life (as expressed by a Hazard Rating 3, defined by a TLm of 1 ppm or more, but less than 10 ppm) when particular weight is given to additional factors in the hazard profile or to special characteristics of the substance.

Category B — Substances which are bioaccumulated with a short retention of the order of one week or less; or which are liable to produce tainting of the sea food; or which are moderately toxic to aquatic life (as expressed by a Hazard Rating 3, defined by a TLm of 1 ppm or more, but less than 10 ppm); and additionally certain substances which are slightly toxic to aquatic life (as expressed by a Hazard Rating 2, defined by a TLm of 10 ppm or more, but less than 100 ppm) when particular weight is given to additional factors in the hazard profile or to special characteristics of the substance.

Category C — Substances which are slightly toxic to aquatic life (as expressed by a Hazard Rating 2, defined by a TLm of 10 ppm or more, but less than 100 ppm); and additionally certain substances which are practically non-toxic to aquatic life (as expressed by a Hazard Rating 1, defined by a TLm of 100 ppm or more, but less than 1,000 ppm) when particular weight is given to additional factors in the hazard profile or to special characteristics of the substance.

Category D — Substances which are practically non-toxic to aquatic life (as expressed by a Hazard Rating 1, defined by a TLm of 100 ppm or more, but less than 1,000 ppm); or causing deposits blanketing the seafloor with a high biochemical oxygen demand (BOD); or highly hazardous to human health, with an LD_{50} of less than 5 mg/kg; or produce moderate reduction of amenities because of persistency, smell or poisonous or irritant characteristics, possibly interfering with use of beaches; or moderately hazardous to human health, with an LD_{50} of 5 mg/kg or more, but less than 50 mg/kg and produce slight reduction of amenities.

Other Liquid Substances (for the purposes of Regulation 4 of this Annex) — Substances other than those categorized in Categories A, B, C and D above.

APPENDIX II

List of Noxious Liquid Substances Carried in Bulk

Substance	UN Number	Pollution Category for operational discharge	Residual concentration (per cent by weight)	
		Regulation 3 of Annex II	Regulation 5 (1) of Annex II	Regulation 5 (7) of Annex II
	I	II	III Outside special areas	IV Within special areas
Acetaldehyde	1089	C		
Acetic acid	1842	C		
Acetic anhydride	1715	C		
Acetone	1090	D		
Acetone cyanohydrin	1541	A	0.1	0.05
Acetyl chloride	1717	C		
Acrolein	1092	A	0.1	0.05
Acrylic acid *	-	C		
Acrylonitrile	1093	B		
Adiponitrile	-	D		
Alkylbenzene sulfonate				
straight chain	-	C		
branched chain	-	B		
Allyl alcohol	1098	B		

* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

Substance	UN Number	Pollution Category for operational discharge	Residual concentration (per cent by weight)	
		Regulation 3 of Annex II	Regulation 5 (1) of Annex II	Regulation 5 (7) of Annex II
	I	II	III Outside special areas	IV Within special areas
Allyl chloride	1100	C		
Alum (15 % solution)	-	D		
Aminoethylethanolamine (Hidroxyethyl-ethylenediamine) *	-	D		
Ammonia (28 % aqueous)	1005	B		
iso-Amyl acetate	1104	C		
n-Amyl acetate	1104	C		
n-Amyl alcohol	-	D		
Aniline	1547	C		
Benzene	1114	C		
Benzyl alcohol	-	D		
Benzyl chloride	1738	B		
n-Butyl acetate	1123	D		
sec-Butyl acetate	1124	D		
n-Butyl acrylate	-	D		
Butyl butyrate *	-	B		
Butylene glycol(s)	-	D		
Butyl methacrylate	-	D		
n-Butyraldehyde	1129	B		
Butyric acid	-	B		
Calcium hydroxide (solution)	-	D		
Camphor oil	1130	B		
Carbon disulphide	1131	A	0.01	0.005
Carbon tetrachloride	1846	B		
Caustic potash (Potassium hydroxide)	1814	C		
Chloroacetic acid	1750	C		
Chloroform	1888	B		
Chlorohydrins (crude) *	-	D		
Chloroprene *	1991	C		
Chlorosulphonic acid	1754	C		
para-Chlorotoluene	-	B		
Citric acid (10 %-25 %)	-	D		
Creosote	1334	A	0.1	0.05
Cresols	2076	A	0.1	0.05
Cresylic acid	2022	A	0.1	0.05
Crotonaldehyde	1143	B		
Cumene	1918	C		
Cyclohexane	1145	C		
Cyclohexanol	-	D		
Cyclohexanone	1915	D		
Cyclohexylamine *	-	D		
para-Cymene (Isopropyltoluene) *	2046	D		
Decahydronaphthalene	1147	D		
Decane *	-	D		
Diacetone alcohol *	1148	D		
Dibenzyl ether *	-	C		
Dichlorobenzenes	1591	A	0.1	0.05
Dichloroethyl ether	1916	B		
Dichloropropene-Dichloropropane mixture (D. D. Soil fumigant)	2047	B		
Diethylamine	1154	C		
Diethylbenzene (mixed isomers)	2049	C		
Diethyl ether	1155	D		
Diethylenetriamine *	2079	C		
Diethylene glycol monoethyl ether	-	C		
Diethylketone (3-Pentanone)	1156	D		
Diisobutylene *	2050	D		
Diisobutyl ketone	1157	D		
Diisopropanolamine	-	C		
Diisopropylamine	1158	C		
Diisopropyl ether *	1159	D		
Dimethylamine (40 % aqueous)	1160	C		
Dimethylethanolamine (2-Dimethylamino-ethanol) *	2051	C		
Dimethylformamide	-	D		
1,4-Dioxane *	1165	C		
Diphenyl/Diphenyloxide, mixtures *	-	D		
Dodecylbenzene	-	C		
Epichlorohydrin	2023	B		
2-Ethoxyethyl acetate *	1172	D		
Ethyl acetate	1173	D		
Ethyl acrylate	1917	D		
Ethyl amyl ketone *	-	C		
Ethylbenzene	1175	C		
Ethyl cyclohexane	-	D		
Ethylene chlorohydrin (2-Chloro-ethanol)	1135	D		
Ethylene cyanohydrin *	-	D		
Ethylenediamine	1604	C		
Ethylene dibromide	1605	B		
Ethylene dichloride	1184	B		
Ethylene glycol monoethyl ether (Methyl cellosolve)	1171	D		
2-Ethylhexyl acrylate *	-	D		
2-Ethylhexyl alcohol	-	C		
Ethyl lactate *	1192	D		
2-Ethyl 3-propylacrolein *	-	B		
Formaldehyde (37-50 % solution)	1198	C		
Formic acid	1779	D		
Furfuryl alcohol	-	C		
Heptanoic acid *	-	D		
Hexamethylenediamine *	1783	C		
Hydrochloric acid	1789	D		
Hydrofluoric acid (40 % aqueous)	1790	B		
Hydrogen peroxide (greater than 60 %)	2015	C		
Isobutyl acrylate	-	D		
Isobutyl alcohol	1212	D		
Isobutyl methacrylate	-	D		
Isobutyraldehyde	2045	C		
Isooctane *	-	D		
Isopentane	-	D		
Isophorone	-	D		
Isopropylamine	1221	C		
Isopropyl cyclohexane	-	D		
Isoprene	1218	D		
Lactic acid	-	D		
Mesityl oxide *	1229	C		
Methyl acetate	1231	D		
Methyl acrylate	1919	C		
Methylamyl alcohol	-	D		
Methylene chloride	1593	B		
2-Methyl-5-Ethylpyridine *	-	B		
Methyl methacrylate	1247	D		
2-Methylpentene *	-	D		
alpha-Methylstyrene *	-	D		

* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

Substance	UN Number	Pollution Category for operational discharge	Residual concentration (per cent by weight)	
		Regulation 3 of Annex II	Regulation 5 (1) of Annex II	Regulation 5 (7) of Annex II
	I	II	III Outside special areas	IV Within special areas
Monochlorobenzene	1134	B		
Monoethanolamine	-	D		
Monoisopropanolamine	-	C		
Monomethyl ethanolamine	-	C		
Mononitrobenzene	-	C		
Monoisopropylamine	-	C		
Morpholine *	2054	C		
Naphthalene (molten)	1334	A	0.1	0.05
Naphthenic acids *	-	A	0.1	0.05
Nitric acid (90 %)	2031/2032	C		
2-Nitropropane	-	D		
ortho-Nitrotoluene	1664	C		
Nonyl alcohol *	-	C		
Nonylphenol	-	C		
n-Octanol	-	C		
Oleum	1831	C		
Oxalic acid (10-25 %)	-	D		
Pentachloroethane	1669	B		
n-Pentane	1265	C		
Perchloroethylene (Tetrachloroethylene)	1897	B		
Phenol	1671	B		
Phosphoric acid	1805	D		
Phosphorus (elemental)	1338	A	0.01	0.005
Phthalic anhydride (molten)	-	C		
beta-Propiolactone *	-	B		
Propionaldehyde	1275	D		
Propionic acid	1848	D		
Propionic anhydride	-	D		
n-Propyl acetate *	1276	C		
n-Propyl alcohol	1274	D		
n-Propylamine	1277	C		
Pyridine	1282	B		
Silicon tetrachloride	1818	D		
Sodium bichromate (solution)	-	C		
Sodium hydroxide	1824	C		
Sodium pentachlorophenate (solution)	-	A	0.1	0.05
Styrene monomer	2055	C		
Sulphuric acid	1830/1831/1832	C		
Tallow	-	D		
Tetraethyl lead	1649	A	0.1	0.05
Tetrahydrofuran	2056	D		
Tetrahydronaphthalene	1540	C		
Tetramethylbenzene	-	D		
Tetramethyl lead	1649	A	0.1	0.05
Titanium tetrachloride	1838	D		
Toluene	1294	C		
Toluene diisocyanate *	2078	B		
Trichloroethane	-	C		
Trichloroethylene	1710	B		
Triethanolamine	-	D		
Triethylamine	1296	C		
Trimethylbenzene *	-	C		
Tritolyl phosphate (Tricresyl phosphate) *	-	B		
Turpentine (wood)	1299	B		
Vinyl acetate	1301	C		
Vinylidene chloride *	1303	B		
Xylenes (mixed isomers)	1307	C		

* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

APPENDIX III

List of Other Liquid Substances Carried in Bulk

Acetonitrile (Methyl cyanide)
tert-Amyl alcohol
n-Butyl alcohol
Butyrolactone
Calcium chloride (solution)
Castor oil
Citric juices
Coconut oil
Cod liver oil
iso-Decyl alcohol
n-Decyl alcohol
Decyl octyl alcohol
Dibutyl ether
Diethanolamine
Diethylene glycol
Dipentene
Dipropylene glycol
Ethyl alcohol
Ethylene glycol
Fatty alcohols (C_{12}-C_{20})
Glycerine
n-Heptane
Heptene (mixed isomers)
n-Hexane
Ligroin
Methyl alcohol
Methylamyl acetate
Methyl ethyl ketone (2-butanone)
Milk
Molasses
Olive oil
Polypropylene glycol
iso-Propyl acetate
iso-Propyl alcohol
Propylene glycol
Propylene oxide
Propylene tetramer
Propylene trimer
Sorbitol
Sulphur (liquid)
Tridecanol
Triethylene glycol
Triethylenetetramine
Tripropylene glycol
Water
Wine

APPENDIX IV

Cargo Record Book for Ships Carrying Noxious Liquid Substances in Bulk

Name of ship .....
Cargo carrying capacity of each tank in cubic metres .....
Voyage from ..... to .....

(*a*) Loading of cargo

1. Date and place of loading
2. Name and category of cargo(es) loaded
3. Identity of tank(s) loaded

(*b*) Transfer of cargo

4. Date of transfer
5. Identity of tank(s)
   (*i*) From
   (*ii*) To
6. Was (were) tank(s) in 5 (*i*) emptied?
7. If not, quantity remaining

(*c*) Unloading of cargo

8. Date and place of unloading
9. Identity of tank(s) unloaded
10. Was (were) tank(s) emptied?
11. If not, quantity remaining in tank(s)
12. Is(are) tank(s) to be cleaned?
13. Amount transferred to slop tank
14. Identity of slop tank

(*d*) **Ballasting of cargo tanks**

15. Identity of tank(s) ballasted
16. Date and position of ship at start of ballasting

..... Signature of Master

(*e*) **Cleaning of cargo tanks**

Category A substances

17. Identity of tank(s) cleaned
18. Date and location of cleaning
19. Method(s) of cleaning
20. Location of reception facility used
21. Concentration of effluent when discharge to reception facility stopped
22. Quantity remaining in tank
23. Procedure and amount of water introduced into tank in final cleaning
24. Location, date of discharge into sea
25. Procedure and equipment used in discharge into the sea

Category B, C and D substances

26. Washing procedure used
27. Quantity of water used
28. Date, location of discharge into sea
29. Procedure and equipment used in discharge into the sea

(*f*) **Transfer of dirty ballast water**

30. Identity tank(s)
31. Date and position of ship at start of discharge into sea
32. Date and position of ship at finish of discharge into sea
33. Ship's speed(s) during discharge
34. Quantity discharged into sea
35. Quantity of polluted water transferred to slop tank(s) [identify slop tank(s)]
36. Date and port of discharge to shore reception facilities (if applicable)

..... Signature of Master

(*g*) **Transfer from slop tank/disposal of residue**

37. Identity of slop tank(s)
38. Quantity disposed from each tank
39. Method of disposal of residue:
    (*a*) Reception facilities
    (*b*) Mixed with cargo
    (*c*) Transferred to another (other) tank(s) [identify tank(s)]
    (*d*) Other method
40. Date and port of disposal of residue

(*h*) **Accidental or other exceptional discharge**

41. Date and time of occurrence
42. Place or position of ship at time of occurrence
43. Approximate quantity, name and category of substance
44. Circumstances of discharge or escape and general remarks

..... Signature of Master

APPENDIX V

Form of Certificate

International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973)

Note: This Certificate shall be supplemented in the case of a chemical tanker by the certificate required pursuant to the provisions of Regulation 13 (3) of Annex II of the Convention.

(Official seal)

Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, under the authority of the Government of .....

(full official designation of the country)

by .....

(full official designation of the competent person or organization authorized under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973)

Name of Ship	Distinctive Number or Letter	Port of Registry	Gross Tonnage

This is to certify:

1. That the ship has been surveyed in accordance with the provisions of Regulation 10 of Annex II of the Convention.
2. That the survey showed that the design, construction and equipment of the ship are such as to minimize the uncontrolled discharge into the sea of noxious liquid substances.
3. That the following arrangements and procedures have been approved by the Administration in connexion with the implementation of Regulation 5 of Annex II of the Convention:

.....

[Continued on the annexed signed and dated sheet(s).]

.....

This certificate is valid until .....
subject to intermediate survey(s)
at intervals of .....

Issued at .....

(place of issue of Certificate)

.../.../19... .....

(Signature of duly authorized official issuing the Certificate.)

(Seal or stamp of the issuing Authority, as appropriate.)

Intermediate surveys

This is to certify that at an intermediate survey required by Regulation 10 (1) (*c*), of Annex II of the Convention, this ship and the condition thereof are found to comply with the relevant provisions of the Convention.

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the Authority, as appropriate)

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the Authority, as appropriate)

Under the provisions of Regulation 12 (2) and (4) of Annex II of the Convention the validity of this Certificate is extended until .....

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

ANNEX III

Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Forms, or in Freight Containers, Portable Tanks or Road and Rail Tank Wagons.

Regulation 1

Application

(1) Unless expressly provided otherwise, the Regulations of this Annex apply to all ships carrying harmful substances in packaged forms, or in freight containers, portable tanks or road and rail tank wagons.

(2) Such carriage of harmful substances is prohibited except in accordance with the provisions of this Annex.

(3) To supplement the provisions of this Annex the Government of each Party to the Convention shall issue, or cause to be issued, detailed requirements on packaging, marking and labelling, documentation, stowage, quantity limitations, exceptions and notification, for preventing or minimizing pollution of the marine environment by harmful substances.

(4) For the purpose of this Annex, empty receptacles, freight containers, portable tanks and road and rail tank wagons which have been used previously for the carriage of harmful substances shall themselves be treated as harmful substances unless adequate precautions have been taken to ensure that they contain no residue that is hazardous to the marine environment.

Regulation 2

Packaging

Packagings, freight containers, portable tanks and road and rail tank wagons shall be adequate to minimize the hazard to the marine environment having regard to their specific contents.

Regulation 3

Marking and Labelling

Packages, whether shipped individually or in units or in freight containers, freight containers, portable tanks or road and rail tank wagons containing a harmful substance, shall be durably marked with the correct technical name (trade names shall not be used as the correct technical name), and further marked with a distinctive label or stencil of label, indicating that the contents are harmful. Such identification shall be supplemented where possible by any other means, for example by the use of the United Nations number.

Regulation 4

Documentation

(1) In all documents relating to the carriage of harmful substances by sea where such substances are named, the correct technical name of the substances shall be used (trade names shall not be used).

(2) The shipping documents supplied by the shipper shall include a certificate or declaration that the shipment offered for carriage is properly packed, marked and labelled and in proper condition for carriage to minimize the hazard to the marine environment.

(3) Each ship carrying harmful substances shall have a special list or manifest setting forth the harmful substances on board and the location thereof. A detailed stowage plan which sets out the location of all harmful substances on board may be used in place of such special list or manifest. Copies of such documents shall also be retained on shore by the owner of the ship or his representative until the harmful substances are unloaded.

(4) In a case where the ship carries a special list or manifest or a detailed stowage plan, required for the carriage of dangerous goods by the International Convention for the Safety of Life at Sea in force, the documents required for the purpose of this Annex may be combined with those for dangerous goods. Where documents are combined, a clear distinction shall be made between dangerous goods and other harmful substances.

Regulation 5

Stowage

Harmful substances shall be both properly stowed and secured so as to minimize the hazards to the marine environment without impairing the safety of ship and persons on board.

Regulation 6

Quantity Limitations

Certain harmful substances which are very hazardous to the marine environment may, for sound scientific and technical reasons, need to be prohibited for carriage or be limited as to the quantity which may be carried aboard any one ship. In limiting the quantity due consideration shall be given to size, construction and equipment of the ship as well as the packaging and the inherent nature of the substance.

Regulation 7

Exceptions

(1) Discharge by jettisoning of harmful substances carried in packaged forms, freight containers, portable tanks or road and rail tank wagons shall be prohibited except where necessary for the purpose of securing the safety of the ship or saving life at sea.

(2) Subject to the provisions of the present Convention, appropriate measures based on the physical, chemical and biological properties of harmful substances shall be taken to regulate the washing of leakages overboard provided that compliance with such measures would not impair the safety of the ship and persons on board.

Regulation 8

Notification

With respect to certain harmful substances, as may be designated by the Government of a Party to the Convention, the master or owner of the ship or his representative shall notify the appropriate port authority of the intent to load or unload such substances at least 24 hours prior to such action.

ANNEX IV

Regulations for the Prevention of Pollution by Sewage from Ships

Regulation 1

Definitions

For the purposes of the present Annex:

(1) «New ship» means a ship:

(*a*) for which the building contract is placed, or in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction, on or after the date of entry into force of this Annex; or

(*b*) the delivery of which is three years or more after the date of entry into force of this Annex.

(2) «Existing ship» means a ship which is not a new ship.

(3) «Sewage» means:

(*a*) drainage and other wastes from any form of toilets, urinals, and WC scuppers;

(*b*) drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;

(*c*) drainage from spaces containing living animals; or

(*d*) other waste waters when mixed with the drainages defined above.

(4) «Holding tank» means a tank used for the collection and storage of sewage.

(5) «Nearest land». The term «from the nearest land» means from the baseline from which the territorial sea of the territory in question is established in accordance with international law except that, for the purposes of the present Convention «from the nearest land» off the north eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude 11°00′ South, longitude 142°08′ East to a point in latitude 10°35′ South,
longitude 141°55′ East — thence to a point latitude 10°00′ South,
longitude 142°00′ East, thence to a point latitude 9°10′ South,
longitude 143°52′ East, thence to a point latitude 9°00′ South,
longitude 144°30′ East, thence to a point latitude 13°00′ South,
longitude 144°00′ East, thence to a point latitude 15°00′ South,
longitude 146°00′ East, thence to a point latitude 18°00′ South,
longitude 147°00′ East, thence to a point latitude 21°00′ South,
longitude 153°00′ East, thence to a point on the coast of Australia in latitude 24°42′ South, longitude 153°15′ East.

Regulation 2

Application

The provisions of this Annex shall apply to:

(*a*) (*i*) new ships of 200 tons gross tonnage and above;

(*ii*) new ships of less than 200 tons gross tonnage which are certified to carry more than 10 persons;

(*iii*) new ships which do not have a measured gross tonnage and are certified to carry more than 10 persons; and

(*b*) (*i*) existing ships of 200 tons gross tonnage and above, 10 years after the date of entry into force of this Annex;

(*ii*) existing ships of less than 200 tons gross tonnage which are certified to carry more than 10 persons, 10 years after the date of entry into force of this Annex; and

(*iii*) existing ships which do not have a measured gross tonnage and are certified to carry more thau 10 persons, 10 years after the date of entry into force of this Annex.

Regulation 3

Surveys

(1) Every ship which is required to comply with the provisions of this Annex and which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention shall be subject to the surveys specified below:

(*a*) an initial survey before the ship is put in service or before the Certificate required under Regulation 4 of this Annex is issued for the first time, which shall include a survey of the ship which shall be such as to ensure:

(*i*) when the ship is equipped with a sewage treatment plant the plant shall meet operational requirements based on standards and the test methods developed by the Organization;

(*ii*) when the ship is fitted with a system to comminute and disinfect the sewage, such a system shall be of a type approved by the Administration;

(*iii*) when the ship is equipped with a holding tank the capacity of such tank shall be to the satisfaction of the Administration for the retention of all sewage having regard to the operation of the ship, the number of persons on board and other relevant factors. The holding tank shall have a means to indicate visually the amount of its contents; and

(*iv*) that the ship is equipped with a pipeline leading to the exterior convenient for the discharge of sewage to a reception facility and that such a pipeline is fitted with a standard shore connection in compliance with Regulation 11 of this Annex.

This survey shall be such as to ensure that the equipment, fittings, arrangements and material

fully with the applicable requirements of this Annex.

(*b*) periodical surveys at intervals specified by the Administration but not exceeding five years which shall be such as to ensure that the equipment, fittings, arrangements and material fully comply with the applicable requirements of this Annex. However, where the duration of the International Sewage Pollution Prevention Certificate (1973) is extended as specified in Regulation 7 (2) or (4) of this Annex, the interval of the periodical survey may be extended correspondingly.

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this Regulation in order to ensure that the provisions of this Annex are complied with.

(3) Surveys of the ship as regards enforcement of the provision of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned fully guarantees the completeness and efficiency of the surveys.

(4) After any survey of the ship under this Regulation has been completed, no significant change shall be made in the equipment, fittings, arrangements, or material covered by the survey without the approval of the Administration, except the direct replacement of such equipment or fittings.

Regulation 4

Issue of Certificate

(1) An Internacional Sewage Pollution Prevention Certificate (1973) shall be issued, after survey in accordance with the provision of Regulation 3 of this Annex, to any ship which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention.

(2) Such Certificate shall be issued either by the Administration or by any persons or organization duly authorized by it. In every case the Administration assumes full responsibility for the Certificate.

Regulation 5

Issue of a Certificate by another Government

(1) The Government of a Party to the Convention may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the provision of this Annex are complied with, shall issue or authorize the issue of an International Sewage Pollution Prevention Certificate (1973) to the ship in accordance with this Annex.

(2) A copy of the Certificate and a copy of the survey report shall be transmitted as early as possible to the Administration requesting the survey.

(3) A Certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as the Certificate issued under Regulation 4 of this Annex.

(4) No International Sewage Pollution Prevention Certificate (1973) shall be issued to a ship which is entitled to fly the flag of a State, which is not a Party.

Regulation 6

Form of Certificate

The International Sewage Pollution Prevention Certificate (1973) shall be drawn up in an official language of the issuing country in the form corresponding to the model given in the Appendix to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 7

Duration of Certificate

(1) An International Sewage Pollution Prevention Certificate (1973) shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, except as provided in paragraphs (2), (3) and (4) of this Regulation.

(2) If a ship at the time when the Certificate expires is not in a port or offshore terminal under the jurisdiction of the Party to the Convention whose flag the ship is entitled to fly, the Certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the State whose flag the ship is entitled to fly or in which it is to be surveyed and then only in cases where it appears proper and reasonable to do so.

(3) No Certificate shall be thus extended for a period longer than five months and a ship to which such extension is granted shall not on its arrival in the State whose flag it is entitled to fly or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or State without having obtained a new Certificate.

(4) A Certificate which has not benn extended under the provision of paragraph (2) of this Regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

(5) A Certificate shall cease to be valid if significant alterations have taken place in the equipment, fittings, arrangement or material required without the approval of the Administration, except the direct replacement of such equipment or fittings.

(6) A Certificate issued to a ship shall cease to be valid upon transfer of such a ship to the flag of another State, except as provided in paragraph (7) of this Regulation.

(7) Upon transfer of a ship to the flag of another Party, the Certificate shall remain in force for a period not exceeding five months provided that it would not have expired before the end of that period, or until the Administration issues a replacement Certificate, whichever is earlier. As soon as possible af-

ter the transfer has taken place the Government of the Party whose flag the ship was formerly entitled to fly shall transmit to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulation 8

Discharge of Sewage

(1) Subject to the provision of Regulation 9 of this Annex, the discharge of sewage into the sea is prohibited, except when:

(*a*) the ship is discharging comminuted and disinfected sewage using a system approved by the Administration in accordance with Regulation 3 (1) (*a*) at a distance of more than four nautical miles from the nearest land, or sewage which is not comminuted or disinfected at a distance of more than 12 nautical miles from the nearest land, provided that in any case, the sewage that has been stored in holding tanks shall not be discharged instantaneously but at a moderate rate when the ship is en route and proceeding at not less than 4 knots; the rate of discharge shall be approved by the Administration based upon standards developed by the Organization; or

(*b*) the ship has in operation an approved sewage treatment plant which has been certified by the Administration to meet the operational requirements referred to in Regulation 3 (1) (*a*) and (*i*) of this Annex, and

(*i*) the test results of the plant are laid down in the ship's International Sewage Pollution Prevention Certificate (1973);

(*ii*) additionally, the effluent shall not produce visible floating solids in, nor cause discolouration of, the surrounding water; or

(*c*) the ship is situated in the waters under the jurisdicion of a State and is discharging sewage in accordance with such less stringent requirements as may be imposed by such State.

(2) When the sewage is mixed with wastes or waste water having different discharge requirements, the more stringent requirements shall apply.

Regulation 9

Exceptions

Regulation 8 of this Annex shall not apply to:

(*a*) the discharge of sewage from a ship necessary for the purpose of securing the safety of a ship and those on board or saving life at sea; or

(*b*) the discharge of sewage resulting from damage to a ship or its equipment if all reasonable precautions have been taken before and after the occurrence of the damage, for the purpose of preventing or minimizing the discharge.

Regulation 10

Reception Facilities

(1) The Government of each Party to the Convention undertakes to ensure the provision of facilities at ports and terminals for the reception of sewage, without causing undue delay to ships, adequate to meet the needs of the ships using them.

(2) The Government of each Party shall notify the Organization for transmission to the Contracting Governments concerned of all cases where the facilities provided under this Regulation are alleged to be inadequate.

Regulation 11

Standard Discharge Connections

To enable pipes of reception facilities to be connected with the ship's discharge pipeline, both lines shall be fitted with a standard discharge connection in accordance with the following table:

Standard Dimension of Flanges for Discharge Connections

Description	Dimension
Outside diameter	210 mm
Inner diameter	According to pipe outside diameter
Bolt circle diameter	170 mm
Slots in flange	4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 18 mm
Flange thickness	16 mm
Bolts and nuts: quantity and diameter	4, each of 16 mm in diameter and of suitable length
The flange is designed to accept pipes up to a maximum internal diameter of 100 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a suitable gasket, shall be suitable for a service pressure of 6 kg/cm².	

For ships having a moulded depth of 5 metres and less, the inner diameter of the discharge connection may be 38 milimetres.

APPENDIX

Form of Certificate

International Sewage Pollution Prevention Certificate (1973)

Issued under the Provisions of the International Convention for the Prevention of Pollution from Ships, 1973, under the Authority of the Government of .....

(full designation of the country)

by .....
(full designation of the competent person or organization authorized under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973)

Name of Ship	Distinctive Number or Letter	Port Registry	Gross Tonnage	Number of persons which the ship is certified to carry

New/existing ship*
Date of building contract .....
Date on which keel was laid or ship was at a similar stage of construction .....
Date of delivery .....

* Delete as appropriate

This is to Certify that:

(1) The ship is equipped with a sewage treatment plant/comminuter/holding tank* and a discharge pipeline in compliance with Regulation 3 (1) (*a*) (*i*) to (*iv*) of Annex IV of the Convention as follows:

*(*a*) Description of the sewage treatment plant:

Type of sewage treatment plant .....
Name of manufacturer .....
The sewage treatment plant is certified by the administration to meet the following effluent standards:**

*(*b*) Description of comminuter:

Type of comminuter .....
Name of manufacturer .....
Standard of sewage after disinfection .....

*(*c*) Description of holding tank equipment:

Total capacity of the holding tank ..... m^3
Location .....

(*d*) A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.

(2) The ship has been surveyed in accordance with Regulation 3 of Annex IV of the International Convention for the Prevention of Pollution from Ships, 1973, concerning the prevention of pollution by sewage and the survey showed that the equipment of the ship and the condition thereof are in all respects satisfactory and the ship complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until .....
Issued at .....
(place of issue of certificate)

...../...../19... .....
(Signature of official issuing the Certificate)

(Seal or stamp of the Issuing Authority, as appropriate)

* Delete as appropriate
** Parameters should be incorporated

Under the provisions of Regulation 7 (2) and (4) of Annex IV of the Convention the validity of this Certificate is extended until

.....

Signed .....
(Signature of duly authorized official)

Place .....
Date .....

(Seal or stamp of the Authority, as appropriate)

ANNEX V

Regulations for the Prevention of Pollution by Garbage from Ships

Regulation 1

Definitions

For the purposes of this Annex:

(1) «Garbage» means all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the present Convention.

(2) «Nearest land». The term «from the nearest land» means from the baseline from which the territorial sea of the territory in question is established in accordance with international law except that, for the purposes of the present Convention «from the nearest land» off the north eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude 11°00′ South, longitude 142°08′ East to a point in latitude 10°35′ South,
longitude 141°55′ East, thence to a point latitude 10°00′ South,
longitude 142°00′ East, thence to a point latitude 9°10′ South,
longitude 143°52′ East, thence to a point latitude 9°00′ South,
longitude 144°30′ East, thence to a point latitude 13°00′ South,
longitude 144°00′ East, thence to a point latitude 15°00′ South,
longitude 146°00′ East, thence to a point latitude 18°00′ South,
longitude 147°00′ East, thence to a point latitude 21°00′ South,
longitude 153°00′ East, thence to a point on the coast of Australia in latitude 24°42′ South, longitude 153°15′ East.

(3) «Special area» means a sea area where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by garbage is required. Special areas shall include those listed in Regulation 5 of this Annex.

Regulation 2

Application

The provisions of this Annex shall apply to all ships.

Regulation 3

Disposal of Garbage outside Special Areas

(1) Subject to the provisions of Regulations 4, 5 and 6 of this Annex:

(*a*) the disposal into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags is prohibited;

(*b*) the disposal into the sea of the following garbage shall be made as far as practicable from the nearest land but in any case is prohibited if the distance from the nearest land is less than:

(*i*) 25 nautical miles for dunnage, linning and packing materials which will float;

(*ii*) 12 nautical miles for food wastes and all other garbage including paper products, rags, glass, metal, bottles, crockery and similar refuse;

(*c*) disposal into the sea of garbage specified in sub-paragraph (*b*) (*ii*) of this Regulation may be permitted when it has passed through a comminuter or grinder and made as far as practicable from the nearest land but in any case is prohibited if the distance from the nearest land is less than 3 nautical miles. Such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25 millimetres.

(2) When the garbage is mixed with other discharges having different disposal or discharge requirements the more stringent requirements shall apply.

Regulation 4

Special Requirements for Disposal of Garbage

(1) Subject to the provisions of paragraph (2) of this Regulation, the disposal of any materials regulated by this Annex is prohibited from fixed or floating platforms engaged in the exploration, exploitation and associated offshore processing of seabed mineral resources, and from all other ships when alongside or within 500 metres of such platforms.

(2) The disposal into the sea of food wastes may be permitted when they have been passed through a comminuter or grinder from such fixed or floating platforms located more than 12 nautical miles from land and all other ships when alongside or within 500 metres of such platforms. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 millimetres.

Regulation 5

Disposal of Garbage within Special Areas

(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area and the «Gulfs area» which are defined as follows:

(*a*) The Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Black Sea constituted by the 41° N parallel and bounded to the west by the Straits of Gibraltar at the meridian of 5° 36′ W.

(*b*) The Baltic Sea area means the Baltic Sea proper with the Gulf of Bothnia and the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57° 44.8′ N.

(*c*) The Black Sea area means the Black Sea proper with the boundary between the Mediterranean and the Black Sea constituted by the parallel 41° N.

(*d*) The Red Sea area means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane (12° 8.5′ N, 43° 19.6′ E) and Husn Murad (12° 40.4′ N, 43° 30.2′ E).

(*e*) The «Gulfs area» means the sea area located north west of the rhumb line between Ras al Hadd (22° 30′ N, 59° 48′ E) and Ras al Fasteh (25° 04′ N, 61° 25′ E).

(2) Subject to the provisions of Regulation 6 of this Annex:

(*a*) disposal into the sea of the following is prohibited:

(*i*) all plastics, including but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags; and

(*ii*) all other garbage, including paper products, rags, glass, metal, bottles, crockery, dunnage, lining and packing materials;

(*b*) disposal into the sea of food wastes shall be made as far as practicable from land, but in any case not less than 12 nautical miles from the nearest land.

(3) When the garbage is mixed with other discharges having different disposal or discharge requirements the more stringent requirements shall apply.

(4) Reception facilities within special areas:

(*a*) The Government of each Party to the Convention, the coastline of which borders a special area undertakes to ensure that as soon as possible in all ports within a special area, adequate reception facilities are provided in accordance with Regulation 7 of this Annex, taking into account the special needs of ships operating in these areas.

(*b*) The Government of each Party concerned shall notify the Organization of the measures taken pursuant to sub-paragraph (*a*) of this Regulation. Upon receipt of sufficient notifications the Organization shall establish a date from which the requirements of this Regulation in respect of the area in question shall take effect. The Organization shall notify all Parties of the date so established no less than twelve months in advance of that date.

(c) After the date so established, ships calling also at ports in these special areas where such facilities are not yet available, shall fully comply with the requirements of this Regulation.

Regulation 6

Exceptions

Regulations 3, 4 and 5 of this Annex shall not apply to:

(a) the disposal of garbage from a ship necessary for the purpose of securing the safety of a ship and those on board or saving life at sea; or
(b) the escape of garbage resulting from damage to a ship or its equipment provided all reasonable precautions have been taken before and after the occurrence of the damage, for the purpose of preventing or minimizing the escape; or
(c) the accidental loss of synthetic fishing nets or synthetic material incidental to the repair of such nets, provided that all reasonable precautions have been taken to prevent such loss.

Regulation 7

Reception Facilities

(1) The Government of each Party to the Convention undertakes to ensure the provision of facilities at ports and terminals for the reception of garbage, without causing undue delay to ships, and according to the needs of the ships using them.

(2) The Government of each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities provided under this Regulation are alleged to be inadequate.

PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

The Parties to the present Protocol,

Recognizing the significant contribution which can be made by the International Convention for the Prevention of Pollution from Ships, 1973, to the protection of the marine environment from pollution from ships,

Recognizing also the need to improve further the prevention and control of marine pollution from ships, particularly oil tankers,

Recognizing further the need for implementing the Regulations for the Prevention of Pollution by Oil contained in Annex I of that Convention as early and as widely as possible,

Acknowledging however the need to defer the application of Annex II of that Convention until certain technical problems have been satisfactorily resolved,

Considering that these objectives may best be achieved by the conclusion of a Protocol relating to the International Convention for the Prevention of Pollution from Ships, 1973,

have agreed as follows:

ARTICLE I

General Obligations

1. The Parties to the present Protocol undertake to give effect to the provisions of:

(a) the present Protocol and the Annex hereto which shall constitute an integral part of the present Protocol; and
(b) the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as «the Convention»), subject to the modifications and additions set out in the present Protocol.

2. The provisions of the Convention and the present Protocol shall be read and interpreted together as one single instrument.

3. Every reference to the present Protocol constitutes at the same time a reference to the Annex hereto.

ARTICLE II

Implementation of Annex II of the Convention

1. Notwithstanding the provisions of Article 14 (1) of the Convention, the Parties to the present Protocol agree that they shall not be bound by the provisions of Annex II of the Convention for a period of three years from the date of entry into force of the present Protocol or for such longer period as may be decided by a two-thirds majority of the Parties to the present Protocol in the Marine Environment Protection Committee (hereinafter referred to as «the Committee») of the International Maritime Organization (hereinafter referred to as «the Organization»).

2. During the period specified in paragraph 1 of this Article, the Parties to the present Protocol shall not be under any obligations nor entitled to claim any privileges under the Convention in respect of matters relating to Annex II of the Convention and all reference to Parties in the Convention shall not include the Parties to the present Protocol in so far as matters relating to that Annex are concerned.

ARTICLE III

Communication of Information

The text of Article 11 (1) (b) of the Convention is replaced by the following:

«a list of nominated surveyors or recognized organizations which are authorized to act their behalf in the administration of matters relating to the design, construction, equipment and operation of ships carrying harmful substances in accordance with the provision of the Regulations for circulation to the Parties for information of their officers. The Administration shall therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations.»

ARTICLE IV

Signature, Ratification, Acceptance, Approval and Accession

1. The present Protocol shall be open for signature at the Headquarters of the Organization from 1 June 1978 to 31 May 1979 and shall thereafter remain open for accession. States may become Parties to the present Protocol by:

(*a*) signature without reservation as to ratification, acceptance or approval; or
(*b*) signature, subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
(*c*) accession.

2. Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.

ARTICLE V

Entry into Force

1. The present Protocol shall enter into force twelve months after the date on which not less than fifteen States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with Article IV of the present Protocol.

2. Any instrument of ratification, acceptance, approval or accession deposited after the date on which the present Protocol enters into force shall take effect three months after the date of deposit.

3. After the date on which an amendement to the present Protocol is deemed to have been accepted in accordance with Article 16 of the Convention, any instrument of ratification, acceptance, approval or accession deposited shall apply to the present Protocol as amended.

ARTICLE VI

Amendments

The procedures set out in Article 16 of the Convention in respect of amendments to the Articles, an Annex and an Appendix to an Annex of the Convention shall apply respectively to amendments to the Articles, the Annex and an Appendix to the Annex of the present Protocol.

ARTICLE VII

Denunciation

1. The present Protocol may be denounced by any Party to the present Protocol at any time after the expiry of five years from the date on which the Protocol enters into force for that Party.

2. Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General of the Organization.

3. A denunciation shall take effect twelve months after receipt of the notification by the Secretary-General of the Organization or after the expiry of any other longer period which may be indicated in the notification.

ARTICLE VIII

Depositary

1. The present protocol shall be deposited with the Secretary-General of the Organization (hereinafter referred to as «the Depositary»).

2. The Depositary shall:

(*a*) inform all States which have signed the present Protocol or acceded thereto of:
  (*i*) each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;
  (*ii*) the date of entry into force of the present Protocol;
  (*iii*) the deposit of any instrument of denunciation of the present Protocol together with the date on which it was received and the date on which the denunciation takes effect;
  (*iv*) any decision made in accordance with Article II (1) of the present Protocol;

(*b*) transmit certified true copies of the present Protocol to all States which have signed the present Protocol or acceded thereto.

3. As soon as the present Protocol enters into force, a certified true copy thereof shall be transmitted by the Depositary to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

ARTICLE IX

Languages

The present Protocol is established in a single original in the English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German, Italian and Japanese languages shall be prepared and deposited with the signed original.

In witness whereof the undersigned* being duly authorized by their respective Governments for that purpose have signed the present Protocol.

Done at London this seventeenth day of February one thousand nine hundred and seventy-eight.

ANNEX

MODIFICATIONS AND ADDITIONS TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973.

ANNEX I

Regulations for the Prevention of Pollution by Oil

Regulation 1

Definitions

Paragraphs (1) to (7) — *No change*

---

* Signatures omitted.

The existing text of paragraph (8) is replaced by the following:

(8) *(a)* «Major conversion» means a conversion of an existing ship:

(*i*) which substantially alters the dimensions or carrying capacity of the ship; or
(*ii*) which changes the type of the ship; or
(*iii*) the intent of which in the opinion of the Administration is substantially to prolong its life; or
(*iv*) which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the present Protocol not applicable to it as an existing ship.

(*b*) Notwithstanding the provisions of sub-paragraph (*a*) of this paragraph, conversion of an existing oil tanker of 20,000 tons deadweight and above to meet the requirements of Regulation 13 of this Annex shall not be deemed to constitute a major conversion for the purposes of this Annex.

Paragraphs (9) to (22) — *No change*

The existing text of paragraph (23) is replaced by the following:

(23) «Lightweight» means the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effects.

Paragraphs (24) and (25) — *No change*

The following paragraphs are added to the existing text:

(26) Notwithstanding the provisions of paragraph (6) of this Regulation, for the purposes of Regulations 13, 13B, 13E and 18 (5) of this Annex, «new oil tanker» means an oil tanker:

(*a*) for which the building contract is placed after 1 June 1979; or
(*b*) in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or
(*c*) the delivery of which is after 1 June 1982; or
(*d*) which has undergone a major conversion:

(*i*) for which the contract is placed after 1 June 1979; or
(*ii*) in the absence of a contract, the construction work of which is begun after 1 January 1980; or
(*iii*) which is completed after 1 June 1982,

except that, for oil tankers of 70,000 tons deadweight and above, the definition in paragraph (6) of this Regulation shall apply for the purposes of Regulation 13 (1) of this Annex.

(27) Notwithstanding the provisions of paragraph (7) of this Regulation, for the purposes of Regulations 13, 13A, 13B, 13C, 13D and 18 (6) of this Annex, «existing oil tanker» means an oil tanker which is not a new oil tanker as defined in paragraph (26) of this Regulation.

(28) «Crude oil» means any liquid hidrocarbon mixture occurring naturally in the earth whether or not treated to render it suitable for transportation and includes:

(*a*) crude oil from which certain distillate fractions may have been removed; and
(*b*) crude oil to which certain distillate fractions may have been added.

(29) «Crude oil tanker» means an oil tanker engaged in the trade of carrying crude oil.

(30) «Product carrier» means an oil tanker engaged in the trade of carrying oil other than crude oil.

Regulations 2 and 3 — *No change*

Regulation 4

The existing text of regulation 4 is replaced by the following:

Surveys and Inspections

(1) Every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:

(*a*) An initial survey before the ship is put in service or before the Certificate required under Regulation 5 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.
(*b*) Periodical surveys at intervals specified by the Administration, but not exceeding five years, which shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the requirements of this Annex.
(*c*) A minimum of one intermediate survey during the period of validity of the Certificate which shall be such as to ensure that the equipment and associated pump and piping systems, including oil discharge monitoring and control systems, crude oil washing systems, oily-water separating equipment and oil filtering systems, fully comply with the applicable requirements of this Annex and are in good working order. In cases where only one such intermediate survey is carried out in any one Certificate validity period, it shall be held not before six months prior to, nor later than six months after the half-way date of the Certificate's period

of validity. Such intermediate surveys shall be endorsed on the Certificate issued under Regulation 5 of this Annex.

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this Regulation in order to ensure that applicable provisions of this Annex are complied with.

(3) (*a*) Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.

(*b*) The Administration shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the Certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended. These inspections may be carried out by their own inspection services, or by nominated surveyors or by recognized organizations, or by other Parties upon request of the Administration. Where the Administration, under the provisions of paragraph (1) of this Regulation, establishes mandatory annual surveys, the above unscheduled inspections shall not be obligatory.

(*c*) An Administration nominating surveyors or recognizing organizations to conduct surveys and inspections as set forth in subparagraphs (*a*) and (*b*) of this paragraph, shall as a minimum empower any nominated surveyor or recognized organization to:

(*i*) require repairs to a ship; and
(*ii*) carry out surveys and inspections if requested by the appropriate authorities of a Port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties to the present Protocol for the information of their officers.

(*d*) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the Certificate should be withdrawn and the Administration shall be notified immediately; and if the ship is in a port of another Party, the appropriate authorities of the Port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or recognized organization has notified the appropriate authorities of the Port State, the Government of the Port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this Regulation. When applicable, the Government of the Port State concerned shall take such steps as will ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the nearest appropriate repair yard available without presenting an unreasonable threat of harm to the marine environment.

(*e*) In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and inspection and shall undertake to ensure the necessary arrangements to satisfy this obligation.

(4) (*a*) The condition of the ship and its equipment shall be maintained to conform with the provisions of the present Protocol to ensure that the ship in all respects will remain fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment.

(*b*) After any survey of ship under paragraph (1) of this Regulation has been completed, no change shall be made in the structure, equipment, systems, fittings, arrangements or material covered by the survey, without the sanction of the Administration, except the direct replacement of such equipment and fittings.

(*c*) Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex the master or owner of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph (1) of this Regulation is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the Port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.

Regulations 5, 6 and 7

In the existing text of these Regulations, delete all references to «(1973)» in relation to the International O. Pollution Prevention Certificate.

Regulation 8

Duration of Certificate

The existing text of Regulation 8 is replaced by the following:

(1) An International Oil Pollution Prevention Certificate shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, provided that in the case of an oil tanker operating with dedicated clean ballast tanks for a limited period specified in Regulation 13 (9) of this Annex, the period of validity of the Certificate shall not exceed such specified period.

(2) A Certificate shall cease to be valid if significant alterations have taken place in the con-

struction, equipment, systems, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment of fittings, or if intermediate surveys as specified by the Administration under Regulation 4 (1) (*c*) of this Annex are not carried out.

(3) A Certificate issued to a ship shall also cease to be valid upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Government issuing the new Certificate is fully satisfied that the ship is in full compliance with the requirements of Regulation 4 (4) (*a*) and (*b*) of this Annex. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall transmit as soon as possible to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulations 9 to 12 — *No change*

The existing text of Regulation 13 is replaced by the following Regulations:

Regulation 13

Segregated Ballast Tanks, Dedicated Clean Ballast Tanks and Crude Oil Washing

Subject to the provisions of Regulations 13C and 13D of this Annex, oil tankers shall comply with the requirements of this Regulation.

New oil tankers of 20,000 tons deadweight and above

(1) Every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with paragraphs (2), (3) and (4), or paragraph (5) as appropriate, of this Regulation.

(2) The capacity of the segregated ballast tanks shall be so determined that the ship may operate safely on ballast voyages without recourse to the use of cargo tanks for water ballast except as provided for in paragraph (3) or (4) of this Regulation. In all cases, however, the capacity of segregated ballast tanks shall be at least such that, in any ballast condition at any part of the voyage, including the conditions consisting of lightweight plus segregated ballast only, the ship's draughts and trim can meet each of the following requirements:

(*a*) the moulded draught amidships (dm) in metres (without taking into account any ship's deformation) shall not be less than:

$$dm = 2.0 + 0.02\ L;$$

(*b*) the draughts at the forward and after perpendiculars shall correspond to those determined by the draught amidships (dm) as specified in sub-paragraph (*a*) of this paragraph, in association with the trim by the stern of not greater than 0.015 *L*; and

(*c*) in any case the draught at the after perpendicular shall not be less than that which is necessary to obtain full immersion of the propeller(s).

(3) In no case shall ballast water be carried in cargo tanks except on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 9 of this Annex and in accordance with the requirements of Regulation 15 of this Annex and entry shall be made in the Oil Record Book referred to in Regulation 20 of this Annex.

(4) In the case of new crude oil tankers, the additional ballast permitted in paragraph (3) of this Regulation shall be carried in cargo tanks only if such tanks have been crude oil washed in accordance with Regulation 13B of this Annex before departure from an oil unloading port or terminal.

(5) Notwithstanding the provisions of paragraph (2) of this Regulation, the segregated ballast conditions for oil tankers less than 150 metres in length shall be to the satisfaction of the Administration.

(6) Every new crude oil tanker of 20,000 tons deadweight and above shall be fitted with a cargo tank cleaning system using crude oil washing. The Administration shall undertake to ensure that the system fully complies with the requirements of Regulation 13B of this Annex within one year after the tanker was first engaged in the trade of carrying crude oil or by the end of the third voyage carrying crude oil suitable for crude oil washing, whichever occurs later. Unless such oil tanker carries crude oil which is not suitable for crude oil washing, the oil tanker shall operate the system in accordance with the requirements of that Regulation.

Existing crude oil tankers of 40,000 tons deadweight and above

(7) Subject to the provisions of paragraphs (8) and (9) of this Regulation every existing crude oil tanker of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation from the date of entry into force of the present Protocol.

(8) Existing crude oil tankers referred to in paragraph (7) of this Regulation may, in lieu of being provided with segregated ballast tanks, operate with a cargo tank cleaning procedure using crude oil washing in accordance with Regulation 13B of this Annex unless the crude oil tanker is intended to carry crude oil which is not suitable for crude oil washing.

(9) Existing crude oil tankers referred to in paragraph (7) or (8) of this Regulation may, in lieu of being provided with segregated ballast tanks or operating with a cargo tank cleaning procedure using crude oil washing, operate with dedicated clean ballast tanks in accordance with the provi-

sions of Regulation 13A of this Annex for the following period:

(*a*) for crude oil tankers of 70,000 tons deadweight and above, until two years after the date of entry into force of the present Protocol; and

(*b*) for crude oil tankers of 40,000 tons deadweight and above but below 70,000 tons deadweight, until four years after the date of entry into force of the present Protocol.

Existing product carriers of 40,000 tons deadweight and above

(10) From the date of entry into force of the present Protocol, every existing product carrier of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation, or, alternatively, operate with dedicated clean ballast tanks in accordance with the provisions of Regulation 13A of this Annex.

An oil tanker qualified as a segregated ballast oil tanker

(11) Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraph (1), (7) or (10) of this Regulation may, however, be qualified as a segregated ballast tanker, provided that it complies with the requirements of paragraphs (2) and (3), or paragraph (5) as appropriate, of this Regulation.

Regulation 13A

Requirements for Oil Tankers with Dedicated Clean Ballast Tanks

(1) An oil tanker operating with dedicated clean ballast tanks in accordance with the provisions of Regulation 13 (9) or (10) of this Annex shall have adequate tank capacity, dedicated solely to the carriage of clean ballast as defined in Regulation 1 (16) of this Annex, to meet the requirements of Regulation 13 (2) and (3) of this Annex.

(2) The arrangements and operational procedures for dedicated clean ballast tanks shall comply with the requirements estallished by the Administration. Such requirements shall contain at least all the provisions of the Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in Resolution 14 and as may be revised by the Organization.

(3) An oil tanker operating with dedicated clean ballast tanks shall be equipped with an oil content meter, approved by the Administration on the basis of specifications recommended by the Organization*, to enable supervision of the oil content in balast water being discharged. The oil content meter shall be installed no later than at the first scheduled shipyard visit of the tanker following the entry into force of the present Protocol. Until such time as the oil content meter is installed, it shall immediately before discharge of ballast be established by examination of the ballast water from dedicated tanks that no contamination with oil has taken place.

(4) Every oil tanker operating with dedicated clean ballast tanks shall be provided with:

(*a*) a Dedicated Clean Ballast Tank Operation Manual detailing the system and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in paragraph (2) of this Regulation. If an alteration affecting the dedicated clean ballast tank system is made, the Operation Manual shall be revised accordingly; and

(*b*) a Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 1 to Appen dix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13B

Requirements for Crude Oil Washing

(1) Every crude oil washing system required to be provided in accordance with Regulation 13 (6) and (8) of this Annex shall comply with the requirements of this Regulation.

(2) The crude oil washing installation and associated equipment and arrangements shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the Specifications for the Design, Operation and Control of Crude Oil Washing Systems adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in Resolution 15 and as may be revised by the Organization.

(3) An inert gas system shall be provided in every cargo tank and slop tank in accordance with the appropriate Regulations of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as modified and added to by the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974.

(4) With respect to the ballasting of cargo tanks, sufficient cargo tanks shall be crude oil washed prior to each ballast voyage in order that, taking into account the tanker's trading pattern and expected weather conditions, ballast water is put only into cargo tanks which have been crude oil washed.

(5) Every oil tanker operating with crude oil wasging systems shall be provided with:

(*a*) an Operations and Equipment Manual detailing the system and equipment and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the

* Reference is made to the Recommmendation on International Performance and Test Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by Resolution A.393(x).

information set out in the Specifications referred to in paragraph (2) of this Regulation. If an alteration affecting the crude oil washing system is made, the Operations and Equipment Manual shall be revised accordingly; and

(*b*) a Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 2 to Appendix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13C

Existing Tankers Engaged in Specific Trades

(1) Subject to the provisions of paragraphs (2) and (3) of this Regulation, Regulation 13 (7) to (10) of this Annex shall not apply to an existing oil tanker solely engaged in specific trades between:

(*a*) ports or terminals within a State Party to the present Protocol; or

(*b*) ports or terminals of States Parties to the present Protocol, where:

(*i*) the voyage is entirely within a Special Area as defined in Regulation 10 (1) of this Annex; or

(*ii*) the voyage is entirely within other limits designated by the Organization.

(2) The provisions of paragraph (1) of this Regulation shall only apply when the ports or terminals where cargo is loaded on such voyages are provided with reception facilities adequate for the reception and treatment of all the ballast and tank washing water from oil tankers using them and all the following conditions are complied with:

(*a*) subject to the exceptions provided for in Regulation 11 of this Annex, all ballast water, including clean ballast water, and tank washing residues are retained on board and transferred to the reception facilities and the entry in the appropriate Sections of the Supplement to the Oil Record Book referred to in paragraph (3) of this Regulation is endorsed by the competent Port State authority;

(*b*) agreement has been reached between the Administration and the Governments of the Port States referred to in sub-paragraph (1) (*a*) or (*b*) of this Regulation concerning the use of an existing oil tanker for a specific trade;

(*c*) the adequacy of the reception facilities in accordance with the relevant provisions of this Annex at the ports or terminals referred to above, for the purpose of this Regulation, is approved by the Governments of the States Parties to the present Protocol within which such ports or terminals are situated; and

(*d*) the International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is solely engaged in such specific trade.

(3) Every oil tanker engaged in a specific trade shall be provided with a Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 3 to Appendix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13D

Existing Oil Tankers Having Special Ballast Arrangements

(1) Where an existing oil tanker is so constructed or operates in such a manner that it complies at all times with the draught and trim requirements set out in Regulation 13 (2) of this Annex without recourse to the use of ballast water, it shall be deemed to comply with the segregated ballast tank requirements referred to in Regulation 13 (7) of this Annex, provided that all of the following conditions are complied with:

(*a*) operational procedures and ballast arrangements are approved by the Administration;

(*b*) agreement is reached between the Administration and the Governments of the Port States Parties to the present Protocol concerned when the draught and trim requirements are achieved through an operational procedure; and

(*c*) the International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is operating with special ballast arrangements.

(2) In no case shall ballast water be carried in oil tanks except on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 9 of this Annex and in accordance with the requirements of Regulation 15 of this Annex, and entry shall be made in the Oil Record Book referred to in Regulation 20 of this Annex.

(3) An Administration which has endorsed a Certificate in accordance with sub-paragraph (1) (*c*) of this Regulation shall communicate to the Organization the particulars thereof for circulation to the Parties to the present Protocol.

Regulation 13E

Protective Location of Segregated Ballast Spaces

(1) In every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above, the segregated ballast tanks required to provide the capacity to comply with the requirements of Regulation 13 of this Annex which are located within the cargo tank length, shall be arranged in accordance with the requirements of paragraphs (2), (3) and (4) of this Regulation to provide a measure of protection against oil outflow in the event of grounding or collision.

(2) Segregated ballast tanks and spaces other than oil tanks within the cargo tank length (L_f) shall be so arranged as to comply with the following requirement:

$$\Sigma PA_c + \Sigma PA_s \geqslant J\ [L_f(B+2D)]$$

where: PA_c = the side shell area in square metres for each segregated ballast tank or space other than an oil tank based on projected moulded dimensions,

PA_s = the bottom shell area in square metres for each such tank or space based on projected moulded dimensions,

L_f = lenght in metres between the forward and after extremities of the cargo tanks,

B = maximum breadth of the ship in metres as defined in Regulation 1 (21) of this Annex,

D = moulded depth in metres measured vertically from the top of the keel to the top of the freeboard deck beam at side amidships. In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design,

J = 0.45 for oil tankers of 20,000 tons deadweight 0.30 for oil tankers of 200,000 tons deadweight and above, subject to the provisions of paragraph (3) of this Regulation.
For intermediate values deadweight the value of «J» shall be determined by linear interpolation.

Whenever symbols given in this paragraph appear in this Regulation, they have the meaning as defined in this paragraph.

(3) For tankers of 200,000 tons deadweight and above, the value of «J» may be reduced as follows:

$$J \text{ reduced} = \left[J - \left(a - \frac{O_c + O_s}{4\ O_A}\right)\right] \text{ or 0.2 whichever is greater}$$

where: a = 0.25 for oil tankers of 200,000 tons deadweight
a = 0.40 for oil tankers of 300,000 tons deadweight
a = 0.50 for oil tankers of 420,000 tons deadweight and above.

For intermediate values of deadweight the value of «a» shall be determined by linear interpolation.

O_c = as defined in Regulation 23 (1) (a) of this Annex,

O_s = as defined in Regultion 23 (1) (b) of this Annex,

O_A = the allowable oil outflow as required by Regulation 24 (2) of this Annex.

(4) In the determination of «PA_c» and «PA_s» for segregated ballast tanks and spaces other than oil tanks the following shall apply:

(a) the minimum width of each wing tank or space either of which extends for the full depth of the ship's side or from the deck to the top of the double bottom shall be not less than 2 metres. The width shall be measured inboard from the ship's side at right angles to the centre line. Where a lesser width is provided the wing tank or space shall not be taken into account when calculating the protecting area «PA_c»; and

(b) the minimum vertical depth of each double bottom tank or space shall be $B/15$ or 2 metres, whichever is the lesser. Where a lesser depth is provided the bottom tank or space shall not be taken into account when calculating the protecting area «PA_s».

The minimum width and depth of wing tanks and double bottom tanks shall be measured clear of the bilge area and, in the case of minimum width, shall be measured clear of any rounded gunwale area.

Regulation 14 — *No change*

Regulation 15

In the existing text of this Regulation, delete reference to «(1973)» in relation to the International Oil Pollution Prevention Certificate.

Regulations 16 and 17 — *No change*

Regulation 18

Pumping, Piping and Discharge Arrangements of Oil Tankers

Paragraphs (1) to (4) — *No change*

The following paragraphs are added to the existing text:

(5) Every new oil tanker required to be provided with segregated balast tanks, or fitted with a crude oil washing system shall comply with the following requirements:

(a) it shall be equipped with oil piping so designed and installed such that oil retention in the lines is minimized; and

(b) means shall be provided to drain all cargo pumps and all oil lines at the completion of cargo discharge, where necessary by connexion to a stripping device. The line and pump drainings shall be capable of being discharged both ashore and to a cargo tank or a slop tank. For discharge ashore a special small diameter line shall be provided for that purpose and connected outboard of the ship's manifold valves.

(6) Every existing crude oil carrier required to be provided with segregated ballast tanks, or fitted with a crude oil washing system or operated with dedicated clean ballast tanks, shall comply with the provisions of paragraph (5) (b) of this Regulation.

Regulation 19 — *No change*

Regulation 20

In the existing text of this Regulation, delete reference to «(1973)» in relation to the International Oil Pollution Prevention Certificate.

Regulations 21 to 25 — *No change*

APPENDIX I — LIST OF OILS

No change

APPENDIX II — FORM OF CERTIFICATE

The existing form of Certificate is replaced by the following form:

INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

Issued under the provisions of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, under the Authority of the Government of .....

.....

(full designation of the country)

by .....

(full designation of the competent person or organization authorized under the provisions of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973)

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage

Type of ship:

Crude oil tanker *
Product carrier *
Crude oil/product carrier *
Ship other than an oil tanker with cargo tanks coming under Regulation 2 (2) of Annex I of the Protocol *
Ship other than any of the above *

Date of building or major conversion contract .....
Date on which keel was laid or ship was at a similar stage of construction or on which major conversion was commenced.....
Date of delivery or completion of major conversion .....

PART A — ALL SHIPS

The ship is equipped with:

for ships of 400 tons gross tonnage and above:

(*a*) oily-water separating equipment * (capable of producing effluent with an oil content not exceeding 100 parts per million)
(*b*) an oil filtering system * (capable of producing effluent with an oil content not exceeding 100 parts per million)

for ships of 10,000 tons gross tonnage and above:

(*c*) an oil discharge monitoring and control system * (additional to (*a*) or (*b*) above) or
(*d*) oily-water separating equipment and an oil filtering system * (capable of producing effluent with an oil content not exceeding 15 parts per million) in lieu of (*a*) or (*b*) above.

Particulars of requirements from which exemption is granted under Regulation 2 (2) and 2 (4) (*a*) of Annex I of the Protocol:

.....
.....

Remarks:

*Endorsement for existing ships**

This is to certify that this ship has now been so equipped as to comply whith the requirements of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, as relating to existing ships **

Signed .....
(Signature of duly authorized official)

Place .....
Date .....
(Seal or stamp of the Authority, as appropriate)

* Delete as appropriate.

* This entry need not be reproduced on a Certificate other than the first Certificate issued to any ship.

** The period after the entry into force of the Protocol within which oily-water separating equipment, oil discharge control systems, oil filtering systems and/or slop tank arrangements must be provided is set out in Regulations 13A (3), 15 (1) and 16 (4) of Annex I of the Protocol.

PART B — OIL TANKERS*

Carrying Capacity of Ship (m^3)	Deadweight of Ship (metric tons)	Length of Ship (m)

It is certified that this ship is constructed and equipped, and must operate, in accordance with the following:

1. This ship is:
   (*a*) required to be constructed according to and complies with **
   (*b*) not required to be constructed according to **
   (*c*) not required to be constructed according to, but complies with **

   the requirements of Regulation 24 of Annex I of the Protocol.

2. This ship is:
   (*a*) required to be constructed according to and complies with **
   (*b*) not required to be constructed according to **

   the requirements of Regulation 13E of Annex I of the Protocol.

3. This ship is:
   (*a*) required to be provided with segregated ballast tanks according to, and complies with **
   (*b*) not required to be provided with segregated ballast tanks acoording to **
   (*c*) not required to be provided with segregated ballast tanks according to, but complies with **
   (*d*) in accordance with Regulation 13C or 13D of Annex I of the Protocol, and as specified in Part C of this Certificate, exempted from **

* This Part should be completed for oil tankers including combination carriers, and those entries which are applicable should be completed for ships other than oil tankers which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or above.

** Delete as appropriate.

the requirements of Regulation 13 of Annex I of the Protocol

(*e*) fitted with a cargo tank cleaning system using crude oil washing in accordance with the provisions in Regulation 13B of Annex I of the Protocol, in lieu of being provided with segregated ballast tanks *

(*f*) provided with dedicated clean ballast tanks in accordance with the provision of Regulation 13A of Annex I of the Protocol, in lieu of being either provided with segregated ballast tanks or fitted with a cargo tank cleaning system using crude oil washing *

4. This ship is:

(*a*) required to be fitted with a cargo tank cleaning system using crude oil washing according to, and complies with*

(*b*) not required to be fitted with a cargo tank cleaning system using crude oil washing according to*

the requirements of Regulation 13 (6) of Annex I of the Protocol.

Segregated ballast tanks **

The segregated ballast tanks are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)

Dedicated clean ballast tanks **

This ship is operating with dedicated clean ballast tanks until ..... (*date*), in accordance with the requirements of Regulation 13A of Annex I of the Protocol.

The dedicated clean ballast tanks are designated as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)

* Delete as appropriate.
** Delete if not applicable.

Manual *

This is to certify that this ship has been supplied with:

(*a*) a valid Dedicated Clean Ballast Tank Operation Manual in accordance with Regulation 13A of Annex I of the Protocol **

(*b*) a valid Operations and Equipment Manual for Crude Oil Washing in accordance with Regulation 13B of Annex I of the Protocol **.

Identification of the valid Manual .....
Signed .....
(Signature of duly authorized official)
Place .....
Date .....
(Seal or stamp of the Authority, as appropriate)

* Delete if not applicable.
** Delete as appropriate.

Identification of the valid Manual .....
Signed .....
(Signature of duly authorized official)
Place .....
Date .....
(Seal or stamp of the Authority, as appropriate)

PART C — EXEMPTIONS *

This is to certify that this ship is:

(*a*) solely engaged in trade between ..... and ..... in accordance with Regulation 13C of Annex I of the Protocol **; or

(*b*) operating with special ballast arrangements in accordance with Regulation 13D of Annex I of the Protocol **

and is therefore exempted from the requirements of Regulation 13 of Annex I of the Protocol.

Signed .....
(Signature of duly authorized official)
Place .....
Date .....
(Seal or stamp of the Authority, as appropriate)

This is to Certify:

That the ship has been surveyed in accordance with Regulation 4 of Annex I of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, concerning the prevention of pollution by oil; and that the survey shows that the structure, equipment, systems, fittings, arrangement and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of that Protocol.

This Certificate is valid until ..... subject to intermeditate survery(s) at intervals of .....
Issued at .....
(Place of issue of Certificate)
..... 19.. .....
(Signature of duly authorized official)
(Seal or stamp of the Authority, as appropriate)

Intermediate survey

This is to certify that at an intermediate survey required by Regulation 4 (1) (*c*) of Annex I of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, this ship and the condition thereof were found to comply wit' the relevant provisions of that Protocol.

Signed .....
(Signature of duly authorized official)
Place .....
Date .....
Next intermediate survey due .....
(Seal stamp of the Authority, as appropriate)
Signed .....
(Signature of duly authorized official)
Place .....
Date .....
Next intermediate survey due .....
(Seal or stamp of the Authority, as appropriate)
Signed .....
(Signature of duly authorized official)
Place .....
Date .....
Next intermediate survey due .....
(Seal stamp of the Authority, as appropriate)
Signed .....
(Signature of duly authorized official)
Place .....
Date .....
(Seal or stamp of the Authority, as appropriate)

* Delete if not applicable.
** Delete as appropriate.

APPENDIX III — FORM OF OIL RECORD BOOK

The following forms of Supplements to the Oil Record Book are added to the existing form:

Supplement 1

FORM OF SUPPLEMENT TO OIL RECORD BOOK FOR OIL TANKERS OPERATED WITH DEDICATED CLEAN BALLAST TANKS*

Name of ship .....
Distinctive numbers or letters .....
Total cargo carrying capacity ..... cubic metres
Total dedicated clean ballast capacity ..... cubic metres

The following tanks are designated as dedicated clean ballast tanks:

Tank	Volume (m^3)	Tank	Volume (m^3)

Note: The periods covered by the Supplement should be consistent with the periods covered by the Oil Record Book.

(A) Ballasting of dedicated clean ballast tanks

101.	Identity of tank(s) ballasted			
102.	Date and position of ship when water intended for flushing, or port ballast was taken to dedicated clean ballast tank(s)			
103.	Date and position of ship when pump(s) and lines were flushed to slop tank			
104.	Date and position of ship when additional ballast water was taken to dedicated clean ballast tank(s)			
105.	Date, time and position of ship when (*a*) valves to slop tank, (*b*) valves to cargo tanks, (*c*) other valves affecting the clean ballast system were closed			
106.	Quantity of clean ballast taken on board			

The undersigned certifies that, in addition to the above, all sea valves, cargo tank and pipeline connexions and connexions between tanks or inter-tank connexions, were secured on the completion of ballasting of dedicated clean ballast tanks.

Date of entry ..... Officer in charge .....
Master .....

(B) Discharge of clean ballast

107.	Identity of tank(s)			
108.	Date, time and position of ship at start of discharge of clean ballast (*a*) to sea, or (*b*) into reception facility			
109.	Date, time and position of ship upon completion of discharge to sea			
110.	Quantity discharged (*a*) to sea, or (*b*) into reception facility			
111.	Was the ballast water checked for oil contamination before discharge?			
112.	Was the discharge monitored during discharge by an oil content meter?			
113.	Was there any indication of oil contamination of the ballast water before or during discharge?			
114.	Date and position of ship when pump and lines were flushed after loading			
115.	Date, time and position of ship when (*a*) valves to slop tank, (*b*) valves to cargo tanks, (*c*) other valves affecting the clean ballast system were closed			
116.	Quantity of polluted water transferred to slop tank(s). [Identify slop tank(s)]			

The undersigned certifies that, in addition to the above, all sea valves, overboard discharge valves, cargo tank and pipeline connexions and connexions between tanks or inter-tank connexions, were secured on completion of discharge of clean ballast and that the pump(s) and pipes designated for clean ballast operations were properly cleaned upon completion of discharge of clean ballast.

Date of entry ..... Officer in charge .....
Master .....

Supplement 2

FORM OF SUPPLEMENT TO OIL RECORD BOOK FOR CRUDE OIL TANKERS OPERATING WITH A CARGO TANK CLEANING PROCEDURE USING CRUDE OIL WASHING*

Name of ship .....
Distinctive number or letters .....
Total cargo carrying capacity ..... cubic metres
Voyage from ..... to .....
[Port(s)] (date) [Port(s)] (date)

Notes: The periods covered by the Supplement should be consistent with the periods covered by the Oil Record Book.

The cargo tanks crude oil washed should be those laid down in the Operations and Equipment Manual required by Regulation 13B (5) (*a*) of the Protocol.

A separate column should be used for each tank washed or water rinsed.

(A) Crude oil washing

201.	Date when and port where crude oil washing was carried out or ship's position if carried out between two discharge ports			
202.	Identity of tank(s) washed (see Note 1)			

(*) This Supplement should be attached to the Oil Record Book for oil tankers operating with dedicated clean ballast tanks in accordance with Regulation 13A of Annex I of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973. Other information as required should be entered in the Oil Record Book.

* This Supplement should be attached to the Oil Record Book for crude oil tankers operating with a cargo tank cleaning procedure using crude oil washing in accordance with Regulation 13B of Annex I of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, and is intended to replace Section (*e*) of the Oil Record Book. Details of ballasting and deballasting and other information required should be entered in the Oil Record Book.

203.	Number of machines in use			
204.	Commenced washing (*a*) date and time (*b*) ullage			
205.	Washing pattern employed (see Note 2)			
206.	Washing line pressure			
207.	Completed or stopped washing (*a*) date and time (*b*) ullage			
208.	Remarks			

The tanks were washed in accordance with programmes given in the operations and equipment manual (see Note 3) and confirmed dry on completion.

Date of entry ..... Officer in charge .....
Master .....

Note 1 When an individual tank has more machines than can be operated simultaneously, as described in the Operations and Equipment Manual, then the section being crude oil washed should be identified, e.g. No. 2 centre, forward section.

Note 2 In accordance with the Operations and Equipment Manual, enter whether single-stage method of washing is employed. If multi-stage method is used, give the vertical arc covered by the machines and the number of times that arc is covered for that particular stage of the programme.

Note 3 If the programmes given in the Operations and Equipment Manual are followed, then details must be given under Remarks.

(B) Water rinsing or flushing of tank bottoms

209.	Date and position of ship when rinsing or flushing was carried out			
210.	Identity of tank(s) and date			
211.	Volume of water used			
212.	Transferred to: (*a*) reception facilities (*b*) slop tank(s) [identify slop tank(s)]			

Date of entry ..... Officer in charge .....
Master .....

Supplement 3

FORM OF SUPPLEMENT TO OIL RECORD BOOK FOR OIL TANKERS ENGAGED IN SPECIFIC TRADES*

Name of ship .....
Distinctive number or letters .....
Total cargo carrying capacity ..... cubic metres
Total ballast water capacity required for compliance with Regulation 13 (2) and (3) of Annex I of the Protocol .... cubic metres
Voyages from ..... to .....
[Port(s)] [Port(s)]

Note: The periods covered by the Supplement should be consistent whit the periods covered by the Oil Record Book.

(*) This Supplement should be attached to the Oil Record Book for oil tankers engaged in specific trades in accordance with Regulation 13C of Annex I of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, and is intended to replace sections (*d*), (*f*), (*g*) and (*i*) of the Oil Record Book. Other information required should be entered in the Oil Record Book.

(A) Loading of ballast water

301.	Identity of tank(s) ballasted			
302.	Date and position of ship when ballasted			
303.	Total quantity of ballast loaded in cubic metres			
304.	Method of calculating ballast quantity			
305.	Remarks			
306.	Date and signature of officier in charge			
307.	Date and signature of Master			

(B) Re-allocation of ballast water within the ship

308.	Reason for re-allocation			
309.	Date and signature of officer in charge			
310.	Date and signature of Master			

(C) Ballast water discharge to reception facility

311. Date and port(s) where ballast water was discharged			
312. Name or designation of reception facility			
313. Total quantity of ballast water discharged in cubic metres			
314. Method of calculating ballast quantity			
315. Date and signature of officer in charge			
316. Date and signature of Master			
317. Date, signature and stamp of port authority official			

ANNEX II

Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk

No change

ANNEX III

Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Forms, or in Freight Containers, Portable Tanks or Road and Rail Tank Wagons

No change

ANNEX IV

Regulations for the Prevention of Pollution by Sewage from Ships

No change

ANNEX V

Regulations for the Prevention of Pollution by Garbage from Ships

No change

(A versão da língua chinesa do presente texto será publicada logo que possível.)

(本文之中文本在可能公布時隨即公布。)

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 172/99

de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, de 1974 (SOLAS 74/78), aprovada pelo Decreto n.º 79/83, de 14 de Outubro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 14 de Outubro de 1983.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com o referido decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

DIRECÇÃO-GERAL DOS NEGÓCIOS ECONÓMICOS

Decreto do Governo n.º 79/83

de 14 de Outubro

O Governo decreta, nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o seguinte:

Artigo único. É aprovada, para ratificação, a Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974, cujos textos em inglês e a respectiva tradução para português vão anexos ao presente decreto.

Visto e aprovado em Conselho de Ministros de 29 de Setembro de 1983. — *Mário Soares — Carlos Alberto da Mota Pinto — Jaime José Matos da Gama.*

Assinado em 4 de Outubro de 1983.

Publique-se.

O Presidente da República, ANTÓNIO RAMALHO EANES.

Referendado em 6 de Outubro de 1983.

O Primeiro-Ministro, *Mário Soares.*

(D.R. n.º 237, I Série, suplemento, de 14 de Outubro de 1983)

共和國總統府

共和國總統令 第172/99號
八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將《1974年國際海上人命安全公約》（SOLAS 74/78）延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經十月十四日第79/83號命令通過，且文本已公布於一九八三年十月十四日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過公約之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月五日第181期《共和國公報》第一組-A）

外交部

經濟事務統籌司

政府命令 第79/83號
十月十四日

政府根據《憲法》第二百條第一款c項之規定，命令制定法規如下：

獨一條

通過《1974年國際海上人命安全公約》，以待批准；該公約之英文本及葡文譯本附於本命令。

一九八三年九月二十九日於部長會議批閱及通過——*Mário Soares —— Carlos Alberto da Mota Pinto —— Jaime José Matos da Gama*

一九八三年十月四日簽署。

命令公布。

共和國總統

ANTÓNIO RAMALHO EANES

一九八三年十月六日副署。

總理

Mário Soares

（一九八三年十月十四日第237期《共和國公報》第一組副刊）

ATTACHMENT 1

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

THE CONTRACTING GOVERNMENTS,

BEING DESIROUS of promoting safety of life at sea by establishing in common agreement uniform principles and rules directed thereto,

CONSIDERING that this end may best be achieved by the conclusion of a Convention to replace the International Convention for the Safety of Life at Sea, 1960, taking account of developments since that Convention was concluded,

HAVE AGREED as follows:

ARTICLE I

General Obligations under the Convention

(a) The Contracting Governments undertake to give effect to the provisions of the present Convention and the Annex thereto, which shall constitute an integral part of the present Convention. Every reference to the present Convention constitutes at the same time a reference to the Annex.

(b) The Contracting Governments undertake to promulgate all laws, decrees, orders and regulations and to take all other steps which may be necessary to give the present Convention full and complete effect, so as to ensure that, from the point of view of safety of life, a ship is fit for the service for which it is intended.

ARTICLE II

Application

The present Convention shall apply to ships entitled to fly the flag of States the Governments of which are Contracting Governments.

ARTICLE III

Laws, Regulations

The Contracting Governments undertake to communicate to and deposit with the Secretary-General of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "the Organization"):

(a) a list of non-governmental agencies which are authorized to act in their behalf in the administration of measures for safety of life at sea for circulation to the Contracting Governments for the information of their officers;

(b) the text of laws, decrees, orders and regulations which shall have been promulgated on the various matters within the scope of the present Convention;

(c) a sufficient number of specimens of their Certificates issued under the provisions of the present Convention for circulation to the Contracting Governments for the information of their officers.

ARTICLE IV

Cases of Force Majeure

(a) A ship, which is not subject to the provisions of the present Convention at the time of its departure on any voyage, shall not become subject to the provisions of the present Convention on account of any deviation from its intended voyage due to stress of weather or any other cause of *force majeure*.

(b) Persons who are on board a ship by reason of *force majeure* or in consequence of the obligation laid upon the master to carry shipwrecked or other persons shall not be taken into account for the purpose of ascertaining the application to a ship of any provisions of the present Convention.

ARTICLE V

Carriage of Persons in Emergency

(a) For the purpose of evacuating persons in order to avoid a threat to the security of their lives a Contracting Government may permit the carriage of a larger number of persons in its ships than is otherwise permissible under the present Convention.

(b) Such permission shall not deprive other Contracting Governments of any right of control under the present Convention over such ships which come within their ports.

(c) Notice of any such permission, together with a statement of the circumstances, shall be sent to the Secretary-General of the Organization by the Contracting Government granting such permission.

ARTICLE VI

Prior Treaties and Conventions

(a) As between the Contracting Governments, the present Convention replaces and abrogates the International Convention for the Safety of Life at Sea which was signed in London on 17 June 1960.

(b) All other treaties, conventions and arrangements relating to safety of life at sea, or matters appertaining thereto, at present in force between Governments parties to the present Convention shall continue to have full and complete effect during the terms thereof as regards:

(i) ships to which the present Convention does not apply;

(ii) ships to which the present Convention applies, in respect of matters for which it has not expressly provided.

(c) To the extent, however, that such treaties, conventions or arrangements conflict with the provisions of the present Convention, the provisions of the present Convention shall prevail.

(d) All matters which are not expressly provided for in the present Convention remain subject to the legislation of the Contracting Governments.

ARTICLE VII

Special Rules drawn up by Agreement

When in accordance with the present Convention special rules are drawn up by agreement between all or some of the Contracting Governments, such rules shall be communicated to the Secretary-General of the Organization for circulation to all Contracting Governments.

ARTICLE VIII

Amendments

(a) The present Convention may be amended by either of the procedures specified in the following paragraphs.

(b) Amendments after consideration within the Organization:

(i) Any amendment proposed by a Contracting Government shall be submitted to the Secretary-General of the Organization, who shall then circulate it to all Members of the Organization and all Contracting Governments at least six months prior to its consideration.

(ii) Any amendment proposed and circulated as above shall be referred to the Maritime Safety Committee of the Organization for consideration.

(iii) Contracting Governments of States, whether or not Members of the Organization, shall be entitled to participate in the proceedings of the Maritime Safety Committee for the consideration and adoption of amendments.

(iv) Amendments shall be adopted by a two-thirds majority of the Contracting Governments present and voting in the Maritime Safety Committee expanded as provided for in sub-paragraph (iii) of this paragraph (hereinafter referred to as "the expanded Maritime Safety Committee") on condition that at least one-third of the Contracting Governments shall be present at the time of voting.

(v) Amendments adopted in accordance with sub-paragraph (iv) of this paragraph shall be communicated by the Secretary-General of the Organization to all Contracting Governments for acceptance.

(vi) (1) An amendment to an Article of the Convention or to Chapter I of the Annex shall be deemed to have been accepted on the date on which it is accepted by two-thirds of the Contracting Governments.

(2) An amendment to the Annex other than Chapter I shall be deemed to have been accepted:

(aa) at the end of two years from the date on which it is communicated to Contracting Governments for acceptance; or

(bb) at the end of a different period, which shall not be less than one year, if so determined at the time of its adoption by a two-thirds majority of the Contracting Governments present and voting in the expanded Maritime Safety Committee.

However, if within the specified period either more than one-third of Contracting Governments, or Contracting Governments the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, notify the Secretary-General of the Organization that they object to the amendment, it shall be deemed not to have been accepted.

(vii) (1) An amendment to an Article of the Convention or to Chapter I of the Annex shall enter into force with respect to those Contracting Governments which have accepted it, six months after the date on which it is deemed to have been accepted, and with respect to each Contracting Government which accepts it after that date, six months after the date of that Contracting Government's acceptance.

(2) An amendment to the Annex other than Chapter I shall enter into force with respect to all Contracting Governments, except those which have objected to the amendment under sub-paragraph (vi)(2) of this paragraph and which have not withdrawn such objections, six months after the date on which it is deemed to have been accepted. However, before the date set for entry into force, any Contracting Government may give notice to the Secretary-General of the Organization that it exempts itself from giving effect to that amendment for a period not longer than one year from the date of its entry into force, or for such longer period as may be determined by a

two-thirds majority of the Contracting Governments present and voting in the expanded Maritime Safety Committee at the time of the adoption of the amendment.

(c) Amendment by a Conference:

(i) Upon the request of a Contracting Government concurred in by at least one-third of the Contracting Governments, the Organization shall convene a Conference of Contracting Governments to consider amendments to the present Convention.

(ii) Every amendment adopted by such a Conference by a two-thirds majority of the Contracting Governments present and voting shall be communicated by the Secretary-General of the Organization to all Contracting Governments for acceptance.

(iii) Unless the Conference decides otherwise, the amendment shall be deemed to have been accepted and shall enter into force in accordance with the procedures specified in sub-paragraphs (b)(vi) and (b)(vii) respectively of this Article, provided that references in these paragraphs to the expanded Maritime Safety Committee shall be taken to mean references to the Conference.

(d) (i) A Contracting Government which has accepted an amendment to the Annex which has entered into force shall not be obliged to extend the benefit of the present Convention in respect of the certificates issued to a ship entitled to fly the flag of a State the Government of which, pursuant to the provisions of sub-paragraph (b)(vi)(2) of this Article, has objected to the amendment and has not withdrawn such an objection, but only to the extent that such certificates relate to matters covered by the amendment in question.

(ii) A Contracting Government which has accepted an amendment to the Annex which has entered into force shall extend the benefit of the present Convention in respect of the certificates issued to a ship entitled to fly the flag of a State the Government of which, pursuant to the provisions of sub-paragraph (b)(vii)(2) of this Article, has notified the Secretary-General of the Organization that it exempts itself from giving effect to the amendment.

(e) Unless expressly provided otherwise, any amendment to the present Convention made under this Article, which relates to the structure of a ship, shall apply only to ships the keels of which are laid or which are at a similar stage of construction, on or after the date on which the amendment enters into force.

(f) Any declaration of acceptance of, or objection to, an amendment or any notice given under sub-paragraph (b)(vii)(2) of this Article shall be submitted in writing to the Secretary-General of the Organization, who shall inform all Contracting Governments of any such submission and the date of its receipt.

(g) The Secretary-General of the Organization shall inform all Contracting Governments of any amendments which enter into force under this Article, together with the date on which each such amendment enters into force.

ARTICLE IX

Signature, Ratification, Acceptance, Approval and Accession

(a) The present Convention shall remain open for signature at the Headquarters of the Organization from 1 November 1974 until 1 July 1975 and shall thereafter remain open for accession. States may become parties to the present Convention by:

(i) signature without reservation as to ratification, acceptance or approval; or

(ii) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or

(iii) accession.

(b) Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.

(c) The Secretary-General of the Organization shall inform the Governments of all States which have signed the present Convention or acceded to it of any signature or of the deposit of any instrument of ratification, acceptance, approval or accession and the date of its deposit.

ARTICLE X

Entry into Force

(a) The present Convention shall enter into force twelve months after the date on which not less than twenty-five States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become parties to it in accordance with Article IX.

(b) Any instrument of ratification, acceptance, approval or accession deposited after the date on which the present Convention enters into force shall take effect three months after the date of deposit.

(c) After the date on which an amendment to the present Convention is deemed to have been accepted under Article VIII, any instrument of ratification, acceptance, approval or accession deposited shall apply to the Convention as amended.

ARTICLE XI

Denunciation

(a) The present Convention may be denounced by any Contracting Government at any time after the expiry of five years from the date on which the Convention enters into force for that Government.

(b) Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General of the Organization who shall notify all the other Contracting Governments of any instrument of denunciation received and of the date of its receipt as well as the date on which such denunciation takes effect.

(c) A denunciation shall take effect one year, or such longer period as may be specified in the instrument of denunciation, after its receipt by the Secretary-General of the Organization.

ARTICLE XII

Deposit and Registration

(a) The present Convention shall be deposited with the Secretary-General of the Organization who shall transmit certified true copies thereof to the Governments of all States which have signed the present Convention or acceded to it.

(b) As soon as the present Convention enters into force, the text shall be transmitted by the Secretary-General of the Organization to the Secretary-General of the United Nations for registration and publication, in accordance with Article 102 of the Charter of the United Nations.

ARTICLE XIII

Languages

The present Convention is established in a single copy in the Chinese, English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German and Italian languages shall be prepared and deposited with the signed original.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments for that purpose, have signed the present Convention.

DONE AT LONDON this first day of November one thousand nine hundred and seventy-four.

ANNEX

CHAPTER I

GENERAL PROVISIONS

PART A - APPLICATION, DEFINITIONS, ETC.

Regulation 1

Application

(a) Unless expressly provided otherwise, the present Regulations apply only to ships engaged on international voyages.

(b) The classes of ships to which each Chapter applies are more precisely defined, and the extent of the application is shown, in each Chapter.

Regulation 2

Definitions

For the purpose of the present Regulations, unless expressly provided otherwise:

(a) "Regulations" means the Regulations contained in the Annex to the present Convention.

(b) "Administration" means the Government of the State whose flag the ship is entitled to fly.

(c) "Approved" means approved by the Administration.

(d) "International voyage" means a voyage from a country to which the present Convention applies to a port outside such country, or conversely.

(e) A passenger is every person other than:

(i) the master and the members of the crew or other persons employed or engaged in any capacity on board a ship on the business of that ship; and

(ii) a child under one year of age.

(f) A passenger ship is a ship which carries more than twelve passengers.

(g) A cargo ship is any ship which is not a passenger ship.

(h) A tanker is a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable* nature.

(i) A fishing vessel is a vessel used for catching fish, whales, seals, walrus or other living resources of the sea.

(j) A nuclear ship is a ship provided with a nuclear power plant.

(k) "New ship" means a ship the keel of which is laid or which is at a similar stage of construction on or after the date of coming into force of the present Convention.

(l) "Existing ship" means a ship which is not a new ship.

(m) A mile is 1,852 metres or 6,080 feet.

Regulation 3

Exceptions

(a) The present Regulations, unless expressly provided otherwise, do not apply to:

(i) Ships of war and troopships.

(ii) Cargo ships of less than 500 tons gross tonnage.

(iii) Ships not propelled by mechanical means.

(iv) Wooden ships of primitive build.

(v) Pleasure yachts not engaged in trade.

(vi) Fishing vessels.

(b) Except as expressly provided in Chapter V, nothing herein shall apply to ships solely navigating the Great Lakes of North America and the River St. Lawrence as far east as a straight line drawn from Cap des Rosiers to West Point, Anticosti Island and, on the north side of Anticosti Island, the 63rd Meridian.

Regulation 4

Exemptions

(a) A ship which is not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage may be exempted by the Administration from any of the requirements of the present Regulations provided that it complies with safety requirements which are adequate in the opinion of the Administration for the voyage which is to be undertaken by the ship.

(b) The Administration may exempt any ship which embodies features of a novel kind from any of the provisions of Chapters II-1, II-2, III and IV of these Regulations the application of which might seriously impede research into the development of such features and their incorporation in ships engaged on international voyages. Any such ship shall, however, comply with safety requirements which, in the opinion of that Administration, are adequate for the service for which it is intended and are such as to ensure the overall safety of the ship and which are acceptable to the Governments of the States to be visited by the ship. The Administration which allows any such exemption shall communicate to the Organization particulars of same and the reasons therefor which the Organization shall circulate to the Contracting Governments for their information.

Regulation 5

Equivalents

(a) Where the present Regulations require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made, the Administration may allow any other fitting, material, appliance or apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that ship, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by the present Regulations.

(b) Any Administration which so allows, in substitution, a fitting, material, appliance or apparatus, or type thereof, or provision, shall communicate to the Organization particulars thereof together with a report on any trials made and the Organization shall circulate such particulars to other Contracting Governments for the information of their officers.

PART B – SURVEYS AND CERTIFICATES

Regulation 6

Inspection and Survey

The inspection and survey of ships, so far as regards the enforcement of the provisions of the present Regulations and the granting of exemptions therefrom, shall be carried out by officers of the country in which the ship is registered, provided that the Government of each country may entrust the inspection and survey either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Government concerned fully guarantees the completeness and efficiency of the inspection and survey.

* "Inflammable" has the same meaning as "flammable".

Regulation 7

Surveys of Passenger Ships

(a) A passenger ship shall be subjected to the surveys specified below:

(i) A survey before the ship is put in service.

(ii) A periodical survey once every twelve months.

(iii) Additional surveys, as occasion arises.

(b) The surveys referred to above shall be carried out as follows:

(i) The survey before the ship is put in service shall include a complete inspection of its structure, machinery and equipment, including the outside of the ship's bottom and the inside and outside of the boilers. This survey shall be such as to ensure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation, radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire protection, fire detecting and extinguishing appliances, radar, echo-sounding device, gyro-compass, pilot ladders, mechanical pilot hoists and other equipment, fully comply with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration for ships of the service for which it is intended. The survey shall also be such as to ensure that the workmanship of all parts of the ship and its equipment is in all respects satisfactory, and that the ship is provided with the lights, shapes, means of making sound signals and distress signals as required by the provisions of the present Convention and the International Regulations for Preventing Collisions at Sea in force.

(ii) The periodical survey shall include an inspection of the structure, boilers and other pressure vessels, machinery and equipment, including the outside of the ship's bottom. The survey shall be such as to ensure that the ship, as regards the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation, radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire protection, fire detecting and extinguishing appliances, radar, echo-sounding device, gyro-compass, pilot ladders, mechanical pilot hoists and other equipment, is in satisfactory condition and fit for the service for which it is intended, and that it complies with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration. The lights, shapes and means of making sound signals and the distress signals carried by the ship shall also be subject to the above-mentioned survey for the purpose of ensuring that they comply with the requirements of the present Convention and of the International Regulations for Preventing Collisions at Sea in force.

(iii) A survey either general or partial, according to the circumstances, shall be made every time an accident occurs or a defect is discovered which affects the safety of the ship or the efficiency or completeness of its life-saving appliances or other equipment, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs are in all respects satisfactory, and that the ship complies in all respects with the provisions of the present Convention and of the International Regulations for Preventing Collisions at Sea in force, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration.

(c) (i) The laws, decrees, orders and regulations referred to in paragraph (b) of this Regulation shall be in all respects such as to ensure that, from the point of view of safety of life, the ship is fit for the service for which it is intended.

(ii) They shall among other things prescribe the requirements to be observed as to the initial and subsequent hydraulic or other acceptable alternative tests to which the main and auxiliary boilers, connexions, steam pipes, high pressure receivers, and fuel tanks for internal combustion engines are to be submitted including the test procedures to be followed and the intervals between two consecutive tests.

Regulation 8

Surveys of Life-Saving Appliances and other Equipment of Cargo Ships

The life-saving appliances, except a radiotelegraph installation in a motor lifeboat or a portable radio apparatus for survival craft, the echo-sounding device, the gyro-compass, and the fire-extinguishing appliances of cargo ships to which Chapters II-1, II-2, III and V apply shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter with the substitution of 24 months for 12 months in sub-paragraph (a)(ii) of that Regulation. The fire control plans in new ships and the pilot ladders, mechanical pilot hoists, lights, shapes and means of making sound signals carried by new and existing ships shall be included in the surveys for the purpose of ensuring that they comply fully with the requirements of the present Convention and, where applicable, the International Regulations for Preventing Collisions at Sea in force.

Regulation 9

Surveys of Radio and Radar Installations of Cargo Ships

The radio and radar installations of cargo ships to which Chapters IV and V apply and any radiotelegraph installation in a motor lifeboat or portable radio

apparatus for survival craft which is carried in compliance with the requirements of Chapter III shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter.

Regulation 10

Surveys of Hull, Machinery and Equipment of Cargo Ships

The hull, machinery and equipment (other than items in respect of which Cargo Ship Safety Equipment Certificates, Cargo Ship Safety Radiotelegraphy Certificates or Cargo Ship Safety Radiotelephony Certificates are issued) of a cargo ship shall be surveyed on completion and thereafter in such manner and at such intervals as the Administration may consider necessary in order to ensure that their condition is in all respects satisfactory. The survey shall be such as to ensure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installations and other equipment are in all respects satisfactory for the service for which the ship is intended.

Regulation 11

Maintenance of Conditions after Survey

After any survey of the ship under Regulations 7, 8, 9 or 10 of this Chapter has been completed, no change shall be made in the structural arrangements, machinery, equipment, etc. covered by the survey, without the sanction of the Administration.

Regulation 12

Issue of Certificates

(a) (i) A certificate called a Passenger Ship Safety Certificate shall be issued after inspection and survey to a passenger ship which complies with the requirements of Chapters II-1, II-2, III and IV and any other relevant requirements of the present Regulations.

(ii) A certificate called a Cargo Ship Safety Construction Certificate shall be issued after survey to a cargo ship which satisfies the requirements for cargo ships on survey set out in Regulation 10 of this Chapter and complies with the applicable requirements of Chapters II-1 and II-2 other than those relating to fire-extinguishing appliances and fire control plans.

(iii) A certificate called a Cargo Ship Safety Equipment Certificate shall be issued after inspection to a cargo ship which complies with the relevant requirements of Chapters II-1, II-2 and III and any other relevant requirements of the present Regulations.

(iv) A certificate called a Cargo Ship Safety Radiotelegraphy Certificate shall be issued after inspection to a cargo ship, fitted with a radiotelegraph installation, which complies with the requirements of Chapter IV and any other relevant requirements of the present Regulations.

(v) A certificate called a Cargo Ship Safety Radiotelephony Certificate shall be issued after inspection to a cargo ship, fitted with a radiotelephone installation, which complies with the requirements of Chapter IV and any other relevant requirements of the present Regulations.

(vi) When an exemption is granted to a ship under and in accordance with the provisions of the present Regulations, a certificate called an Exemption Certificate shall be issued in addition to the certificates prescribed in this paragraph.

(vii) Passenger Ship Safety Certificates, Cargo Ship Safety Construction Certificates, Cargo Ship Safety Equipment Certificates, Cargo Ship Safety Radiotelegraphy Certificates, Cargo Ship Safety Radiotelephony Certificates and Exemption Certificates shall be issued either by the Administration or by any person or organization duly authorized by it. In every case, that Administration assumes full responsibility for the Certificate.

(b) Notwithstanding any other provision of the present Convention any certificate issued under, and in accordance with, the provisions of the International Convention for the Safety of Life at Sea, 1960, which is current when the present Convention comes into force in respect of the Administration by which the certificate is issued, shall remain valid until it expires under the terms of Regulation 14 of Chapter I of that Convention.

(c) A Contracting Government shall not issue certificates under, and in accordance with, the provisions of the International Convention for the Safety of Life at Sea, 1960, 1948 or 1929, after the date on which acceptance of the present Convention by the Government takes effect.

Regulation 13

Issue of Certificate by another Government

A Contracting Government may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the requirements of the present Regulations are complied with, shall issue certificates to the ship in accordance with the present Regulations. Any certificate so issued must contain a statement to the effect that it has been issued at the request of the Government of the country in which the ship is or will be registered, and it shall have the same force and receive the same recognition as a certificate issued under Regulation 12 of this Chapter.

Regulation 14

Duration of Certificates

(a) Certificates other than Cargo Ship Safety Construction Certificates, Cargo Ship Safety Equipment Certificates and Exemption Certificates shall be issued for a period of not more than 12 months. Cargo Ship Safety Equipment Certificates shall be issued for a period of not more than 24 months. Exemption Certificates shall not be valid for longer than the period of the certificates to which they refer.

(b) If a survey takes place within two months before the end of the period for which a Cargo Ship Safety Radiotelegraphy Certificate or a Cargo Ship Safety Radiotelephony Certificate issued in respect of cargo ships of 300 tons gross tonnage and upwards, but less than 500 tons gross tonnage, was originally issued, that certificate may be withdrawn, and a new certificate may be issued which shall expire 12 months after the end of the said period.

(c) If a ship at the time when its certificate expires is not in a port of the country in which it is registered, the certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the country in which it is registered or is to be surveyed, and then only in cases where it appears proper and reasonable so to do.

(d) No certificate shall be thus extended for a longer period than five months, and a ship to which such extension is granted shall not, on its arrival in the country in which it is registered or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or country without having obtained a new certificate.

(e) A certificate which has not been extended under the foregoing provisions of this Regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

Regulation 15

Form of Certificates

(a) All certificates shall be drawn up in the official language or languages of the country by which they are issued.

(b) The form of the certificates shall be that of the models given in the Appendix to the present Regulations. The arrangement of the printed part of the model certificates shall be exactly reproduced in the certificates issued, or in certified copies thereof, and the particulars inserted in the certificates issued, or in certified copies thereof, shall be in Roman characters and Arabic figures.

Regulation 16

Posting up of Certificates

All certificates or certified copies thereof issued under the present Regulations shall be posted up in a prominent and accessible place in the ship.

Regulation 17

Acceptance of Certificates

Certificates issued under the authority of a Contracting Government shall be accepted by the other Contracting Governments for all purposes covered by the present Convention. They shall be regarded by the other Contracting Governments as having the same force as certificates issued by them.

Regulation 18

Qualification of Certificates

(a) If in the course of a particular voyage a ship has on board a number of persons less than the total number stated in the Passenger Ship Safety Certificate and is in consequence, in accordance with the provisions of the present Regulations, free to carry a smaller number of lifeboats and other life-saving appliances than that stated in the Certificate, an annex may be issued by the Government, person or organization referred to in Regulation 12 or 13 of this Chapter.

(b) This annex shall state that in the circumstances there is no infringement of the provisions of the present Regulations. It shall be annexed to the Certificate and shall be substituted for it in so far as the life-saving appliances are concerned. It shall be valid only for the particular voyage for which it is issued.

Regulation 19

Control

Every ship holding a certificate issued under Regulation 12 or Regulation 13 of this Chapter is subject in the ports of the other Contracting Governments to control by officers duly authorized by such Governments in so far as this control is directed towards verifying that there is on board a valid certificate. Such certificate shall be accepted unless there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of that certificate. In that case, the officer carrying out the control shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without danger to the passengers or the crew. In the event of this control giving rise to intervention of any kind, the officer carrying out the control shall inform the Consul of the country in which the ship is registered in writing forthwith of all the circumstances in which intervention was deemed to be necessary, and the facts shall be reported to the Organization.

Regulation 20

Privileges

The privileges of the present Convention may not be claimed in favour of any ship unless it holds appropriate valid certificates.

PART C - CASUALTIES

Regulation 21

Casualties

(a) Each Administration undertakes to conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the present Regulations might be desirable.

(b) Each Contracting Government undertakes to supply the Organization with pertinent information concerning the findings of such investigations. No reports or recommendations of the Organization based upon such information shall disclose the identity or nationality of the ships concerned or in any manner fix or imply responsibility upon any ship or person.

CHAPTER II-1

CONSTRUCTION - SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

PART A - GENERAL

Regulation 1

Application

(a) (i) Unless expressly provided otherwise, this Chapter applies to new ships.

(ii) Existing passenger ships and cargo ships shall comply with the following:

(1) for ships the keels of which were laid or which were at a similar stage of construction on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to new ships as defined in that Chapter are complied with;

(2) for ships the keels of which were laid or which were at a similar stage of construction on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1948, but before the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, the Administration shall ensure that the requirements which were applied under Chapter II of the 1948 Convention to new ships as defined in that Chapter are complied with;

(3) for ships the keels of which were laid or which were at a similar stage of construction before the date of coming into force of the International Convention for the Safety of Life at Sea, 1948, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to existing ships as defined in that Chapter are complied with;

(4) as regards the requirements of Chapter II-1 of the present Convention which are not contained in Chapter II of the 1960 and 1948 Conventions, the Administration shall decide which of these requirements shall be applied to existing ships as defined in the present Convention.

(iii) A ship which undergoes repairs, alterations, modifications and outfitting related thereto shall continue to comply with at least the requirements previously applicable to the ship. An existing ship in such a case shall not, as a rule, comply to a lesser extent with the requirements for a new ship than it did before. Repairs, alterations and modifications of a major character and outfitting related thereto should meet the requirements for a new ship in so far as the Administration deems reasonable and practicable.

(b) For the purpose of this Chapter:

(i) A new passenger ship is a passenger ship the keel of which is laid or which is at a similar stage of construction on or after the date of coming into force of the present Convention, or a cargo ship which is converted to a passenger ship on or after that date, all other passenger ships being described as existing passenger ships.

(ii) A new cargo ship is a cargo ship the keel of which is laid or which is at a similar stage of construction after the date of coming into force of the present Convention.

(c) The Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific [illegible] Chapter unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships belonging to its country which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.

(d) In the case of a passenger ship which is permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided, it shall comply with the special standards of subdivision set out in paragraph (e) of Regulation 5 of this Chapter, and the associated special provisions regarding permeability in paragraph (d) of Regulation 4 of this Chapter, unless the Administration is satisfied that, having regard to the nature and conditions of the voyage, compliance with the other provisions of the Regulations of this Chapter and Chapter II-2 of the present Convention is sufficient.

(e) In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this Chapter, may exempt such ships, when they belong to its country, from those requirements, provided that they comply fully with the provisions of:

(i) the Rules annexed to the Special Trade Passenger Ships Agreement, 1971, and

(ii) the Rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973, when it enters into force.

Regulation 2

Definitions

For the purpose of this Chapter, unless expressly provided otherwise:

(a) (i) A subdivision load line is a water-line used in determining the subdivision of the ship.

(ii) The deepest subdivision load line is the water-line which corresponds to the greatest draught permitted by the subdivision requirements which are applicable.

(b) The length of the ship is the length measured between perpendiculars taken at the extremities of the deepest subdivision load line.

(c) The breadth of the ship is the extreme width from outside of frame to outside of frame at or below the deepest subdivision load line.

(d) The draught is the vertical distance from the moulded base line amidships to the subdivision load line in question.

(e) The bulkhead deck is the uppermost deck up to which the transverse watertight bulkheads are carried.

(f) The margin line is a line drawn at least 76 millimetres (3 inches) below the upper surface of the bulkhead deck at side.

(g) The permeability of a space is the percentage of that space which can be occupied by water.

The volume of a space which extends above the margin line shall be measured only to the height of that line.

(h) The machinery space is to be taken as extending from the moulded base line to the margin line and between the extreme main transverse watertight bulkheads bounding the spaces containing the main and auxiliary propelling machinery, boilers serving the needs of propulsion, and all permanent coal bunkers.

In the case of unusual arrangements, the Administration may define the limits of the machinery spaces.

(i) Passenger spaces are those which are provided for the accommodation and use of passengers, excluding baggage, store, provision and mail rooms.

For the purposes of Regulations 4 and 5 of this Chapter, spaces provided below the margin line for the accommodation and use of the crew shall be regarded as passenger spaces.

(j) In all cases volumes and areas shall be calculated to moulded lines.

PART B - SUBDIVISION AND STABILITY*

(Part B applies to passenger ships only, except that Regulation 19 also applies to cargo ships.)

Regulation 3

Floodable Length

(a) The floodable length at any point of the length of a ship shall be determined by a method of calculation which takes into consideration the form, draught and other characteristics of the ship in question.

(b) In a ship with a continuous bulkhead deck, the floodable length at a given point is the maximum portion of the length of the ship, having its centre at the point in question, which can be flooded under the definite assumptions set forth in Regulation 4 of this Chapter without the ship being submerged beyond the margin line.

(c) (i) In the case of a ship not having a continuous bulkhead deck, the floodable length at any point may be determined to an assumed continuous margin line which at no point is less than 76 millimetres (3 inches) below the top of the deck (at side) to which the bulkheads concerned and the shell are carried watertight.

* Instead of the requirements in this Part, the Regulations on Subdivision and Stability of Passenger Ships as an Equivalent to Part B of Chapter II of the International Convention for the Safety of Life at Sea, 1960, adopted by the Organization by Resolution A.265(VIII), may be used, if applied, in their entirety.

(ii) Where a portion of an assumed margin line is appreciably below the deck to which bulkheads are carried, the Administration may permit a limited relaxation in the watertightness of those portions of the bulkheads which are above the margin line and immediately under the higher deck.

Regulation 4

Permeability

(a) The definite assumptions referred to in Regulation 3 of this Chapter relate to the permeabilities of the spaces below the margin line.

In determining the floodable length, a uniform average permeability shall be used throughout the whole length of each of the following portions of the ship below the margin line:

(i) the machinery space as defined in Regulation 2 of this Chapter;

(ii) the portion forward of the machinery space; and

(iii) the portion abaft the machinery space.

(b) (i) The uniform average permeability throughout the machinery space shall be determined from the formula –

$$85 + 10\left(\frac{a - c}{v}\right)$$

where:

a = volume of the passenger spaces, as defined in Regulation 2 of this Chapter, which are situated below the margin line within the limits of the machinery space;

c = volume of between deck spaces below the margin line within the limits of the machinery space which are appropriated to cargo, coal or stores;

v = whole volume of the machinery space below the margin line.

(ii) Where it is shown to the satisfaction of the Administration that the average permeability as determined by detailed calculation is less than that given by the formula, the detailed calculated value may be used. For the purpose of such calculation, the permeabilities of passenger spaces, as defined in Regulation 2 of this Chapter, shall be taken as 95, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such values as may be approved in each case.

(c) Except as provided in paragraph (d) of this Regulation, the uniform average permeability throughout the portion of the ship before (or abaft) the machinery space shall be determined from the formula –

$$63 + 35\frac{a}{v}$$

where:

a = volume of the passenger spaces, as defined in Regulation 2 of this Chapter, which are situated below the margin line, before (or abaft) the machinery space, and

v = whole volume of the portion of the ship below the margin line before (or abaft) the machinery space.

(d) In the case of a ship which is permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided, and is required under paragraph (d) of Regulation 1 of this Chapter to comply with special provisions, the uniform average permeability throughout the portion of the ship before (or abaft) the machinery space shall be determined from the formula –

$$95 - 35\frac{b}{v}$$

where:

b = the volume of the spaces below the margin line and above the tops of floors, inner bottom, or peak tanks, as the case may be, which are appropriated to and used as cargo spaces, coal or oil fuel bunkers, store-rooms, baggage and mail rooms, chain lockers and fresh water tanks, before (or abaft) the machinery space; and

v = whole volume of the portion of the ship below the margin line before (or abaft) the machinery space.

In the case of ships engaged on services where the cargo holds are not generally occupied by any substantial quantities of cargo, no part of the cargo spaces is to be included in calculating "b".

(e) In the case of unusual arrangements the Administration may allow, or require, a detailed calculation of average permeability for the portions before or abaft the machinery space. For the purpose of such calculation, the permeability of passenger spaces as defined in Regulation 2 of this Chapter shall be taken as 95, that of spaces containing machinery as 85, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such value as may be approved in each case.

(f) Where a between deck compartment between two watertight transverse bulkheads contains any passenger or crew space, the whole of that compartment, less any space completely enclosed within permanent steel bulkheads and appropriated to other purposes, shall be regarded as passenger space. Where, however, the passenger or crew space in question is completely enclosed within permanent steel bulkheads, only the space so enclosed need be considered as passenger space.

Regulation 5

Permissible Length of Compartments

(a) Ships shall be as efficiently subdivided as is possible having regard to the nature of the service for which they are intended. The degree of subdivision shall vary with the length of the ship and with the service, in such manner that the highest degree of subdivision corresponds with the ships of greatest length, primarily engaged in the carriage of passengers.

(b) *Factor of Subdivision.* The maximum permissible length of a compartment having its centre at any point in the ship's length is obtained from the floodable length by multiplying the latter by an appropriate factor called the factor of subdivision.

The factor of subdivision shall depend on the length of the ship, and for a given length shall vary according to the nature of the service for which the ship is intended. It shall decrease in a regular and continuous manner:

(i) as the length of the ship increases, and

(ii) from a factor A, applicable to ships primarily engaged in the carriage of cargo, to a factor B, applicable to ships primarily engaged in the carriage of passengers.

The variations of the factors A and B shall be expressed by the following formulae (I) and (II) where L is the length of the ship as defined in Regulation 2 of this Chapter:

L in metres

$$A = \frac{58.2}{L - 60} + .18 \quad (L = 131 \text{ and upwards}) \ldots\ldots\ldots\ldots\ldots\ldots (I)$$

L in feet

$$A = \frac{190}{L - 198} + .18 \quad (L = 430 \text{ and upwards})$$

L in metres

$$B = \frac{30.3}{L - 42} + .18 \quad (L = 79 \text{ and upwards}) \ldots\ldots\ldots\ldots\ldots\ldots (II)$$

L in feet

$$B = \frac{100}{L - 138} + .18 \quad (L = 260 \text{ and upwards})$$

(c) *Criterion of Service.* For a ship of given length the appropriate factor of subdivision shall be determined by the Criterion of Service Numeral (hereinafter called the Criterion Numeral) as given by the following formulae (III) and (IV) where:

C_s = the Criterion Numeral;

L = length of the ship, as defined in Regulation 2 of this Chapter;

M = the volume of the machinery space, as defined in Regulation 2 of this Chapter; with the addition thereto of the volume of any permanent oil fuel bunkers which may be situated above the inner bottom and before or abaft the machinery space;

P = the whole volume of the passenger spaces below the margin line, as defined in Regulation 2 of this Chapter;

V = the whole volume of the ship below the margin line;

P_1 = KN where:

N = number of passengers for which the ship is to be certified, and

K has the following values:

	Value of K
Length in metres and volumes in cubic metres	.056L
Length in feet and volumes in cubic feet	.6L

Where the value of KN is greater than the sum of P and the whole volume of the actual passenger spaces above the margin line, the figure to be taken as P_1 is that sum or two-thirds KN, whichever is the greater.

When P_1 is greater than P –

$$C_s = 72\frac{M + 2P_1}{V + P_1 - P} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (III)$$

and in other cases –

$$C_s = 72\frac{M + 2P}{V} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (IV)$$

For ships not having a continuous bulkhead deck the volumes are to be taken up to the actual margin lines used in determining the floodable lengths.

(d) *Rules for Subdivision of Ships other than those covered by paragraph (e) of this Regulation*

(i) The subdivision abaft the forepeak of ships 131 metres (430 feet) in length and upwards having a criterion numeral of 23 or less shall be governed by the factor A given by formula (I); of those having a criterion numeral of 123 or more by the factor B given by formula (II); and of those having a criterion numeral between 23 and 123 by the factor F obtained by linear interpolation between the factors A and B, using the formula:

$$F = A - \frac{(A - B)(C_s - 23)}{100} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (V)$$

Nevertheless, where the criterion numeral is equal to 45 or more and simultaneously the computed factor of subdivision as given by formula (V) is .65 or less, but more than .50, the subdivision abaft the forepeak shall be governed by the factor .50.

Where the factor F is less than .40 and it is shown to the satisfaction of the Administration to be impracticable to comply with the factor F in a machinery compartment of the ship, the subdivision of such compartment may be governed by an increased factor, which, however, shall not exceed .40.

(ii) The subdivision abaft the forepeak of ships less than 131 metres (430 feet) but not less than 79 metres (260 feet) in length having a criterion numeral equal to S, where –

$$S = \frac{3,574 - 25L}{13} \text{ (L in metres)} = \frac{9,382 - 20L}{34} \text{ (L in feet)}$$

shall be governed by the factor unity; of those having a criterion numeral of 123 or more by the factor B given by the formula (II); of those having a criterion numeral between S and 123 by the factor F obtained by linear interpolation between unity and the factor B using the formula:

$$F = 1 - \frac{(1 - B)(C_s - S)}{123 - S} \quad \text{(VI)}$$

(iii) The subdivision abaft the forepeak of ships less than 131 metres (430 feet) but not less than 79 metres (260 feet) in length and having a criterion numeral less than S, and of all ships less than 79 metres (260 feet) in length shall be governed by the factor unity, unless, in either case, it is shown to the satisfaction of the Administration to be impracticable to comply with this factor in any part of the ship, in which case the Administration may allow such relaxation as may appear to be justified, having regard to all the circumstances.

(iv) The provisions of sub-paragraph (iii) of this paragraph shall apply also to ships of whatever length, which are to be certified to carry a number of passengers exceeding 12 but not exceeding –

$$\frac{L^2}{650} \text{ (in metres)} = \frac{L^2}{7,000} \text{ (in feet)}, \quad \text{or 50, whichever is the less.}$$

(e) *Special Standards of Subdivision for Ships which are permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided and are required under paragraph (d) of Regulation 1 of this Chapter to comply with special provisions*

(i) (1) In the case of ships primarily engaged in the carriage of passengers, the subdivision abaft the forepeak shall be governed by a factor of .50 or by the factor determined according to paragraphs (c) and (d) of this Regulation, if less than .50.

(2) In the case of such ships less than 91.5 metres (300 feet) in length, if the Administration is satisfied that compliance with such factor would be impracticable in a compartment, it may allow the length of that compartment to be governed by a higher factor provided the factor used is the lowest that is practicable and reasonable in the circumstances.

(ii) Where, in the case of any ship whether less than 91.5 metres (300 feet) or not, the necessity of carrying appreciable quantities of cargo makes it impracticable to require the subdivision abaft the forepeak to be governed by a factor not exceeding .50, the standard of subdivision to be applied shall be determined in accordance with the following sub-paragraphs (1) to (5), subject to the condition that where the Administration is satisfied that insistence on strict compliance in any respect would be unreasonable, it may allow such alternative arrangement of the watertight bulkheads as appears to be justified on merits and will not diminish the general effectiveness of the subdivision.

(1) The provisions of paragraph (c) of this Regulation relating to the criterion numeral shall apply with the exception that in calculating the value of P_1 for berthed passengers K is to have the value defined in paragraph (c) of this Regulation, or 3.55 cubic metres (125 cubic feet), whichever is the greater, and for unberthed passengers K is to have the value 3.55 cubic metres (125 cubic feet).

(2) The factor B in paragraph (b) of this Regulation shall be replaced by the factor BB determined by the following formula:

L in metres

$$BB = \frac{17.6}{L - 33} + .20 \quad (L = 55 \text{ and upwards})$$

L in feet

$$BB = \frac{57.6}{L - 108} + .20 \quad (L = 180 \text{ and upwards})$$

(3) The subdivision abaft the forepeak of ships 131 metres (430 feet) in length and upwards having a criterion numeral of 23 or less shall be governed by the factor A given by formula (I) in paragraph (b) of this Regulation; of those having a criterion numeral of 123 of more by the factor BB given by the formula in sub-paragraph (ii)(2) of this paragraph; and of those having a criterion numeral between 23 and 123 by the factor F obtained by linear interpolation between the factors A and BB, using the formula:

$$F = A - \frac{(A - BB)(C_s - 23)}{100}$$

except that if the factor F so obtained is less than .50 the factor to be used shall be either .50 or the factor calculated according to the provisions of sub-paragraph (d)(i) of this Regulation, whichever is the smaller.

(4) The subdivision abaft the forepeak of ships less than 131 metres (430 feet) but not less than 55 metres (180 feet) in length having a criterion numeral equal to S_1 where –

$$S_1 = \frac{3,712 - 25L}{19} \quad \text{(L in metres)}$$

$$S_1 = \frac{1,950 - 4L}{10} \quad \text{(L in feet)}$$

shall be governed by the factor unity; of those having a criterion numeral of 123 or more by the factor BB given by the formula in sub-paragraph (ii)(2) of this paragraph; of those having a criterion numeral between S_1 and 123 by the factor F obtained by linear interpolation between unity and the factor BB using the formula:

$$F = 1 - \frac{(1 - BB)(C_s - S_1)}{123 - S_1}$$

except that in either of the two latter cases if the factor so obtained is less than .50 the subdivision may be governed by a factor not exceeding .50.

(5) The subdivision abaft the forepeak of ships less than 131 metres (430 feet) but not less than 55 metres (180 feet) in length and having a criterion numeral less than S_1 and of all ships less than 55 metres (180 feet) in length shall be governed by the factor unity, unless it is shown to the satisfaction of the Administration to be impracticable to comply with this factor in particular compartments, in which event the Administration may allow such relaxations in respect of those compartments as appear to be justified, having regard to all the circumstances, provided that the aftermost compartment and as many as possible of the forward compartments (between the forepeak and the after end of the machinery space) shall be kept within the floodable length.

Regulation 6

Special Rules concerning Subdivision

(a) Where in a portion or portions of a ship the watertight bulkheads are carried to a higher deck than in the remainder of the ship and it is desired to take advantage of this higher extension of the bulkheads in calculating the floodable length, separate margin lines may be used for each such portion of the ship provided that:

(i) the sides of the ship are extended throughout the ship's length to the deck corresponding to the upper margin line and all openings in the shell plating below this deck throughout the length of the ship are treated as being below a margin line, for the purposes of Regulation 14 of this Chapter; and

(ii) the two compartments adjacent to the "step" in the bulkhead deck are each within the permissible length corresponding to their respective margin lines, and, in addition, their combined length does not exceed twice the permissible length based on the lower margin line.

(b) (i) A compartment may exceed the permissible length determined by the rules of Regulation 5 of this Chapter provided the combined length of each pair of adjacent compartments to which the compartment in question is common does not exceed either the floodable length or twice the permissible length, whichever is the less.

(ii) If one of the two adjacent compartments is situated inside the machinery space, and the second is situated outside the machinery space, and the average permeability of the portion of the ship in which the second is situated differs from that of the machinery space, the combined length of the two compartments shall be adjusted to the mean average permeability of the two portions of the ship in which the compartments are situated.

(iii) Where the two adjacent compartments have different factors of subdivision, the combined length of the two compartments shall be determined proportionately.

(c) In ships 100 metres (330 feet) in length and upwards, one of the main transverse bulkheads abaft the forepeak shall be fitted at a distance from forward perpendicular which is not greater than the permissible length.

(d) A main transverse bulkhead may be recessed provided that all parts of the recess lie inboard of vertical surfaces on both sides of the ship, situated at a distance from the shell plating equal to one-fifth the breadth of the ship, as defined in Regulation 2 of this Chapter, and measured at right angles to the centre line at the level of the deepest subdivision load line.

Any part of a recess which lies outside these limits shall be dealt with as a step in accordance with paragraph (e) of this Regulation.

(e) A main transverse bulkhead may be stepped provided that it meets one of the following conditions:

(i) the combined length of the two compartments, separated by the bulkhead in question, does not exceed either 90 per cent of the floodable length or twice the permissible length, except that in ships having a factor of subdivision greater than .9, the combined length of the two compartments in question shall not exceed the permissible length;

(ii) additional subdivision is provided in way of the step to maintain the same measure of safety as that secured by a plane bulkhead;

(iii) the compartment over which the step extends does not exceed the permissible length corresponding to a margin line taken 76 millimetres (3 inches) below the step.

(f) Where a main transverse bulkhead is recessed or stepped, an equivalent plane bulkhead shall be used in determining the subdivision.

(g) If the distance between two adjacent main transverse bulkheads, or their equivalent plane bulkheads, or the distance between the transverse planes passing through the nearest stepped portions of the bulkheads, is less than 3.05 metres (10 feet) plus 3 per cent of the length of the ship, or 10.67 metres (35 feet) whichever is the less, only one of these bulkheads shall be regarded as forming part of the subdivision of the ship in accordance with the provisions of Regulation 5 of this Chapter.

(h) Where a main transverse watertight compartment contains local subdivision and it can be shown to the satisfaction of the Administration that, after any assumed side damage extending over a length of 3.05 metres (10 feet) plus 3 per cent of the length of the ship, or 10.67 metres (35 feet) whichever is the less, the whole volume of the main compartment will not be flooded, a proportionate allowance may be made in the permissible length otherwise required for such compartment. In such a case the volume of effective buoyancy assumed on the undamaged side shall not be greater than that assumed on the damaged side.

(i) Where the required factor of subdivision is .50 or less, the combined length of any two adjacent compartments shall not exceed the floodable length.

Regulation 7

Stability of Ships in Damaged Condition

(a) Sufficient intact stability shall be provided in all service conditions so as to enable the ship to withstand the final stage of flooding of any one main compartment which is required to be within the floodable length.

Where two adjacent main compartments are separated by a bulkhead which is stepped under the conditions of sub-paragraph (e)(i) of Regulation 6 of this Chapter the intact stability shall be adequate to withstand the flooding of those two adjacent main compartments.

Where the required factor of subdivision is .50 or less but more than .33 intact stability shall be adequate to withstand the flooding of any two adjacent main compartments.

Where the required factor of subdivision is .33 or less the intact stability shall be adequate to withstand the flooding of any three adjacent main compartments.

(b) (i) The requirements of paragraph (a) of this Regulation shall be determined by calculations which are in accordance with paragaphs (c), (d) and (f) of this Regulation and which take into consideration the proportions and design characteristics of the ship and the arrangement and configuration of the damaged compartments. In making these calculations the ship is to be assumed in the worst anticipated service condition as regards stability.

(ii) Where it is proposed to fit decks, inner skins or longitudinal bulkheads of sufficient tightness to seriously restrict the flow of water, the Administration shall be satisfied that proper consideration is given to such restrictions in the calculations.

(iii) In cases where the Administration considers the range of stability in the damaged condition to be doubtful, it may require investigation thereof.

(c) For the purpose of making damage stability calculations the volume and surface permeabilities shall be in general as follows:

Spaces	Permeability
Appropriated to Cargo, Coal or Stores	60
Occupied by Accommodation	95
Occupied by Machinery	85
Intended for Liquids	0 or 95*

Higher surface permeabilities are to be assumed in respect of spaces which, in the vicinity of the damage waterplane, contain no substantial quantity of accommodation or machinery and spaces which are not generally occupied by any substantial quantity of cargo or stores.

(d) Assumed extent of damage shall be as follows:

(i) longitudinal extent: 3.05 metres (10 feet) plus 3 per cent of the length of the ship, or 10.67 metres (35 feet) whichever is the less. Where the required factor of subdivision is .33 or less the assumed longitudinal extent of damage shall be increased as necessary so as to include any two consecutive main transverse watertight bulkheads;

(ii) transverse extent (measured inboard from the ship's side, at right angles to the centre line at the level of the deepest subdivision load line): a distance of one-fifth of the breadth of the ship, as defined in Regulation 2 of this Chapter; and

(iii) vertical extent: from the base line upwards without limit.

(iv) If any damage of lesser extent than that indicated in sub-paragraphs (i), (ii) and (iii) of this paragraph would result in a more severe condition regarding heel or loss of metacentric height, such damage shall be assumed in the calculations.

(e) Unsymmetrical flooding is to be kept to a minimum consistent with efficient arrangements. Where it is necessary to correct large angles of heel, the means adopted shall, where practicable, be self-acting, but in any case where controls to cross-flooding fittings are provided they shall be operable from above the bulkhead deck. These fittings together with their controls as well as the maximum heel before equalization shall be acceptable to the Administration. Where cross-flooding fittings are required the time for equalization shall not exceed 15 minutes. Suitable information concerning the use of cross-flooding fittings shall be supplied to the master of the ship.*

(f) The final conditions of the ship after damage and, in the case of unsymmetrical flooding, after equalization measures have been taken shall be as follows:

(i) in the case of symmetrical flooding there shall be a positive residual metacentric height of at least 50 millimetres (2 inches) as calculated by the constant displacement method;

(ii) in the case of unsymmetrical flooding the total heel shall not exceed seven degrees, except that, in special cases, the Administration may allow additional heel due to the unsymmetrical moment, but in no case shall the final heel exceed fifteen degrees;

(iii) in no case shall the margin line be submerged in the final stage of flooding. If it is considered that the margin line may become submerged during an intermediate stage of flooding, the Administration may require such investigations and arrangements as it considers necessary for the safety of the ship.

(g) The master of the ship shall be supplied with the data necessary to maintain sufficient intact stability under service conditions to enable the ship to withstand the critical damage. In the case of ships requiring cross-flooding the master of the ship shall be informed of the conditions of stability on which the calculations of heel are based and be warned that excessive heeling might result should the ship sustain damage when in a less favourable condition.

(h) (i) No relaxation from the requirements for damage stability may be considered by the Administration unless it is shown that the intact metacentric height in any service condition necessary to meet these requirements is excessive for the service intended.

(ii) Relaxations from the requirements for damage stability shall be permitted only in exceptional cases and subject to the condition that the Administration is to be satisfied that the proportions, arrangements and other characteristics of the ship are the most favourable to stability after damage which can practically and reasonably be adopted in the particular circumstances.

Regulation 8

Ballasting

When ballasting with water is necessary, the water ballast should not in general be carried in tanks intended for oil fuel. In ships in which it is not practicable to avoid putting water in oil fuel tanks, oily-water separator equipment to the satisfaction of the Administration shall be fitted, or other alternative means acceptable to the Administration shall be provided for disposing of the oily-water ballast.

Regulation 9

Peak and Machinery Space Bulkheads, Shaft Tunnels, etc.

(a) (i) A ship shall have a forepeak or collision bulkhead, which shall be watertight up to the bulkhead deck. This bulkhead shall be fitted not less than 5 per cent of the length of the ship, and not more than 3.05 metres (10 feet) plus 5 per cent of the length of the ship from the forward perpendicular.

(ii) If the ship has a long forward superstructure, the forepeak bulkhead shall be extended weathertight to the deck next above the bulkhead deck. The extension need not be fitted directly over the bulkhead below, provided it is at least 5 per cent of the length of the ship from the forward perpendicular, and the part of the bulkhead deck which forms the step is made effectively weathertight.

(b) An afterpeak bulkhead, and bulkheads dividing the machinery space, as defined in Regulation 2 of this Chapter, from the cargo and passenger spaces forward and aft, shall also be fitted and made watertight up to the bulkhead deck. The afterpeak bulkhead may, however, be stepped below the bulkhead deck, provided the degree of safety of the ship as regards subdivision is not thereby diminished.

(c) In all cases stern tubes shall be enclosed in watertight spaces of moderate volume. The stern gland shall be situated in a watertight shaft tunnel or other watertight space separate from the stern tube compartment and of such volume that, if flooded by leakage through the stern gland, the margin line will not be submerged.

Regulation 10

Double Bottoms

(a) A double bottom shall be fitted extending from the forepeak bulkhead to the afterpeak bulkhead as far as this is practicable and compatible with the design and proper working of the ship.

(i) In ships 50 metres (165 feet) and under 61 metres (200 feet) in length a double bottom shall be fitted at least from the machinery space to the forepeak bulkhead, or as near thereto as practicable.

* Whichever results in the more severe requirements.

* Reference is made to the Recommendation on a Standard Method for Establishing Compliance with the Requirements for Cross-Flooding Arrangements in Passenger Ships, adopted by the Organization by Resolution A.266(VIII).

(ii) In ships 61 metres (200 feet) and under 76 metres (249 feet) in length a double bottom shall be fitted at least outside the machinery space, and shall extend to the fore and after peak bulkheads, or as near thereto as practicable.

(iii) In ships 76 metres (249 feet) in length and upwards, a double bottom shall be fitted amidships, and shall extend to the fore and after peak bulkheads, or as near thereto as practicable.

(b) Where a double bottom is required to be fitted its depth shall be to the satisfaction of the Administration and the inner bottom shall be continued out to the ship's sides in such a manner as to protect the bottom to the turn of the bilge. Such protection will be deemed satisfactory if the line of intersection of the outer edge of the margin plate with the bilge plating is not lower at any part than a horizontal plane passing through the point of intersection with the frame line amidships of a transverse diagonal line inclined at 25 degrees to the base line and cutting it at a point one-half the ship's moulded breadth from the middle line.

(c) Small wells constructed in the double bottom in connexion with drainage arrangements of holds, etc., shall not extend downwards more than necessary. The depth of the well shall in no case be more than the depth less 457 millimetres (18 inches) of the double bottom at the centreline, nor shall the well extend below the horizontal plane referred to in paragraph (b) of this Regulation. A well extending to the outer bottom is, however, permitted at the after end of the shaft tunnel of screw-ships. Other wells (e.g., for lubricating oil under main engines) may be permitted by the Administration if satisfied that the arrangements give protection equivalent to that afforded by a double bottom complying with this Regulation.

(d) A double bottom need not be fitted in way of watertight compartments of moderate size used exclusively for the carriage of liquids, provided the safety of the ship, in the event of bottom or side damage, is not, in the opinion of the Administration, thereby impaired.

(e) In the case of ships to which the provisions of paragraph (d) of Regulation 1 of this Chapter apply and which are engaged on regular service within the limits of a short international voyage as defined in Regulation 2 of Chapter III, the Administration may permit a double bottom to be dispensed with in any part of the ship which is subdivided by a factor not exceeding .50, if satisfied that the fitting of a double bottom in that part would not be compatible with the design and proper working of the ship.

Regulation 11

Assigning, Marking and Recording of Subdivision Load Lines

(a) In order that the required degree of subdivision shall be maintained, a load line corresponding to the approved subdivision draught shall be assigned and marked on the ship's sides. A ship having spaces which are specially adapted for the accommodation of passengers and the carriage of cargo alternatively may, if the owners desire, have one or more additional load lines assigned and marked to correspond with the subdivision draughts which the Administration may approve for the alternative service conditions.

(b) The subdivision load lines assigned and marked shall be recorded in the Passenger Ship Safety Certificate, and shall be distinguished by the notation C.1 for the principal passenger condition, and C.2, C.3, etc., for the alternative conditions.

(c) The freeboard corresponding to each of these load lines shall be measured at the same position and from the same deck line as the freeboards determined in accordance with the International Convention respecting Load Lines in force.

(d) The freeboard corresponding to each approved subdivision load line and the conditions of service for which it is approved, shall be clearly indicated on the Passenger Ship Safety Certificate.

(e) In no case shall any subdivision load line mark be placed above the deepest load line in salt water as determined by the strength of the ship and/or the International Convention respecting Load Lines in force.

(f) Whatever may be the position of the subdivision load line marks, a ship shall in no case be loaded so as to submerge the load line mark appropriate to the season and locality as determined in accordance with the International Convention respecting Load Lines in force.

(g) A ship shall in no case be so loaded that when she is in salt water the subdivision load line mark appropriate to the particular voyage and condition of service is submerged.

Regulation 12

Construction and Initial Testing of Watertight Bulkheads, etc.

(a) Each watertight subdivision bulkhead, whether transverse or longitudinal, shall be constructed in such a manner that it shall be capable of supporting, with a proper margin of resistance, the pressure due to the maximum head of water which it might have to sustain in the event of damage to the ship but at least the pressure due to a head of water up to the margin line. The construction of these bulkheads shall be to the satisfaction of the Administration.

(b) (i) Steps and recesses in bulkheads shall be watertight and as strong as the bulkhead at the place where each occurs.

(ii) Where frames or beams pass through a watertight deck or bulkhead, such deck or bulkhead shall be made structurally watertight without the use of wood or cement.

(c) Testing main compartments by filling them with water is not compulsory. When testing by filling with water is not carried out, a hose test is compulsory; this test shall be carried out in the most advanced stage of the fitting out of the ship. In any case, a thorough inspection of the watertight bulkheads shall be carried out.

(d) The forepeak, double bottoms (including duct keels) and inner skins shall be tested with water to a head corresponding to the requirements of paragraph (a) of this Regulation.

(e) Tanks which are intended to hold liquids, and which form part of the subdivision of the ship, shall be tested for tightness with water to a head up to the deepest subdivision load line or to a head corresponding to two-thirds of the depth from the top of keel to the margin line in way of the tanks, whichever is the greater; provided that in no case shall the test head be less than 0.92 metres (3 feet) above the top of the tank.

(f) The tests referred to in paragraphs (d) and (e) of this Regulation are for the purpose of ensuring that the subdivision structural arrangements are watertight and are not to be regarded as a test of the fitness of any compartment for the storage of oil fuel or for other special purposes for which a test of a superior character may be required depending on the height to which the liquid has access in the tank or its connexions.

Regulation 13

Openings in Watertight Bulkheads

(a) The number of openings in watertight bulkheads shall be reduced to the minimum compatible with the design and proper working of the ship; satisfactory means shall be provided for closing these openings.

(b) (i) Where pipes, scuppers, electric cables, etc. are carried through watertight subdivision bulkheads, arrangements shall be made to ensure the integrity of the watertightness of the bulkheads.

(ii) Valves and cocks not forming part of a piping system shall not be permitted in watertight subdivision bulkheads.

(iii) Lead or other heat sensitive materials shall not be used in systems which penetrate watertight subdivision bulkheads, where deterioration of such systems in the event of fire would impair the watertight integrity of the bulkheads.

(c) (i) No doors, manholes, or access openings are permitted:

(1) in the collision bulkhead below the margin line;

(2) in watertight transverse bulkheads dividing a cargo space from an adjoining cargo space or from a permanent or reserve bunker, except as provided in paragraph (1) of this Regulation.

(ii) Except as provided in sub-paragraph (iii) of this paragraph, the collision bulkhead may be pierced below the margin line by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a screwdown valve capable of being operated from above the bulkhead deck, the valve chest being secured inside the forepeak to the collision bulkhead.

(iii) If the forepeak is divided to hold two different kinds of liquids the Administration may allow the collision bulkhead to be pierced below the margin line by two pipes, each of which is fitted as required by sub-paragraph (ii) of this paragraph, provided the Administration is satisfied that there is no practical alternative to the fitting of such a second pipe and that, having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained.

(d) (i) Watertight doors fitted in bulkheads between permanent and reserve bunkers shall be always accessible, except as provided in sub-paragraph (ii) of paragraph (k) of this Regulation for between deck bunker doors.

(ii) Satisfactory arrangements shall be made by means of screens or otherwise to prevent the coal from interfering with the closing of watertight bunker doors.

(e) Within spaces containing the main and auxiliary propelling machinery including boilers serving the needs of propulsion and all permanent bunkers, not more than one door apart from the doors to bunkers and shaft tunnels may be fitted in each main transverse bulkhead. Where two or more shafts are fitted the tunnels shall be connected by an inter-communicating passage. There shall be only one door between the machinery space and the tunnel spaces where two shafts are fitted and only two doors where there are more than two shafts. All these doors shall be of the sliding type and shall be located so as to have their sills as high as practicable. The hand gear for operating these doors from above the bulkhead deck shall be situated outside the spaces containing the machinery if this is consistent with a satisfactory arrangement of the necessary gearing.

(f) (i) Watertight doors shall be sliding doors or hinged doors or doors of an equivalent type. Plate doors secured only by bolts and doors required to be closed by dropping or by the action of a dropping weight are not permitted.

(ii) Sliding doors may be either:
hand-operated only, or
power-operated as well as hand-operated.

(iii) Authorized watertight doors may therefore be divided into three Classes:

Class 1 – hinged doors;

Class 2 – hand-operated sliding doors;

Class 3 – sliding doors which are power-operated as well as hand-operated.

(iv) The means of operation of any watertight door whether power-operated or not shall be capable of closing the door with the ship listed to 15 degrees either way.

(v) In all classes of watertight doors indicators shall be fitted which show, at all operating stations from which the doors are not visible, whether the doors are open or closed. If any of the watertight doors, of whatever Class, is not fitted so as to enable it to be closed from a central control station, it shall be provided with a mechanical, electrical, telephonic, or any other suitable direct means of communication, enabling the officer of the watch promptly to contact the person who is responsible for closing the door in question, under previous orders.

(g) Hinged doors (Class 1) shall be fitted with quick action closing devices, such as catches, workable from each side of the bulkhead.

(h) Hand-operated sliding doors (Class 2) may have a horizontal or vertical motion. It shall be possible to operate the mechanism at the door itself from either side, and in addition, from an accessible position above the bulkhead deck, with an all round crank motion, or some other movement providing the same guarantee of safety and of an approved type. Departures from the requirement of operation on both sides may be allowed, if this requirement is impossible owing to the layout of the spaces. When operating a hand gear the time necessary for the complete closure of the door with the vessel upright, shall not exceed 90 seconds.

(i) (i) Power-operated sliding doors (Class 3) may have a vertical or horizontal motion. If a door is required to be power-operated from a central control, the gearing shall be so arranged that the door can be operated by power also at the door itself from both sides. The arrangement shall be such that the door will close automatically if opened by local control after being closed from the central control, and also such that any door can be kept closed by local systems which will prevent the door from being opened from the upper control. Local control handles in connexion with the power gear shall be provided each side of the bulkhead and shall be so arranged as to enable persons passing through the doorway to hold both handles in the open position without being able to set the closing mechanism in operation accidentally. Power-operated sliding doors shall be provided with hand gear workable at the door itself on either side and from an accessible position above the bulkhead deck, with an all round crank motion or some other movement providing the same guarantee of safety and of an approved type. Provision shall be made to give warnings by sound signal that the door has begun to close and will continue to move until it is completely closed. The door shall take a sufficient time to close to ensure safety.

(ii) There shall be at least two independent power sources capable of opening and closing all the doors under control, each of them capable of operating all the doors simultaneously. The two power sources shall be controlled from the central station on the bridge provided with all the necessary indicators for checking that each of the two power sources is capable of giving the required service satisfactorily.

(iii) In the case of hydraulic operation, each power source shall consist of a pump capable of closing all doors in not more than 60 seconds. In addition, there shall be for the whole installation hydraulic accumulators of sufficient capacity to operate all the doors at least three times, i.e., closed–open–closed. The fluid used shall be one which does not freeze at any of the temperatures liable to be encountered by the ship during its service.

(j) (i) Hinged watertight doors (Class 1) in passenger, crew and working spaces are only permitted above a deck the underside of which, at its lowest point at side, is at least 2.13 metres (7 feet) above the deepest subdivision load line.

(ii) Watertight doors, the sills of which are above the deepest load line and below the line specified in the preceding sub-paragraph shall be sliding doors and may be hand-operated (Class 2), except in vessels engaged on short international voyages and required to have a factor of subdivision of .50 or less in which all such doors shall be power-operated. When trunkways in connexion with refrigerated cargo and ventilation or forced draught ducts are carried through more than one main watertight subdivision bulkhead, the doors at such openings shall be operated by power.

(k) (i) Watertight doors which may sometimes be opened at sea, and the sills of which are below the deepest subdivision load line shall be sliding doors. The following rules shall apply:

(1) when the number of such doors (excluding doors at entrances to shaft tunnels) exceeds five, all of these doors and those at the entrance to shaft tunnels or ventilation or forced draught ducts, shall be power-operated (Class 3) and shall be capable of being simultaneously closed from a central station situated on the bridge;

(2) when the number of such doors (excluding doors at entrances to shaft tunnels) is greater than one, but does not exceed five,

(a) where the ship has no passenger spaces below the bulkhead deck, all the above-mentioned doors may be hand-operated (Class 2);

(b) where the ship has passenger spaces below the bulkhead deck all the above-mentioned doors shall be power-operated (Class 3) and shall be capable of being simultaneously closed from a central station situated on the bridge;

(3) in any ship where there are only two such watertight doors and they are into or within the space containing machinery, the Administration may allow these two doors to be hand-operated only (Class 2).

(ii) If sliding watertight doors which have sometimes to be open at sea for the purpose of trimming coal are fitted between bunkers in the between decks below the bulkhead deck, these doors shall be operated by power. The opening and closing of these doors shall be recorded in such log book as may be prescribed by the Administration.

(l) (i) If the Administration is satisfied that such doors are essential, watertight doors of satisfactory construction may be fitted in watertight bulkheads dividing cargo between deck spaces. Such doors may be hinged, rolling or sliding doors but shall not be remotely controlled. They shall be fitted at the highest level and as far from the shell plating as practicable, but in no case shall the outboard vertical edges be situated at a distance from the shell plating which is less than one-fifth of the breadth of the ship, as defined in Regulation 2 of this Chapter, such distance being measured at right angles to the centre line of the ship at the level of the deepest subdivision load line.

(ii) Such doors shall be closed before the voyage commences and shall be kept closed during navigation; and the time of opening such doors in port and of closing them before the ship leaves port shall be entered in the log book. Should any of the doors be accessible during the voyage, they shall be fitted with a device which prevents unauthorized opening. When it is proposed to fit such doors, the number and arrangements shall receive the special consideration of the Administration.

(m) Portable plates on bulkheads shall not be permitted except in machinery spaces. Such plates shall always be in place before the ship leaves port, and shall not be removed during navigation except in case of urgent necessity. The necessary precautions shall be taken in replacing them to ensure that the joints shall be watertight.

(n) All watertight doors shall be kept closed during navigation except when necessarily opened for the working of the ship, and shall always be ready to be immediately closed.

(o) (i) Where trunkways or tunnels for access from crew accommodation to the stokehold, for piping, or for any other purpose are carried through main transverse watertight bulkheads, they shall be watertight and in accordance with the requirements of Regulation 16 of this Chapter. The access to at least one end of each such tunnel or trunkway, if used as a passage at sea, shall be through a trunk extending watertight to a height sufficient to permit access above the margin line. The access to the other end of the trunkway or tunnel may be through a watertight door of the type required by its location in the ship. Such trunkways or tunnels shall not extend through the first subdivision bulkhead abaft the collision bulkhead.

(ii) Where it is proposed to fit tunnels or trunkways for forced draught, piercing main transverse watertight bulkheads, these shall receive the special consideration of the Administration.

Regulation 14

Openings in the Shell Plating below the Margin Line

(a) The number of openings in the shell plating shall be reduced to the minimum compatible with the design and proper working of the ship.

(b) The arrangement and efficiency of the means for closing any opening in the shell plating shall be consistent with its intended purpose and the position in which it is fitted and generally to the satisfaction of the Administration.

(c) (i) If in a between decks, the sills of any sidescuttles are below a line drawn parallel to the bulkhead deck at side and having its lowest point 2½ per cent of the breadth of the ship above the deepest subdivision load line, all sidescuttles in that between deck shall be of the non-opening type.

(ii) All sidescuttles the sills of which are below the margin line, other than those required to be of a non-opening type by sub-paragraph (i) of this paragraph, shall be of such construction as will effectively prevent any person opening them without the consent of the master of the ship.

(iii) (1) Where in a between decks, the sills of any of the sidescuttles referred to in sub-paragraph (ii) of this paragraph are below a line drawn parallel to the bulkhead deck at side and having its lowest point 1.37 metres (4½ feet) plus 2½ per cent of the breadth of the ship above the water when the ship departs from any port, all the sidescuttles in that between decks shall be closed watertight and locked before the ship leaves port, and they shall not be opened before the ship arrives at the next port. In the application of this sub-paragraph the appropriate allowance for fresh water may be made when applicable.

(2) The time of opening such sidescuttles in port and of closing and locking them before the ship leaves port shall be entered in such log book as may be prescribed by the Administration.

(3) For any ship that has one or more sidescuttles so placed that the requirements of clause (1) of this sub-paragraph would apply when she was floating at her deepest subdivision load line, the Administration may indicate the limiting mean draught at which these sidescuttles will have their sills above the line drawn parallel to the bulkhead deck at side, and having its lowest point 1.37 metres (4½ feet) plus 2½ per cent of the breadth of the ship

above the water-line corresponding to the limiting mean draught, and at which it will therefore be permissible to depart from port without previously closing and locking them and to open them at sea on the responsibility of the master during the voyage to the next port. In tropical zones as defined in the International Convention respecting Load Lines in force, this limiting draught may be increased by 0.305 metres (1 foot).

(d) Efficient hinged inside deadlights arranged so that they can be easily and effectively closed and secured watertight shall be fitted to all sidescuttles except that abaft one-eighth of the ship's length from the forward perpendicular and above a line drawn parallel to the bulkhead deck at side and having its lowest point at a height of 3.66 metres (12 feet) plus 2½ per cent of the breadth of the ship above the deepest subdivision load line, the deadlights may be portable in passenger accommodation other than that for steerage passengers, unless the deadlights are required by the International Convention respecting Load Lines in force to be permanently attached in their proper positions. Such portable deadlights shall be stowed adjacent to the sidescuttles they serve.

(e) Sidescuttles and their deadlights, which will not be accessible during navigation, shall be closed and secured before the ship leaves port.

(f) (i) No sidescuttles shall be fitted in any spaces which are appropriated exclusively to the carriage of cargo or coal.

(ii) Sidescuttles may, however, be fitted in spaces appropriated alternatively to the carriage of cargo or passengers, but they shall be of such construction as will effectively prevent any person opening them or their deadlights without the consent of the master of the ship.

(iii) If cargo is carried in such spaces, the sidescuttles and their deadlights shall be closed watertight and locked before the cargo is shipped and such closing and locking shall be recorded in such log book as may be prescribed by the Administration.

(g) Automatic ventilating sidescuttles shall not be fitted in the shell plating below the margin line without the special sanction of the Administration.

(h) The number of scuppers, sanitary discharges and other similar openings in the shell plating shall be reduced to the minimum either by making each discharge serve for as many as possible of the sanitary and other pipes, or in any other satisfactory manner.

(i) (i) All inlets and discharges in the shell plating shall be fitted with efficient and accessible arrangements for preventing the accidental admission of water into the ship. Lead or other heat sensitive materials shall not be used for pipes fitted outboard of shell valves in inlets or discharges, or any other application where the deterioration of such pipes in the event of fire would give rise to danger of flooding.

(ii) (1) Except as provided in sub-paragraph (iii) of this paragraph, each separate discharge led through the shell plating from spaces below the margin line shall be provided either with one automatic non-return valve fitted with a positive means of closing it from above the bulkhead deck, or, alternatively, with two automatic non-return valves without such means, the upper of which is so situated above the deepest subdivision load line as to be always accessible for examination under service conditions, and is of a type which is normally closed.

(2) Where a valve with positive means of closing is fitted, the operating position above the bulkhead deck shall always be readily accessible, and means shall be provided for indicating whether the valve is open or closed.

(iii) Main and auxiliary sea inlets and discharges in connexion with machinery shall be fitted with readily accessible cocks or valves between the pipes and shell plating or between the pipes and fabricated boxes attached to the shell plating.

(j) (i) Gangway, cargo and coaling ports fitted below the margin line shall be of sufficient strength. They shall be effectively closed and secured watertight before the ship leaves port, and shall be kept closed during navigation.

(ii) Such ports shall be in no case fitted so as to have their lowest point below the deepest subdivision load line.

(k) (i) The inboard opening of each ash-shoot, rubbish-shoot, etc. shall be fitted with an efficient cover.

(ii) If the inboard opening is situated below the margin line, the cover shall be watertight, and in addition an automatic non-return valve shall be fitted in the shoot in an easily accessible position above the deepest subdivision load line. When the shoot is not in use both the cover and the valve shall be kept closed and secured.

Regulation 15

Construction and Initial Tests of Watertight Doors, Sidescuttles, etc.

(a) (i) The design, materials and construction of all watertight doors, sidescuttles, gangway, cargo and coaling ports, valves, pipes, ash-shoots and rubbish-shoots referred to in these Regulations shall be to the satisfaction of the Administration.

(ii) The frames of vertical watertight doors shall have no groove at the bottom in which dirt might lodge and prevent the door closing properly.

(iii) All cocks and valves for sea inlets and discharges below the bulkhead deck and all fittings outboard of such cocks and valves shall be made of steel, bronze or other approved ductile material. Ordinary cast iron or similar materials shall not be used.

(b) Each watertight door shall be tested by water pressure to a head up to the bulkhead deck. The test shall be made before the ship is put in service, either before or after the door is fitted.

Regulation 16

Construction and Initial Tests of Watertight Decks, Trunks, etc.

(a) Watertight decks, trunks, tunnels, duct keels and ventilators shall be of the same strength as watertight bulkheads at corresponding levels. The means used for making them watertight, and the arrangements adopted for closing openings in them, shall be to the satisfaction of the Administration. Watertight ventilators and trunks shall be carried at least up to the bulkhead deck.

(b) After completion, a hose or flooding test shall be applied to watertight decks and a hose test to watertight trunks, tunnels and ventilators.

Regulation 17

Watertight Integrity above the Margin Line

(a) The Administration may require that all reasonable and practicable measures shall be taken to limit the entry and spread of water above the bulkhead deck. Such measures may include partial bulkheads or webs. When partial watertight bulkheads and webs are fitted on the bulkhead deck, above or in the immediate vicinity of main subdivision bulkheads, they shall have watertight shell and bulkhead deck connexions so as to restrict the flow of water along the deck when the ship is in a heeled damaged condition. Where the partial watertight bulkhead does not line up with the bulkhead below, the bulkhead deck between shall be made effectively watertight.

(b) The bulkhead deck or a deck above it shall be weathertight in the sense that in ordinary sea conditions water will not penetrate in a downward direction. All openings in the exposed weather deck shall have coamings of ample height and strength and shall be provided with efficient means for expeditiously closing them weathertight. Freeing ports, open rails and/or scuppers shall be fitted as necessary for rapidly clearing the weather deck of water under all weather conditions.

(c) Sidescuttles, gangway, cargo and coaling ports and other means for closing openings in the shell plating above the margin line shall be of efficient design and construction and of sufficient strength having regard to the spaces in which they are fitted and their positions relative to the deepest subdivision load line.

(d) Efficient inside deadlights, arranged so that they can be easily and effectively closed and secured watertight, shall be provided for all sidescuttles to spaces below the first deck above the bulkhead deck.

Regulation 18

Bilge Pumping Arrangements in Passenger Ships

(a) Ships shall be provided with an efficient bilge pumping plant capable of pumping from and draining any watertight compartment which is neither a permanent oil compartment nor a permanent water compartment under all practicable conditions after a casualty whether the ship is upright or listed. For this purpose wing suctions will generally be necessary except in narrow compartments at the ends of the ship, where one suction may be sufficient. In compartments of unusual form, additional suctions may be required. Arrangements shall be made whereby water in the compartment may find its way to the suction pipes. Where in relation to particular compartments the Administration is satisfied that the provision of drainage may be undesirable, it may allow such provision to be dispensed with if calculations made in accordance with the conditions laid down in paragraph (b) of Regulation 7 of this Chapter show that the safety of the ship will not be impaired. Efficient means shall be provided for draining water from insulated holds.

(b) (i) Ships shall have at least three power pumps connected to the bilge main, one of which may be attached to the propelling unit. Where the criterion numeral is 30 or more, one additional independent power pump shall be provided.

(ii) The requirements are summarized in the following table:

Criterion numeral	Less than 30	30 and over
Main engine pump (may be replaced by one independent pump)	1	1
Independent pumps	2	3

(iii) Sanitary, ballast and general service pumps may be accepted as independent power bilge pumps if fitted with the necessary connexions to the bilge pumping system.

(c) Where practicable, the power bilge pumps shall be placed in separate watertight compartments so arranged or situated that these compartments will not readily be flooded by the same damage. If the engines and boilers are in two or more watertight compartments, the pumps available for bilge service shall be distributed throughout these compartments as far as is possible.

(d) On ships 91.5 metres (300 feet) or more in length or having a criterion numeral of 30 or more, the arrangements shall be such that at least one power pump shall be available for use in all ordinary circumstances in which a ship may be flooded at sea. This requirement will be satisfied if:

(i) one of the required pumps is an emergency pump of a reliable submersible type having a source of power situated above the bulkhead deck; or

(ii) the pumps and their sources of power are so disposed throughout the length of the ship that under any condition of flooding which the ship is required to withstand, at least one pump in an undamaged compartment will be available.

(e) With the exception of additional pumps which may be provided for peak compartments only, each required bilge pump shall be arranged to draw water from any space required to be drained by paragraph (a) of this Regulation.

(f) (i) Each power bilge pump shall be capable of giving a speed of water through the required main bilge pipe of not less than 122 metres (400 feet) per minute. Independent power bilge pumps situated in machinery spaces shall have direct suctions from these spaces, except that not more than two such suctions shall be required in any one space. Where two or more such suctions are provided there shall be at least one on the port side and one on the starboard side. The Administration may require independent power bilge pumps situated in other spaces to have separate direct suctions. Direct suctions shall be suitably arranged and those in a machinery space shall be of a diameter not less than that required for the bilge main.

(ii) In coal-burning ships there shall be provided in the stokehold, in addition to the other suctions required by this Regulation, a flexible suction hose of suitable diameter and sufficient length, capable of being connected to the suction side of an independent power pump.

(g) (i) In addition to the direct bilge suction or suctions required by paragraph (f) of this Regulation there shall be in the machinery space a direct suction from the main circulating pump leading to the drainage level of the machinery space and fitted with a non-return valve. The diameter of this direct suction pipe shall be at least two-thirds of the diameter of the pump inlet in the case of steamships, and of the same diameter as the pump inlet in the case of motorships.

(ii) Where in the opinion of the Administration the main circulating pump is not suitable for this purpose, a direct emergency bilge suction shall be led from the largest available independent power driven pump to the drainage level of the machinery space; the suction shall be of the same diameter as the main inlet of the pump used. The capacity of the pump so connected shall exceed that of a required bilge pump by an amount satisfactory to the Administration.

(iii) The spindles of the sea inlet and direct suction valves shall extend well above the engine room platform.

(iv) Where the fuel is, or may be, coal and there is no watertight bulkhead between the engines and the boilers, a direct discharge overboard or alternatively a by-pass to the circulating pump discharge, shall be fitted from any circulating pump used in compliance with sub-paragraph (i) of this paragraph.

(h) (i) All pipes from the pumps which are required for draining cargo or machinery spaces shall be entirely distinct from pipes which may be used for filling or emptying spaces where water or oil is carried.

(ii) All bilge pipes used in or under coal bunkers or fuel storage tanks or in boiler or machinery spaces, including spaces in which oil-settling tanks or oil fuel pumping units are situated, shall be of steel or other approved material.

(i) The diameter of the bilge main shall be calculated according to the following formulae provided that the actual internal diameter of the bilge main may be of the nearest standard size acceptable to the Administration:

$$d = 1.68\sqrt{L(B + D)} + 25$$

where: d = internal diameter of the bilge main in millimetres,
L and B are the length and the breadth of the ship in metres, as defined in Regulation 2 of this Chapter, and
D = moulded depth of the ship to bulkhead deck in metres;

or

$$d = \sqrt{\frac{L(B + D)}{2,500}} + 1$$

where: d = internal diameter of the bilge main in inches,
L and B are the length and the breadth of the ship in feet, as defined in Regulation 2 of this Chapter, and
D = moulded depth of the ship to bulkhead deck in feet.

The diameter of the bilge branch pipes shall be determined by rules to be made by the Administration.

(j) The arrangement of the bilge and ballast pumping system shall be such as to prevent the possibility of water passing from the sea and from water ballast spaces into the cargo and machinery spaces, or from one compartment to another. Special provision shall be made to prevent any deep tank having bilge and ballast connexions being inadvertently run up from the sea when containing cargo, or pumped out through a bilge pipe when containing water ballast.

(k) Provision shall be made to prevent the compartment served by any bilge suction pipe being flooded in the event of the pipe being severed, or otherwise damaged by collision or grounding in any other compartment. For this purpose, where the pipe is at any part situated nearer the side of the ship than one-fifth the breadth of the ship (measured at right angles to the centre line at the level of the deepest subdivision load line), or in a duct keel, a non-return valve shall be fitted to the pipe in the compartment containing the open end.

(l) All the distribution boxes, cocks and valves in connexion with the bilge pumping arrangements shall be in positions which are accessible at all times under ordinary circumstances. They shall be so arranged that, in the event of flooding, one of the bilge pumps may be operative on any compartment; in addition, damage to a pump or its pipe connecting to the bilge main outboard of a line drawn at one-fifth of the breadth of the ship shall not put the bilge system out of action. If there is only one system of pipes common to all the pumps, the necessary cocks or valves for controlling the bilge suctions must be capable of being operated from above the bulkhead deck. Where in addition to the main bilge pumping system an emergency bilge pumping system is provided, it shall be independent of the main system and so arranged that a pump is capable of operating on any compartment under flooding conditions; in that case only the cocks and valves necessary for the operation of the emergency system need be capable of being operated from above the bulkhead deck.

(m) All cocks and valves mentioned in paragraph (l) of this Regulation which can be operated from above the bulkhead deck shall have their controls at their place of operation clearly marked and provided with means to indicate whether they are open or closed.

Regulation 19

*Stability Information for Passenger Ships and Cargo Ships**

(a) Every passenger ship and cargo ship shall be inclined upon its completion and the elements of its stability determined. The master shall be supplied with such reliable information as is necessary to enable him by rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service, and a copy shall be furnished to the Administration.

(b) Where any alterations are made to a ship so as to materially affect the stability information supplied to the master, amended stability information shall be provided. If necessary the ship shall be re-inclined.

(c) The Administration may allow the inclining test of an individual ship to be dispensed with provided basic stability data are available from the inclining test of a sister ship and it is shown to the satisfaction of the Administration that reliable stability information for the exempted ship can be obtained from such basic data.

(d) The Administration may also allow the inclining test of an individual ship or class of ships, especially designed for the carriage of liquids or ore in bulk, to be dispensed with when reference to existing data for similar ships clearly indicates that due to the ship's proportions and arrangements more than sufficient metacentric height will be available in all probable loading conditions.

Regulation 20

Damage Control Plans

There shall be permanently exhibited, for the guidance of the officer in charge of the ship, plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.

Regulation 21

Marking, Periodical Operation and Inspection of Watertight Doors, etc.

(a) This Regulation applies to new and existing ships.

(b) Drills for the operating of watertight doors, sidescuttles, valves and closing mechanisms of scuppers, ash-shoots and rubbish-shoots shall take place weekly. In ships in which the voyage exceeds one week in duration a complete drill shall be held before leaving port, and others thereafter at least once a week during the voyage. In all ships all watertight power doors and hinged doors, in main transverse bulkheads, in use at sea, shall be operated daily.

(c) (i) The watertight doors and all mechanisms and indicators connected therewith, all valves the closing of which is necessary to make a compartment watertight, and all valves the operation of which is necessary for damage control cross connexions shall be periodically inspected at sea at least once a week.

(ii) Such valves, doors and mechanisms shall be suitably marked to ensure that they may be properly used to provide maximum safety.

Regulation 22

Entries in Log

(a) This Regulation applies to new and existing ships.

(b) Hinged doors, portable plates, sidescuttles, gangway, cargo and coaling ports and other openings, which are required by these Regulations to be kept closed during navigation, shall be closed before the ship leaves port. The time of closing and the time of opening (if permissible under these Regulations) shall be recorded in such log book as may be prescribed by the Administration.

(c) A record of all drills and inspections required by Regulation 21 of this Chapter shall be entered in the log book with an explicit record of any defects which may be disclosed.

* Reference is made to the Recommendation on Intact Stability for Passenger and Cargo Ships under 100 metres in length, adopted by the Organization by Resolution A.167 (ES.IV) and Amendments to this Recommendation, adopted by the Organization by Resolution A.206(VII).

PART C - MACHINERY AND ELECTRICAL INSTALLATIONS*

(Part C applies to passenger ships and cargo ships)

Regulation 23

General

(a) Electrical installations in passenger ships shall be such that:

(i) services essential for safety will be maintained under various emergency conditions; and

(ii) the safety of passengers, crew and ship from electrical hazards will be assured.

(b) Cargo ships shall comply with Regulations 26, 27, 28, 29, 30 and 32 of this Chapter.

Regulation 24

Main Source of Electrical Power in Passenger Ships

(a) Every passenger ship, the electrical power of which constitutes the only means of maintaining the auxiliary services indispensable for the propulsion and the safety of the ship, shall be provided with at least two main generating sets. The power of these sets shall be such that it shall still be possible to ensure the functioning of the services referred to in sub-paragraph (a)(i) of Regulation 23 of this Chapter in the event of any one of these generating sets being stopped.

(b) In a passenger ship where there is only one main generating station, the main switchboard shall be located in the same main fire zone. Where there is more than one main generating station, it is permissible to have only one main switchboard.

Regulation 25

Emergency Source of Electrical Power in Passenger Ships

(a) There shall be above the bulkhead deck and outside the machinery casings a self-contained emergency source of electrical power. Its location in relation to the main source or sources of electrical power shall be such as to ensure to the satisfaction of the Administration that a fire or other casualty to the machinery space as defined in paragraph (h) of Regulation 2 of this Chapter will not interfere with the supply or distribution of emergency power. It shall not be forward of the collision bulkhead.

(b) The power available shall be sufficient to supply all those services that are, in the opinion of the Administration, necessary for the safety of the passengers and the crew in an emergency, due regard being paid to such services as may have to be operated simultaneously. Special consideration shall be given to emergency lighting at every boat station on deck and oversides, in all alleyways, stairways and exits, in the machinery spaces and in the control stations as defined in paragraph (r) of Regulation 3 of Chapter II-2, to the sprinkler pump, to navigation lights, and to the daylight signalling lamp if operated from the main source of power. The power shall be adequate for a period of 36 hours, except that, in the case of ships engaged regularly on voyages of short duration, the Administration may accept a lesser supply if satisfied that the same standard of safety would be attained.

(c) The emergency source of power may be either:

(i) a generator driven by a suitable prime-mover with an independent fuel supply and with approved starting arrangements; the fuel used shall have a flashpoint of not less than 43°C (110°F); or

(ii) an accumulator (storage) battery capable of carrying the emergency load without recharging or excessive voltage drop.

(d) (i) Where the emergency source of power is a generator there shall be provided a temporary source of emergency power consisting of an accumulator battery of sufficient capacity:

(1) to supply emergency lighting continuously for half an hour;

(2) to close the watertight doors (if electrically operated) but not necessarily to close them all simultaneously;

(3) to operate the indicators (if electrically operated) which show whether power-operated watertight doors are open or closed; and

(4) to operate the sound signals (if electrically operated) which give warning that power-operated watertight doors are about to close.

The arrangements shall be such that the temporary source of emergency power will come into operation automatically in the event of failure of the main electrical supply.

(ii) Where the emergency source of power is an accumulator battery, arrangements shall be made to ensure that emergency lighting will automatically come into operation in the event of failure of the main lighting supply.

(e) An indicator shall be mounted in the machinery space, preferably on the main switchboard, to indicate when any accumulator battery fitted in accordance with this Regulation is being discharged.

(f) (i) The emergency switchboard shall be installed as near as is practicable to the emergency source of power.

(ii) Where the emergency source of power is a generator, the emergency switchboard shall be located in the same space as the emergency source of power, unless the operation of the emergency switchboard would thereby be impaired.

(iii) No accumulator battery fitted in accordance with this Regulation shall be installed in the same space as the emergency switchboard.

(iv) The Administration may permit the emergency switchboard to be supplied from the main switchboard in normal operation.

(g) Arrangements shall be such that the complete emergency installation will function when the ship is inclined 22½ degrees and/or when the trim of the ship is 10 degrees.

(h) Provision shall be made for the periodic testing of the emergency source of power and the temporary source of power, if provided, which shall include the testing of automatic arrangements.

Regulation 26

Emergency Source of Electrical Power in Cargo Ships

(a) *Cargo ships of 5,000 Tons Gross Tonnage and upwards*

(i) In cargo ships of 5,000 tons gross tonnage and upwards there shall be a self-contained emergency source of power, located to the satisfaction of the Administration above the uppermost continuous deck and outside the machinery casings, to ensure its functioning in the event of fire or other casualty causing failure to the main electrical installation.

(ii) The power available shall be sufficient to supply all those services which are, in the opinion of the Administration, necessary for the safety of all on board in an emergency, due regard being paid to such services as may have to be operated simultaneously. Special consideration shall be given to:

(1) emergency lighting at every boat station on deck and oversides, in all alleyways, stairways and exits, in the main machinery space and main generating set space, on the navigating bridge and in the chartroom;

(2) the general alarm; and

(3) navigation lights if solely electric, and the daylight signalling lamp if operated by the main source of electrical power.

The power shall be adequate for a period of 6 hours.

(iii) The emergency source of power may be either:

(1) an accumulator (storage) battery capable of carrying the emergency load without recharging or excessive voltage drop; or

(2) a generator driven by a suitable prime-mover with an independent fuel supply and with starting arrangements to the satisfaction of the Administration. The fuel used shall have a flashpoint of not less than 43°C (110°F).

(iv) Arrangements shall be such that the complete emergency installation will function when the ship is inclined 22½ degrees and/or when the trim of the ship is 10 degrees.

(v) Provision shall be made for the periodic testing of the complete emergency installation.

(b) *Cargo ships of less than 5,000 Tons Gross Tonnage*

(i) In cargo ships of less than 5,000 tons gross tonnage there shall be a self-contained emergency source of power located to the satisfaction of the Administration, and capable of supplying the illumination at launching stations and stowage positions of survival craft prescribed in sub-paragraphs (a)(ii), (b)(ii) and (b)(iii) of Regulation 19 of Chapter III, and in addition such other services as the Administration may require, due regard being paid to Regulation 38 of Chapter III.

(ii) The power available shall be adequate for a period of at least 3 hours.

(iii) These ships shall also be subject to sub-paragraphs (iii), (iv), and (v) of paragraph (a) of this Regulation.

Regulation 27

Precautions against Shock, Fire and other Hazards of Electrical Origin

(a) *Passenger Ships and Cargo Ships*

(i) (1) All exposed metal parts of electrical machines or equipment which are not intended to be "live" but are liable to become "live" under fault conditions, shall be earthed (grounded); and all electrical apparatus shall be so constructed and so installed that danger of injury in ordinary handling shall not exist.

(2) Metal frames of all portable electric lamps, tools and similar apparatus, supplied as ship's equipment and rated in excess of a safety voltage to be prescribed by the Administration shall be earthed (grounded) through a suitable conductor, unless equivalent provisions are made such as by double insulation or by an isolating transformer. The Administration may require additional special precautions for electric lamps, tools or similar apparatus for use in damp spaces.

(ii) Main and emergency switchboards shall be so arranged as to give easy access back and front, without danger to attendants. The sides

* Reference is made to the Recommendation on Safety Measures for Periodically Unattended Machinery Spaces of Cargo Ships additional to those normally considered necessary for an Attended Machinery Space, adopted by the Organization by Resolution A.211(VII).

and backs and, where necessary, the fronts of switchboards shall be suitably guarded. There shall be non-conducting mats or gratings front and rear where necessary. Exposed current-carrying parts at voltages to earth (ground) exceeding a voltage to be specified by the Administration shall not be installed on the face of any switchboard or control panel.

(iii) (1) Where the hull return system of distribution is used, special precautions shall be taken to the satisfaction of the Administration.

(2) Hull return shall not be used in tankers.

(iv) (1) All metal sheaths and armour of cables shall be electrically continuous and shall be earthed (grounded).

(2) Where the cables are neither sheathed nor armoured and there might be a risk of fire in the event of an electrical fault, precautions shall be required by the Administration.

(v) Lighting fittings shall be arranged to prevent temperature rises that would be injurious to the wiring, and to prevent surrounding material from becoming excessively hot.

(vi) Wiring shall be supported in such a manner as to avoid chafing or other injury.

(vii) Each separate circuit shall be protected against short circuit. Each separate circuit shall also be protected against overload, except in accordance with Regulation 30 of this Chapter or where the Administration grants an exemption. The current-carrying capacity of each circuit shall be permanently indicated, together with the rating or setting of the appropriate overload protective device.

(viii) Accumulator batteries shall be suitably housed, and compartments used primarily for their accommodation shall be properly constructed and efficiently ventilated.

(b) *Passenger Ships only*

(i) Distribution systems shall be so arranged that fire in any main fire zone will not interfere with essential services in any other main fire zone. This requirement will be met if main and emergency feeders passing through any zone are separated both vertically and horizontally as widely as is practicable.

(ii) Electric cables shall be of a flame retarding type to the satisfaction of the Administration. The Administration may require additional safeguards for electric cables in particular spaces of the ship with a view to the prevention of fire or explosion.

(iii) In spaces where inflammable mixtures are liable to collect, no electrical equipment shall be installed unless it is of a type which will not ignite the mixture concerned, such as flameproof (explosion proof) equipment.

(iv) A lighting circuit in a bunker or hold shall be provided with an isolating switch outside the space.

(v) Joints in all conductors except for low voltage communication circuits shall be made only in junction or outlet boxes. All such boxes or wiring devices shall be so constructed as to prevent the spread of fire from the box or device. Where splicing is employed it shall only be by an approved method such that it retains the original mechanical and electrical properties of the cable.

(vi) Wiring systems for interior communications essential for safety and for emergency alarm systems shall be arranged to avoid galleys, machinery spaces and other enclosed spaces having a high risk of fire except in so far as it is necessary to provide communication or to give alarm within those spaces. In the case of ships the construction and small size of which do not permit of compliance with these requirements, measures satisfactory to the Administration shall be taken to ensure efficient protection for these wiring systems where they pass through galleys, machinery spaces and other enclosed spaces having a high risk of fire.

(c) *Cargo Ships only*

Devices liable to arc shall not be installed in any compartment assigned principally to accumulator batteries unless the devices are flameproof (explosion proof).

Regulation 28

Means of Going Astern

(a) *Passenger Ships and Cargo Ships*

Ships shall have sufficient power for going astern to secure proper control of the ship in all normal circumstances.

(b) *Passenger Ships only*

The ability of the machinery to reverse the direction of thrust of the propeller in sufficient time, under normal manoeuvring conditions, and so to bring the ship to rest from maximum ahead service speed shall be demonstrated at the initial survey.

Regulation 29

*Steering Gear**

(a) *Passenger Ships and Cargo Ships*

(i) Ships shall be provided with a main steering gear and an auxiliary steering gear to the satisfaction of the Administration.

(ii) The main steering gear shall be of adequate strength and sufficient to steer the ship at maximum service speed. The main steering gear and rudder stock shall be so designed that they are not damaged at maximum astern speed.

(iii) The auxiliary steering gear shall be of adequate strength and sufficient to steer the ship at navigable speed and capable of being brought speedily into action in an emergency.

(iv) The exact position of the rudder, if power operated, shall be indicated at the principal steering station.

(b) *Passenger Ships only*

(i) The main steering gear shall be capable of putting the rudder over from 35 degrees on one side to 35 degrees on the other side with the ship running ahead at maximum service speed. The rudder shall be capable of being put over from 35 degrees on either side to 30 degrees on the other side in 28 seconds at maximum service speed.

(ii) The auxiliary steering gear shall be operated by power in any case in which the Administration would require a rudder stock of over 228.6 millimetres (9 inches) diameter in way of the tiller.

(iii) Where main steering gear power units and their connexions are fitted in duplicate to the satisfaction of the Administration, and each power unit enables the steering gear to meet the requirements of sub-paragraph (i) of this paragraph, no auxiliary steering gear need be required.

(iv) Where the Administration would require a rudder stock with a diameter in way of the tiller exceeding 228.6 millimetres (9 inches) there shall be provided an alternative steering station located to the satisfaction of the Administration. The remote steering control systems from the principal and alternative steering stations shall be so arranged to the satisfaction of the Administration that failure of either system would not result in inability to steer the ship by means of the other system.

(v) Means satisfactory to the Administration shall be provided to enable orders to be transmitted from the bridge to the alternative steering station.

(c) *Cargo Ships only*

(i) The auxiliary steering gear shall be operated by power in any case in which the Administration would require a rudder stock of over 355.6 millimetres (14 inches) diameter in way of the tiller.

(ii) Where power-operated steering gear units and connexions are fitted in duplicate to the satisfaction of the Administration, and each unit complies with sub-paragraph (iii) of paragraph (a) of this Regulation, no auxiliary steering gear need be required, provided that the duplicate units and connexions operating together comply with sub-paragraph (ii) of paragraph (a) of this Regulation.

Regulation 30

*Electric and Electrohydraulic Steering Gear**

(a) *Passenger Ships and Cargo Ships*

Indicators for running indication of the motors of electric and electrohydraulic steering gear shall be installed in a suitable location to the satisfaction of the Administration.

(b) *All Passenger Ships (irrespective of tonnage) and Cargo Ships of 5,000 Tons Gross Tonnage and upwards*

(i) Electric and electrohydraulic steering gear shall be served by two circuits fed from the main switchboard. One of the circuits may pass through the emergency switchboard, if provided. Each circuit shall have adequate capacity for supplying all the motors which are normally connected to it and which operate simultaneously. If transfer arrangements are provided in the steering gear room to permit either circuit to supply any motor or combination of motors, the capacity of each circuit shall be adequate for the most severe load condition. The circuits shall be separated throughout their length as widely as is practicable.

(ii) Short circuit protection only shall be provided for these circuits and motors.

(c) *Cargo Ships of less than 5,000 Tons Gross Tonnage*

(i) Cargo ships in which electrical power is the sole source of power for both main and auxiliary steering gear shall comply with sub-paragraphs (i) and (ii) of paragraph (b) of this Regulation, except that if the auxiliary steering gear is powered by a motor primarily intended for other services, paragraph (b)(ii) may be waived, provided that the Administration is satisfied with the protection arrangements.

(ii) Short circuit protection only shall be provided for motors and power circuits of electrically or electrohydraulically operated main steering gear.

Regulation 31

Location of Emergency Installations in Passenger Ships

The emergency source of electrical power, emergency fire pumps, emergency bilge pumps, batteries of carbon dioxide bottles for fire extinguishing

* Reference is made to the Recommendation on Steering Gear for Large Ships, adopted by the Organization by Resolution A.210(VII).

* Reference is made to the Recommendation on Steering Gear for Large Ships, adopted by the Organization by Resolution A.210(VII).

purposes and other emergency installations which are essential for the safety of the ship shall not be installed in a passenger ship forward of the collision bulkhead.

Regulation 32

Communication between Bridge and Engine Room

Ships shall be fitted with two means of communicating orders from the bridge to the engine room. One means shall be an engine room telegraph.

CHAPTER II-2

CONSTRUCTION - FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

PART A - GENERAL*

Regulation 1

Application

(a) For the purpose of this Chapter:

(i) A new passenger ship is a passenger ship the keel of which is laid or which is at a similar stage of construction on or after the date of coming into force of the present Convention, or a cargo ship which is converted to a passenger ship on or after that date, all other passenger ships being considered as existing ships.

(ii) A new cargo ship is a cargo ship the keel of which is laid or which is at a similar stage of construction on or after the date of coming into force of the present Convention.

(iii) A ship which undergoes repairs, alterations, modifications and outfitting related thereto shall continue to comply with at least the requirements previously applicable to the ship. An existing ship in such a case shall not as a rule comply to a lesser extent with the requirements for a new ship than it did before. Repairs, alterations and modifications of a major character and outfitting related thereto should meet the requirements for a new ship in so far as the Administration deems reasonable and practicable.

(b) Unless expressly provided otherwise:

(i) Regulations 4 to 16 of Part A of this Chapter apply to new ships.

(ii) Part B of this Chapter applies to new passenger ships carrying more than 36 passengers.

(iii) Part C of this Chapter applies to new passenger ships carrying not more than 36 passengers.

(iv) Part D of this Chapter applies to new cargo ships.

(v) Part E of this Chapter applies to new tankers.

(c) (i) Part F of this Chapter applies to existing passenger ships carrying more than 36 passengers.

(ii) Existing passenger ships carrying not more than 36 passengers and existing cargo ships shall comply with the following:

(1) for ships the keels of which were laid or which were at a similar stage of construction on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to new ships as defined in that Chapter are complied with;

(2) for ships the keels of which were laid or which were at a similar stage of construction on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1948, but before the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, the Administration shall ensure that the requirements which were applied under Chapter II of the 1948 Convention to new ships as defined in that Chapter are complied with;

(3) for ships the keels of which were laid or which were at a similar stage of construction before the date of coming into force of the International Convention for the Safety of Life at Sea, 1948, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to existing ships as defined in that Chapter are complied with.

(d) For any existing ship as defined in the present Convention the Administration, in addition to applying the requirements of sub-paragraph (c)(i) of this Regulation, shall decide which of the requirements of this Chapter not contained in Chapter II of the 1948 and 1960 Conventions shall be applied.

(e) The Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of this Chapter unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships belonging to its country which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.

(f) In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this Chapter, may exempt such ships, when they belong to its country, from those requirements, provided that they comply fully with the provisions of:

(i) the Rules annexed to the Special Trade Passenger Ships Agreement, 1971, and

(ii) the Rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973, when it comes into force.

Regulation 2

Basic Principles

The purpose of this Chapter is to require the fullest practicable degree of fire protection, fire detection and fire extinction in ships. The following basic principles underlie the Regulations in this Chapter and are embodied in the Regulations as appropriate, having regard to the type of ships and the potential fire hazard involved:

(a) division of ship into main vertical zones by thermal and structural boundaries;

(b) separation of accommodation spaces from the remainder of the ship by thermal and structural boundaries;

(c) restricted use of combustible materials;

(d) detection of any fire in the zone of origin;

(e) containment and extinction of any fire in the space of origin;

(f) protection of means of escape or access for fire fighting;

(g) ready availability of fire-extinguishing appliances;

(h) minimization of possibility of ignition of inflammable* cargo vapour.

Regulation 3

Definitions

For the purpose of this Chapter, unless expressly provided otherwise:

(a) "Non-combustible material" means a material which neither burns nor gives off inflammable vapours in sufficient quantity for self-ignition when heated to approximately 750°C (1,382°F) this being determined to the satisfaction of the Administration by an established test procedure.† Any other material is a combustible material.

(b) "A Standard Fire Test" is one in which specimens of the relevant bulkheads or decks are exposed in a test furnace to temperatures corresponding approximately to the standard time-temperature curve. The specimen shall have an exposed surface of not less than 4.65 square metres (50 square feet) and height (or length of deck) of 2.44 metres (8 feet) resembling as closely as possible the intended construction and including where appropriate at least one joint. The standard time-temperature curve is defined by a smooth curve drawn through the following points:

at the end of the first 5 minutes - 538°C (1,000°F)
" " " " " " 10 " - 704°C (1,300°F)
" " " " " " 30 " - 843°C (1,550°F)
" " " " " " 60 " - 927°C (1,700°F)

(c) ""A" Class Divisions" are those divisions formed by bulkheads and decks which comply with the following:

(i) they shall be constructed of steel or other equivalent material;

(ii) they shall be suitably stiffened;

(iii) they shall be so constructed as to be capable of preventing the passage of smoke and flame to the end of the one-hour standard fire test;

(iv) they shall be insulated with approved non-combustible materials such that the average temperature of the unexposed side will not rise more than 139°C (250°F) above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180°C (325°F) above the original temperature, within the time listed below:

Class "A-60"	60 minutes
Class "A-30"	30 minutes
Class "A-15"	15 minutes
Class "A-0"	0 minutes

(v) the Administration may require a test of a prototype bulkhead or deck to ensure that it meets the above requirements for integrity and temperature rise.**

(d) ""B" Class Divisions" are those divisions formed by bulkheads, decks, ceilings or linings which comply with the following:

(i) they shall be so constructed as to be capable of preventing the passage of flame to the end of the first one-half hour of the standard fire test;

* Reference is made to Recommendation on Safety Measures for Periodically Unattended Machinery Spaces of Cargo Ships additional to those normally considered necessary for an Attended Machinery Space, adopted by the Organization by Resolution A.211(VII).

† Reference is made to Recommendation on Test Method for Qualifying Marine Construction Materials as Non-Combustible, adopted by the Organization by Resolution A.270(VIII).

• "Inflammable" has the same meaning as "flammable".

** Reference is made to Recommendation for Fire Test Procedures for "A" and "B" Class Divisions, adopted by the Organization by Resolutions A.163(ES.IV) and A.215(VII).

(ii) they shall have an insulation value such that the average temperature of the unexposed side will not rise more than 139°C (250°F) above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225°C (405°F) above the original temperature, within the time listed below:

Class "B-15"	15 minutes
Class "B-0"	0 minutes

(iii) they shall be constructed of approved non-combustible materials and all materials entering into the construction and erection of "B" Class divisions shall be non-combustible, except where in accordance with Parts C and D of this Chapter the use of combustible material is not precluded, in which case it shall comply with the temperature rise limitation specified in sub-paragraph (ii) of this paragraph up to the end of the first one-half hour of the standard fire test;

(iv) the Administration may require a test of a prototype division to ensure that it meets the above requirements for integrity and temperature rise.*

(e) ""C" Class Divisions" shall be constructed of approved non-combustible materials. They need meet no requirements relative to the passage of smoke and flame nor the limiting of temperature rise.

(f) "Continuous "B" Class Ceilings or Linings" are those "B" Class ceilings or linings which terminate only at an "A" or "B" Class division.

(g) "Steel or Other Equivalent Material". Where the words "steel or other equivalent material" occur, "equivalent material" means any material which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fire test (e.g. aluminium alloy with appropriate insulation).

(h) "Low Flame Spread" means that the surface thus described will adequately restrict the spread of flame, this being determined to the satisfaction of the Administration by an established test procedure.

(i) "Main Vertical Zones" are those sections into which the hull, superstructure, and deckhouses are divided by "A" Class divisions, the mean length of which on any one deck does not in general exceed 40 metres (131 feet).

(j) "Accommodation Spaces" are those used for public spaces, corridors, lavatories, cabins, offices, crew quarters, barber shops, isolated pantries and lockers and similar spaces.

(k) "Public Spaces" are those portions of the accommodation which are used for halls, dining rooms, lounges and similar permanently enclosed spaces.

(l) "Service Spaces" are those used for galleys, main pantries, stores (except isolated pantries and lockers), mail and specie rooms, workshops other than those forming part of machinery spaces, and similar spaces and trunks to such spaces.

(m) "Cargo Spaces" are all spaces used for cargo (including cargo oil tanks) and trunks to such spaces.

(n) "Special Category Spaces" are those enclosed spaces above or below the bulkhead deck intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion, into and from which such vehicles can be driven and to which passengers have access.

(o) "Machinery Spaces of Category A" are all spaces which contain:

(i) internal combustion type machinery used either for main propulsion purposes, or for other purposes where such machinery has in the aggregate a total power output of not less than 373 kW, or

(ii) any oil-fired boiler or oil fuel unit; and trunks to such spaces.

(p) "Machinery Spaces" are all machinery spaces of Category A and all other spaces containing propelling machinery, boilers, oil fuel units, steam and internal combustion engines, generators and major electrical machinery, oil filling stations, refrigerating, stabilizing, ventilation and air conditioning machinery, and similar spaces; and trunks to such spaces.

(q) "Oil Fuel Unit" means the equipment used for the preparation of oil fuel for delivery to an oil-fired boiler, or equipment used for the preparation for delivery of heated oil to an internal combustion engine, and includes any oil pressure pumps, filters and heaters dealing with oil at a pressure more than 1.8 kilogrammes per square centimetre (25 pounds per square inch) gauge.

(r) "Control Stations" are those spaces in which the ship's radio or main navigating equipment or the emergency source of power is located or where the fire recording or fire control equipment is centralized.

(s) "Rooms containing Furniture and Furnishings of Restricted Fire Risk" are, for the purpose of Regulation 20 of this Chapter, those rooms containing furniture and furnishings of restricted fire risk (whether cabins, public spaces, offices or other types of accommodation) in which:

(i) all case furniture such as desks, wardrobes, dressing tables, bureaux, dressers, is constructed entirely of approved non-combustible materials, except that a combustible veneer not exceeding 2 millimetres ($\frac{1}{12}$ inch) may be used on the working surface of such articles;

(ii) all free-standing furniture such as chairs, sofas, tables, is constructed with frames of non-combustible materials;

(iii) all draperies, curtains and other suspended textile materials have, to the satisfaction of the Administration, qualities of resistance to the propagation of flame not inferior to those of wool weighing 0.8 kilogrammes per square metre (24 ounces per square yard);

(iv) all floor coverings have, to the satisfaction of the Administration, qualities of resistance to the propagation of flame not inferior to those of an equivalent woollen material used for the same purpose; and

(v) all exposed surfaces of bulkheads, linings and ceilings have low flame-spread characteristics.

(t) "Bulkhead deck" is the uppermost deck up to which the transverse watertight bulkheads are carried.

(u) "Deadweight" is the difference in metric tons between the displacement of a ship in water of a specific gravity of 1.025 at the load water line corresponding to the assigned summer freeboard and the lightweight of the ship.

(v) "Lightweight" is the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feedwater in tanks, consumable stores, together with passengers, and crew and their effects.

(w) "Combination carrier" is a tanker designed to carry oil or alternatively solid cargoes in bulk.

Regulation 4

Fire Control Plans

There shall be permanently exhibited in all new and existing ships for the guidance of the ship's officers general arrangement plans showing clearly for each deck the control stations, the various fire sections enclosed by "A" Class divisions, the sections enclosed by "B" Class divisions (if any), together with particulars of the fire alarms, detecting systems, the sprinkler installation (if any), the fire-extinguishing appliances, means of access to different compartments, decks, etc. and the ventilating system including particulars of the fan control positions, the position of dampers and identification numbers of the ventilating fans serving each section. Alternatively, at the discretion of the Administration, the aforementioned details may be set out in a booklet, a copy of which shall be supplied to each officer, and one copy at all times shall be available on board in an accessible position. Plans and booklets shall be kept up to date, any alterations being recorded thereon as soon as practicable. Description in such plans and booklets shall be in the national language. If the language is neither English nor French, a translation into one of those languages shall be included. In addition, instructions concerning the maintenance and operation of all the equipment and installations on board for the fighting and containment of fire shall be kept under one cover, readily available in an accessible position.

Regulation 5

Fire Pumps, Fire Mains, Hydrants and Hoses

(a) *Total Capacity of Fire Pumps*

(i) In a passenger ship, the required fire pumps shall be capable of delivering for fire-fighting purposes a quantity of water, at the appropriate pressure prescribed below, not less than two-thirds of the quantity required to be dealt with by the bilge pumps when employed for bilge pumping.

(ii) In a cargo ship, the required fire pumps, other than the emergency pump (if any), shall be capable of delivering for fire-fighting purposes a quantity of water, at the appropriate pressure prescribed, not less than four-thirds of the quantity required under Regulation 18 of Chapter II-1 to be dealt with by each of the independent bilge pumps in a passenger ship of the same dimensions when employed on bilge pumping, provided that in no cargo ship need the total required capacity of the fire pumps exceed 180 cubic metres per hour.

(b) *Fire Pumps*

(i) The fire pumps shall be independently driven. Sanitary, ballast, bilge or general service pumps may be accepted as fire pumps, provided that they are not normally used for pumping oil and that if they are subject to occasional duty for the transfer or pumping of fuel oil, suitable change-over arrangements are fitted.

(ii) (1) In passenger ships carrying more than 36 passengers, each of the required fire pumps shall have a capacity not less than 80 per cent of the total required capacity divided by the minimum number of required fire pumps and each such pump shall in any event be capable of delivering at least the two required jets of water. These fire pumps shall be capable of supplying the fire main system under the required conditions.

Where more pumps than the minimum of required pumps are installed the capacity of such additional pumps shall be to the satisfaction of the Administration.

(2) In all other types of ships, each of the required fire pumps (other than any emergency pump required by Regulation 52 of this Chapter) shall have a capacity not less than 80 per cent of the total required capacity divided by the number of required fire pumps, and shall in any event be capable of supplying the fire main system under the required conditions.

Where more pumps than required are installed their capacity shall be to the satisfaction of the Administration.

* Reference is made to Recommendation for Fire Test Procedures for "A" and "B" Class Divisions, adopted by the Organization by Resolutions A.163(ES.IV) and A.215(VII).

(iii) Relief valves shall be provided in conjunction with all fire pumps if the pumps are capable of developing a pressure exceeding the design pressure of the water service pipes, hydrants and hoses. These valves shall be so placed and adjusted as to prevent excessive pressure in any part of the fire main system.

(c) *Pressure in the Fire Main*

(i) The diameter of the fire main and water service pipes shall be sufficient for the effective distribution of the maximum required discharge from two fire pumps operating simultaneously, except that in the case of cargo ships the diameter need only be sufficient for the discharge of 140 cubic metres per hour.

(ii) With the two pumps simultaneously delivering through nozzles specified in paragraph (g) of this Regulation the quantity of water specified in sub-paragraph (i) of this paragraph, through any adjacent hydrants, the following minimum pressures shall be maintained at all hydrants:

Passenger ships:

4,000 tons gross tonnage and upwards	3.2 kilogrammes per square centimetre (45 pounds per square inch)
1,000 tons gross tonnage and upwards but under 4,000 tons gross tonnage	2.8 kilogrammes per square centimetre (40 pounds per square inch)
Under 1,000 tons gross tonnage	To the satisfaction of the Administration

Cargo ships:

6,000 tons gross tonnage and upwards	2.8 kilogrammes per square centimetre (40 pounds per square inch)
1,000 tons gross tonnage and upwards but under 6,000 tons gross tonnage	2.6 kilogrammes per square centimetre (37 pounds per square inch)
Under 1,000 tons gross tonnage	To the satisfaction of the Administration

(d) *Number and Position of Hydrants*

The number and position of the hydrants shall be such that at least two jets of water not emanating from the same hydrant, one of which shall be from a single length of hose, may reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated.

(e) *Pipes and Hydrants*

(i) Materials readily rendered ineffective by heat shall not be used for fire mains and hydrants unless adequately protected. The pipes and hydrants shall be so placed that the fire hoses may be easily coupled to them. In ships where deck cargo may be carried, the positions of the hydrants shall be such that they are always readily accessible and the pipes shall be arranged as far as practicable to avoid risk of damage by such cargo. Unless there is provided one hose and nozzle for each hydrant in the ship, there shall be complete interchangeability of hose couplings and nozzles.

(ii) A cock or valve shall be fitted to serve each fire hose so that any fire hose may be removed while the fire pumps are at work.

(f) *Fire Hoses*

Fire hoses shall be of material approved by the Administration and sufficient in length to project a jet of water to any of the spaces in which they may be required to be used. Their maximum length shall be to the satisfaction of the Administration. Each hose shall be provided with a nozzle and the necessary couplings. Hoses specified in this Chapter as "fire hoses" shall together with any necessary fittings and tools be kept ready for use in conspicuous positions near the water service hydrants or connexions. Additionally in interior locations in passenger ships carrying more than 36 passengers, fire hoses shall be connected to the hydrants at all times.

(g) *Nozzles*

(i) For the purposes of this Chapter, standard nozzle sizes shall be 12 millimetres (½ inch), 16 millimetres (⅝ inch) and 19 millimetres (¾ inch) or as near thereto as possible. Larger diameter nozzles may be permitted at the discretion of the Administration.

(ii) For accommodation and service spaces, a nozzle size greater than 12 millimetres (½ inch) need not be used.

(iii) For machinery spaces and exterior locations, the nozzle size shall be such as to obtain the maximum discharge possible from two jets at the pressure mentioned in paragraph (c) of this Regulation from the smallest pump, provided that a nozzle size greater than 19 millimetres (¾ inch) need not be used.

(iv) For machinery spaces or in similar spaces where the risk of spillage of oil exists, the nozzles shall be suitable for spraying water on oil or alternatively shall be of a dual purpose type.

(h) *International Shore Connexion*

Standard dimensions of flanges for the international shore connexion required in this Chapter to be installed in the ship shall be in accordance with the following table:

Description	Dimension
Outside diameter	178 millimetres (7 inches)
Inner diameter	64 millimetres (2½ inches)
Bolt circle diameter	132 millimetres (5¼ inches)
Slots in flange	4 holes 19 millimetres (¾ inch) in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery
Flange thickness	14.5 millimetres (9/16 inch) minimum
Bolts and nuts	4, each of 16 millimetres (⅝ inch) diameter, 50 millimetres (2 inches) in length

The connexion shall be constructed of material suitable for 10.5 kilogrammes per square centimetre (150 pounds per square inch) service. The flange shall have a flat face on one side and the other shall have permanently attached thereto a coupling that will fit the ship's hydrant and hose. The connexion shall be kept aboard the ship together with a gasket of any material suitable for 10.5 kilogrammes per square centimetre (150 pounds per square inch) service, together with four 16 millimetre (⅝ inch) bolts, 50 millimetres (2 inches) in length and eight washers.

Regulation 6

Miscellaneous Items

(a) Electric radiators, if used, shall be fixed in position and so constructed as to reduce fire risks to a minimum. No such radiators shall be fitted with an element so exposed that clothing, curtains, or other similar materials can be scorched or set on fire by heat from the element.

(b) Cellulose-nitrate based films shall not be used for cinematograph installations.

Regulation 7

Fire Extinguishers

(a) All fire extinguishers shall be of approved types and designs.

(i) The capacity of required portable fluid extinguishers shall be not more than 13.5 litres (3 gallons) and not less than 9 litres (2 gallons). Other extinguishers shall not be in excess of the equivalent portability of the 13.5 litre (3 gallons) fluid extinguisher and shall not be less than the fire-extinguishing equivalent of a 9 litre (2 gallons) fluid extinguisher.

(ii) The Administration shall determine the equivalents of fire extinguishers.

(b) Spare charges shall be provided in accordance with requirements to be specified by the Administration.

(c) Fire extinguishers containing an extinguishing medium which, in the opinion of the Administration, either by itself or under expected conditions of use gives off toxic gases in such quantities as to endanger persons shall not be permitted.

(d) A portable froth applicator unit shall consist of an inductor type of air-froth nozzle capable of being connected to the fire main by a fire hose, together with a portable tank containing at least 20 litres (4½ gallons) of froth-making liquid and one spare tank. The nozzle shall be capable of producing effective froth suitable for extinguishing an oil fire, at the rate of at least 1.5 cubic metres (53 cubic feet) per minute.

(e) Fire extinguishers shall be periodically examined and subjected to such tests as the Administration may require.

(f) One of the portable fire extinguishers intended for use in any space shall be stowed near the entrance to that space.

Regulation 8

Fixed Gas Fire-Extinguishing Systems

(a) The use of a fire-extinguishing medium which, in the opinion of the Administration, either by itself or under expected conditions of use gives off toxic gases in such quantities as to endanger persons shall not be permitted.

(b) Where provision is made for the injection of gas for fire-extinguishing purposes, the necessary pipes for conveying the gas shall be provided with control valves or cocks so marked as to indicate clearly the compartments to which the pipes are led. Suitable provision shall be made to prevent inadvertent admission of the gas to any compartment. Where cargo spaces fitted with such a system for fire protection are used as passenger spaces the gas connexion shall be blanked during such use.

(c) The piping shall be arranged so as to provide effective distribution of fire-extinguishing gas.

(d) (i) When carbon dioxide is used as the extinguishing medium in cargo spaces, the quantity of gas available shall be sufficient to give a minimum volume of free gas equal to 30 per cent of the gross volume of the largest cargo compartment in the ship which is capable of being sealed.

(ii) When carbon dioxide is used as an extinguishing medium for machinery spaces of Category A the quantity of gas carried shall be sufficient to give a minimum quantity of free gas equal to the larger of the following quantities, either:

(1) 40 per cent of the gross volume of the largest space, the volume to include the casing up to the level at which the horizontal area of the casing is 40 per cent or less of the horizontal area of the space concerned taken midway between the tank top and the lowest part of the casing; or

(2) 35 per cent of the entire volume of the largest space including the casing;

provided that the above-mentioned percentages may be reduced to 35 per cent and 30 per cent respectively for cargo ships of less than 2,000 tons gross tonnage; provided also that if two or more machinery spaces of Category A are not entirely separate they shall be considered as forming one compartment.

(iii) Where the volume of free air contained in air receivers in any machinery space of Category A is such that, if released in such space in the event of fire, such release of air within that space would seriously affect the efficiency of the fixed fire-extinguishing installation, the Administration shall require the provision of an additional quantity of carbon dioxide.

(iv) When carbon dioxide is used as an extinguishing medium both for cargo spaces and for machinery spaces of Category A the quantity of gas need not be more than the maximum required either for the largest cargo compartment or machinery space.

(v) For the purpose of this paragraph the volume of carbon dioxide shall be calculated at 0.56 cubic metres to the kilogramme (9 cubic feet to the pound).

(vi) When carbon dioxide is used as the extinguishing medium for machinery spaces of Category A the fixed piping system shall be such that 85 per cent of the gas can be discharged into the space within 2 minutes.

(vii) Carbon dioxide bottle storage rooms shall be situated at a safe and readily accessible position and shall be effectively ventilated to the satisfaction of the Administration. Any entrance to such storage rooms shall preferably be from the open deck, and in any case shall be independent of the protected space. Access doors shall be gastight and bulkheads and decks which form the boundaries of such rooms shall be gastight and adequately insulated.

(c) (i) Where gas other than carbon dioxide or steam as permitted by paragraph (f) of this Regulation is produced on the ship and is used as an extinguishing medium, it shall be a gaseous product of fuel combustion in which the oxygen content, the carbon monoxide content, the corrosive elements and any solid combustible elements have been reduced to a permissible minimum.

(ii) Where such gas is used as the extinguishing medium in a fixed fire-extinguishing system for the protection of machinery spaces of Category A it shall afford protection equivalent to that provided by a fixed carbon dioxide system.

(iii) Where such gas is used as the extinguishing medium in a fixed fire-extinguishing system for the protection of cargo spaces a sufficient quantity of such gas shall be available to supply hourly a volume of free gas at least equal to 25 per cent of the gross volume of the largest compartment protected in this way for a period of 72 hours.

(f) In general, the Administration shall not permit the use of steam as a fire-extinguishing medium in fixed fire-extinguishing systems of new ships. Where the use of steam is permitted by the Administration it shall be used only in restricted areas as an addition to the required fire-extinguishing medium and with the proviso that the boiler or boilers available for supplying steam shall have an evaporation of at least 1 kilogramme of steam per hour for each 0.75 cubic metres (1 pound of steam per hour per 12 cubic feet) of the gross volume of the largest space so protected. In addition to complying with the foregoing requirements the systems in all respects shall be as determined by, and to the satisfaction of the Administration.

(g) Means shall be provided for automatically giving audible warning of the release of fire-extinguishing gas into any space to which personnel normally have access. The alarm shall operate for a suitable period before the gas is released.

(h) The means of control of any such fixed gas fire-extinguishing system shall be readily accessible and simple to operate and shall be grouped together in as few locations as possible at positions not likely to be cut off by a fire in the protected space.

Regulation 9

Fixed Froth Fire-Extinguishing Systems in Machinery Spaces

(a) Any required fixed froth fire-extinguishing system in machinery spaces shall be capable of discharging through fixed discharge outlets in not more than five minutes, a quantity of froth sufficient to cover to a depth of 150 millimetres (6 inches) the largest single area over which oil fuel is liable to spread. The system shall be capable of generating froth suitable for extinguishing oil fires. Means shall be provided for effective distribution of the froth through a permanent system of piping and control valves or cocks to suitable discharge outlets, and for the froth to be effectively directed by fixed sprayers on other main fire hazards in the protected space. The expansion ratio of the froth shall not exceed 12 to 1.

(b) The means of control of any such systems shall be readily accessible and simple to operate and shall be grouped together in as few locations as possible at positions not likely to be cut off by a fire in the protected space.

Regulation 10

Fixed High Expansion Froth Fire-Extinguishing Systems in Machinery Spaces

(a) (i) Any required fixed high expansion froth system in machinery spaces shall be capable of rapidly discharging through fixed discharge outlets a quantity of froth sufficient to fill the greatest space to be protected at a rate of at least 1 metre (3.3 feet) in depth per minute. The quantity of froth-forming liquid available shall be sufficient to produce a volume of froth equal to five times the volume of the largest space to be protected. The expansion ratio of the froth shall not exceed 1,000 to 1.

(ii) The Administration may permit alternative arrangements and discharge rates provided that it is satisfied that equivalent protection is achieved.

(b) Supply ducts for delivering froth, air intakes to the froth generator and the number of froth-producing units shall in the opinion of the Administration be such as will provide effective froth production and distribution.

(c) The arrangement of the froth generator delivery ducting shall be such that a fire in the protected space will not affect the froth-generating equipment.

(d) The froth generator, its sources of power supply, froth-forming liquid and means of controlling the system shall be readily accessible and simple to operate and shall be grouped in as few locations as possible at positions not likely to be cut off by fire in the protected space.

Regulation 11

Fixed Pressure Water-Spraying Fire-Extinguishing Systems in Machinery Spaces

(a) Any required fixed pressure water-spraying fire-extinguishing system in machinery spaces shall be provided with spraying nozzles of an approved type.

(b) The number and arrangement of the nozzles shall be to the satisfaction of the Administration and be such as to ensure an effective average distribution of water of at least 5 litres per square metre (0.1 gallon per square foot) per minute in the spaces to be protected. Where increased application rates are considered necessary, these shall be to the satisfaction of the Administration. Nozzles shall be fitted above bilges, tank tops and other areas over which oil fuel is liable to spread and also above other specific fire hazards in the machinery spaces.

(c) The system may be divided into sections, the distribution valves of which shall be operated from easily accessible positions outside the spaces to be protected and which will not be readily cut off by an outbreak of fire.

(d) The system shall be kept charged at the necessary pressure and the pump supplying the water for the system shall be put automatically into action by a pressure drop in the system.

(e) The pump shall be capable of simultaneously supplying at the necessary pressure all sections of the system in any one compartment to be protected. The pump and its controls shall be installed outside the space or spaces to be protected. It shall not be possible for a fire in the space or spaces protected by the water-spraying system to put the system out of action.

(f) The pump may be driven by independent internal combustion type machinery but if it is dependent upon power being supplied from the emergency generator fitted in compliance with the provisions of Regulation 25 or Regulation 26 as appropriate of Chapter II-1 of the present Convention that generator shall be arranged to start automatically in case of main power failure so that power for the pump required by paragraph (e) of this Regulation is immediately available. When the pump is driven by independent internal combustion type machinery it shall be so situated that a fire in the protected space will not affect the air supply to the machinery.

(g) Precautions shall be taken to prevent the nozzles from becoming clogged by impurities in the water or corrosion of piping, nozzles, valves and pump.

Regulation 12

Automatic Sprinkler and Fire Alarm and Fire Detection Systems

(a) (i) Any required automatic sprinkler and fire alarm and fire detection system shall be capable of immediate operation at all times and no action by the crew shall be necessary to set it in operation. It shall be of the wet pipe type but small exposed sections may be of the dry pipe type where in the opinion of the Administration this is a necessary precaution. Any parts of the system which may be subjected to freezing temperatures in service shall be suitably protected against freezing. It shall be kept charged at the necessary pressure and shall have provision for a continuous supply of water as required in this Regulation.

(ii) Each section of sprinklers shall include means for giving a visual and audible alarm signal automatically at one or more indicating units whenever any sprinkler comes into operation. Such units shall give an indication of any fire and its location in any space served by the system and shall be centralized on the navigating bridge or in the main fire control station, which shall be so manned or equipped as to ensure that any alarm from the system is immediately received by a responsible member of the crew. Such alarm systems shall be constructed so as to indicate if any fault occurs in the system.

(b) (i) Sprinklers shall be grouped into separate sections, each of which shall contain not more than 200 sprinklers. Any section of sprinklers shall not serve more than two decks and shall not be situated in more than one main vertical zone, except that an Administration, if it is satisfied that the protection of the ship against fire will not thereby be reduced, may permit such a section of sprinklers to serve more than two decks or to be situated in more than one main vertical zone.

(ii) Each section of sprinklers shall be capable of being isolated by one stop valve only. The stop valve in each section shall be readily accessible and its location shall be clearly and permanently indicated. Means shall be provided to prevent the operation of the stop valves by any unauthorized person.

(iii) A gauge indicating the pressure in the system shall be provided at each section stop valve and at a central station.

(iv) The sprinklers shall be resistant to corrosion by marine atmospheres. In accommodation and service spaces the sprinklers shall come into operation within the temperature range of 68°C (155°F) and 79°C (175°F), except that in locations such as drying rooms, where high ambient temperatures might be expected, the operating temperature may be increased by not more than 30°C (54°F) above the maximum deck head temperature.

(v) A list or plan shall be displayed at each indicating unit showing the spaces covered and the location of the zone in respect of each section. Suitable instructions for testing and maintenance shall be available.

(c) Sprinklers shall be placed in an overhead position and spaced in a suitable pattern to maintain an average application rate of not less than 5 litres per square metre (0.1 gallon per square foot) per minute over the nominal area covered by the sprinklers. Alternatively, the Administration may permit the use of sprinklers providing such other amount of water suitably distributed as has been shown to the satisfaction of the Administration to be not less effective.

(d) (i) A pressure tank having a volume equal to at least twice that of the charge of water specified in this sub-paragraph shall be provided. The tank shall contain a standing charge of fresh water, equivalent to the amount of water which would be discharged in one minute by the pump referred to in sub-paragraph (e)(ii) of this Regulation, and the arrangements shall provide for maintaining such air pressure in the tank to ensure that where the standing charge of fresh water in the tank has been used the pressure will be not less than the working pressure of the sprinkler, plus the pressure due to a head of water measured from the bottom of the tank to the highest sprinkler in the system. Suitable means of replenishing the air under pressure and of replenishing the fresh water charge in the tank shall be provided. A glass gauge shall be provided to indicate the correct level of the water in the tank.

(ii) Means shall be provided to prevent the passage of sea water into the tank.

(e) (i) An independent power pump shall be provided solely for the purpose of continuing automatically the discharge of water from the sprinklers. The pump shall be brought into action automatically by the pressure drop in the system before the standing fresh water charge in the pressure tank is completely exhausted.

(ii) The pump and the piping system shall be capable of maintaining the necessary pressure at the level of the highest sprinkler to ensure a continuous output of water sufficient for the simultaneous coverage of a minimum area of 280 square metres (3,000 square feet) at the application rate specified in paragraph (c) of this Regulation.

(iii) The pump shall have fitted on the delivery side a test valve with a short open-ended discharge pipe. The effective area through the valve and pipe shall be adequate to permit the release of the required pump output while maintaining the pressure in the system specified in sub-paragraph (d)(i) of this Regulation.

(iv) The sea inlet to the pump shall wherever possible be in the space containing the pump and shall be so arranged that when the ship is afloat it will not be necessary to shut off the supply of sea water to the pump for any purpose other than the inspection or repair of the pump.

(f) The sprinkler pump and tank shall be situated in a position reasonably remote from any machinery space of Category A and shall not be situated in any space required to be protected by the sprinkler system.

(g) There shall be not less than two sources of power supply for the sea water pump and automatic alarm and detection system. Where the sources of power for the pump are electrical, these shall be a main generator and an emergency source of power. One supply for the pump shall be taken from the main switchboard, and one from the emergency switchboard by separate feeders reserved solely for that purpose.

The feeders shall be arranged so as to avoid galleys, machinery spaces and other enclosed spaces of high fire risk except in so far as it is necessary to reach the appropriate switchboards, and shall be run to an automatic change-over switch situated near the sprinkler pump. This switch shall permit the supply of power from the main switchboard so long as a supply is available therefrom, and be so designed that upon failure of that supply it will automatically change over to the supply from the emergency switchboard. The switches on the main switchboard and the emergency switchboard shall be clearly labelled and normally kept closed. No other switch shall be permitted in the feeders concerned. One of the sources of power supply for the alarm and detection system shall be an emergency source. Where one of the sources of power for the pump is an internal combustion-type engine it shall, in addition to complying with the provisions of paragraph (f) of this Regulation, be so situated that a fire in any protected space will not affect the air supply to the machinery.

(h) The sprinkler system shall have a connexion from the ship's fire main by way of a lockable screw-down non-return valve at the connexion which will prevent a backflow from the sprinkler system to the fire main.

(i) (i) A test valve shall be provided for testing the automatic alarm for each section of sprinklers by a discharge of water equivalent to the operation of one sprinkler. The test valve for each section shall be situated near the stop valve for that section.

(ii) Means shall be provided for testing the automatic operation of the pump, on reduction of pressure in the system.

(iii) Switches shall be provided at one of the indicating positions referred to in sub-paragraph (a)(ii) of this Regulation which will enable the alarm and the indicators for each section of sprinklers to be tested.

(j) Spare sprinkler heads shall be provided for each section of sprinklers to the satisfaction of the Administration.

Regulation 13

Automatic Fire Alarm and Fire Detection Systems

Requirements for passenger ships carrying more than 36 passengers

(a) (i) Any required automatic fire alarm and fire detection system shall be capable of immediate operation at all times and no action of the crew shall be necessary to set it in operation.

(ii) Each section of detectors shall include means for giving a visual and audible alarm signal automatically at one or more indicating units whenever any detector comes into operation. Such units shall give an indication of any fire and its location in any space served by the system and shall be centralized on the navigating bridge or in the main fire control station which shall be so manned or equipped as to ensure that any alarm from the system is immediately received by a responsible member of the crew. Such alarm system shall be constructed so as to indicate if any fault occurs in the system.

(b) Detectors shall be grouped into separate sections each covering not more than 50 rooms served by such a system and containing not more than 100 detectors. A section of detectors shall not serve spaces on both the port and starboard sides of the ship nor on more than one deck and neither shall it be situated in more than one main vertical zone except that the Administration, if it is satisfied that the protection of the ship against fire will not thereby be reduced, may permit such a section of detectors to serve both the port and starboard sides of the ship and more than one deck.

(c) The system shall be operated by an abnormal air temperature, by an abnormal concentration of smoke or by other factors indicative of incipient fire in any one of the spaces to be protected. Systems which are sensitive to air temperature shall not operate at less than 57°C (135°F) and shall operate at a temperature not greater than 74°C (165°F) when the temperature increase to those levels is not more than 1°C (1.8°F) per minute. At the discretion of the Administration the permissible temperature of operation may be increased to 30°C (54°F) above the maximum deckhead temperature in drying rooms and similar places of a normally high ambient temperature. Systems which are sensitive to smoke concentration shall operate on the reduction of the intensity of a transmitted light beam by an amount to be determined by the Administration. Other equally effective methods of operation may be accepted at the discretion of the Administration. The detection system shall not be used for any purpose other than fire detection.

(d) The detectors may be arranged to operate the alarm by the opening or closing of contacts or by other appropriate methods. They shall be fitted in an overhead position and shall be suitably protected against impact and physical damage. They shall be suitable for use in a marine atmosphere. They shall be placed in an open position clear of beams and other objects likely to obstruct the flow of hot gases or smoke to the sensitive element. Detectors operated by the closing of contacts shall be of the sealed contact type and the circuit shall be continuously monitored to indicate fault conditions.

(e) At least one detector shall be installed in each space where detection facilities are required and there shall be not less than one detector for each 37 square metres (400 square feet) of deck area. In large spaces the detectors shall be arranged in a regular pattern so that no detector is more than 9 metres (30 feet) from another detector or more than 4.5 metres (15 feet) from a bulkhead.

(f) There shall be not less than two sources of power supply for the electrical equipment used in the operation of the fire alarm and fire detection system, one of which shall be an emergency source. The supply shall be provided by separate feeders reserved solely for that purpose. Such feeders shall run to a change-over switch situated in the control station for the fire detection system. The wiring system shall be so arranged to avoid galleys, machinery spaces and other enclosed spaces having a high fire risk except in so far as it is necessary to provide for fire detection in such spaces or to reach the appropriate switchboard.

(g) (i) A list or plan shall be displayed adjacent to each indicating unit showing the spaces covered and the location of the zone in respect of each section. Suitable instructions for testing and maintenance shall be available.

(ii) Provision shall be made for testing the correct operation of the detectors and the indicating units by supplying means for applying hot air or smoke at detector positions.

(h) Spare detector heads shall be provided for each section of detectors to the satisfaction of the Administration.

Requirements for all other types of ships

(i) All required fire detection systems shall be capable of automatically indicating the presence or indication of fire and also its location. Indicators shall

be centralized either on the navigating bridge or in other control stations which are provided with a direct communication with the bridge. The Administration may permit the indicators to be distributed among several stations.

(j) In passenger ships electrical equipment used in the operation of required fire detection systems shall have two separate sources of power, one of which shall be an emergency source.

(k) The alarm system shall operate both audible and visible signals at the main stations referred to in paragraph (i) of this Regulation. Detection systems for cargo spaces need not have audible alarms.

Regulation 14

Fireman's Outfit

A fireman's outfit shall consist of:

(a) Personal equipment comprising:

(i) Protective clothing of material to protect the skin from the heat radiating from the fire and from burns and scalding by steam. The outer surface shall be water-resistant.

(ii) Boots and gloves of rubber or other electrically non-conducting material.

(iii) A rigid helmet providing effective protection against impact.

(iv) An electric safety lamp (hand lantern) of an approved type with a minimum burning period of three hours.

(v) An axe to the satisfaction of the Administration.

(b) A breathing apparatus of an approved type which may be either:

(i) A smoke helmet or smoke mask which shall be provided with a suitable air pump and a length of air hose sufficient to reach from the open deck, well clear of hatch or doorway, to any part of the holds or machinery spaces. If, in order to comply with this sub-paragraph, an air hose exceeding 36 metres (120 feet) in length would be necessary, a self-contained breathing apparatus shall be substituted or provided in addition as determined by the Administration, or

(ii) a self-contained breathing apparatus which shall be capable of functioning for a period of time to be determined by the Administration.

For each breathing apparatus a fireproof lifeline of sufficient length and strength shall be provided capable of being attached by means of a snaphook to the harness of the apparatus or to a separate belt in order to prevent the breathing apparatus becoming detached when the lifeline is operated.

Regulation 15

Ready Availability of Fire-Extinguishing Appliances

In all new and existing ships, fire-extinguishing appliances shall be kept in good order and available for immediate use at all times during the voyage.

Regulation 16

Acceptance of Substitutes

Where in this Chapter any special type of appliance, apparatus, extinguishing medium or arrangement is specified in any new and existing ships, any other type of appliance etc., may be allowed, provided the Administration is satisfied that it is not less effective.

PART B - FIRE SAFETY MEASURES FOR PASSENGER SHIPS CARRYING MORE THAN 36 PASSENGERS

Regulation 17

Structure

The hull, superstructure, structural bulkheads, decks and deckhouses shall be constructed of steel or other equivalent material. For the purpose of applying the definition of steel or other equivalent material as given in Regulation 3(g) of this Chapter the "applicable fire exposure" shall be according to the integrity and insulation standards given in the tables of Regulation 20 of this Chapter. An example where divisions such as decks or sides and ends of deckhouses are permitted to have "B-0" fire integrity, the "applicable fire exposure" shall be one half-hour.

Provided that in cases where any part of the structure is of aluminium alloy, the following requirements shall apply:

(a) The insulation of aluminium alloy components of "A" or "B" Class divisions, except structure which in the opinion of the Administration is non-load-bearing, shall be such that the temperature of the structural core does not rise more than 200°C (360°F) above the ambient temperature at any time during the applicable fire exposure to the standard fire test.

(b) Special attention shall be given to the insulation of aluminium alloy components of columns, stanchions and other structural members required to support lifeboat and liferaft stowage, launching and embarkation areas, and "A" and "B" Class divisions to ensure:

(i) that for such members supporting lifeboat and liferaft areas and "A" Class divisions the temperature rise limitation specified in paragraph (a) of this Regulation shall apply at the end of one hour; and

(ii) that for such members required to support "B" Class divisions, the temperature rise limitation specified in paragraph (a) of this Regulation shall apply at the end of one half-hour.

(c) Crowns and casings of machinery spaces of Category A shall be of steel construction adequately insulated and openings therein, if any, shall be suitably arranged and protected to prevent the spread of fire.

Regulation 18

Main Vertical Zones and Horizontal Zones

(a) The hull, superstructure and deckhouses shall be subdivided into main vertical zones by "A" Class divisions. Steps and recesses shall be kept to a minimum, but where they are necessary, they shall also be "A" Class divisions. These divisions shall have insulation values in accordance with the applicable tables in Regulation 20 of this Chapter.

(b) As far as practicable, the bulkheads forming the boundaries of the main vertical zones above the bulkhead deck shall be in line with watertight subdivision bulkheads situated immediately below the bulkhead deck.

(c) Such bulkheads shall extend from deck to deck and to the shell or other boundaries.

(d) Where a main vertical zone is subdivided by horizontal "A" Class divisions into horizontal zones for the purpose of providing an appropriate barrier between sprinklered and non-sprinklered zones of the ship the divisions shall extend between adjacent main vertical zone bulkheads and to the shell or exterior boundaries of the ship and shall be insulated in accordance with the fire insulation and integrity values given in Table 3 of Regulation 20 of this Chapter.

(e) On ships designed for special purposes, such as automobile or railroad car ferries, where the provision of main vertical zone bulkheads would defeat the purpose for which the ship is intended, equivalent means for controlling and limiting a fire shall be substituted and specifically approved by the Administration.

Provided that in a ship with special category spaces, any such space shall comply with the applicable provisions of Regulation 30 of this Chapter, and in so far as such compliance would be inconsistent with compliance with other requirements of this Part of this Chapter, the requirements of Regulation 30 shall prevail.

Regulation 19

Bulkheads within a Main Vertical Zone

(a) All bulkheads which are not required to be "A" Class divisions shall be at least "B" Class or "C" Class divisions as prescribed in the tables in Regulation 20 of this Chapter. All such divisions may be faced with combustible materials in accordance with the provisions of Regulation 27 of this Chapter.

(b) All corridor bulkheads where not required to be "A" Class shall be "B" Class divisions which shall extend from deck to deck except:

(i) when continuous "B" Class ceilings and/or linings are fitted on both sides of the bulkhead, the portion of the bulkhead behind the continuous ceiling or lining shall be of material which in thickness and composition is acceptable in the construction of "B" Class divisions but which shall be required to meet "B" Class integrity standards only in so far as is reasonable and practicable in the opinion of the Administration;

(ii) in the case of a ship protected by an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter, the corridor bulkheads of "B" Class materials may terminate at a ceiling in the corridor provided such a ceiling is of material which in thickness and composition is acceptable in the construction of "B" Class divisions. Notwithstanding the requirements of Regulation 20 of this Chapter, such bulkheads and ceilings shall be required to meet "B" Class integrity standards only in so far as is reasonable and practicable in the opinion of the Administration. All doors and frames in such bulkheads shall be of incombustible materials and shall be constructed and erected so as to provide substantial fire resistance to the satisfaction of the Administration.

(c) All bulkheads required to be "B" Class divisions, except corridor bulkheads, shall extend from deck to deck and to the shell or other boundaries unless continuous "B" Class ceilings and/or linings are fitted on both sides of the bulkhead in which case the bulkhead may terminate at the continuous ceiling or lining.

Regulation 20

Fire Integrity of Bulkheads and Decks

(a) In addition to complying with the specific provisions for fire integrity of bulkheads and decks mentioned elsewhere in the Regulations of this Part, the minimum fire integrity of all bulkheads and decks shall be as prescribed in Tables 1 to 4 in this Regulation. Where, due to any particular structural arrangements in the ship, difficulty is experienced in determining from the tables the minimum fire integrity value of any divisions, such values shall be determined to the satisfaction of the Administration.

(b) The following requirements shall govern application of the tables:

(i) Table 1 shall apply to bulkheads bounding main vertical zones or horizontal zones.

Table 2 shall apply to bulkheads not bounding either main vertical zones or horizontal zones.

Table 3 shall apply to decks forming steps in main vertical zones or bounding horizontal zones.

Table 4 shall apply to decks not forming steps in main vertical zones nor bounding horizontal zones.

(ii) For the purpose of determining the appropriate fire integrity standards to be applied to boundaries between adjacent spaces, such spaces are classified according to their fire risk as shown in Categories (1) to (14) below. Where the contents and use of a space are such that there is a doubt as to its classification for the purpose of this Regulation, it shall be treated as a space within the relevant category having the most stringent boundary requirements. The title of each category is intended to be typical rather than restrictive. The number in parentheses preceding each category refers to the applicable column or row number in the tables.

(1) *Control Stations*

Spaces containing emergency sources of power and lighting.
Wheelhouse and chartroom.
Spaces containing the ship's radio equipment.
Fire control and recording stations.
Control room for propelling machinery when located outside the propelling machinery space.
Spaces containing centralized fire alarm equipment.
Spaces containing centralized emergency public address system stations and equipment.

(2) *Stairways*

Interior stairways, lifts and escalators (other than those wholly contained within the machinery spaces) for passengers and crew and enclosures thereto.

In this connexion, a stairway which is enclosed at only one level shall be regarded as part of the space from which it is not separated by a fire door.

(3) *Corridors*

Passenger and crew corridors.

(4) *Lifeboat and Liferaft Handling and Embarkation Stations*

Open deck spaces and enclosed promenades forming lifeboat and liferaft embarkation and lowering stations.

(5) *Open Deck Spaces*

Open deck spaces and enclosed promenades clear of lifeboat and liferaft embarkation and lowering stations.
Air space (the space outside superstructures and deckhouses).

(6) *Accommodation Spaces of Minor Fire Risk*

Cabins containing furniture and furnishings of restricted fire risk.
Public spaces containing furniture and furnishings of restricted fire risk.
Public spaces containing furniture and furnishings of restricted fire risk and having a deck area of less than 50 square metres (540 square feet).
Offices and dispensaries containing furniture and furnishings of restricted fire risk.

(7) *Accommodation Spaces of Moderate Fire Risk*

Same as (6) above but containing furniture and furnishings of other than restricted fire risk.
Public spaces containing furniture and furnishings of restricted fire risk and having a deck area of 50 square metres (540 square feet) and greater.
Isolated lockers and small store-rooms in accommodation spaces.
Sale shops.
Motion picture projection and film stowage rooms.
Diet kitchens (containing no open flame).
Cleaning gear lockers (in which inflammable liquids are not stowed).
Laboratories (in which inflammable liquids are not stowed).
Pharmacies.
Small drying rooms (having a deck area of 4 square metres (43 square feet) or less).
Specie rooms.

(8) *Accommodation Spaces of Greater Fire Risk*

Public spaces containing furniture and furnishings of other than restricted fire risk and having a deck area of 50 square metres (540 square feet) and greater.
Barber shops and beauty parlours.

(9) *Sanitary and Similar Spaces*

Communal sanitary facilities, showers, baths, water closets, etc.
Small laundry rooms.
Indoor swimming pool area.
Operating rooms.
Isolated serving pantries in accommodation spaces.

Private sanitary facilities shall be considered a portion of the space in which they are located.

(10) *Tanks, Voids and Auxiliary Machinery Spaces having little or no Fire Risk*

Water tanks forming part of the ship's structure.
Voids and cofferdams.
Auxiliary machinery spaces which do not contain machinery having a pressure lubrication system and where storage of combustibles is prohibited, such as:

ventilation and air-conditioning rooms; windlass room; steering gear room; stabilizer equipment room; electrical propulsion motor room; rooms containing section switchboards and purely electrical equipment other than oil-filled electrical transformers (above 10 kVA); shaft alleys and pipe tunnels; spaces for pumps and refrigeration machinery (not handling or using inflammable liquids).

Closed trunks serving the spaces listed above.
Other closed trunks such as pipe and cable trunks.

(11) *Auxiliary Machinery Spaces, Cargo Spaces, Special Category Spaces, Cargo and other Oil Tanks and other Similar Spaces of Moderate Fire Risk*

Cargo oil tanks.
Cargo holds, trunkways and hatchways.
Refrigerated chambers.
Oil fuel tanks (where installed in a separate space with no machinery).
Shaft alleys and pipe tunnels allowing storage of combustibles.
Auxiliary machinery spaces as in Category (10) which contain machinery having a pressure lubrication system or where storage of combustibles is permitted.
Oil fuel filling stations.
Spaces containing oil-filled electrical transformers (above 10 kVA).
Spaces containing turbine and reciprocating steam engine driven auxiliary generators and small internal combustion engines of power output up to 112 kW driving emergency generators, sprinkler, drencher or fire pumps, bilge pumps, etc.
Special category spaces (Tables 1 and 3 only apply).
Closed trunks serving the spaces listed above.

(12) *Machinery Spaces and Main Galleys*

Main propelling machinery rooms (other than electric propulsion motor rooms) and boiler rooms.
Auxiliary machinery spaces other than those in Categories (10) and (11) which contain internal combustion machinery or other oil-burning, heating or pumping units.
Main galleys and annexes.
Trunks and casings to the spaces listed above.

(13) *Store-rooms, Workshops, Pantries, etc.*

Main pantries not annexed to galleys.
Main laundry.
Large drying rooms (having a deck area of more than 4 square metres (43 square feet)).
Miscellaneous stores.
Mail and baggage rooms.
Garbage rooms.
Workshops (not part of machinery spaces, galleys, etc.).

(14) *Other Spaces in which Inflammable Liquids are stowed*

Lamp rooms.
Paint rooms.
Store-rooms containing inflammable liquids (including dyes, medicines, etc.).
Laboratories (in which inflammable liquids are stowed).

(iii) Where a single value is shown for the fire integrity of a boundary between two spaces, that value shall apply in all cases.

(iv) In determining the applicable fire integrity standard of a boundary between two spaces within a main vertical zone or horizontal zone which is not protected by an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter or between such zones neither of which is so protected, the higher of the two values given in the tables shall apply.

(v) In determining the applicable fire integrity standard of a boundary between two spaces within a main vertical zone or horizontal zone which is protected by an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter or between such zones both of which are so protected, the lesser of the two values given in the tables shall apply. In instances where a sprinklered zone and a non-sprinklered zone meet within accommodation and service spaces, the higher of the two values given in the tables shall apply to the division between the zones.

(vi) Where adjacent spaces are in the same numerical category and the superscript "1" appears in the tables, a bulkhead or deck between such spaces need not be fitted if deemed unnecessary by the Administration. For example, in Category (12) a bulkhead need not be required between a galley and its annexed pantries provided the pantry bulkheads and decks maintain the integrity of the galley boundaries. A bulkhead is, however, required between a galley and a machinery space even though both spaces are in Category (12).

(vii) Where the superscript "2" appears in the tables, the lesser insulation value may be permitted only if at least one of the adjoining spaces is protected by an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter.

(viii) Notwithstanding the provisions of Regulation 19 of this Chapter, there are no special requirements for material or integrity of boundaries where only a dash appears in the tables.

(ix) The Administration shall determine in respect of Category (5) spaces whether the insulation values in Table 1 or 2 shall apply to ends of deckhouses and superstructures, and whether the insulation values in Table 3 or 4 shall apply to weather decks. In no case shall the requirements of Category (5) of Tables 1 to 4 necessitate enclosure of spaces which in the opinion of the Administration need not be enclosed.

(c) Continuous "B" Class ceilings or linings, in association with the relevant decks or bulkheads, may be accepted as contributing wholly or in part, to the required insulation and integrity of a division.

(d) In approving structural fire protection details, the Administration shall have regard to the risk of heat transmission at intersections and terminal points of required thermal barriers.

TABLE 1. – BULKHEADS BOUNDING MAIN VERTICAL ZONES OR HORIZONTAL ZONES

Spaces	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Control stations (1)	A-60	A-30	A-30	A-0	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Stairways (2)		A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-30	A-60	A-15 A-0	A-60
Corridors (3)			A-0	A-0	A-0	A-0	A-30 A-0	A-30 A-0	A-0	A-0	A-30	A-60	A-15 A-0	A-60
Lifeboat and liferaft handling and embarkation stations (4)				—	—	A-0	A-0	A-0	A-0	A-0	A-0	A-60	A-0	A-60
Open deck spaces (5)					—	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Accommodation spaces of minor fire risk (6)						A-15 A-0	A-30 A-0	A-30 A-0	A-0	A-0	A-15 A-0	A-30	A-15 A-0	A-30
Accommodation spaces of moderate fire risk (7)							A-30 A-0	A-60 A-15	A-0	A-0	A-30 A-0	A-60	A-30 A-0	A-60
Accommodation spaces of greater fire risk (8)								A-60 A-15	A-0	A-0	A-60 A-15	A-60	A-30 A-0	A-60
Sanitary and similar spaces (9)									A-0	A-0	A-0	A-0	A-0	A-0
Tanks, voids and auxiliary machinery spaces having little or no fire risk (10)										A-0	A-0	A-0	A-0	A-0
Auxiliary machinery spaces, cargo spaces, special category spaces, cargo and other oil tanks and other similar spaces of moderate fire risk (11)											A-0	A-60	A-0	A-60
Machinery spaces and main galleys (12)												A-60	A-30[2] A-15	A-60
Store-rooms, workshops, pantries, etc. (13)													A-0	A-30
Other spaces in which inflammable liquids are stowed (14)														A-60

TABLE 2. – BULKHEADS NOT BOUNDING EITHER MAIN VERTICAL ZONES OR HORIZONTAL ZONES

Spaces	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Control stations (1)	B-0[1]	A-0	A-0	A-0	A-0 B-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Stairways (2)		A-0[1]	A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-15	A-30	A-15 A-0	A-30
Corridors (3)			C	A-0	A-0 B-0	B-0	B-15 B-0	B-15 B-0	B-0	A-0	A-15	A-30	A-0	A-30 A-0
Lifeboat and liferaft handling and embarkation stations (4)				—	—	A-0	A-0	A-0	A-0	A-0	A-0	A-15	A-0	A-15 A-0
Open deck space (5)					—	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0 B-0	A-0 B-0
Accommodation spaces of minor fire risk (6)						B-0 C	B-15 C	B-15 C	B-0 C	A-0	A-15 A-0	A-30	A-0	A-30 A-0
Accommodation spaces of moderate fire risk (7)							B-15 C	B-15 C	B-0 C	A-0	A-15 A-0	A-60	A-15 A-0	A-60 A-15
Accommodation spaces of greater fire risk (8)								B-15 C	B-0 C	A-0	A-30 A-0	A-60	A-15 A-0	A-60 A-15
Sanitary and similar spaces (9)									C	A-0	A-0	A-0	A-0	A-0
Tanks, voids and auxiliary machinery spaces having little or no fire risk (10)										A-0[1]	A-0	A-0	A-0	A-0
Auxiliary machinery spaces, cargo spaces, cargo and other oil tanks and other similar spaces of moderate fire risk (11)											A-0[1]	A-0	A-0	A-30[2] A-15
Machinery spaces and main galleys (12)												A-0	A-0	A-60
Store-rooms, workshops, pantries, etc. (13)													A-0[1]	A-0
Other spaces in which inflammable liquids are stowed (14)														A-30[2] A-15

TABLE 3. - DECKS FORMING STEPS IN MAIN VERTICAL ZONES OR BOUNDING HORIZONTAL ZONES

Space below ↓ Space above →		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Control stations	(1)	A-60	A-60	A-30	A-0	A-0	A-15	A-30	A-60	A-0	A-0	A-30	A-60	A-15	A-60
Stairways	(2)	A-15	A-0	A-0	A-0	A-0	A-0	A-15 A-0	A-15 A-0	A-0	A-0	A-0	A-60	A-0	A-60
Corridors	(3)	A-30	A-0	A-0	A-0	A-0	A-0	A-15 A-0	A-15 A-0	A-0	A-0	A-0	A-60	A-0	A-60
Lifeboat and liferaft handling and embarkation stations	(4)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Open deck spaces	(5)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Accommodation spaces of minor fire risk	(6)	A-60	A-30 A-0	A-15 A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-15 A-0	A-15	A-0	A-15
Accommodation spaces of moderate fire risk	(7)	A-60	A-60 A-15	A-30 A-0	A-15 A-0	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-30 A-0	A-30	A-0	A-30
Accommodation spaces of greater fire risk	(8)	A-60	A-60 A-15	A-60 A-15	A-60 A-15	A-0	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-30 A-0	A-60	A-15 A-0	A-60
Sanitary and similar spaces	(9)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Tanks, voids and auxiliary machinery spaces having little or no fire risk	(10)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Auxiliary machinery spaces, cargo spaces, special category spaces, cargo and other oil tanks and other similar spaces of moderate fire risk	(11)	A-60	A-60	A-60	A-60	A-0	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-0	A-30	A-30[2] A-0	A-30
Machinery spaces and main galleys	(12)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Store-rooms, workshops, pantries, etc.	(13)	A-60	A-60 A-15	A-30 A-0	A-15	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-0	A-30	A-0	A-30
Other spaces in which inflammable liquids are stowed	(14)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60

TABLE 4. - DECKS NOT FORMING STEPS IN MAIN VERTICAL ZONES NOR BOUNDING HORIZONTAL ZONES

Space below ↓ Space above →		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Control stations	(1)	A-30 A-0	A-30 A-0	A-15 A-0	A-0	A-0 B-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-0	A-60	A-0	A-60 A-15
Stairways	(2)	A-0	A-0	A-0	A-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0	A-0	A-30	A-0	A-30 A-0
Corridors	(3)	A-15 A-0	A-0	A-0[1] B-0[1]	A-0	A-0 B-0	A-0 B-0	A-15 B-0	A-15 B-0	A-0 B-0	A-0	A-0	A-30	A-0	A-30 A-0
Lifeboat and liferaft handling and embarkation stations	(4)	A-0	A-0	A-0	A-0	—	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0
Open deck spaces	(5)	A-0	A-0	A-0 B-0	A-0	—	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0 B-0	A-0
Accommodation spaces of minor fire risk	(6)	A-60	A-15 A-0	A-0	A-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-15 A-0	A-0	A-15 A-0
Accommodation spaces of moderate fire risk	(7)	A-60	A-30 A-0	A-15 A-0	A-15 A-0	A-0 B-0	A-0 B-0	A-15 B-0	A-30 B-0	A-0 B-0	A-0	A-15 A-0	A-30 A-0	A-0	A-30 A-0
Accommodation spaces of greater fire risk	(8)	A-60	A-60 A-15	A-60 A-0	A-30 A-0	A-0 B-0	A-15 B-0	A-30 B-0	A-60 B-0	A-0 B-0	A-0	A-30 A-0	A-30 A-0	A-0	A-30 A-0
Sanitary spaces and similar spaces	(9)	A-0	A-0	A-0 B-0	A-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0
Tanks, voids and auxiliary machinery spaces having little or no fire risk	(10)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0[1]	A-0	A-0	A-0	A-0
Auxiliary machinery spaces, cargo spaces, cargo and other oil tanks and other similar spaces of moderate fire risk	(11)	A-60	A-60 A-15	A-60 A-15	A-30 A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-0[1]	A-0	A-0	A-30[2] A-15
Machinery spaces and main galleys	(12)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-30	A-30[1]	A-0	A-60
Store-rooms, workshops, pantries, etc.	(13)	A-60	A-30 A-0	A-15 A-0	A-15 A-0	A-0 B-0	A-15 A-0	A-30 A-0	A-30 A-0	A-0 B-0	A-0	A-0	A-0	A-0	A-15[2] A-0
Other spaces in which inflammable liquids are stowed	(14)	A-60	A-60 A-30	A-60 A-30	A-60	A-0	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-30[2] A-0	A-30[2] A-0	A-0	A-30[2] A-0

Regulation 21

Means of Escape

(a) In and from all passenger and crew spaces and in spaces in which the crew is normally employed, other than machinery spaces, stairways and ladders shall be arranged to provide ready means of escape to the lifeboat and liferaft embarkation deck. In particular, the following provisions shall be complied with:

(i) Below the bulkhead deck, two means of escape, at least one of which shall be independent of watertight doors, shall be provided from each watertight compartment or similarly restricted space or group of spaces. Exceptionally, the Administration may dispense with one of the means of escape, due regard being paid to the nature and location of spaces and to the number of persons who normally might be quartered or employed there.

(ii) Above the bulkhead deck, there shall be at least two means of escape from each main vertical zone or similarly restricted space or group of spaces at least one of which shall give access to a stairway forming a vertical escape.

(iii) At least one of the means of escape required by sub-paragraphs (a)(i) and (ii) of this Regulation shall be by means of a readily accessible enclosed stairway, which shall provide continuous fire shelter from the level of its origin to the appropriate lifeboat and liferaft embarkation decks or the highest level served by the stairway, whichever level is the highest. However, where an Administration has granted dispensation under the provisions of sub-paragraph (a)(i) of this Regulation the sole means of escape shall provide safe escape to the satisfaction of the Administration. The width, number and continuity of the stairways shall be to the satisfaction of the Administration.

(iv) Protection of access from the stairway enclosures to the lifeboat and liferaft embarkation areas shall be to the satisfaction of the Administration.

(v) Lifts shall not be considered as forming one of the required means of escape.

(vi) Stairways serving only a space and a balcony in that space shall not be considered as forming one of the required means of escape.

(vii) If a radiotelegraph station has no direct access to the weather deck, two means of escape shall be provided from such station.

(viii) Dead-end corridors exceeding 13 metres (43 feet) shall not be permitted.

(b) (i) In special category spaces the number and disposition of the means of escape both below and above the bulkhead deck shall be to the satisfaction of the Administration, and in general the safety of access to the embarkation deck shall be at least equivalent to that provided for under sub-paragraphs (a)(i), (ii), (iii), (iv) and (v) of this Regulation.

(ii) One of the escape routes from the machinery spaces where the crew is normally employed shall avoid direct access to any special category space.

(c) Two means of escape shall be provided from each machinery space. In particular, the following provisions shall be complied with:

(i) Where the space is below the bulkhead deck the two means of escape shall consist of either:

(1) two sets of steel ladders as widely separated as possible, leading to doors in the upper part of the space similarly separated and from which access is provided to the appropriate lifeboat and liferaft embarkation decks. One of these ladders shall provide continuous fire shelter from the lower part of the space to a safe position outside the space; or

(2) one steel ladder leading to a door in the upper part of the space from which access is provided to the embarkation deck and a steel door capable of being operated from each side and which provides a safe escape route to the embarkation deck.

(ii) Where the space is above the bulkhead deck, two means of escape shall be as widely separated as possible and the doors leading from such means of escape shall be in a position from which access is provided to the appropriate lifeboat and liferaft embarkation decks. Where such escapes require the use of ladders these shall be of steel.

Provided that in a ship of less than 1,000 tons gross tonnage, the Administration may dispense with one of the means of escape due regard being paid to the width and disposition of the upper part of the space; and in a ship of 1,000 tons gross tonnage and above, the Administration may dispense with one means of escape from any such space so long as either a door or a steel ladder provides a safe escape route to the embarkation deck due regard being paid to the nature and location of the space and whether persons are normally employed in that space.

Regulation 22

Protection of Stairways and Lifts in Accommodation and Service Spaces

(a) All stairways shall be of steel frame construction except where the Administration sanctions the use of other equivalent material, and shall be within enclosures formed of "A" Class divisions, with positive means of closure at all openings, except that:

(i) a stairway connecting only two decks need not be enclosed, provided the integrity of the deck is maintained by proper bulkheads or doors at one between deck space. When a stairway is closed at one between deck space, the stairway enclosure shall be protected in accordance with the tables for decks in Regulation 20 of this Chapter;

(ii) stairways may be fitted in the open in a public space, provided they lie wholly within such public space.

(b) Stairway enclosures shall have direct communication with the corridors and be of sufficient area to prevent congestion, having in view the number of persons likely to use them in an emergency. In so far as practicable, stairway enclosures shall not give direct access to cabins, service lockers, or other enclosed spaces containing combustibles in which a fire is likely to originate.

(c) Lift trunks shall be so fitted as to prevent the passage of smoke and flame from one between deck to another and shall be provided with means of closing so as to permit the control of draught and smoke.

Regulation 23

Openings in "A" Class Divisions

(a) Where "A" Class divisions are pierced for the passage of electric cables, pipes, trunks, ducts, etc., for girders, beams or other structures, arrangements shall be made to ensure that the fire resistance is not impaired, subject to the provisions of paragraph (g) of this Regulation.

(b) Where of necessity, a ventilation duct passes through a main vertical zone bulkhead, a fail-safe automatic closing fire damper shall be fitted adjacent to the bulkhead. The damper shall also be capable of being manually closed from each side of the bulkhead. The operating position shall be readily accessible and be marked in red light-reflecting colour. The duct between the bulkhead and the damper shall be of steel or other equivalent material and, if necessary, to an insulating standard such as to comply with paragraph (a) of this Regulation. The damper shall be fitted on at least one side of the bulkhead with a visible indicator showing if the damper is in the open position.

(c) Except for hatches between cargo, special category, store, and baggage spaces, and between such spaces and the weather decks, all openings shall be provided with permanently attached means of closing which shall be at least as effective for resisting fires as the divisions in which they are fitted.

(d) The construction of all doors and door frames in "A" Class divisions, with the means of securing them when closed, shall provide resistance to fire as well as to the passage of smoke and flame, as far as practicable, equivalent to that of the bulkheads in which the doors are situated. Such doors and door frames shall be constructed of steel or other equivalent material. Watertight doors need not be insulated.

(e) It shall be possible for each door to be opened and closed from each side of the bulkhead by one person only.

(f) Fire doors in main vertical zone bulkheads and stairway enclosures, other than power-operated watertight doors and those which are normally locked, shall be of the self-closing type capable of closing against an inclination of 3½ degrees opposing closure. The speed of door closure shall, if necessary, be controlled so as to prevent undue danger to personnel. All such doors, except those that are normally closed, shall be capable of release from a control station, either simultaneously or in groups, and also individually from a position at the door. The release mechanism shall be so designed that the door will automatically close in the event of disruption of the control system; however, approved power-operated watertight doors will be considered acceptable for this purpose. Hold-back hooks, not subject to control station release, will not be permitted. When double swing doors are permitted, they shall have a latch arrangement which is automatically engaged by the operation of the door release system.

(g) Where a space is protected by an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter or fitted with a continuous "B" Class ceiling, openings in decks not forming steps in main vertical zones nor bounding horizontal zones shall be closed reasonably tight and such decks shall meet the "A" Class integrity requirements in so far as is reasonable and practicable in the opinion of the Administration.

(h) The requirements for "A" Class integrity of the outer boundaries of a ship shall not apply to glass partitions, windows and sidescuttles. Similarly, the requirements for "A" Class integrity shall not apply to exterior doors in superstructures and deckhouses.

Regulation 24

Openings in "B" Class Divisions

(a) Where "B" Class divisions are penetrated for the passage of electrical cables, pipes, trunks, ducts, etc., or for the fitting of ventilation terminals, lighting fixtures and similar devices, arrangements shall be made to ensure that the fire resistance is not impaired.

(b) Doors and door frames in "B" Class divisions and means of securing them shall provide a method of closure which shall have resistance to fire as far as practicable equivalent to the divisions except that ventilation openings may be permitted in the lower portion of such doors. Where such opening is in or under a door the total net area of any such opening or openings shall not exceed 0.05 square metres (78 square inches). When such opening is cut in a door it shall be fitted with a grill made of non-combustible material. Doors shall be non-combustible.

(c) The requirements for "B" Class integrity of the outer boundaries of a ship shall not apply to glass partitions, windows and sidescuttles. Similarly, the requirements for "B" Class integrity shall not apply to exterior doors in superstructures and deckhouses.

(d) Where an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter is fitted:

(i) openings in decks not forming steps in main vertical zones nor bounding horizontal zones shall be closed reasonably tight and such decks shall meet the "B" Class integrity requirements in so far as is reasonable and practicable in the opinion of the Administration; and

(ii) openings in corridor bulkheads of "B" Class materials shall be protected in accordance with the provisions of Regulation 19 of this Chapter.

Regulation 25

Ventilation Systems

(a) In general, the ventilation fans shall be so disposed that the ducts reaching the various spaces remain within the main vertical zone.

(b) Where ventilation systems penetrate decks, precautions shall be taken, in addition to those relating to the fire integrity of the deck required by Regulation 23 of this Chapter, to reduce the likelihood of smoke and hot gases passing from one between deck space to another through the system. In addition to insulation requirements contained in this Regulation, vertical ducts shall, if necessary, be insulated as required by the appropriate tables in Regulation 20 of this Chapter.

(c) The main inlets and outlets of all ventilation systems shall be capable of being closed from outside the space being ventilated.

(d) Except in cargo spaces, ventilation ducts shall be constructed of the following materials:

(i) Ducts not less than 0.075 square metres (116 square inches) in sectional area and all vertical ducts serving more than a single between deck space shall be constructed of steel or other equivalent material.

(ii) Ducts less than 0.075 square metres (116 square inches) in sectional area shall be constructed of non-combustible materials. Where such ducts penetrate "A" or "B" Class divisions due regard shall be given to ensuring the fire integrity of the division.

(iii) Short lengths of duct, not in general exceeding 0.02 square metres (31 square inches) in sectional area nor 2 metres (79 inches) in length, need not be incombustible provided that all of the following conditions are met:

(1) the duct is constructed of a material of restricted fire risk to the satisfaction of the Administration;

(2) the duct is used only at the terminal end of the ventilation system; and

(3) the duct is not located closer than 0.6 metres (24 inches) measured along its length to a penetration of an "A" or "B" Class division, including continuous "B" Class ceilings.

(e) Where a stairway enclosure is ventilated, the duct or ducts (if any) shall be taken from the fan room independently of other ducts in the ventilation system and shall not serve any other space.

(f) All power ventilation, except machinery and cargo spaces ventilation and any alternative system which may be required under paragraph (h) of this Regulation, shall be fitted with controls so grouped that all fans may be stopped from either of two separate positions which shall be situated as far apart as practicable. Controls provided for the power ventilation serving machinery spaces shall also be grouped so as to be operable from two positions, one of which shall be outside such spaces. Fans serving power ventilation systems to cargo spaces shall be capable of being stopped from a safe position outside such spaces.

(g) Where they pass through accommodation spaces or spaces containing combustible materials, the exhaust ducts from galley ranges shall be constructed of "A" Class divisions. Each exhaust duct shall be fitted with:

(i) a grease trap readily removable for cleaning;

(ii) a fire damper located in the lower end of the duct;

(iii) arrangements, operable from within the galley, for shutting off the exhaust fan; and

(iv) fixed means for extinguishing a fire within the duct.

(h) Such measures as are practicable shall be taken in respect of control stations outside machinery spaces in order to ensure that ventilation, visibility and freedom from smoke are maintained, so that in the event of fire the machinery and equipment contained therein may be supervised and continue to function effectively. Alternative and separate means of air supply shall be provided; air inlets of the two sources of supply shall be so disposed that the risk of both inlets drawing in smoke simultaneously is minimized. At the discretion of the Administration, such requirements need not apply to control stations situated on, and opening on to, an open deck, or where local closing arrangements would be equally effective.

(i) Ducts provided for ventilation of machinery spaces of Category A shall not in general pass through accommodation, service spaces or control stations, except that the Administration may permit relaxation from this requirement, provided that:

(i) the ducts are constructed of steel, and are insulated to "A-60" standard; or

(ii) the ducts are constructed of steel and are fitted with an automatic fire damper close to the boundary penetrated and are insulated to "A-60" standard from the machinery space to a point at least 5 metres (16 feet) beyond the fire damper.

(j) Ducts provided for ventilation of accommodation, service spaces, or control stations shall not in general pass through machinery spaces of Category A, except that the Administration may permit relaxation from this requirement provided that the ducts are constructed of steel and automatic fire dampers are fitted close to the boundaries penetrated.

Regulation 26

Windows and Sidescuttles

(a) All windows and sidescuttles in bulkheads within accommodation and service spaces and control stations other than those to which the provisions of paragraph (h) of Regulation 23 and paragraph (c) of Regulation 24 of this Chapter apply, shall be constructed so as to preserve the integrity requirements of the type of bulkheads in which they are fitted.

(b) Notwithstanding the requirements of the tables in Regulation 20 of this Chapter:

(i) All windows and sidescuttles in bulkheads separating accommodation and service spaces and control stations from weather shall be constructed with frames of steel or other suitable material. The glass shall be retained by a metal glazing bead or angle.

(ii) Special attention shall be given to the fire integrity of windows facing open or enclosed lifeboat and liferaft embarkation areas and to windows situated below such areas in such a position that their failure during a fire would impede the launching of, or embarkation into, lifeboats or liferafts.

Regulation 27

Restriction of Combustible Materials

(a) Except in cargo spaces, mail rooms, baggage rooms, or refrigerated compartments of service spaces, all linings, grounds, ceilings and insulations shall be of non-combustible materials. Partial bulkheads or decks used to subdivide a space for utility or artistic treatment shall also be of non-combustible material.

(b) Vapour barriers and adhesives used in conjunction with insulation, as well as insulation of pipe fittings, for cold service systems need not be non-combustible, but they shall be kept to the minimum quantity practicable and their exposed surfaces shall have qualities of resistance to the propagation of flame to the satisfaction of the Administration.

(c) Bulkheads, linings and ceilings in all accommodation and service spaces may have combustible veneer, provided that such veneer shall not exceed 2 millimetres ($\frac{1}{12}$ inch) within any such spaces except corridors, stairway enclosures and control stations where it shall not exceed 1.5 millimetres ($\frac{1}{17}$ inch).

(d) The total volume of combustible facings, mouldings, decorations and veneers in any accommodation and service space shall not exceed a volume equivalent to 2.5 millimetres ($\frac{1}{10}$ inch) veneer on the combined area of the walls and ceilings. In the case of ships fitted with an automatic sprinkler system complying with the provisions of Regulation 12 of this Chapter, the above volume may include some combustible material used for erection of "C" Class divisions.

(e) All exposed surfaces in corridors or stairway enclosures and surfaces in concealed or inaccessible spaces in accommodation and service spaces and control stations shall have low flame-spread characteristics.*

(f) Furniture in the passages and stairway enclosures shall be kept to a minimum.

(g) Paints, varnishes and other finishes used on exposed interior surfaces shall not be of a nature to offer an undue fire hazard in the judgment of the Administration and shall not be capable of producing excessive quantities of smoke or other toxic properties.

(h) Primary deck coverings, if applied, within accommodation and service spaces and control stations, shall be of approved material which will not readily ignite, or give rise to toxic or explosive hazards at elevated temperatures.†

(i) Waste-paper receptacles shall be constructed of non-combustible materials and with solid sides and bottoms.

Regulation 28

Miscellaneous Items

Requirements Applicable to all Portions of the Ship

(a) Pipes penetrating "A" or "B" Class divisions shall be of a material approved by the Administration having regard to the temperature such divisions are required to withstand. Pipes conveying oil or combustible liquids shall be of a material approved by the Administration having regard to the fire risk. Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the water-line and where the failure of the material in the event of fire would give rise to danger of flooding.

* Reference is made to Guidelines on the Evaluation of Fire Hazard Properties of Materials, adopted by the Organization by Resolution A.166(ES.IV).

† Reference is made to Improved Provisional Guidelines on Test Procedures for Primary Deck Coverings, adopted by the Organization by Resolution A.214(VII).

Requirements Applicable to Accommodation and Service Spaces, Control Stations, Corridors and Stairways

(b) (i) Air spaces enclosed behind ceilings, panelling or linings shall be suitably divided by close-fitting draught stops not more than 14 metres (46 feet) apart.

(ii) In the vertical direction, such spaces, including those behind linings of stairways, trunks, etc., shall be closed at each deck.

(c) The construction of ceiling and bulkheading shall be such that it will be possible, without impairing the efficiency of the fire protection, for the fire patrols to detect any smoke originating in concealed and inaccessible places, except where in the opinion of the Administration there is no risk of fire originating in such places.

Regulation 29

Automatic Sprinkler and Fire Alarm and Fire Detection Systems or Automatic Fire Aiarm and Fire Detection Systems

In any ship to which this Part applies there shall be installed throughout each separate zone, whether vertical or horizontal, in all accommodation and service spaces and, where it is considered necessary by the Administration, in control stations, except spaces which afford no substantial fire risk (such as void spaces, sanitary spaces, etc.) either:

(i) an automatic sprinkler and fire alarm and fire detection system of an approved type, complying with the provisions of Regulation 12 of this Chapter and installed and so arranged as to protect such spaces; or

(ii) an automatic fire alarm and fire detection system of an approved type, complying with the provisions of Regulation 13 of this Chapter, and installed and so arranged as to detect the presence of fire in such spaces.

Regulation 30

Protection of Special Category Spaces

Provisions Applicable to Special Category Spaces whether above or below the Bulkhead Deck

(a) *General*

(i) The basic principle underlying the provisions in this Regulation is that as normal main vertical zoning may not be practicable in special category spaces, equivalent protection must be obtained in such spaces on the basis of a horizontal zone concept and the provision of an efficient fixed fire-extinguishing system. Under this concept a horizontal zone for the purpose of this Regulation may include special category spaces on more than one deck provided that the overall height of the zone does not exceed 10 metres (33 feet).

(ii) All requirements laid down in Regulations 23 and 25 of this Chapter for maintaining the integrity of vertical zones shall be applied equally to decks and bulkheads forming the boundaries separating horizontal zones from each other and from the remainder of the ship.

(b) *Structural Protection*

(i) Boundary bulkheads of special category spaces shall be insulated as required for Category (11) spaces in Table 1 of Regulation 20 of this Chapter and the horizontal boundaries as required for Category (11) spaces in Table 3 of that Regulation.

(ii) Indicators shall be provided on the navigating bridge which shall indicate when any fire door leading to or from the special category spaces is closed.

(c) *Fixed Fire-Extinguishing System**

Each special category space shall be fitted with an approved fixed pressure water-spraying system for manual operation which shall protect all parts of any deck and vehicle platform, if any, in such space, provided that the Administration may permit the use of any other fixed fire-extinguishing system that has been shown by full-scale test in conditions simulating a flowing petrol fire in a special category space to be not less effective in controlling fires likely to occur in such a space.

(d) *Patrols and Detection*

(i) An efficient patrol system shall be maintained in special category spaces. In any such space in which the patrol is not maintained by a continuous fire watch at all times during the voyage there shall be provided in that space an automatic fire detection system of an approved type.

(ii) Manual fire alarms shall be provided as necessary throughout the special category spaces and one shall be placed close to each exit from such spaces.

(e) *Fire-Extinguishing Equipment*

There shall be provided in each special category space:

(i) a number of hydrants with hoses and dual-purpose nozzles of an approved type so arranged that at least two jets of water each from a single length of hose not emanating from the same hydrant may reach any part of such space;

(ii) at least three water fog applicators;

(iii) one portable applicator unit complying with the provisions of Regulation 7(d) of this Chapter, provided that at least two such units are available in the ship for use in such spaces; and

(iv) such number of portable fire extinguishers of an approved type as the Administration may deem sufficient.

(f) *Ventilation System*

(i) There shall be provided an effective power ventilation system for the special category spaces sufficient to give at least 10 air changes per hour. The system for such spaces shall be entirely separated from other ventilation systems and shall be operating at all times when vehicles are in such spaces. The Administration may require an increased number of air changes when vehicles are being loaded and unloaded.

(ii) The ventilation shall be such as to prevent air stratification and the formation of air pockets.

(iii) Means shall be provided to indicate on the navigating bridge any loss or reduction of the required ventilating capacity.

Additional Provisions Applicable only to Special Category Spaces above the Bulkhead Deck

(g) *Scuppers*

In view of the serious loss of stability which could arise due to large quantities of water accumulating on the deck or decks consequent on the operation of the fixed pressure water-spraying system, scuppers shall be fitted so as to ensure that such water is rapidly discharged directly overboard.

(h) *Precautions against Ignition of Inflammable Vapours*

(i) Equipment which may constitute a source of ignition of inflammable vapours and in particular electrical equipment and wiring, shall be installed at least 450 millimetres (18 inches) above the deck, provided that if the Administration is satisfied that the installation of such electrical equipment and wiring below this level is necessary for the safe operation of the ship, such electrical equipment and wiring shall be of a type approved for use in an explosive petrol and air mixture. Electrical equipment installed at more than 450 millimetres (18 inches) above the deck shall be of a type so enclosed and protected as to prevent the escape of sparks. The reference to a level of 450 millimetres (18 inches) above the deck shall be construed to mean each deck on which vehicles are carried and on which explosive vapours might be expected to accumulate.

(ii) Electrical equipment and wiring, if installed in an exhaust ventilation duct, shall be of a type approved for use in explosive petrol and air mixtures and the outlet from any exhaust duct shall be sited in a safe position, having regard to other possible sources of ignition.

Additional Provisions applicable only to Special Category Spaces below the Bulkhead Deck

(i) *Bilge Pumping and Drainage*

In view of the serious loss of stability which could arise due to large quantities of water accumulating on the deck or tank top consequent on the operation of the fixed pressure water-spraying system, the Administration may require pumping and drainage facilities to be provided additional to the requirements of Regulation 18 of Chapter II-1 of the present Convention.

(j) *Precautions against Ignition of Inflammable Vapours*

(i) Electrical equipment and wiring, if fitted, shall be of a type suitable for use in explosive petrol and air mixtures. Other equipment which may constitute a source of ignition of inflammable vapours shall not be permitted.

(ii) Electrical equipment and wiring, if installed in an exhaust ventilation duct, shall be of a type approved for use in explosive petrol and air mixtures and the outlet from any exhaust duct shall be sited in a safe position, having regard to other possible sources of ignition.

Regulation 31

Protection of Cargo Spaces other than Special Category Spaces intended for the Carriage of Motor Vehicles with Fuel in their Tanks for their own Propulsion

In any cargo space (other than special category spaces) containing motor vehicles with fuel in their tanks for their own propulsion, the following provisions shall be complied with:

(a) *Fire Detection*

There shall be provided an approved fire detection and fire alarm system.

(b) *Fire-Extinguishing Arrangements*

(i) There shall be fitted a fixed gas fire-extinguishing system which shall comply with the provisions of Regulation 8 of this Chapter, except that if a carbon dioxide system is fitted, the quantity of gas available shall be at least sufficient to give a minimum volume of free gas equal to 45 per cent of the gross volume of the largest of such cargo spaces which is capable of being sealed, and the arrangements shall be such as to ensure that the gas is introduced rapidly and effectively into the space. Any other fixed gas fire-extinguishing system or fixed high expansion froth fire-extinguishing system may be fitted provided it gives equivalent protection.

(ii) There shall be provided for use in any such space such number of portable fire extinguishers of an approved type as the Administration may deem sufficient.

* Reference is made to Recommendation on Fixed Fire Extinguishing Systems for Special Category Spaces, adopted by the Organization by Resolution A.123(V).

(c) *Ventilation System*

(i) In any such cargo space there shall be provided an effective power ventilation system sufficient to give at least 10 air changes per hour. The system for such cargo spaces shall be entirely separated from other ventilation systems and shall be operating at all times when vehicles are in such spaces.

(ii) The ventilation shall be such as to prevent air stratification and the formation of air pockets.

(iii) Means shall be provided to indicate on the navigating bridge any loss or reduction of the required ventilating capacity.

(d) *Precautions against Ignition of Inflammable Vapours*

(i) Electrical equipment and wiring, if fitted, shall be of a type suitable for use in explosive petrol and air mixtures. Other equipment which may constitute a source of ignition of inflammable vapours shall not be permitted.

(ii) Electrical equipment and wiring, if installed in an exhaust ventilation duct, shall be of a type approved for use in explosive petrol and air mixtures and the outlet from any exhaust duct shall be sited in a safe position, having regard to other possible sources of ignition.

Regulation 32

Maintenance of Fire Patrols, etc., and Provision for Fire-Extinguishing Equipment

(a) *Fire Patrols and Detection, Alarms and Public Address Systems*

(i) An efficient patrol system shall be maintained so that an outbreak of fire may be promptly detected. Each member of the fire patrol shall be trained to be familiar with the arrangements of the ship as well as the location and operation of any equipment he may be called upon to use.

(ii) Manual alarms shall be fitted throughout the accommodation and service spaces to enable the fire patrol to give an alarm immediately to the navigating bridge or main fire control station.

(iii) An approved fire alarm or fire detecting system shall be provided which will automatically indicate at one or more suitable points or stations the presence or indication of fire and its location in any cargo space which, in the opinion of the Administration, is not accessible to the patrol system, except where it is shown to the satisfaction of the Administration that the ship is engaged on voyages of such short duration that it would be unreasonable to apply this requirement.

(iv) The ship shall at all times when at sea, or in port (except when out of service), be so manned or equipped as to ensure that any initial fire alarm is immediately received by a responsible member of the crew.

(v) A special alarm, operated from the navigating bridge or fire control station, shall be fitted to summon the crew. This alarm may be part of the ship's general alarm system but it shall be capable of being sounded independently of the alarm to the passenger spaces.

(vi) A public address system or other effective means of communication shall be available throughout the accommodation and service spaces and control stations.

(b) *Fire Pumps and Fire Main System*

The ship shall be provided with fire pumps, fire main system, hydrants and hoses complying with the provisions of Regulation 5 of this Chapter and shall comply with the following requirements:

(i) In a ship of 4,000 tons gross tonnage and upwards, there shall be provided at least three independently-driven fire pumps and, in a ship of less than 4,000 tons gross tonnage, at least two such fire pumps.

(ii) In a ship of 1,000 tons gross tonnage and upwards, the arrangement of sea connexions, fire pumps and sources of power for operating them shall be such as to ensure that a fire in any one compartment will not put all the fire pumps out of action.

(iii) In a ship of 1,000 tons gross tonnage and upwards, the arrangement of fire pumps, fire mains and hydrants shall be such that at least one effective jet of water as stipulated in paragraph (c) of Regulation 5 of this Chapter is immediately available from any one hydrant in an interior location. Arrangements shall also be made to ensure the continuation of the output of water by the automatic starting of a required fire pump.

(iv) In a ship of less than 1,000 tons gross tonnage the arrangements shall be to the satisfaction of the Administration.

(c) *Fire Hydrants, Hoses and Nozzles*

(i) The ship shall be provided with fire hoses the number and diameter of which shall be to the satisfaction of the Administration. There shall be at least one fire hose for each of the hydrants required by paragraph (d) of Regulation 5 of this Chapter and these hoses shall be used only for the purposes of extinguishing fires or testing the fire-extinguishing apparatus at fire drills and surveys.

(ii) In accommodation and service spaces and in machinery spaces, the number and position of hydrants shall be such that the requirements of paragraph (d) of Regulation 5 of this Chapter may be complied with when all watertight doors and all doors in main vertical zone bulkheads are closed.

(iii) The arrangements shall be such that at least two jets of water can reach any part of any cargo space when empty.

(iv) All required hydrants in machinery spaces shall be fitted with hoses having in addition to the nozzles required in paragraph (g) of Regulation 5 of this Chapter nozzles suitable for spraying water on oil, or alternatively dual-purpose nozzles. Additionally, each machinery space of Category A shall be provided with at least two suitable water fog applicators.*

(v) Water spray nozzles or dual-purpose nozzles shall be provided for at least one quarter of the number of hoses required in parts of the ship other than machinery spaces.

(vi) For each pair of breathing apparatus there shall be provided one water fog applicator which shall be stored adjacent to such apparatus.

(vii) Where, in any machinery space of Category A, access is provided at a low level from an adjacent shaft tunnel, two hydrants fitted with hoses with dual-purpose nozzles shall be provided external to, but near the entrance to that machinery space. Where such access is not provided from a tunnel but is provided from other space or spaces there shall be provided in one of those spaces two hydrants fitted with hoses with dual-purpose nozzles near the entrance to the machinery space of Category A. Such provision need not be made when the tunnel or adjacent spaces are not part of an escape route.

(d) *International Shore Connexion*

(i) A ship of 1,000 tons gross tonnage and upwards shall be provided with at least one international shore connexion, complying with the provisions of paragraph (h) of Regulation 5 of this Chapter.

(ii) Facilities shall be available enabling such a connexion to be used on either side of the ship.

(e) *Portable Fire Extinguishers in Accommodation and Service Spaces and Control Stations*

The ship shall be provided in accommodation and service spaces and control stations with such approved portable fire extinguishers as the Administration may deem to be appropriate and sufficient.

(f) *Fixed Fire-Extinguishing Arrangements in Cargo Spaces*

(i) The cargo spaces of ships of 1,000 tons gross tonnage and upwards shall be protected by a fixed gas fire-extinguishing system complying with the provisions of Regulation 8 of this Chapter, or by a fixed high expansion froth fire-extinguishing system which gives equivalent protection.

(ii) Where it is shown to the satisfaction of the Administration that a ship is engaged on voyages of such short duration that it would be unreasonable to apply the requirements of sub-paragraph (i) of this paragraph and also in ships of less than 1,000 tons gross tonnage, the arrangements in cargo spaces shall be to the satisfaction of the Administration.

(g) *Fire-Extinguishing Appliances in Boiler Rooms, etc.*

Spaces containing oil-fired boilers or oil fuel units shall be provided with the following arrangements:

(i) There shall be any one of the following fixed fire-extinguishing systems:

(1) A pressure water-spraying system complying with the provisions of Regulation 11 of this Chapter.

(2) A gas system complying with the provisions of Regulation 8 of this Chapter.

(3) A froth system complying with the provisions of Regulation 9 of this Chapter.

(4) A high expansion froth system complying with the provisions of Regulation 10 of this Chapter.

In each case if the engine and boiler rooms are not entirely separate, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler rooms shall be considered as one compartment.

(ii) There shall be in each boiler room at least one set of portable air-froth equipment complying with the provisions of paragraph (d) of Regulation 7 of this Chapter.

(iii) There shall be at least two approved portable extinguishers discharging froth or equivalent in each firing space in each boiler room and each space in which a part of the oil fuel installation is situated. There shall be not less than one approved froth-type extinguisher of at least 136 litres (30 gallons) capacity or equivalent in each boiler room. These extinguishers shall be provided with hoses on reels suitable for reaching any part of the boiler room.

(iv) In each firing space there shall be a receptacle containing sand, sawdust impregnated with soda or other approved dry material, in such quantity as may be required by the Administration. Alternatively an approved portable extinguisher may be substituted therefor.

(h) *Fire-Extinguishing Appliances in Spaces containing Internal Combustion Type Machinery*

Spaces containing internal combustion machinery used either for main propulsion, or for other purposes when such machinery has in the aggregate a total power output of not less than 373 kW, shall be provided with the following arrangements:

(i) There shall be one of the fire-extinguishing systems required by sub-paragraph (g)(i) of this Regulation.

* A water fog applicator might consist of a metal "L"-shaped pipe, the long limb being about 2 metres (6 feet) in length capable of being fitted to a fire hose and the short limb being about 250 millimetres (10 inches) in length fitted with a fixed water fog nozzle or capable of being fitted with a water spray nozzle.

(ii) There shall be at least one set of portable air-froth equipment complying with the provisions of paragraph (d) of Regulation 7 of this Chapter.

(iii) There shall be in each such space approved froth-type fire extinguishers each of at least 45 litres (10 gallons) capacity or equivalent sufficient in number to enable froth or its equivalent to be directed on to any part of the fuel and lubricating oil pressure systems, gearing and other fire hazards. In addition, there shall be provided a sufficient number of portable froth extinguishers or equivalent which shall be so located that an extinguisher is not more than 10 metres (33 feet) walking distance from any point in the space; provided that there shall be at least two such extinguishers in each such space.

(i) *Fire-Extinguishing Arrangements in Spaces containing Steam Turbines or enclosed Steam Engines*

In spaces containing steam turbines or enclosed steam engines used either for main propulsion or for other purposes when such machinery has in the aggregate a total power output of not less than 373 kW:

(i) There shall be provided froth fire extinguishers each of at least 45 litres (10 gallons) capacity or equivalent sufficient in number to enable froth or its equivalent to be directed on to any part of the pressure lubrication system, on to any part of the casings enclosing pressure lubricated parts of the turbines, engines or associated gearing, and any other fire hazards. Provided that such extinguishers shall not be required if protection at least equivalent to this sub-paragraph is provided in such spaces by a fixed fire-extinguishing system fitted in compliance with sub-paragraph (g)(i) of this Regulation.

(ii) There shall be provided a sufficient number of portable froth extinguishers or equivalent which shall be so located that an extinguisher is not more than 10 metres (33 feet) walking distance from any point in the space; provided that there shall be at least two such extinguishers in each such space, and such extinguishers shall not be required in addition to any provided in compliance with sub-paragraph (h)(iii) of this Regulation.

(j) *Fire-Extinguishing Appliances in other Machinery Spaces*

Where, in the opinion of the Administration, a fire hazard exists in any machinery space for which no specific provisions for fire-extinguishing appliances are prescribed in paragraphs (g), (h) and (i) of this Regulation there shall be provided in, or adjacent to, that space such number of approved portable fire extinguishers or other means of fire extinction as the Administration may deem sufficient.

(k) *Fixed Fire-Extinguishing Appliances not required by this Part*

Where a fixed fire-extinguishing system not required by this Part of this Chapter is installed, such a system shall be to the satisfaction of the Administration.

(l) *Special Requirements for Machinery Spaces*

(i) For any machinery space of Category A to which access is provided at a low level from an adjacent shaft tunnel there shall be provided in addition to any watertight door and on the side remote from that machinery space a light steel fire-screen door which shall be operable from each side.

(ii) An automatic fire detection and alarm system shall be fitted when the Administration considers such special precautions warranted in any machinery space in which the installation of automatic and remote control systems and equipment have been approved in lieu of continuous manning of the space.

(m) *Fireman's Outfits and Personal Equipment*

(i) The minimum number of fireman's outfits complying with the requirements of Regulation 14 of this Chapter, and of additional sets of personal equipment, each such set comprising the items stipulated in sub-paragraphs (a)(i), (ii) and (iii) of that Regulation, to be carried shall be as follows:

(1) two fireman's outfits; and in addition

(2) for every 80 metres (262 feet) or part thereof, of the aggregate of the lengths of all passenger spaces and service spaces on the deck which carries such spaces or, if there is more than one such deck, on the deck which has the largest aggregate of such lengths, two fireman's outfits and two sets of personal equipment, each such set comprising the items stipulated in Regulation 14(a)(i), (ii) and (iii) of this Chapter.

(ii) For each fireman's outfit which includes a self-contained breathing apparatus as provided in paragraph (b) of Regulation 14 of this Chapter, spare charges shall be carried on a scale approved by the Administration.

(iii) Fireman's outfits and sets of personal equipment shall be stored in widely separated positions ready for use. At least two fireman's outfits and one set of personal equipment shall be available at any one position.

Regulation 33

Arrangements for Oil Fuel, Lubricating Oil and other Inflammable Oils

(a) *Oil Fuel Arrangements*

In a ship in which oil fuel is used, the arrangements for the storage, distribution and utilization of the oil fuel shall be such as to ensure the safety of the ship and persons on board and shall at least comply with the following provisions:

(i) No oil fuel which has a flashpoint of less than 60°C (140°F) (closed cup test) as determined by an approved flashpoint apparatus shall be used as fuel, except in emergency generators, in which case the flashpoint shall be not less than 43°C (110°F).
Provided that the Administration may permit the general use of fuel oil having a flashpoint of not less than 43°C (110°F) subject to such additional precautions as it may consider necessary and on condition that the temperature of the space in which such fuel is stored or used shall not be allowed to rise within 10°C (18°F) below the flashpoint of the fuel.

(ii) As far as practicable, no part of the oil fuel system containing heated oil under pressure exceeding 1.8 kilogrammes per square centimetre (25 pounds per square inch) gauge shall be so concealed that defects and leakage cannot readily be observed. In way of such parts of the oil fuel system the machinery space shall be adequately illuminated.

(iii) The ventilation of machinery spaces shall be sufficient under all normal conditions to prevent accumulation of oil vapour.

(iv) (1) As far as practicable, oil fuel tanks shall be part of the ship's structure and shall be located outside machinery spaces of Category A. When oil fuel tanks, except double bottom tanks, are necessarily located adjacent to machinery spaces of Category A, they shall preferably have a common boundary with the double bottom tanks, and the area of the tank boundary common with the machinery space shall be kept to a minimum. In general, the use of free-standing oil fuel tanks shall be avoided but when such tanks are employed they shall not be situated in machinery spaces of Category A.

(2) No oil tank shall be situated where spillage or leakage therefrom can constitute a hazard by falling on heated surfaces. Precautions shall be taken to prevent any oil that may escape under pressure from any pump, filter or heater from coming into contact with heated surfaces.

(v) Every oil fuel pipe which if damaged would allow oil to escape from a storage, settling or daily service tank situated above the double bottom shall be fitted with a cock or valve on the tank capable of being closed from a safe position outside the space concerned in the event of a fire arising in the space in which such tanks are situated. In the special case of deep tanks situated in any shaft or pipe tunnel or similar space, valves on the tanks shall be fitted but control in event of fire may be effected by means of an additional valve on the pipe or pipes outside the tunnel or similar space.

(vi) Safe and efficient means of ascertaining the amount of oil fuel contained in any oil tank shall be provided. Sounding pipes with suitable means of closure may be permitted if their upper ends terminate in safe positions. Other means of ascertaining the amount of oil fuel contained in any oil fuel tank may be permitted if they do not require penetration below the top of the tank, and providing their failure or overfilling of the tanks will not permit release of fuel thereby.

(vii) Provision shall be made to prevent over-pressure in any oil tank or in any part of the oil fuel system, including the filling pipes. Any relief valves and air or overflow pipes shall discharge to a position which, in the opinion of the Administration, is safe.

(viii) Oil fuel pipes shall be of steel or other approved material, provided that restricted use of flexible pipes shall be permissible in positions where the Administration is satisfied that they are necessary. Such flexible pipes and end attachments shall be of approved fire-resisting materials of adequate strength and shall be constructed to the satisfaction of the Administration.

(b) *Lubricating Oil Arrangements*

The arrangements for the storage, distribution and utilization of oil used in pressure lubrication systems shall be such as to ensure the safety of the ships and persons on board, and such arrangements in machinery spaces of Category A and, whenever practicable, in other machinery spaces shall at least comply with the provisions of sub-paragraphs (ii), (iv)(2), (v), (vi) and (vii) of paragraph (a) of this Regulation.

(c) *Arrangements for other Inflammable Oils*

The arrangements for the storage, distribution and utilization of other inflammable oils employed under pressure in power transmission systems, control and activating systems and heating systems shall be such as to ensure the safety of the ship and persons on board. In locations where means of ignition are present such arrangements shall at least comply with the provisions of sub-paragraphs (a)(iv)(2) and (a)(vi), and with the provisions of sub-paragraph (a)(viii) in respect of strength and construction, of this Regulation.

Regulation 34

Special Arrangements in Machinery Spaces

(a) The provisions of this Regulation shall apply to machinery spaces of Category A and, where the Administration considers it desirable, to other machinery spaces.

(b) (i) The number of skylights, doors, ventilators, openings in funnels to permit exhaust ventilation and other openings to machinery spaces shall be reduced to a minimum consistent with the needs of ventilation and the proper and safe working of the ship.

(ii) The flaps of such skylights where fitted shall be of steel. Suitable arrangements shall be made to permit the release of smoke in the event of fire, from the space to be protected.

(iii) Such doors other than power-operated watertight doors shall be arranged so that positive closure is assured in case of fire in the space, by power-operated closing arrangements or by the provision

of self-closing doors capable of closing against an inclination of 3½ degrees opposing closure and having a fail-safe hook-back facility, provided with a remotely operated release device.

(c) Windows shall not be fitted in machinery space casings.

(d) Means of control shall be provided for:

(i) opening and closure of skylights, closure of openings in funnels which normally allow exhaust ventilation, and closure of ventilator dampers;

(ii) permitting the release of smoke;

(iii) closure of power-operated doors or release mechanism on doors other than power-operated watertight doors;

(iv) stopping ventilating fans; and

(v) stopping forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps.

(e) The controls required for ventilating fans shall comply with the provisions of paragraph (f) of Regulation 25 of this Chapter. The controls for any required fixed fire-extinguishing system and those required by sub-paragraphs (d)(i), (ii), (iii) and (v) of this Regulation and of sub-paragraph (a)(v) of Regulation 33 of this Chapter shall be situated at one control position, or grouped in as few positions as possible to the satisfaction of the Administration. Such position or positions shall be located where they will not be cut off in the event of fire in the space they serve, and shall have a safe access from the open deck.

PART C - FIRE SAFETY MEASURES FOR PASSENGER SHIPS CARRYING NOT MORE THAN 36 PASSENGERS

Regulation 35

Structure

(a) The hull, superstructure, structural bulkheads, decks and deckhouses shall be constructed of steel or other equivalent material.

(b) Where fire protection in accordance with paragraph (b) of Regulation 40 of this Chapter is employed, the superstructure may be constructed of, for example, aluminium alloy, provided that:

(i) for the temperature rise of the metallic cores of "A" Class divisions when exposed to the standard fire test, due regard is given to the mechanical properties of the material;

(ii) the Administration is satisfied that the amount of combustible materials used in the relevant part of the ship is suitably reduced; the ceilings (i.e. linings of deck heads) are non-combustible;

(iii) adequate provision is made to ensure that in the event of fire, arrangements for stowage, launching and embarkation into survival craft remain as effective as if the superstructure were constructed of steel;

(iv) crowns and casings of boiler and machinery spaces are of steel construction adequately insulated, and the openings therein, if any, are suitably arranged and protected to prevent spread of fire.

Regulation 36

Main Vertical Zones

(a) The hull, superstructure and deckhouses shall be subdivided into main vertical zones. Steps and recesses shall be kept to a minimum, but where they are necessary, they shall be of "A" Class divisions.

(b) As far as practicable, the bulkheads forming the boundaries of the main vertical zones above the bulkhead deck shall be in line with watertight subdivision bulkheads situated immediately below the bulkhead deck.

(c) Such bulkheads shall extend from deck to deck and to the shell or other boundaries.

(d) On ships designed for special purposes, such as automobile or railroad car ferries, where installation of such bulkheads would defeat the purpose for which the ship is intended, equivalent means for controlling and limiting a fire shall be substituted and specifically approved by the Administration.

Regulation 37

Openings in "A" Class Divisions

(a) Where "A" Class divisions are pierced for the passage of electric cables, pipes, trunks, ducts, etc., for girders, beams or other structures, arrangements shall be made to ensure that the fire resistance is not impaired.

(b) Where of necessity, a duct passes through a main vertical zone bulkhead, a fail-safe automatic closing fire damper shall be fitted adjacent to the bulkhead. The damper shall also be capable of being manually closed from both sides of the bulkhead. The operating position shall be readily accessible and be marked in red light-reflecting colour. The duct between the bulkhead and the damper shall be of steel or other equivalent material and, if necessary, to an insulating standard such as to comply with paragraph (a) of this Regulation. The damper shall be fitted on at least one side of the bulkhead with a visible indicator showing if the damper is in the open position.

(c) Except for hatches between cargo, store, and baggage spaces, and between such spaces and the weather decks, all openings shall be provided with permanently attached means of closing which shall be at least as effective for resisting fires as the divisions in which they are fitted.

(d) The construction of all doors and door frames in "A" Class divisions, with the means of securing them when closed, shall provide resistance to fire as well as to the passage of smoke and flame as far as practicable equivalent to that of the bulkheads in which the doors are situated. Watertight doors need not be insulated.

(e) It shall be possible for each door to be opened from either side of the bulkhead by one person only.

(f) Fire doors in main vertical zone bulkheads and stairway enclosures, other than power-operated watertight doors and those which are normally locked, shall be of the self-closing type capable of closing against an inclination of 3½ degrees opposing closure. All such doors, except those that are normally closed, shall be capable of release from a control station, either simultaneously or in groups, and also individually from a position at the door. The release mechanism shall be so designed that the door will automatically close in the event of disruption of the control system; however, approved power-operated watertight doors will be considered acceptable for this purpose. Hold-back hooks, not subject to control station release, will not be permitted. When double swing doors are permitted, they shall have a latch arrangement which is automatically engaged by the operation of the door release system.

Regulation 38

Fire Integrity of "A" Class Divisions

Where "A" Class divisions are required under this Part, the Administration, in deciding the amount of insulation to be provided, shall be guided by the provisions of Part B of this Chapter, but may accept a reduction of the amount of insulation below that stipulated by that Part.

Regulation 39

Separation of Accommodation Spaces from Machinery, Cargo and Service Spaces

The boundary bulkheads and decks separating accommodation spaces from machinery, cargo and service spaces shall be constructed of "A" Class divisions, and these bulkheads and decks shall have an insulation value to the satisfaction of the Administration having regard to the nature of the adjacent spaces.

Regulation 40

Protection of Accommodation and Service Spaces

The accommodation and service spaces shall be protected in accordance with the provisions of either paragraph (a) or (b) of this Regulation.

(a) (i) Within the accommodation spaces, all enclosure bulkheads other than those required to be of "A" Class divisions, shall be constructed of "B" Class divisions of non-combustible materials, which may, however, be faced with combustible materials in accordance with sub-paragraph (iii) of this paragraph.

(ii) All corridor bulkheads shall extend from deck to deck. Ventilation openings may be permitted in the doors in "B" Class bulkheads, preferably in the lower portion. All other enclosure bulkheads shall extend from deck to deck vertically, and to the shell or other boundaries transversely, unless non-combustible ceilings or linings such as will ensure fire integrity are fitted, in which case the bulkheads may terminate at the ceilings or linings.

(iii) Except in cargo spaces, mail rooms, baggage rooms, or refrigerated compartments of service spaces, all linings, grounds, ceilings and insulations shall be of non-combustible materials. The total volume of combustible facings, mouldings, decorations and veneers in any accommodation or public space shall not exceed a volume equivalent to 2.54 millimetres (1/10 inch) veneer on the combined area of the walls and ceilings. All exposed surfaces in corridors or stairway enclosures and in concealed or inaccessible spaces shall have low flame-spread characteristics.*

(b) (i) All corridor bulkheads in accommodation spaces shall be of steel or be constructed of "B" Class panels.

(ii) A fire detecting system of an approved type shall be installed and so arranged as to detect the presence of fire in all enclosed spaces appropriated to the use or service of passengers or crew (except spaces which afford no substantial fire hazard) and automatically to indicate at one or more points or stations where it can be most quickly observed by officers and crew, the presence or indication of fire and also its location.

* Reference is made to Guidelines on the Evaluation of Fire Hazard Properties of Materials, adopted by the Organization by Resolution A.166(ES.IV).

Regulation 41

*Deck Coverings**

Primary deck coverings within accommodation spaces, control stations, stairways and corridors shall be of approved material which will not readily ignite.

Regulation 42

Protection of Stairways and Lifts in Accommodation and Service Spaces

(a) All stairways and means of escape in accommodation and service spaces shall be of steel or other suitable materials.

(b) Passenger and service lift trunks, vertical trunks for light and air to passenger spaces, etc., shall be of "A" Class divisions. Doors shall be of steel or other equivalent material and when closed shall provide fire resistance at least as effective as the trunks in which they are fitted.

Regulation 43

Protection of Control Stations and Store-rooms

(a) Control stations shall be separated from the remainder of the ship by "A" Class bulkheads and decks.

(b) The boundary bulkheads of baggage rooms, mail rooms, store-rooms, paint and lamp lockers, galleys and similar spaces shall be of "A" Class divisions. Spaces containing highly inflammable stores shall be so situated as to minimize the danger to passengers or crew in the event of fire.

Regulation 44

Windows and Sidescuttles

(a) All windows and sidescuttles in bulkheads separating accommodation spaces from weather shall be constructed with frames of steel or other suitable material. The glass shall be retained by a metal glazing bead.

(b) All windows and sidescuttles in bulkheads within accommodation spaces shall be constructed so as to preserve the integrity requirements of the type of bulkhead in which they are fitted.

Regulation 45

Ventilation Systems

Power ventilation of machinery spaces shall be capable of being stopped from an easily accessible position outside the machinery spaces.

Regulation 46

Details of Construction

(a) Paints, varnishes and similar preparations having a nitro-cellulose or other highly inflammable base shall not be used in any part of the ship.

(b) Pipes penetrating "A" or "B" Class divisions shall be of a material approved by the Administration having regard to the temperature such divisions are required to withstand. Pipes conveying oil or combustible liquids shall be of a material approved by the Administration having regard to the fire risk. Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the water-line and where the failure of the material in the event of fire would give rise to danger of flooding.

(c) In spaces containing main propulsion machinery, or oil-fired boilers, or auxiliary internal combustion type machinery of total power output of 746 kW or over, the following measures shall be taken:

(i) skylights shall be capable of being closed from outside the space;

(ii) skylights containing glass panels shall be fitted with external shutters of steel or other equivalent material permanently attached;

(iii) any window permitted by the Administration in casings of such spaces shall be of the non-opening type, and shall be fitted with an external shutter of steel or other equivalent material permanently attached; and

(iv) in the windows and skylights referred to in sub-paragraphs (i), (ii) and (iii) of this paragraph, wire reinforced glass shall be used.

Regulation 47

Fire Detection Systems and Fire-Extinguishing Equipment

(a) *Patrols and Detection*

(i) An efficient patrol system shall be maintained in all ships so that any outbreak of fire may be promptly detected. Manual fire alarms shall be fitted throughout the passenger and crew accommodation to enable the fire patrol to give an alarm immediately to the navigating bridge or fire control station.

(ii) An approved fire alarm or fire detecting system shall be provided which will automatically indicate at one or more suitable points or stations the presence or indication of fire and its location in any part of the ship which, in the opinion of the Administration, is not accessible to the patrol system, except where it is shown to the satisfaction of the Administration that the ship is engaged on voyages of such short duration that it would be unreasonable to apply this requirement.

(iii) The ship, whether new or existing, shall at all times when at sea, or in port (except when out of service), be so manned or equipped as to ensure that any initial fire alarm is immediately received by a responsible member of the crew.

(b) *Fire Pumps and Fire Main System*

The ship shall be provided with fire pumps, fire main system, hydrants and hoses complying with Regulation 5 of this Chapter and with the following requirements:

(i) A ship of 4,000 tons gross tonnage and upwards shall be provided with at least three independently driven fire pumps and every ship of less than 4,000 tons gross tonnage with at least two such fire pumps.

(ii) In a ship of 1,000 tons gross tonnage and upwards, the arrangement of sea connexions, pumps and sources of power for operating them shall be such as to ensure that a fire in any one compartment will not put all the fire pumps out of action.

(iii) In a ship of less than 1,000 tons gross tonnage the arrangements shall be to the satisfaction of the Administration.

(c) *Fire Hydrants, Hoses and Nozzles*

(i) The ship shall be provided with such number of fire hoses as the Administration may deem sufficient. There shall be at least one fire hose for each of the hydrants required by paragraph (d) of Regulation 5 of this Chapter and these hoses shall be used only for the purposes of extinguishing fires or testing the fire-extinguishing apparatus at fire drills and surveys.

(ii) In accommodation, service and machinery spaces, the number and position of hydrants shall be such that the requirements of paragraph (d) of Regulation 5 of this Chapter may be complied with when all watertight doors and all doors in main vertical zone bulkheads are closed.

(iii) The arrangements shall be such that at least two jets of water can reach any part of any cargo space when empty.

(iv) All required hydrants in the machinery spaces of ships with oil-fired boilers or internal combustion type propelling machinery shall be fitted with hoses having nozzles as required in paragraph (g) of Regulation 5 of this Chapter.

(d) *International Shore Connexion*

(i) A ship of 1,000 tons gross tonnage and upwards shall be provided with at least one international shore connexion, complying with paragraph (h) of Regulation 5 of this Chapter.

(ii) Facilities shall be available enabling such a connexion to be used on either side of the ship.

(e) *Portable Fire Extinguishers in Accommodation and Service Spaces*

The ship shall be provided in accommodation and service spaces with such approved portable fire extinguishers as the Administration may deem to be appropriate and sufficient.

(f) *Fixed Fire-Extinguishing Arrangements in Cargo Spaces*

(i) The cargo spaces of ships of 1,000 tons gross tonnage and upwards shall be protected by a fixed gas fire-extinguishing system complying with Regulation 8 of this Chapter.

(ii) Where it is shown to the satisfaction of the Administration that a ship is engaged on voyages of such short duration that it would be unreasonable to apply the requirements of sub-paragraph (i) of this paragraph and also in ships of less than 1,000 tons gross tonnage, the arrangements in cargo spaces shall be to the satisfaction of the Administration.

(g) *Fire-Extinguishing Appliances in Boiler Rooms, etc.*

Where main or auxiliary oil-fired boilers are situated, or in spaces containing oil fuel units or settling tanks, a ship shall be provided with the following arrangements:

(i) There shall be any one of the following fixed fire-extinguishing installations:

(1) a pressure water-spraying system complying with Regulation 11 of this Chapter;

(2) a gas fire-extinguishing installation complying with Regulation 8 of this Chapter;

(3) a fixed froth installation complying with Regulation 9 of this Chapter. (The Administration may require fixed or mobile arrangements by pressure water or froth spraying to fight fire above the floor plates.)

In each case if the engine and boiler rooms are not entirely separate, or if fuel oil can drain from the boiler room into the engine room bilges, the combined engine and boiler rooms shall be considered as one compartment.

(ii) There shall be at least two approved portable extinguishers discharging froth or other approved medium suitable for extinguishing oil fires, in each firing space in each boiler room and each space in

* Reference is made to Improved Provisional Guidelines on Test Procedures for Primary Deck Coverings, adopted by the Organization by Resolution A.214(VII).

which a part of the oil fuel installation is situated. There shall be not less than one approved froth type extinguisher of at least 136 litres (30 gallons) capacity or equivalent in each boiler room. These extinguishers shall be provided with hoses on reels suitable for reaching any part of the boiler room and spaces containing any part of the oil fuel installations.

(iii) In each firing space there shall be a receptacle containing sand, sawdust impregnated with soda or other approved dry material, in such quantity as may be required by the Administration. Alternatively an approved portable extinguisher may be substituted therefor.

(h) *Fire-Fighting Appliances in Spaces containing Internal Combustion Type Machinery*

Where internal combustion type engines are used, either for main propulsion or for auxiliary purposes associated with a total power output of not less than 746 kW, a ship shall be provided with the following arrangements:

(i) there shall be one of the fixed arrangements required by sub-paragraph (g)(i) of this Regulation;

(ii) there shall be in each engine space one approved froth-type extinguisher of not less than 45 litres (10 gallons) capacity or equivalent and also one approved portable froth-type extinguisher for each 746 kW of engine power output or part thereof; but the total number of portable extinguishers so supplied shall be not less than two and need not exceed six.

(i) *Fire-Fighting Arrangements in Spaces containing Steam Turbines and not requiring any Fixed Installation*

The Administration shall give special consideration to the fire-extinguishing arrangements to be provided in spaces containing steam turbines which are separated from boiler rooms by watertight bulkheads.

(j) *Fireman's Outfits and Personal Equipment*

(i) The minimum number of fireman's outfits complying with the requirements of Regulation 14 of this Chapter, and of additional sets of personal equipment, each such set comprising the items stipulated in sub-paragraphs (a)(i), (ii) and (iii) of that Regulation, to be carried, shall be as follows:

(1) two fireman's outfits; and in addition

(2) for every 80 metres (262 feet) or part thereof, of the aggregate of the lengths of all passenger spaces and service spaces on the deck which carries such spaces or, if there is more than one such deck, on the deck which has the largest aggregate of such lengths, two fireman's outfits and two sets of personal equipment, each such set comprising the items stipulated in Regulation 14(a)(i), (ii) and (iii) of this Chapter.

(ii) For each fireman's outfit which includes a self-contained breathing apparatus as provided in paragraph (b) of Regulation 14 of this Chapter, spare charges shall be carried on a scale approved by the Administration.

(iii) Fireman's outfits and sets of personal equipment shall be stored in widely separated positions ready for use. At least two fireman's outfits and one set of personal equipment shall be available at any one position.

Regulation 48

Means of Escape

(a) In and from all passenger and crew spaces and spaces in which crew are normally employed, other than machinery spaces, stairways and ladderways shall be arranged so as to provide ready means of escape to the lifeboat embarkation deck. In particular the following precautions shall be complied with:

(i) below the bulkhead deck, two means of escape, at least one of which shall be independent of watertight doors, shall be provided for each watertight compartment or similarly restricted space or group of spaces. One of these means of escape may be dispensed with by the Administration, due regard being paid to the nature and the location of spaces concerned, and to the number of persons who normally might be quartered or employed there;

(ii) above the bulkhead deck, there shall be at least two practical means of escape from each main vertical zone or similarly restricted space or group of spaces at least one of which shall give access to a stairway forming a vertical escape; and

(iii) at least one of the means of escape shall be by means of a readily accessible enclosed stairway, which shall provide as far as practicable continuous fire shelter from the level of its origin to the lifeboat embarkation deck. The width, number and continuity of the stairways shall be to the satisfaction of the Administration.

(b) In machinery spaces, two means of escape, one of which may be a watertight door, shall be provided from each engine room, shaft tunnel and boiler room. In machinery spaces, where no watertight door is available, the two means of escape shall be formed by two sets of steel ladders as widely separated as possible leading to doors in the casing similarly separated and from which access is provided to the embarkation deck. In the case of ships of less than 2,000 tons gross tonnage, the Administration may dispense with this requirement, due regard being paid to the width and the disposition of the casing.

Regulation 49

Oil Fuel used for Internal Combustion Engines

No internal combustion engine shall be used for any fixed installation in a ship if its fuel has a flashpoint of 43°C (110°F) or less (closed cup test) as determined by an approved flashpoint apparatus.

Regulation 50

Special Arrangements in Machinery Spaces

(a) Means shall be provided for stopping ventilating fans serving machinery and cargo spaces and for closing all doorways, ventilators, annular spaces around funnels and other openings to such spaces. These means shall be capable of being operated from outside such spaces in case of fire.

(b) Machinery driving forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps shall be fitted with remote controls situated outside the space concerned so that they may be stopped in the event of a fire arising in the space in which they are located.

(c) Every oil fuel suction pipe from a storage, settling or daily service tank situated above the double bottom shall be fitted with a cock or valve capable of being closed from outside the space concerned in the event of a fire arising in the space in which such tanks are situated. In the special case of deep tanks situated in any shaft or pipe tunnel, valves on the tanks shall be fitted but control in event of fire may be effected by means of an additional valve on the pipeline or lines outside the tunnel or tunnels.

PART D - FIRE SAFETY MEASURES FOR CARGO SHIPS*

Regulation 51

General Requirements for Cargo Ships of 4,000 tons Gross Tonnage and Upwards other than Tankers Covered by Part E of this Chapter

(a) The hull, superstructure, structural bulkheads, decks and deckhouses shall be constructed of steel, except where the Administration may sanction the use of other suitable material in special cases, having in mind the risk of fire.

(b) In accommodation spaces, the corridor bulkheads shall be of steel or be constructed of "B" Class panels.

(c) Deck coverings within accommodation spaces on the decks forming the crown of machinery and cargo spaces shall be of a type which will not readily ignite.†

(d) Interior stairways below the weather deck shall be of steel or other suitable material. Crew lift trunks within accommodation shall be of steel or equivalent material.

(e) Bulkheads of galleys, paint stores, lamp rooms, boatswain's stores when adjacent to accommodation spaces and emergency generator rooms if any, shall be of steel or equivalent material.

(f) In accommodation and machinery spaces, paints, varnishes and similar preparations having a nitro-cellulose or other highly inflammable base shall not be used.

(g) Pipes conveying oil or combustible liquids shall be of a material approved by the Administration having regard to the fire risk. Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the water-line and where the failure of the material in the event of fire would give rise to danger of flooding.

(h) Power ventilation of machinery spaces shall be capable of being stopped from an easily accessible position outside the machinery spaces.

Regulation 52

Fire-Extinguishing Systems and Equipment

(a) *Application*

Where ships have a lower gross tonnage than those quoted in this Regulation, the arrangements for the items covered in this Regulation shall be to the satisfaction of the Administration.

(b) *Fire Pumps and Fire Main System*

The ship shall be provided with fire pumps, fire main system, hydrants and hoses complying with Regulation 5 of this Chapter and with the following requirements:

(i) A ship of 1,000 tons gross tonnage and upwards shall be provided with two independently driven power pumps.

(ii) In a ship of 1,000 tons gross tonnage and upwards if a fire in any one compartment could put all the pumps out of action, there must be an alternative means of providing water for fire fighting. In a ship of 2,000 tons gross tonnage and upwards this alternative means shall be a fixed emergency pump independently driven. This emergency pump shall be capable of supplying two jets of water to the satisfaction of the Administration.

(c) *Fire Hydrants, Hoses and Nozzles*

(i) In a ship of 1,000 tons gross tonnage and upwards the number of fire hoses to be provided, each complete with couplings and nozzles, shall be one for each 30 metres (100 feet) length of the ship and one spare but in no case less than five in all. This number does not include

* Reference is made to Recommendation on Safety Measures for Periodically Unattended Machinery Spaces of Cargo Ships additional to those normally considered necessary for an Attended Machinery Space, adopted by the Organization by Resolution A.211(VII).

† Reference is made to Improved Provisional Guidelines on Test Procedures for Primary Deck Coverings, adopted by the Organization by Resolution A.214(VII).

any hoses required in any engine or boiler room. The Administration may increase the number of the hoses required so as to ensure that hoses in sufficient number are available and accessible at all times, having regard to the type of the ship and the nature of the trade on which the ship is employed.

(ii) In accommodation, service and machinery spaces, the number and position of hydrants shall be such as to comply with the requirements of paragraph (d) of Regulation 5 of this Chapter.

(iii) In a ship the arrangements shall be such that at least two jets of water can reach any part of any cargo space when empty.

(iv) All required hydrants in the machinery spaces of ships with oil-fired boilers or internal combustion type propelling machinery shall be fitted with hoses having nozzles as required in paragraph (g) of Regulation 5 of this Chapter.

(d) *International Shore Connexion*

(i) A ship of 1,000 tons gross tonnage and upwards shall be provided with at least one international shore connexion, complying with paragraph (h) of Regulation 5 of this Chapter.

(ii) Facilities shall be available enabling such a connexion to be used on either side of the ship.

(e) *Portable Fire Extinguishers in Accommodation and Service Spaces*

The ship shall be provided in accommodation and service spaces with such approved portable fire extinguishers as the Administration may deem to be appropriate and sufficient; in any case, their number shall not be less than five for ships of 1,000 tons gross tonnage and upwards.

(f) *Fixed Fire-Extinguishing Arrangements in Cargo Spaces*

(i) Cargo spaces of ships of 2,000 tons gross tonnage and upwards shall be protected by a fixed fire-extinguishing system complying with Regulation 8 of this Chapter.

(ii) The Administration may exempt from the requirements of sub-paragraph (i) of this paragraph the cargo holds of any ship (other than the tanks of a tanker):

(1) if they are provided with steel hatch covers and effective means of closing all ventilators and other openings leading to the holds;

(2) if the ship is constructed and intended solely for carrying such cargoes as ore, coal or grain; or

(3) where it is shown to the satisfaction of the Administration that the ship is engaged on voyages of such short duration that it would be unreasonable to apply the requirement.

(iii) Every ship in addition to complying with the requirements of this Regulation shall, while carrying explosives of such nature or in such quantity as are not permitted to be carried in passenger ships under Regulation 7 of Chapter VII of this Convention comply with the following requirements:

(1) Steam shall not be used in any compartment containing explosives. For the purpose of this sub-paragraph, "compartment" means all spaces contained between two adjacent permanent bulkheads and includes the lower hold and all cargo spaces above it.

(2) In addition, in each compartment containing explosives and in adjacent cargo compartments, there shall be provided a smoke- or fire-detection system in each cargo space.

(g) *Fire-Extinguishing Appliances in Boiler Rooms, etc.*

Where main or auxiliary oil-fired boilers are situated, or in spaces containing oil fuel units or settling tanks, a ship of 1,000 tons gross tonnage and upwards shall be provided with the following arrangements:

(i) There shall be any one of the following fixed fire-extinguishing installations:

(1) A pressure water-spraying system complying with Regulation 11 of this Chapter.

(2) A fire-extinguishing installation complying with Regulation 8 of this Chapter.

(3) A fixed froth installation complying with Regulation 9 of this Chapter. (The Administration may require fixed or mobile arrangements by pressure water or froth spraying to fight fire above the floor plates.)

In each case if the engine and boiler rooms are not entirely separate, or if fuel oil can drain from the boiler room into the engine room bilges, the combined engine and boiler rooms shall be considered as one compartment.

(ii) There shall be at least two approved portable extinguishers discharging froth or other approved medium suitable for extinguishing oil fires in each firing space in each boiler room and each space in which a part of the oil fuel installation is situated. In addition, there shall be at least one extinguisher of the same description with a capacity of 9 litres (2 gallons) for each burner, provided that the total capacity of the additional extinguisher or extinguishers need not exceed 45 litres (10 gallons) for any one boiler room.

(iii) In each firing space there shall be a receptacle containing sand, sawdust impregnated with soda, or other approved dry material in such quantity as may be required by the Administration. Alternatively an approved portable extinguisher may be substituted therefor.

(h) *Fire-Fighting Appliances in Spaces containing Internal Combustion Type Machinery*

Where internal combustion type engines are used, either for main propulsion machinery, or for auxiliary purposes associated with a total power output of not less than 746 kW, a ship of 1,000 tons gross tonnage and upwards shall be provided with the following arrangements:

(i) There shall be one of the fixed arrangements required by sub-paragraph (g)(i) of this Regulation.

(ii) There shall be in each engine space one approved froth-type extinguisher of not less than 45 litres (10 gallons) capacity or equivalent and also one approved portable froth extinguisher for each 746 kW of engine power output or part thereof; but the total number of portable extinguishers so supplied shall be not less than two and need not exceed six.

(i) *Fire-Fighting Arrangements in Spaces containing Steam Turbines and not requiring any Fixed Installation*

The Administration shall give special consideration to the fire-extinguishing arrangements to be provided in spaces containing steam turbines which are separated from boiler rooms by watertight bulkheads.

(j) *Fireman's Outfits and Personal Equipment*

(i) The ship, whether new or existing, shall carry at least two fireman's outfits complying with the requirements of Regulation 14 of this Chapter. Furthermore, Administrations may require in large ships additional sets of personal equipment and in tankers and special ships such as factory ships additional fireman's outfits.

(ii) For each fireman's outfit which includes a self-contained breathing apparatus as provided in paragraph (b) of Regulation 14 of this Chapter, spare charges shall be carried on a scale approved by the Administration.

(iii) The fireman's outfits and personal equipment shall be stored so as to be easily accessible and ready for use and, where more than one fireman's outfit and set of personal equipment are carried, they shall be stored in widely separated positions.

Regulation 53

Means of Escape

(a) In and from all crew and passenger spaces and spaces in which crew are normally employed, other than machinery spaces, stairways and ladders shall be arranged so as to provide ready means of escape to the lifeboat embarkation deck.

(b) In machinery spaces, two means of escape, one of which may be a watertight door, shall be provided from each engine room, shaft tunnel and boiler room. In machinery spaces, where no watertight door is available, the two means of escape shall be formed by two sets of steel ladders as widely separated as possible leading to doors in the casing similarly separated and from which access is provided to the embarkation deck. In the case of ships of less than 2,000 tons gross tonnage, the Administration may dispense with this requirement, due regard being paid to the width and the disposition of the casing.

Regulation 54

Special Arrangements in Machinery Spaces

(a) Means shall be provided for stopping ventilating fans serving machinery and cargo spaces and for closing all doorways, ventilators, annular spaces around funnels and other openings to such spaces. These means shall be capable of being operated from outside such spaces in case of fire.

(b) Machinery driving forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps shall be fitted with remote controls situated outside the space concerned so that they may be stopped in the event of a fire arising in the space in which they are located.

(c) Every oil fuel suction pipe from a storage, settling or daily service tank situated above the double bottom shall be fitted with a cock or valve capable of being closed from outside the space concerned in the event of a fire arising in the space in which such tanks are situated. In the special case of deep tanks situated in any shaft or pipe tunnel, valves on the tanks shall be fitted but control in event of fire may be effected by means of an additional valve on the pipeline or lines outside the tunnel or tunnels.

PART E - FIRE SAFETY MEASURES FOR TANKERS

Regulation 55

Application

(a) This Part shall apply to all new tankers carrying crude oil and petroleum products having a flashpoint not exceeding 60°C (140°F) (closed cup test) as determined by an approved flashpoint apparatus and whose Reid vapour pressure is below that of atmospheric pressure, and other liquid products having a similar fire hazard.

(b) In addition, all ships covered by this Part shall comply with the requirements of Regulations 52, 53 and 54 of this Chapter, except that paragraph (f) of Regulation 52 need not apply to tankers complying with Regulation 60 of this Chapter.

(c) Where cargoes other than those referred to in paragraph (a) of this Regulation which introduce additional fire hazards are intended to be carried, additional safety measures shall be required to the satisfaction of the Administration.

(d) Combination carriers shall not carry solid cargoes unless all cargo tanks are empty of oil and gas freed or unless, in each case, the Administration is satisfied with the arrangements provided.

Regulation 56

Location and Separation of Spaces

(a) Machinery spaces of Category A shall be positioned aft of cargo tanks and slop tanks and shall be isolated from them by a cofferdam, cargo pump room or oil fuel bunker tank; they shall also be situated aft of such cargo pump rooms and cofferdams, but not necessarily aft of the oil fuel bunker tanks. However, the lower portion of the pump room may be recessed into such spaces to accommodate pumps provided the deck head of the recess is in general not more than one-third of the moulded depth above the keel except that in the case of ships of not more than 25,000 metric tons deadweight, where it can be demonstrated that for reasons of access and satisfactory piping arrangements this is impracticable, the Administration may permit a recess in excess of such height, but not exceeding one half of the moulded depth above the keel.

(b) Accommodation spaces, main cargo control stations, control stations and service spaces shall be positioned aft of all cargo tanks, slop tanks, cargo pump rooms and cofferdams which isolate cargo or slop tanks from machinery spaces of Category A. Any common bulkhead separating a cargo pump room, including the pump room entrance, from accommodation and service spaces and control stations shall be constructed to "A-60" Class. Where deemed necessary, accommodation spaces, control stations, machinery spaces other than those of Category A and service spaces may be permitted forward of all cargo tanks, slop tanks, cargo pump rooms and cofferdams subject to an equivalent standard of safety and appropriate availability of fire-extinguishing arrangements being provided to the satisfaction of the Administration.

(c) Where the fitting of a navigation position above the cargo tank area is shown to be necessary it shall be for navigation purposes only and it shall be separated from the cargo tank deck by means of an open space with a height of at least 2 metres. The fire protection of such navigation position shall in addition be as required for control spaces as set forth in paragraphs (a) and (b) of Regulation 57 and other provisions as applicable of this Part.

(d) Means shall be provided to keep deck spills away from the accommodation and service areas. This may be accomplished by provision of a permanent continuous coaming of a suitable height extending from side to side. Special consideration shall be given to the arrangements associated with stern loading.

(e) Exterior boundaries of superstructures and deckhouses enclosing accommodation and service spaces and including any overhanging decks which support such accommodation, shall be insulated to "A-60" Class for the whole of the portions which face cargo oil tanks and for 3 metres aft of the front boundary. In the case of the sides of these superstructures and deckhouses, such insulation shall be carried as high as is deemed necessary by the Administration.

(f) In boundaries, facing cargo tanks, of superstructures and deckhouses containing accommodation and service spaces the following provisions shall apply:

(i) No doors shall be permitted in such boundaries, except that doors to those spaces not having access to accommodation and service spaces, such as cargo control stations, provision rooms, and storerooms may be permitted by the Administration. Where such doors are fitted, the boundaries of the space shall be insulated to "A-60" Class. Bolted plates for removal of machinery may be fitted in such boundaries.

(ii) Portlights in such boundaries shall be of a fixed (non-opening) type. Pilot house windows may be non-fixed (opening).

(iii) Portlights in the first tier on the main deck shall be fitted with inside covers of steel or equivalent material.

The requirements of this paragraph. where applicable, except in the case of access to the navigating bridge spaces, shall also be applied to the boundaries of the superstructures and deckhouses for a distance of 5 metres measured longitudinally from the forward end of such structures.

Regulation 57

Construction

(a) (i) The hull, superstructure, structural bulkheads, decks and deckhouses shall be constructed of steel or other equivalent material.

(ii) Bulkheads between cargo pump rooms, including their trunks and machinery spaces of Category A shall be "A" Class and shall have no penetrations which are less than "A-0" Class or equivalent in all respects, other than the cargo pump shaft glands and similar glanded penetrations.

(iii) Bulkheads and decks forming divisions separating machinery spaces of Category A and cargo pump rooms, including their trunks, respectively, from the accommodation and service spaces shall be of "A-60" Class. Such bulkheads and decks and any boundaries of machinery spaces of Category A and cargo pump rooms shall not be pierced for windows or portlights.

(iv) The requirements of sub-paragraphs (ii) and (iii) of this paragraph, however, do not preclude the installation of permanent approved gas-tight lighting enclosures for illuminating the pump rooms provided that they are of adequate strength and maintain the integrity and gas-tightness of the bulkhead as "A" Class. Further, it does not preclude the use of windows in a control room located entirely within a machinery space.

(v) Control stations shall be separated from adjacent enclosed spaces by means of "A" Class bulkheads and decks. The insulation of these control station boundaries shall be to the satisfaction of the Administration having in mind the risk of fire in adjacent spaces.

(vi) Casing doors in machinery spaces of Category A shall be self-closing and comply with the related provisions of sub-paragraph (b)(vii) of this Regulation.

(vii) The surface of the insulation on interior boundaries of machinery spaces of Category A shall be impervious to oil and oil vapours.

(viii) Primary deck coverings, if applied, shall be of approved materials which will not readily ignite.*

(ix) Interior stairways shall be of steel or other suitable material.

(x) When adjacent to accommodation spaces, bulkheads of galleys, paint stores, lamp rooms and boatswain's stores shall be of steel or equivalent material.

(xi) Paints, varnishes and other finishes used on exposed interior surfaces shall not be of a nature to offer an undue fire hazard in the judgement of the Administration and shall not be capable of producing excessive quantities of smoke or other toxic properties.

(xii) Pipes conveying oil or combustible liquids shall be of a material approved by the Administration having regard to the fire risk. Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the water-line and where the failure of the material in the event of fire would give rise to danger of flooding.

(xiii) Power ventilation of machinery spaces shall be capable of being stopped from an easily accessible position outside the machinery spaces.

(xiv) Skylights to machinery spaces of Category A and cargo pump rooms shall comply with the provisions of sub-paragraph (a)(iii) of this Regulation in respect of windows and portlights and in addition shall be so arranged as to be capable of being readily closed from outside the spaces which they serve.

(b) Within the accommodation and service spaces and control stations the following conditions shall apply:

(i) Corridor bulkheads including doors shall be of "A" or "B" Class divisions extending from deck to deck. Where continuous "B" Class ceilings and/or linings are fitted on both sides of the bulkhead, the bulkhead may terminate at the continuous ceiling or lining. Doors of cabins and public spaces in such bulkheads may have a louvre in the lower half.

(ii) Air spaces enclosed behind ceilings, panellings, or linings shall be divided by close fitting draught stops spaced not more than 14 metres apart.

(iii) Ceilings, linings, bulkheads and insulation except for insulation in refrigerated compartments shall be of non-combustible material. Vapour barriers and adhesives used in conjunction with insulation, as well as insulation of pipe fittings for cold service systems need not be non-combustible, but they shall be kept to the minimum quantity practicable and their exposed surfaces shall have resistance to propagation of flame to the satisfaction of the Administration.

(iv) The framing, including grounds and the joint pieces of bulkheads, linings, ceilings and draught stops, if fitted, shall be of non-combustible material.

(v) All exposed surfaces in corridors and stairway enclosures and surfaces in concealed or inaccessible spaces shall have low flame-spread characteristics.**

(vi) Bulkheads, linings and ceilings may have combustible veneer, provided that such veneer shall not exceed 2 millimetres within any such space except corridors, stairway enclosures and control stations where it shall not exceed 1.5 millimetres.

(vii) Stairways which penetrate only a single deck shall be protected at least at one level by "A" or "B" Class divisions and self-closing doors so as to limit the rapid spread of fire from one deck to another. Crew lift trunks shall be of "A" Class divisions. Stairways and lift trunks which penetrate more than a single deck shall be surrounded by "A" Class divisions and protected by self-closing steel doors at all levels. Self-closing doors shall not be fitted with hold-back hooks. However, hold-back arrangements fitted with remote release fittings of the fail-safe type may be utilized.

(c) Ducts provided for ventilation of machinery spaces of Category "A" shall not in general pass through accommodation and service spaces or control

* Reference is made to Improved Provisional Guidelines on Test Procedures for Primary Deck Coverings, adopted by the Organization by Resolution A.214(VII).

** Reference is made to Guidelines on the Evaluation of Fire Hazard Properties o Materials, adopted by the Organization by Resolution A.166(ES.IV).

stations, except that the Administration may permit relaxation from this requirement provided that:

(i) the ducts are constructed of steel and each is insulated to "A-60" Class; or

(ii) the ducts are constructed of steel and are fitted with an automatic fire damper close to the boundary penetrated and are insulated to "A-60" Class from the machinery space of Category A to a point at least 5 metres beyond the fire damper.

(d) Ducts provided for ventilation of accommodation and service spaces or control stations shall not in general pass through machinery spaces of Category A except that the Administration may permit relaxation from this requirement provided that ducts are constructed of steel and an automatic fire damper is fitted close to the boundaries penetrated.

Regulation 58

Ventilation

(a) The arrangement and positioning of openings in the cargo tank deck from which gas emission can occur shall be such as to minimize the possibility of gas being admitted to enclosed spaces containing a source of ignition, or collecting in the vicinity of deck machinery and equipment which may constitute an ignition hazard. In every case the height of the outlet above the deck and the discharge velocity of the gas shall be considered in conjunction with the distance of any outlet from any deckhouse opening or source of ignition.

(b) The arrangement of ventilation inlets and outlets and other deckhouse and superstructure boundary space openings shall be such as to complement the provisions of paragraph (a) of this Regulation. Such vents especially for machinery spaces shall be situated as far aft as practicable. Due consideration in this regard should be given when the ship is equipped to load or discharge at the stern. Sources of ignition such as electrical equipment shall be so arranged as to avoid an explosion hazard.

(c) Cargo pump rooms shall be mechanically ventilated and discharges from the exhaust fans shall be led to a safe place on the open deck. The ventilation of these rooms shall have sufficient capacity to minimize the possibility of accumulation of inflammable vapours. The number of changes of air shall be at least 20 times per hour, based upon the gross volume of the space. The air ducts shall be arranged so that all of the space is effectively ventilated. The ventilation shall be of the suction type.

Regulation 59

Means of Escape

In addition to the requirements of paragraph (a) of Regulation 53 of this Chapter, consideration shall be given by the Administration to the availability of emergency means of escape for personnel from each cabin.

Regulation 60

Cargo Tank Protection

(a) For tankers of 100,000 metric tons deadweight and upwards and combination carriers of 50,000 metric tons deadweight and upwards, the protection of the cargo tanks deck area and cargo tanks shall be achieved by a fixed deck froth system and a fixed inert gas system in accordance with the requirements of Regulations 61 and 62 of this Part except that in lieu of the above installations the Administration, after having given consideration to the ship arrangement and equipment, may accept other combinations of fixed installations if they afford protection equivalent to the above, in accordance with Regulation 5 of Chapter I of this Convention.

(b) To be considered equivalent, the system proposed in lieu of the deck froth system shall:

(i) be capable of extinguishing spill fires and also preclude ignition of spilled oil not yet ignited; and

(ii) be capable of combating fires in ruptured tanks.

(c) To be considered equivalent, the system proposed in lieu of the fixed inert gas system shall:

(i) be capable of preventing dangerous accumulations of explosive mixtures in intact cargo tanks during normal service throughout the ballast voyage and necessary in-tank operations; and

(ii) be so designed as to minimize the risk of ignition from the generation of static electricity by the system itself.

(d) In tankers of less than 100,000 metric tons deadweight and combination carriers of less than 50,000 metric tons deadweight the Administration, in applying the requirements of paragraph (f) of Regulation 52 of this Chapter, may accept a froth system, capable of discharging froth internally or externally, to the tanks. The details of such installation shall be to the satisfaction of the Administration.

Regulation 61

Fixed Deck Froth System

The fixed deck froth system referred to in paragraph (a) of Regulation 60 of this Chapter shall be designed as follows:

(a) The arrangements for providing froth shall be capable of delivering froth to the entire cargo tank area as well as into any cargo tank, the deck of which has been ruptured.

(b) The system shall be capable of simple and rapid operation. The main control station for the system shall be suitably located outside of the cargo tank area, adjacent to the accommodation spaces and readily accessible and operable in the event of fire in the areas protected.

(c) The rate of supply of froth solution shall be not less than the greater of the following:

(i) 0.6 litres per minute per square metre of the cargo deck area, where cargo deck area means the maximum breadth of the ship times the total longitudinal extent of the cargo tank spaces, or

(ii) 6 litres per minute per square metre of the horizontal sectional area of the single tank having the largest such area.

Sufficient froth concentrate shall be supplied to ensure at least 20 minutes of froth generation when using solution rates stipulated in sub-paragraph (i) or (ii) of this paragraph, whichever is the greater. The froth expansion ratio (i.e. the ratio of the volume of froth produced to the volume of the mixture of water and froth-making concentrate supplied) shall not generally exceed 12 to 1. Where systems essentially produce low expansion froth but at an expansion ratio slightly in excess of 12 to 1, the quantity of froth solution available shall be calculated as for 12 to 1 expansion ratio systems. When medium expansion ratio froth (between 50 to 1 and 150 to 1 expansion ratio) is employed the application rate of the froth and the capacity of a monitor installation shall be to the satisfaction of the Administration.

(d) Froth from the fixed froth system shall be supplied by means of monitors and froth applicators. At least 50 per cent of the required froth rate shall be delivered from each monitor.

(e) (i) The number and position of monitors shall be such as to comply with paragraph (a) of this Regulation. The capacity of any monitor in litres per minute of froth solution shall be at least three times the deck area in square metres protected by that monitor, such area being entirely forward of the monitor.

(ii) The distance from the monitor to the farthest extremity of the protected area forward of that monitor shall not be more than 75 per cent of the monitor throw in still air conditions.

(f) A monitor and hose connexion for a froth applicator shall be situated both port and starboard at the poop front or accommodation spaces facing the cargo deck. Applicators shall be provided for flexibility of action during fire-fighting operations and to cover areas screened from the monitors.

(g) Valves shall be provided in both the froth main and the fire main immediately forward of every monitor position to isolate damaged sections of these mains.

(h) Operation of a deck froth system at its required output shall permit the simultaneous use of the minimum required number of jets of water at the required pressure from the fire main.

Regulation 62

Inert Gas System

The inert gas system referred to in paragraph (a) of Regulation 60 of this Chapter shall be capable of providing on demand a gas or mixture of gases to the cargo tanks so deficient in oxygen that the atmosphere within a tank may be rendered inert, i.e. incapable of propagating flame. Such a system shall satisfy the following conditions:

(a) The need for fresh air to enter a tank during normal operations shall be eliminated, except when preparing a tank for entry by personnel.

(b) Empty tanks shall be capable of being purged with inert gas to reduce the hydrocarbon content of a tank after discharge of cargo.

(c) The washing of tanks shall be capable of being carried out in an inert atmosphere.

(d) During cargo discharge, the system shall be such as to ensure that the volume of gas referred to in paragraph (f) of this Regulation is available. At other times sufficient gas to ensure compliance with paragraph (g) of this Regulation shall be continuously available.

(e) Suitable means for purging the tanks with fresh air as well as with inert gas shall be provided.

(f) The system shall be capable of supplying inert gas at a rate of at least 125 per cent of the maximum rated capacity of the cargo pumps.

(g) Under normal running conditions, when tanks are being filled or have been filled with inert gas, a positive pressure shall be capable of being maintained at the tank.

(h) Exhaust gas outlets for purging shall be suitably located in the open air and shall be to the same general requirements as prescribed for ventilating outlets of tanks, referred to in paragraph (a) of Regulation 58 of this Chapter.

(i) A scrubber shall be provided which will effectively cool the gas and remove solids and sulphur combustion products.

(j) At least two fans (blowers) shall be provided which together shall be capable of delivering at least the amount of gas stipulated in paragraph (f) of this Regulation.

(k) The oxygen content in the inert gas supply shall not normally exceed 5 per cent by volume.

(l) Means shall be provided to prevent the return of hydrocarbon gases or vapours from the tanks to the machinery spaces and uptakes and prevent the development of excessive pressure or vacuum. In addition, an effective water lock shall be installed at the scrubber or on deck. Branch piping for inert gas shall be fitted with stop valves or equivalent means of control at every tank. The system shall be so designed as to minimize the risk of ignition from the generation of static electricity.

(m) Instrumentation shall be fitted for continuously indicating and permanently recording at all times when inert gas is being supplied the pressure and oxygen content of the gas in the inert gas supply main on the discharge side of the fan. Such instrumentation should preferably be placed in the cargo control room if fitted but in any case shall be easily accessible to the officer in charge of cargo operations. Portable instruments suitable for measuring oxygen and hydrocarbon gases or vapour and the necessary tank fittings shall be provided for monitoring the tank contents.

(n) Means for indicating the temperature and pressure of the inert gas main shall be provided.

(o) Alarms shall be provided to indicate:

(i) high oxygen content of gas in the inert gas main;

(ii) low gas pressure in the inert gas main;

(iii) low pressure in the supply to the deck water seal, if such equipment is installed;

(iv) high temperature of gas in the inert gas main; and

(v) low water pressure to the scrubber

and automatic shut-downs of the system shall be arranged on predetermined limits being reached in respect of sub-paragraphs (iii), (iv) and (v) of this paragraph.

(p) The master of any ship equipped with an inert gas system shall be provided with an instruction manual covering operational, safety and occupational health requirements relevant to the system.

Regulation 63

Cargo Pump Room

Each cargo pump room shall be provided with a fixed fire-fighting system operated from a readily accessible position outside the pump room. The system shall use water-spray or another suitable medium satisfactory to the Administration.

Regulation 64

Hose Nozzles

All hose water nozzles provided shall be of an approved dual purpose type (i.e. spray/jet type) incorporating a shut-off.

PART F - SPECIAL FIRE SAFETY MEASURES FOR EXISTING PASSENGER SHIPS

(For the purposes of this Part of this Chapter, all references to Regulation... (1948) mean references to Regulations of Chapter II of the International Convention for the Safety of Life at Sea, 1948, and all references to Regulation... (1960) mean, unless otherwise stated, references to Regulations of Chapter II of the International Convention for the Safety of Life at Sea, 1960)

Regulation 65

Application

Any passenger ship carrying more than 36 passengers shall at least comply as follows:

(a) A ship, the keel of which was laid before 19 November 1952, shall comply with the provisions of Regulations 66 to 85 inclusive of this Part.

(b) A ship, the keel of which was laid on or after 19 November 1952 but before 26 May 1965, shall comply with the provisions of the International Convention for the Safety of Life at Sea, 1948, relating to the fire safety measures applicable in that Convention to new ships and shall also comply with the provisions of Regulations 68(b) and (c), 75, 77(b), 78, 80(b), 81(b) to (g), 84 and 85 of this Part.

(c) A ship, the keel of which was laid on or after 26 May 1965, but before the present Convention comes into force, shall, unless it complies with Parts A and B of this Chapter, comply with the provisions of the International Convention for the Safety of Life at Sea, 1960 relating to the fire safety measures applicable in that Convention to new ships and shall also comply with Regulations 68(b) and (c), 80(b), 81(b), (c) and (d) and 85 of this Part.

Regulation 66

Structure

The structural components shall be of steel or other suitable material in compliance with Regulation 27 (1948), except that isolated deckhouses containing no accommodation and decks exposed to the weather may be of wood if structural fire protection measures are taken to the satisfaction of the Administration.

Regulation 67

Main Vertical Zones

The ship shall be subdivided by "A" Class divisions into main vertical zones in compliance with Regulation 28 (1948). Such divisions shall have as far as practicable adequate insulating value, taking into account the nature of the adjacent spaces as provided for in Regulation 26(c)(iv) (1948).

Regulation 68

Openings in Main Vertical Zone Bulkheads

(a) The ship shall comply substantially with Regulation 29 (1948).

(b) Fire doors shall be of steel or equivalent material with or without non-combustible insulation.

(c) In the case of ventilation trunks and ducts having a cross-sectional area of 0.02 square metres (31 square inches) or more which pass through main zone divisions, the following additional provisions shall apply:

(i) for trunks and ducts having cross-sectional areas between 0.02 square metres (31 square inches) and 0.075 square metres (116 square inches) inclusive, fire dampers shall be of a fail-safe automatic closing type, or such trunks and ducts shall be insulated for at least 457 millimetres (18 inches) on each side of the division to meet the applicable bulkhead requirements;

(ii) for trunks and ducts having a cross-sectional area exceeding 0.075 square metres (116 square inches), fire dampers shall be of a fail-safe automatic closing type.

Regulation 69

Separation of Accommodation Spaces from Machinery, Cargo and Service Spaces

The ship shall comply with Regulation 31 (1948).

Regulation 70

Application relative to Methods I, II and III

Each accommodation space and service space in a ship shall comply with all the provisions stipulated in one of the paragraphs (a), (b), (c) or (d) of this Regulation:

(a) When a ship is being considered for acceptance in the context of Method I, a network of non-combustible "B" Class bulkheads shall be provided in substantial compliance with Regulation 30(a) (1948) together with maximum use of non-combustible materials in compliance with Regulation 39(a) (1948).

(b) When a ship is being considered for acceptance in the context of Method II:

(i) an automatic sprinkler and fire alarm system shall be provided which shall be in substantial compliance with Regulations 42 and 48 (1948), and

(ii) the use of combustible materials of all kinds shall be reduced as far as is reasonable and practicable.

(c) When a ship is being considered for acceptance in the context of Method III, a network of fire-retarding bulkheads shall be fitted from deck to deck in substantial compliance with Regulation 30(b) (1948), together with an automatic fire detection system in substantial compliance with Regulation 43 (1948). The use of combustible and highly inflammable materials shall be restricted as prescribed in Regulations 39(b) and 40(g) (1948). Departure from the requirements of Regulations 39(b) and 40(g) (1948) may be permitted if a fire patrol is provided at intervals not exceeding 20 minutes.

(d) When a ship is being considered for acceptance in the context of Method III:

(i) additional "A" Class divisions shall be provided within the accommodation spaces in order to reduce in these spaces the mean length of the main vertical zones to about 20 metres (65.5 feet); and

(ii) an automatic fire detection system shall be provided in substantial compliance with Regulation 43 (1948); and

(iii) all exposed surfaces, and their coatings, of corridor and cabin bulkheads in accommodation spaces shall be of limited flame-spreading power; and

(iv) the use of combustible materials shall be restricted as prescribed in Regulation 39(b) (1948). Departure from the requirements of Regulation 39(b) (1948) may be permitted if a fire patrol is provided at intervals not exceeding 20 minutes; and

(v) additional non-combustible "B" Class divisions shall be fitted from deck to deck forming a network of fire-retarding bulkheads within which the area of any compartment, except public spaces, will in general not exceed 300 square metres (3,200 square feet).

Regulation 71

Protection of Vertical Stairways

The stairways shall comply with Regulation 33 (1948) except that, in cases of exceptional difficulty, the Administration may permit the use of non-combustible "B" Class divisions and doors instead of "A" Class divisions and doors

for stairway enclosures. Moreover, the Administration may permit exceptionally the retention of a wooden stairway subject to its being sprinkler-protected and satisfactorily enclosed.

Regulation 72

Protection of Lifts (Passenger and Service), Vertical Trunks for Light and Air, etc.

The ship shall comply with Regulation 34 (1948).

Regulation 73

Protection of Control Stations

The ship shall comply with Regulation 35 (1948), except however that in cases where the disposition or construction of control stations is such as to preclude full compliance, e.g. timber construction of wheelhouse, the Administration may permit the use of free-standing non-combustible "B" Class divisions to protect the boundaries of such control stations. In such cases, where spaces immediately below such control stations constitute a significant fire hazard, the deck between shall be fully insulated as an "A" Class division.

Regulation 74

Protection of Store-rooms, etc.

The ship shall comply with Regulation 36 (1948).

Regulation 75

Windows and Sidescuttles

Skylights of engine and boiler spaces shall be capable of being closed from outside such spaces.

Regulation 76

Ventilation Systems

(a) All power ventilation, except cargo and machinery space ventilation, shall be fitted with master controls so located outside the machinery space and in readily accessible positions, that it shall not be necessary to go to more than three stations in order to stop all the ventilation fans to spaces other than machinery and cargo spaces. Machinery space ventilation shall be provided with a master control operable from a position outside the machinery space.

(b) Efficient insulation shall be provided for exhaust ducts from galley ranges where the ducts pass through accommodation spaces.

Regulation 77

Miscellaneous Items

(a) The ship shall comply with Regulation 40(a), (b) and (f) (1948), except that in Regulation 40(a)(i) (1948), 20 metres (65.5 feet) may be substituted for 13.73 metres (45 feet).

(b) Fuel pumps shall be fitted with remote controls situated outside the space concerned so that they may be stopped in the event of a fire arising in the space in which they are located.

Regulation 78

Cinematograph Film

Cellulose-nitrate-based film shall not be used in cinematograph installations on board ship.

Regulation 79

Plans

Plans shall be provided in compliance with Regulation 44 (1948).

Regulation 80

Pumps, Fire Main Systems, Hydrants and Hoses

(a) The provisions of Regulation 45 (1948) shall be complied with.

(b) Water from the fire main shall, as far as practicable, be immediately available, such as by maintenance of pressure or by remote control of fire pumps, which control shall be easily operable and readily accessible.

Regulation 81

Fire Detection and Extinction Requirements

General

(a) The requirements of Regulation 50(a) to (o) (1948) inclusive shall be complied with, subject to further provisions of this Regulation.

Patrols, Detection and Communication System

(b) Each member of any fire patrol required by this Part shall be trained to be familiar with the arrangements of the ship as well as the location and operation of any equipment he may be called upon to use.

(c) A special alarm to summon the crew shall be fitted which may be part of the ship's general alarm system.

(d) A public address system or other effective means of communication shall also be available throughout the accommodation, public and service spaces.

Machinery and Boiler Spaces

(e) The number, type and distribution of fire extinguishers shall comply with paragraphs (g)(ii), (g)(iii) and (h)(ii) of Regulation 64 (1960).

International Shore Connexion

(f) The provisions of Regulation 64(d) (1960) shall be complied with.

Fireman's Outfits

(g) The provisions of Regulation 64(j) (1960) shall be complied with.

Regulation 82

Ready Availability of Fire-Fighting Appliances

The provisions of Regulation 66 (1960) shall be complied with.

Regulation 83

Means of Escape

The provisions of Regulation 54 (1948) shall be complied with.

Regulation 84

Emergency Source of Electrical Power

The provisions of Regulation 22(a), (b) and (c) (1948) shall be complied with except that the location of the emergency source of electrical power shall be in accordance with the requirements of Regulation 25(a) (1960).

Regulation 85

Practice Musters and Drills

At the fire drills mentioned in Regulation 26 of Chapter III of the International Convention for the Safety of Life at Sea, 1960 each member of the crew shall be required to demonstrate his familiarity with the arrangements and facilities of the ship, his duties, and any equipment he may be called upon to use. Masters shall be required to familiarize and instruct the crews in this regard.

CHAPTER III

LIFE-SAVING APPLIANCES, ETC.

Regulation 1

Application

(a) This Chapter, except where it is otherwise expressly provided, applies as follows to new ships engaged on international voyages:

Part A – Passenger ships and cargo ships.

Part B – Passenger ships.

Part C – Cargo ships.

(b) In the case of existing ships engaged on international voyages, the keels of which were laid or which were at a similar stage of construction on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, the requirements of Chapter III of that Convention applicable to new ships as defined in that Convention shall apply.

(c) In the case of existing ships engaged on international voyages, the keels of which were laid or which were at a similar stage of construction before the date of coming into force of the International Convention for the Safety of Life at Sea, 1960, and which do not already comply with the provisions of Chapter III of that Convention relating to new ships, the arrangements in each ship shall be considered by the Administration with a view to securing, so far as this is practicable and reasonable, and as early as possible, substantial compliance with the requirements of Chapter III of that Convention. The proviso to sub-paragraph (b)(i) of Regulation 27 of this Chapter may, however, be applied to existing ships referred to in this paragraph only if:

(i) the provisions of Regulations 4, 8, 14, 18 and 19 and paragraphs (a) and (b) of Regulation 27 of this Chapter are complied with;

(ii) the liferafts carried in accordance with the provisions of paragraph (b) of Regulation 27 comply with the requirements of either Regulation 15 or Regulation 16, and of Regulation 17 of this Chapter; and

(iii) the total number of persons on board shall not be increased as the result of the provision of liferafts unless the ship fully complies with the provisions of:

(1) Part B of Chapter II-1;

(2) sub-paragraphs (a)(iii) and (iv) of Regulation 21 or sub-paragraph (a)(iii) of Regulation 48 of Chapter II-2, as applicable; and

(3) paragraphs (a), (b), (e) and (f) of Regulation 29 of this Chapter.

PART A - GENERAL

(Part A applies to both passenger ships and cargo ships)

Regulation 2

Definitions

For the purpose of this Chapter:

(a) "Short international voyage" means an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety, and which does not exceed 600 miles in length between the last port of call in the country in which the voyage begins and the final port of destination.

(b) "Liferaft" means a liferaft complying with either Regulation 15 or Regulation 16 of this Chapter.

(c) "Approved launching device" means a device approved by the Adminstration, capable of launching from the embarkation position a liferaft fully loaded with the number of persons it is permitted to carry and with its equipment.

(d) "Certificated lifeboatman" means any member of the crew who holds a certificate of efficiency issued under the provisions of Regulation 32 of this Chapter.

(e) "Buoyant apparatus" means flotation equipment (other than lifeboats, liferafts, lifebuoys and life-jackets) designed to support a specified number of persons who are in the water and of such construction that it retains its shape and properties.

Regulation 3

Exemptions

(a) The Administration, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of the full requirements of this Chapter unreasonable or unnecessary, may to that extent exempt from the requirements of this Chapter individual ships or classes of ships which, in the course of their voyage, do not go more than 20 miles from the nearest land.

(b) In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this Chapter, may exempt such ships, when they belong to its country, from those requirements, provided that they comply fully with the provisions of:

(i) the Rules annexed to the Special Trade Passenger Ships Agreement, 1971; and

(ii) the Rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973, when it enters into force.

Regulation 4

Ready Availability of Lifeboats, Liferafts and Buoyant Apparatus

(a) The general principle governing the provision of lifeboats, liferafts and buoyant apparatus in a ship to which this Chapter applies is that they shall be readily available in case of emergency.

(b) To be readily available, the lifeboats, liferafts and buoyant apparatus shall comply with the following conditions:

(i) they shall be capable of being put into the water safely and rapidly even under unfavourable conditions of trim and of 15 degree of list;

(ii) it shall be possible to effect embarkation into the lifeboats and liferafts rapidly and in good order;

(iii) the arrangement of each lifeboat, liferaft and article of buoyant apparatus shall be such that it will not interfere with the operation of other boats, liferafts and buoyant apparatus.

(c) All the life-saving appliances shall be kept in working order and available for immediate use before the ship leaves port and at all times during the voyage.

Regulation 5

Construction of Lifeboats

(a) All lifeboats shall be properly constructed and shall be of such form and proportions that they shall have ample stability in a seaway, and sufficient freeboard when loaded with their full complement of persons and equipment. All lifeboats shall be capable of maintaining positive stability when open to the sea and loaded with their full complement of persons and equipment.

(b) (i) All lifeboats shall have rigid sides and internal buoyancy only. The Administration may approve lifeboats with a rigid shelter, provided that it may be readily opened from both inside and outside, and does not impede rapid embarkation and disembarkation or the launching and handling of the lifeboat.

(ii) Motor lifeboats may be fitted to the satisfaction of the Administration with a means for preventing the entry of water at the fore end.

(iii) All lifeboats shall be not less than 7.3 metres (24 feet) in length except where owing to the size of the ship, or for other reasons, the Administration considers the carriage of such lifeboats unreasonable or impracticable. In no ship shall the lifeboats be less than 4.9 metres (16 feet) in length.

(c) No lifeboat may be approved the weight of which when fully laden with persons and equipment exceeds 20,300 kilogrammes (20 tons) or which has a carrying capacity calculated in accordance with Regulation 7 of this Chapter of more than 150 persons.

(d) All lifeboats permitted to carry more than 60 persons but not more than 100 persons shall be either motor lifeboats complying with the requirements of Regulation 9 of this Chapter or be lifeboats fitted with an approved means of mechanical propulsion complying with Regulation 10 of this Chapter. All lifeboats permitted to carry more than 100 persons shall be motor lifeboats complying with the requirements of Regulation 9 of this Chapter.

(e) All lifeboats shall be of sufficient strength to enable them to be safely lowered into the water when loaded with their full complement of persons and equipment. All lifeboats shall be of such strength that they will not suffer residual deflection if subjected to an overload of 25 per cent.

(f) All lifeboats shall have a mean sheer at least equal to 4 per cent of their length. The sheer shall be approximately parabolic in form.

(g) In lifeboats permitted to carry 100 or more persons the volume of the buoyancy shall be increased to the satisfaction of the Administration.

(h) All lifeboats shall have inherent buoyancy, or shall be fitted with watertight air cases or other equivalent non-corrodible buoyant material which shall not be adversely affected by oil or oil products, sufficient to float the boat and its equipment when the boat is flooded and open to the sea. An additional volume of watertight air cases or other equivalent non-corrodible buoyant material, which shall not be adversely affected by oil or oil products, equal to at least one-tenth of the cubic capacity of the boat shall also be provided. The Administration may permit the watertight air cases to be filled with a non-corrodible buoyant material which shall not be adversely affected by oil or oil products.

(i) All thwarts and side-seats shall be fitted as low in the lifeboat as practicable.

(j) The block coefficient of the cubic capacity as determined in accordance with Regulation 6 of this Chapter of all lifeboats, except wooden lifeboats made of planks, shall be not less than 0.64 provided that any such lifeboat may have a block coefficient of less than 0.64 if the Administration is satisfied with the sufficiency of the metacentric height and freeboard when the lifeboat is loaded with its full complement of persons and equipment.

Regulation 6

Cubic Capacity of Lifeboats

(a) The cubic capacity of a lifeboat shall be determined by Simpson's (Stirling's) Rule or by any other method giving the same degree of accuracy. The capacity of a square-sterned lifeboat shall be calculated as if the lifeboat had a pointed stern.

(b) For example, the capacity in cubic metres (or cubic feet) of a lifeboat, calculated by the aid of Simpson's Rule, may be considered as given by the following formula:

$$\text{Capacity} = \frac{L}{12}(4A + 2B + 4C)$$

L being the length of the lifeboat in metres (or feet) from the inside of the planking or plating at the stem to the corresponding point at the stern post: in the case of a lifeboat with a square stern, the length is measured to the inside of the transom.

A, B, C denote respectively the areas of the cross-sections at the quarter-length forward, amidships, and the quarter-length aft, which correspond to the three points obtained by dividing L into four equal parts. (The areas corresponding to the two ends of the lifeboat are considered negligible.)

The areas A, B, C shall be deemed to be given in square metres (or square feet) by the successive application of the following formula to each of the three cross-sections:

$$\text{Area} = \frac{h}{12}(a + 4b + 2c + 4d + e)$$

h being the depth measured in metres (or in feet) inside the planking or plating from the keel to the level of the gunwale, or, in certain cases, to a lower level as determined hereafter.

a, b, c, d, e denote the horizontal breadths of the lifeboat measured in metres (or in feet) at the upper and lower points of the depth and at the three points obtained by dividing h into four equal parts (a and e being the breadths at the extreme point, and c at the middle point of h).

(c) If the sheer of the gunwale, measure at the two points situated at a quarter of the length of the lifeboat from the ends, exceeds 1 per cent of the length of the

lifeboat the depth employed in calculating the area of the cross-sections A or C shall be deemed to be the depth amidships plus 1 per cent of the length of the lifeboat.

(d) If the depth of the lifeboat amidships exceeds 45 per cent of the breadth, the depth employed in calculating the area of the amidship cross-section B shall be deemed to be equal to 45 per cent of the breadth, and the depth employed in calculating the areas of the quarter-length sections A and C is obtained by increasing this last figure by an amount equal to 1 per cent of the length of the lifeboat, provided that in no case shall the depths employed in the calculation exceed the actual depths at these points.

(e) If the depth of the lifeboat is greater than 1.22 metres (4 feet) the number of persons given by the application of this Rule shall be reduced in proportion to the ratio of 1.22 metres (4 feet) to the actual depth, until the lifeboat has been satisfactorily tested afloat with that number of persons on board, all wearing life-jackets.

(f) The Administration shall impose, by suitable formulae, a limit for the number of persons allowed in lifeboats with very fine ends and in lifeboats very full in form.

(g) The Administration may assign to a lifeboat constructed of wooden planks capacity equal to the product of the length, the breadth and the depth multiplied by 0.6 if it is evident that this formula does not give a greater capacity than that obtained by the above method. The dimensions shall then be measured in the following manner:

Length – From the intersection of the outside of the planking with the stem to the corresponding point at the stern post or, in the case of a square-sterned boat, to the after side of the transom.

Breadth – From the outside of the planking at the point where the breadth of the boat is greatest.

Depth – Amidships inside the planking from the keel to the level of the gunwale, but the depth used in calculating the cubic capacity may not in any case exceed 45 per cent of the breadth.

In all cases the shipowner has the right to require that the cubic capacity of the lifeboat shall be determined by exact measurement.

(h) The cubic capacity of a motor lifeboat or a lifeboat fitted with other propelling gear shall be obtained from the gross capacity by deducting a volume equal to that occupied by the motor and its accessories or the gearbox of the other propelling gear, and, when carried, the radiotelegraph installation and searchlight with their accessories.

Regulation 7

Carrying Capacity of Lifeboats

The number of persons which a lifeboat shall be permitted to accommodate shall be equal to the greatest whole number obtained by dividing the capacity in cubic metres by:

In the case of a lifeboat of 7.3 metres (24 feet) in length or over	0.283 (or where the capacity is measured in cubic feet 10);
in the case of lifeboats of 4.9 metres (16 feet) in length	0.396 (or where the capacity is measured in cubic feet 14); and
in the case of lifeboats of 4.9 metres (16 feet) in length or over but under 7.3 metres (24 feet)	a number between 0.396 and 0.283 (or where the capacity is measured in cubic feet between 14 and 10), to be obtained by interpolation;

provided that the number shall in no case exceed the number of adult persons wearing life-jackets which can be seated without in any way interfering with the use of oars or the operation of other propulsion equipment.

Regulation 8

Number of Motor Lifeboats to be carried

(a) In every passenger ship there shall be carried on each side of the ship at least one motor lifeboat complying with the requirements of Regulation 9 of this Chapter.

Provided that in passenger ships in which the total number of persons which the ship is certified to carry, together with the crew, does not exceed 30, only one such motor lifeboat shall be required.

(b) In every cargo ship of 1,600 tons gross tonnage and upwards, except tankers, ships employed as whale factory ships, ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons in the whaling, fish processing or canning industries, there shall be carried at least one motor lifeboat complying with the requirements of Regulation 9 of this Chapter.

(c) In every tanker of 1,600 tons gross tonnage and upwards, in every ship employed as a whale factory ship, in every ship employed as a fish processing or canning factory ship and in every ship engaged in the carriage of persons employed in the whaling, fish processing or canning industries, there shall be carried on each side at least one motor lifeboat complying with the requirements of Regulation 9 of this Chapter.

Regulation 9

Specification of Motor Lifeboats

(a) A motor lifeboat shall comply with the following conditions:

(i) It shall be fitted with a compression ignition engine and kept so as to be at all times ready for use; it shall be capable of being readily started in all conditions; sufficient fuel for 24 hours continuous operation at the speed specified in sub-paragraph (iii) of this paragraph shall be provided.

(ii) The engine and its accessories shall be suitably enclosed to ensure operation under adverse weather conditions, and the engine casing shall be fire-resisting. Provision shall be made for going astern.

(iii) The speed ahead in smooth water when loaded with its full complement of persons and equipment shall be:

(1) In the case of motor lifeboats required by Regulation 8 of this Chapter to be carried in passenger ships, tankers, ships employed as whale factory ships, ships employed as fish processing or canning factory ships and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries, at least six knots.

(2) In the case of any other motor lifeboat, at least four knots.

(b) The volume of the internal buoyancy appliances of a motor lifeboat shall be increased above that required by Regulation 5 of this Chapter by the amount, if any, by which the volume of the internal buoyancy appliances required to support the engine and its accessories, and, if fitted, the searchlight and radiotelegraph installation and their accessories, exceeds the volume of the internal buoyancy appliances required, at the rate of 0.0283 cubic metres (one cubic foot) per person, to support the additional persons which the lifeboat could accommodate if the motor and its accessories, and, if fitted, the searchlight and radiotelegraph installation and their accessories, were removed.

Regulation 10

Specification of Mechanically Propelled Lifeboats other than Motor Lifeboats

A mechanically propelled lifeboat, other than a motor lifeboat, shall comply with the following conditions:

(a) The propelling gear shall be of an approved type and shall have sufficient power to enable the lifeboat to be readily cleared from the ship's side when launched and to be able to hold course under adverse weather conditions. If the gear is manually operated it shall be capable of being worked by persons untrained in its use and shall be capable of being operated when the lifeboat is flooded.

(b) A device shall be fitted by means of which the helmsman can cause the lifeboat to go astern at any time when the propelling gear is in operation.

(c) The volume of the internal buoyancy of a mechanically propelled lifeboat, other than a motor lifeboat, shall be increased to compensate for the weight of the propelling gear.

Regulation 11

Equipment of Lifeboats

(a) The normal equipment of every lifeboat shall consist of:

(i) a single banked complement of buoyant oars, two spare buoyant oars, and a buoyant steering oar; one set and a half of thole pins or crutches, attached to the lifeboat by lanyard or chain; a boat hook;

(ii) two plugs for each plug hole (plugs are not required when proper automatic valves are fitted) attached to the lifeboat by lanyards or chains; a baler, and two buckets of approved material;

(iii) a rudder attached to the lifeboat and a tiller;

(iv) two hatchets, one at each end of the lifeboat;

(v) a lamp, with oil sufficient for 12 hours; two boxes of suitable matches in a watertight container;

(vi) a mast or masts, with galvanized wire stays together with sails (coloured orange);

(vii) an efficient compass in binnacle, to be luminised or fitted with suitable means of illumination;

(viii) a lifeline becketed round the outside of the lifeboat;

(ix) a sea-anchor of approved size;

(x) two painters of sufficient length. One shall be secured to the forward end of the lifeboat with strop and toggle so that it can be released, and the other shall be firmly secured to the stem of the lifeboat and be ready for use;

(xi) a vessel containing 4½ litres (1 gallon) of vegetable, fish or animal oil. The vessel shall be so constructed that the oil can be easily distributed on the water, and so arranged that it can be attached to the sea-anchor;

(xii) a food ration, determined by the Administration, for each person the lifeboat is certified to carry. These rations shall be kept in airtight receptacles which are to be stowed in a watertight container;

(xiii) watertight receptacles containing 3 litres (6 pints) of fresh water for each person the lifeboat is certified to carry, or watertight receptacles containing 2 litres (4 pints) of fresh water for each person together with an approved de-salting apparatus capable of

providing 1 litre (2 pints) of drinking water per person; a rust-proof dipper with lanyard; a rustproof graduated drinking vessel;

(xiv) four parachute signals of approved type capable of giving a bright red light at a high altitude; six hand flares of an approved type giving a bright red light;

(xv) two buoyant smoke signals of an approved type (for day-time use) capable of giving off a volume of orange-coloured smoke;

(xvi) approved means to enable persons to cling to the boat should it be upturned, in the form of bilge keels or keel rails, together with grab lines secured from gunwale to gunwale under the keel, or other approved arrangements;

(xvii) an approved first-aid outfit in a watertight case;

(xviii) a waterproof electric torch suitable for signalling in the Morse Code together with one spare set of batteries and one spare bulb in a waterproof container;

(xix) a daylight-signalling mirror of an approved type;

(xx) a jack-knife fitted with a tin-opener to be kept attached to the boat with a lanyard;

(xxi) two light buoyant heaving lines;

(xxii) a manual pump of an approved type;

(xxiii) a suitable locker for stowage of small items of equipment;

(xxiv) one whistle or equivalent sound signal;

(xxv) one set of fishing tackle;

(xxvi) one approved cover of a highly visible colour capable of protecting the occupants against injury by exposure: and

(xxvii) one copy of the illustrated table of life-saving signals referred to in Regulation 16 of Chapter V.

(b) In the case of ships engaged on voyages of such duration that in the opinion of the Administration the items specified in sub-paragraphs (vi), (xii), (xix), (xx) and (xxv) of paragraph (a) of this Regulation are unnecessary, the Administration may allow them to be dispensed with.

(c) Notwithstanding the provisions of paragraph (a) of this Regulation, motor lifeboats or other approved mechanically propelled lifeboats need not carry a mast or sails or more than half the complement of oars, but they shall carry two boat hooks.

(d) All lifeboats shall be fitted with suitable means to enable persons in the water to climb into the lifeboat.

(e) Every motor lifeboat shall carry portable fire-extinguishing equipment of an approved type capable of discharging froth or other suitable substance for extinguishing oil fires.

Regulation 12

Security of Lifeboat Equipment

All items of lifeboat equipment, with the exception of the boat hook which shall be kept free for fending off purposes, shall be suitably secured within the lifeboat. The lashing shall be carried out in such a manner as to ensure the security of the equipment and so as not to interfere with the lifting hooks or to prevent ready embarkation. All items of lifeboat equipment shall be as small and light in weight as possible and shall be packed in suitable and compact form.

Regulation 13

Portable Radio Apparatus for Survival Craft

(a) An approved portable radio apparatus for survival craft complying with the requirements set out in Regulation 14 of Chapter IV shall be carried in all ships except those on which there is carried on each side of the ship a motor lifeboat fitted with a radiotelegraph installation complying with the provisions of Regulation 14 of this Chapter and of Regulation 13 of Chapter IV. All this equipment shall be kept together in the chartroom or other suitable place ready to be moved to one or other of the lifeboats in the event of an emergency. However, in tankers of 3,000 tons gross tonnage and upwards in which lifeboats are fitted amidships and aft this equipment shall be kept in a suitable place in the vicinity of those lifeboats which are furthest away from the ship's main transmitter.

(b) In the case of ships engaged on voyages of such duration that in the opinion of the Administration portable radio apparatus for survival craft is unnecessary, the Administration may allow such equipment to be dispensed with.

Regulation 14

Radio Apparatus and Searchlights in Motor Lifeboats

(a) (i) Where the total number of persons on board a passenger ship engaged on international voyages which are not short international voyages, a ship employed as a whale factory ship, a ship employed as a fish processing or canning factory ship or a ship engaged in the carriage of persons employed in the whaling, fish processing or canning industries, is more than 199 but less than 1,500, a radiotelegraph apparatus complying with the requirements set out in this Regulation and in Regulation 13 of Chapter IV shall be fitted in at least one of the motor lifeboats required under Regulation 8 of this Chapter to be carried in that ship.

(ii) Where the total number of persons on board such a ship is 1,500 or more, such a radiotelegraph apparatus shall be fitted in every motor lifeboat required under Regulation 8 of this Chapter to be carried in that ship.

(b) The radio apparatus shall be installed in a cabin large enough to accommodate both the equipment and the person using it.

(c) The arrangements shall be such that the efficient operation of the transmitter and receiver shall not be interfered with by the engine while it is running, whether a battery is on charge or not.

(d) The radio battery shall not be used to supply power to any engine starting motor or ignition system.

(e) The motor lifeboat engine shall be fitted with a dynamo for recharging the radio battery, and for other services.

(f) A searchlight shall be fitted in each motor lifeboat required to be carried under paragraph (a) of Regulation 8 of this Chapter in passenger ships and under paragraph (c) of that Regulation in ships employed as whale factory ships, fish processing or canning factory ships and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries.

(g) The searchlight shall include a lamp of at least 80 watts, an efficient reflector and a source of power which will give effective illumination of a light-coloured object having a width of about 18 metres (60 feet) at a distance of 180 metres (200 yards) for a total period of six hours and shall be capable of working for at least three hours continuously.

Regulation 15

Requirements for Inflatable Liferafts

(a) Every inflatable liferaft shall be so constructed that, when fully inflated and floating with the cover uppermost, it shall be stable in a seaway.

(b) The liferaft shall be so constructed that if it is dropped into the water from a height of 18 metres (60 feet) neither the liferaft nor its equipment will be damaged. If the raft is to be stowed on the ship at a height above the water of more than 18 metres (60 feet), it shall be of a type which has been satisfactorily drop-tested from a height at least equal to the height at which it is to be stowed.

(c) The construction of the liferaft shall include a cover which shall automatically be set in place when the liferaft is inflated. This cover shall be capable of protecting the occupants against injury from exposure, and means shall be provided for collecting rain. The top of the cover shall be fitted with a lamp which derives its luminosity from a sea-activated cell and a similar lamp shall also be fitted inside the liferaft. The cover of the liferaft shall be of a highly visible colour.

(d) The liferaft shall be fitted with a painter and shall have a line securely becketed round the outside. A lifeline shall also be fitted around the inside of the liferaft.

(e) The liferaft shall be capable of being readily righted by one person if it inflates in an inverted position.

(f) The liferaft shall be fitted at each opening with efficient means to enable persons in the water to climb on board.

(g) The liferaft shall be contained in a valise or other container so constructed as to be capable of withstanding hard wear under conditions met with at sea. The liferaft in its valise or other container shall be inherently buoyant.

(h) The buoyancy of the liferaft shall be so arranged as to ensure by a division into an even number of separate compartments, half of which shall be capable of supporting out of the water the number of persons which the liferaft is permitted to accommodate, or by some other equally efficient means, that there is a reasonable margin of buoyancy if the raft is damaged or partially fails to inflate.

(i) The total weight of the liferaft, its valise or other container and its equipment shall not exceed 180 kilogrammes (400 lbs.).

(j) The number of persons which an inflatable liferaft shall be permitted to accommodate shall be equal to:

(i) the greatest whole number obtained by dividing by 96 the volume, measured in cubic decimetres (or by 3.4 the volume, measured in cubic feet) of the main buoyancy tubes (which for this purpose shall include neither the arches nor the thwart or thwarts if fitted) when inflated; or

(ii) the greatest whole number obtained by dividing by 3,720 the area measured in square centimetres (or by 4 the area, measured in square feet) of the floor (which for this purpose may include the thwart or thwarts if fitted) of the liferaft when inflated whichever number shall be the less.

(k) The floor of the liferaft shall be waterproof and shall be capable of being sufficiently insulated against cold.

(l) The liferaft shall be inflated by a gas which is not injurious to the occupants and the inflation shall take place automatically either on the pulling of a line or by some other equally simple and efficient method. Means shall be provided whereby the topping-up pump or bellows required by Regulation 17 of this Chapter may be used to maintain pressure.

(m) The liferaft shall be of approved material and construction, and shall be so constructed as to be capable of withstanding exposure for 30 days afloat in all sea conditions.

(n) No liferaft shall be approved which has a carrying capacity calculated in accordance with paragraph (j) of this Regulation of less than six persons. The maximum number of persons calculated in accordance with that paragraph for which an inflatable liferaft may be approved shall be at the discretion of the Administration, but shall in no case exceed 25.

(o) The liferaft shall be capable of operating throughout a temperature range of 66°C to minus 30°C (150°F to minus 22°F).

(p) (i) The liferaft shall be so stowed as to be readily available in case of emergency. It shall be stowed in such a manner as to permit it to float free from its stowage, inflate and break free from the vessel in the event of sinking.

(ii) If used, lashings shall be fitted with an automatic release system of a hydrostatic or equivalent nature approved by the Administration.

(iii) The liferaft required by paragraph (c) of Regulation 35 of this Chapter may be securely fastened.

(q) The liferaft shall be fitted with arrangements enabling it to be readily towed.

Regulation 16

Requirements for Rigid Liferafts

(a) Every rigid liferaft shall be so constructed that if it is dropped into the water from its stowed position neither the liferaft nor its equipment will be damaged.

(b) The deck area of the liferaft shall be situated within that part of the liferaft which affords protection to its occupants. The area of that deck shall be at least 0.3720 square metres (4 square feet) for every person the liferaft is permitted to carry. The nature of the deck shall be such as to prevent so far as practicable the ingress of water and it shall effectively support the occupants out of the water.

(c) The liferaft shall be fitted with a cover or equivalent arrangement of a highly visible colour, which shall be capable of protecting the occupants against injury from exposure whichever way up the liferaft is floating.

(d) The equipment of the liferaft shall be so stowed as to be readily available whichever way up the liferaft is floating.

(e) The total weight of a liferaft and its equipment carried in passenger ships shall not exceed 180 kilogrammes (400 lbs.). Liferafts carried in cargo ships may exceed 180 kilogrammes (400 lbs.) in weight if they are capable of being launched from both sides of the ship or if there are provided means for putting them into the water mechanically.

(f) The liferaft must at all times be effective and stable when floating either way up.

(g) The liferaft shall have at least 96 cubic decimetres (3.4 cubic feet) of air cases or equivalent buoyancy for each person it is permitted to carry which must be placed as near as possible to the sides of the raft.

(h) The liferaft shall have a painter attached and a lifeline securely becketed round the outside. A lifeline shall also be fitted around the inside of the raft.

(i) The liferaft shall be fitted at each opening with efficient means to enable persons in the water to climb on board.

(j) The liferaft shall be so constructed as not to be affected by oil or oil products.

(k) A buoyant light of the electric battery type shall be attached to the liferaft by a lanyard.

(l) The liferaft shall be fitted with arrangements enabling it to be readily towed.

(m) Liferafts shall be so stowed as to float free in the event of the ship sinking.

Regulation 17

Equipment of Inflatable and Rigid Liferafts

(a) The normal equipment of every liferaft shall consist of:

(i) One buoyant rescue quoit, attached to at least 30 metres (100 feet) of buoyant line.

(ii) For liferafts which are permitted to accommodate not more than 12 persons: one knife and one baler; for liferafts which are permitted to accommodate 13 persons or more: two knives and two balers.

(iii) Two sponges.

(iv) Two sea-anchors, one permanently attached to the liferaft and one spare.

(v) Two paddles.

(vi) One repair outfit capable of repairing punctures in buoyancy compartments.

(vii) One topping-up pump or bellows, unless the liferaft complies with Regulation 16 of this Chapter.

(viii) Three tin-openers.

(ix) One approved first-aid outfit in a waterproof case.

(x) One rustproof graduated drinking vessel.

(xi) One waterproof electric torch suitable for signalling in the Morse Code, together with one spare set of batteries and one spare bulb in a waterproof container.

(xii) One daylight-signalling mirror and one signalling whistle.

(xiii) Two parachute distress signals of an approved type, capable of giving a bright red light at a high altitude.

(xiv) Six hand flares of an approved type, capable of giving a bright red light.

(xv) One set of fishing tackle.

(xvi) A food ration, determined by the Administration, for each person the liferaft is permitted to accommodate.

(xvii) Watertight receptacles containing 1½ litres (3 pints) of fresh water for each person the liferaft is permitted to accommodate, of which ½ litre (1 pint) per person may be replaced by a suitable de-salting apparatus capable of producing an equal amount of fresh water.

(xviii) Six anti-seasickness tablets for each person the liferaft is deemed fit to accommodate.

(xix) Instructions on how to survive in the liferaft; and

(xx) one copy of the illustrated table of life-saving signals referred to in Regulation 16 of Chapter V.

(b) In the case of passenger ships engaged on short international voyages of such duration that in the opinion of the Administration all the items specified in paragraph (a) of this Regulation are unnecessary, the Administration may allow one or more liferafts, not being less than one-sixth of the number of liferafts carried in any such ship, to be provided with the equipment specified in sub-paragraphs (i) to (vii) inclusive, (xi) and (xix) of paragraph (a) of this Regulation, and with one-half of the equipment specified in sub-paragraphs (xiii) and (xiv) of that paragraph and the remainder of the liferafts carried to be provided with the equipment specified in sub-paragraphs (i) to (vii) inclusive and (xix) of that paragraph.

Regulation 18

Training in the use of Liferafts

The Administration shall so far as is practicable and reasonable take steps with a view to ensuring that crews of ships in which liferafts are carried are trained in their launching and use.

Regulation 19

Embarkation into Lifeboats and Liferafts

(a) Suitable arrangements shall be made for embarkation into the lifeboats, which shall include:

(i) a ladder at each set of davits to afford access to the lifeboats when waterborne, except that in passenger ships, ships employed as whale factory ships, ships employed as fish processing or canning factory ships and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries, the Administration may permit such ladders to be replaced by approved devices provided that there shall not be less than one ladder on each side of the ship;

(ii) means for illuminating the lifeboats and their launching gear during preparation for and the process of launching, and also for illuminating the water into which the lifeboats are launched until the process of launching is completed;

(iii) arrangements for warning the passengers and crew that the ship is about to be abandoned; and

(iv) means for preventing any discharge of water into the lifeboats.

(b) Suitable arrangements shall also be made for embarkation into the liferafts, which shall include:

(i) sufficient ladders to facilitate embarkation into the liferafts when waterborne except that in passenger ships, ships employed as whale factory ships, ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the whaling, fish processing or fish canning industries, the Administration may permit the replacement of some or all of such ladders by approved devices;

(ii) where there are carried liferafts for which approved launching devices are provided, means for illuminating those liferafts and launching devices during the preparation for and the process of launching, and also for illuminating the water into which those liferafts are launched until the process of launching is completed;

(iii) means for illuminating the stowage position of liferafts for which approved launching devices are not provided;

(iv) arrangements for warning the passengers and crew that the ship is about to be abandoned; and

(v) means for preventing any discharge of water into the liferafts at fixed launching positions, including those under approved launching devices.

Regulation 20

Marking of Lifeboats, Liferafts and Buoyant Apparatus

(a) The dimensions of a lifeboat and the number of persons which it is permitted to carry shall be marked on it in clear permanent characters. The name and port of registry of the ship to which the lifeboat belongs shall be painted on each side of the bow.

(b) Buoyant apparatus shall be marked with the number of persons in the same manner.

(c) The number of persons shall be marked in the same manner on inflatable liferafts and also on the valise or container in which the inflatable liferaft is contained. Every inflatable liferaft shall also bear a serial number and the manufacturer's name so that the owner of the liferaft can be ascertained.

(d) Every rigid liferaft shall be marked with the name and port of registry of the ship in which it is carried, and with the number of persons it is permitted to carry.

(e) No lifeboat, liferaft or buoyant apparatus shall be marked for a greater number of persons than that obtained in the manner specified in this Chapter.

Regulation 21

Specification of a Lifebuoy

(a) A lifebuoy shall satisfy the following requirements:

(i) it shall be of solid cork or any other equivalent material;

(ii) it shall be capable of supporting in fresh water for 24 hours at least 14.5 kilogrammes (32 lbs.) of iron;

(iii) it shall not be adversely affected by oil or oil products;

(iv) it shall be of a highly visible colour;

(v) it shall be marked in block letters with the name and port of registry of the ship in which it is carried.

(b) Lifebuoys filled with rushes, cork shavings or granulated cork, or any other loose granulated material, or whose buoyancy depends upon air compartments which require to be inflated, are prohibited.

(c) Lifebuoys made of plastic or other synthetic compounds shall be capable of retaining their buoyant properties and durability in contact with sea water or oil products, or under variations of temperature or climatic changes prevailing in open sea voyages.

(d) Lifebuoys shall be fitted with beckets securely seized. At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline of at least 27.5 metres (15 fathoms) in length.

(e) In passenger ships not less than one-half of the total number of lifebuoys, and in no case less than six, and in cargo ships at least one-half of the total number of lifebuoys, shall be provided with efficient self-igniting lights.

(f) The self-igniting lights required by paragraph (e) of this Regulation shall be such that they cannot be extinguished by water. They shall be capable of burning for not less than 45 minutes and shall have a luminous intensity of not less than 2 candelas in all directions of the upper hemisphere. The lights shall be kept near the lifebuoys to which they belong, with the necessary means of attachment. Self-igniting lights used in tankers shall be of an approved electric battery type.*

(g) All lifebuoys shall be so placed as to be readily accessible to the persons on board, and at least two of the lifebuoys provided with self-igniting lights in accordance with paragraph (e) of this Regulation shall also be provided with an efficient self-activating smoke signal capable of producing smoke of a highly visible colour for at least 15 minutes, and shall be capable of quick release from the navigating bridge.

(h) Lifebuoys shall always be capable of being rapidly cast loose and shall not be permanently secured in any way.

Regulation 22

Life-jackets

(a) Ships shall carry for every person on board a life-jacket of an approved type and, in addition, unless these life-jackets can be adapted for use by children, a sufficient number of life-jackets suitable for children. Each life-jacket shall be suitably marked showing that it has been approved by the Administration.

* The following ranges of visibilities of the light might be expected in given atmospheric conditions.

Atmospheric transmissivity factor	Meteorological range of visibility (miles)	Range of visibility of the light (miles)
0.3	2.4	0.96
0.4	3.3	1.05
0.5	4.3	1.15
0.6	5.8	1.24
0.7	8.4	1.34
0.8	13.4	1.45
0.9	28.9	1.57

(b) In addition to the life-jackets required by paragraph (a) of this Regulation there shall be carried on passenger ships life-jackets for 5 per cent of the total number of persons on board. These life-jackets shall be stowed in a conspicuous place on deck.

(c) An approved life-jacket shall comply with the following requirements:

(i) it shall be constructed with proper workmanship and materials;

(ii) it shall be so constructed as to eliminate so far as possible all risk of its being put on incorrectly, except that it shall be capable of being worn inside out;

(iii) it shall be capable of lifting the face of an exhausted or unconscious person out of the water and holding it above the water with the body inclined backwards from its vertical position;

(iv) it shall be capable of turning the body in the water from any position to a safe floating position with the body inclined backwards from its vertical position;

(v) it shall not be adversely affected by oil or oil products;

(vi) it shall be of a highly visible colour;

(vii) it shall be fitted with an approved whistle, firmly secured by a cord;

(viii) the buoyancy of the life-jacket required to provide the foregoing performance shall not be reduced by more than 5 per cent after 24 hours' submergence in fresh water.

(d) A life-jacket, the buoyancy of which depends on inflation, may be permitted for use by the crews of all ships except passenger ships and tankers provided that:

(i) it has two separate inflatable compartments;

(ii) it is capable of being inflated both mechanically and by mouth; and

(iii) it complies with the requirements of paragraph (c) of this Regulation with either compartment inflated separately.

(e) Life-jackets shall be so placed as to be readily accessible and their position shall be plainly indicated.

Regulation 23

Line-throwing Appliances

(a) Ships shall carry a line-throwing appliance of an approved type.

(b) The appliance shall be capable of carrying a line not less than 230 metres (250 yards) with reasonable accuracy, and shall include not less than four projectiles and four lines.

Regulation 24

Ships' Distress Signals

Ships shall be provided, to the satisfaction of the Administration, with means of making effective distress signals by day and by night, including at least twelve parachute signals capable of giving a bright red light at a high altitude.

Regulation 25

Muster List and Emergency Procedure

(a) Special duties to be undertaken in the event of an emergency shall be allotted to each member of the crew.

(b) The muster list shall show all the special duties and shall indicate, in particular, the station to which each member must go, and the duties that he has to perform.

(c) The muster list for each passenger ship shall be in a form approved by the Administration.

(d) Before the vessel sails, the muster list shall be completed. Copies shall be posted in several parts of the ship, and in particular in the crew's quarters.

(e) The muster list shall show the duties assigned to the different members of the crew in connexion with:

(i) the closing of the watertight doors, valves and closing mechanisms of scuppers, ash-shoots and fire doors;

(ii) the equipping of the lifeboats (including the portable radio apparatus for survival craft) and the other life-saving appliances;

(iii) the launching of the lifeboat;

(iv) the general preparation of the other life-saving appliances;

(v) the muster of the passengers; and

(vi) the extinction of fire, having regard to the ship's fire control plans.

(f) The muster list shall show the several duties assigned to the members of the stewards' department in relation to the passengers in case of emergency. These duties shall include:

(i) warning the passengers;

(ii) seeing that they are suitably clad and have put on their life-jackets in a proper manner;

(iii) assembling the passengers at muster stations;

(iv) keeping order in the passages and on the stairways, and, generally, controlling the movements of the passengers; and

(v) ensuring that a supply of blankets is taken to the lifeboats.

(g) The duties shown by the muster list in relation to the extinction of fire pursuant to sub-paragraph (e)(vi) of this Regulation shall include particulars of:

(i) the manning of the fire parties assigned to deal with fires;

(ii) the special duties assigned in respect of the operation of fire-fighting equipment and installations.

(h) The muster list shall specify definite signals for calling all the crew to their boat, liferaft and fire stations, and shall give full particulars of these signals. These signals shall be made on the whistle or siren and, except on passenger ships on short international voyages and on cargo ships of less than 45.7 metres (150 feet) in length, they shall be supplemented by other signals which shall be electrically operated. All these signals shall be operable from the bridge.

Regulation 26

Practice Musters and Drills

(a) (i) In passenger ships, musters of the crew for boat drill and fire drill shall take place weekly when practicable and there shall be such a muster when a passenger ship leaves the final port of departure on an international voyage which is not a short international voyage.

(ii) In cargo ships, a muster of the crew for boat drill and fire drill shall take place at intervals of not more than one month, provided that a muster of the crew for boat drill and fire drill shall take place within 24 hours of leaving a port if more than 25 per cent of the crew have been replaced at that port.

(iii) On the occasion of the monthly muster in cargo ships the boat's equipment shall be examined to ensure that it is complete.

(iv) The date upon which musters are held, and details of any training and drills in fire fighting which are carried out on board shall be recorded in such log book as may be prescribed by the Administration. If in any week (for passenger ships) or month (for cargo ships) no muster or a part muster only is held, an entry shall be made stating the circumstances and extent of the muster held. A report of the examination of the boat's equipment on cargo ships shall be entered in the log book, which shall also record the occasions on which the lifeboats are swung out and lowered in compliance with paragraph (c) of this Regulation.

(b) In passenger ships, except those engaged on short international voyages, a muster of the passengers shall be held within 24 hours after leaving port.

(c) Different groups of lifeboats shall be used in turn at successive boat drills and every lifeboat shall be swung out and, if practicable and reasonable, lowered at least once every four months. The musters and inspections shall be so arranged that the crew thoroughly understand and are practised in the duties they have to perform, including instructions in the handling and operation of liferafts where these are carried.

(d) The emergency signal for summoning passengers to muster stations shall be a succession of seven or more short blasts followed by one long blast on the whistle or siren. This shall be supplemented in passenger ships, except those engaged on short international voyages, by other signals, which shall be electrically operated, throughout the ship operable from the bridge. The meaning of all signals affecting passengers, with precise instructions on what they are to do in an emergency, shall be clearly stated in appropriate languages on cards posted in their cabins and in conspicuous places in other passenger quarters.

PART B – PASSENGER SHIPS ONLY

Regulation 27

Lifeboats, Liferafts and Buoyant Apparatus

(a) Passenger ships shall carry two boats attached to davits – one on each side of the ship – for use in an emergency. These boats shall be of an approved type and shall be not more than 8.5 metres (28 feet) in length. They may be counted for the purposes of paragraphs (b) and (c) of this Regulation, provided that they comply fully with the requirements for lifeboats of this Chapter, and for the purposes of Regulation 8 provided that in addition they comply fully with the requirements of Regulation 9 and where appropriate Regulation 14 of this Chapter. They shall be kept ready for immediate use while the ship is at sea. In ships in which the requirements of paragraph (h) of Regulation 29 are met by means of appliances fitted to the sides of the lifeboats, such appliances shall not be required to be fitted to the two boats provided to meet the requirements of this Regulation.

(b) Passenger ships engaged on international voyages which are not short international voyages shall carry:

(i) Lifeboats on each side of such aggregate capacity as will accommodate half the total number of persons on board. Provided that the Administration may permit the substitution of lifeboats by liferafts of the same total capacity so however that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37½ per cent of all on board.

(ii) Liferafts of sufficient aggregate capacity to accommodate 25 per cent of the total number of persons on board, together with buoyant apparatus for 3 per cent of that number. Provided that ships which have a factor of subdivision of 0.33 or less shall be permitted to carry, in lieu of liferafts for 25 per cent of all on board and buoyant apparatus for 3 per cent of all on board, buoyant apparatus for 25 per cent of that number.

(c) (i) A passenger ship engaged on short international voyages shall be provided with sets of davits in accordance with its length as specified in Column A of the Table in Regulation 28 of this Chapter. Each set of davits shall have a lifeboat attached to it and these lifeboats shall provide at least the minimum capacity required by Column C of the Table or the capacity required to provide accommodation for all on board if this is less.

Provided that when in the opinion of the Administration it is impracticable or unreasonable to place on a ship engaged on short international voyages the number of sets of davits required by Column A of the Table in Regulation 28, the Administration may authorize, under exceptional conditions, a smaller number of davits, except that this number shall never be less than the minimum number fixed by Column B of the Table, and that the total capacity of the lifeboats on the ship will be at least equal to the minimum capacity required by Column C or the capacity required to provide for all persons on board if this is less.

(ii) If the lifeboats so provided are not sufficient to accommodate all on board, additional lifeboats under davits or liferafts shall be provided so that the accommodation provided in the lifeboats and the liferafts in the ship shall be sufficient for all on board.

(iii) Notwithstanding the provisions of sub-paragraph (ii) of this paragraph in any ship engaged on short international voyages the number of persons carried shall not exceed the total capacity of the lifeboats provided in accordance with sub-paragraphs (i) and (ii) of this paragraph unless the Administration considers that this is necessitated by the volume of traffic and then only if the ship complies with the provisions of paragraph (d) of Regulation 1 of Chapter II-1.

(iv) Where under the provisions of sub-paragraph (iii) of this paragraph the Administration has permitted the carriage of persons in excess of the lifeboat capacity and is satisfied that it is impracticable in that ship to stow the liferafts carried in accordance with sub-paragraph (ii) of this paragraph it may permit a reduction in the number of lifeboats.

Provided that:

(1) the number of lifeboats shall, in the case of ships of 58 metres (190 feet) in length and over, never be less than four, two of which shall be carried on each side of the ship, and in the case of ships of less than 58 metres (190 feet) in length, shall never be less than two, one of which shall be carried on each side of the ship; and

(2) the number of lifeboats and liferafts shall always be sufficient to accommodate the total number of persons on board.

(v) Every passenger ship engaged on short international voyages shall carry in addition to the lifeboats and liferafts required by the provisions of this paragraph, liferafts sufficient to accommodate 10 per cent of the total number of persons for whom there is accommodation in the lifeboats carried in that ship.

(vi) Every passenger ship engaged on short international voyages shall also carry buoyant apparatus for at least 5 per cent of the total number of persons on board.

(vii) The Administration may permit individual ships or classes of ships with short international voyage certificates to proceed on voyages in excess of 600 miles but not exceeding 1,200 miles if such ships comply with the provisions of paragraph (d) of Regulation 1 of Chapter II-1, if they carry lifeboats which provide for 75 per cent of the persons on board and otherwise comply with the provisions of this paragraph.

Regulation 28

Table relating to Davits and Lifeboat Capacity for Ships on Short International Voyages

The following table fixes according to the length of the ship:

(A) the minimum number of sets of davits to be provided on a ship engaged on short international voyages to each of which must be attached a lifeboat in accordance with Regulation 27 of this Chapter;

(B) the smaller number of sets of davits which may be authorized exceptionally on a ship engaged on short international voyages under Regulation 27 of this Chapter; and

(C) the minimum lifeboat capacity required for a ship engaged on short international voyages.

Registered length of ship				(A) Minimum number of sets of davits	(B) Smaller number of sets of davits authorized exceptionally	(C) Minimum capacity of lifeboats	
Metres		Feet				Cubic metres	Cubic feet
31 and under	37	100 and under	120	2	2	11	400
37 "	43	120 "	140	2	2	18	650
43 "	49	140 "	160	2	2	26	900
49 "	53	160 "	175	3	3	33	1,150
53 "	58	175 "	190	3	3	38	1,350
58 "	63	190 "	205	4	4	44	1,550
63 "	67	205 "	220	4	4	50	1,750
67 "	70	220 "	230	5	4	52	1,850
70 "	75	230 "	245	5	4	61	2,150
75 "	78	245 "	255	6	5	68	2,400
78 "	82	255 "	270	6	5	76	2,700
82 "	87	270 "	285	7	5	85	3,000
87 "	91	285 "	300	7	5	94	3,300
91 "	96	300 "	315	8	6	102	3,600
96 "	101	315 "	330	8	6	110	3,900
101 "	107	330 "	350	9	7	122	4,300
107 "	113	350 "	370	9	7	135	4,750
113 "	119	370 "	390	10	7	146	5,150
119 "	125	390 "	410	10	7	157	5,550
125 "	133	410 "	435	12	9	171	6,050
133 "	140	435 "	460	12	9	185	6,550
140 "	149	460 "	490	14	10	202	7,150
149 "	159	490 "	520	14	10	221	7,800
159 "	168	520 "	550	16	12	238	8,400

Note on (C): Where the length of the ship is under 31 metres (100 feet) or over 168 metres (550 feet) the minimum number of sets of davits and the cubic capacity of the lifeboats shall be prescribed by the Administration.

Regulation 29

Stowage and Handling of Lifeboats, Liferafts and Buoyant Apparatus

(a) Lifeboats and liferafts shall be stowed to the satisfaction of the Administration in such a way that:

(i) they can all be launched in the shortest possible time and in not more than 30 minutes;

(ii) they will not impede in any way the prompt handling of any of the other lifeboats, liferafts or buoyant apparatus or the marshalling of the persons on board at the launching stations, or their embarkation;

(iii) the lifeboats, and the liferafts for which approved launching devices are required to be carried, shall be capable of being put into the water loaded with their full complement of persons and equipment even in unfavourable conditions of trim and of 15 degrees of list either way; and

(iv) the liferafts for which approved launching devices are not required to be carried, and the buoyant apparatus, shall be capable of being put into the water even in unfavourable conditions of trim and of 15 degrees of list either way.

(b) Every lifeboat shall be attached to a separate set of davits.

(c) Lifeboats may only be stowed on more than one deck if proper measures are taken to prevent lifeboats on a lower deck being fouled by those stowed on a deck above.

(d) Lifeboats, and liferafts for which approved launching devices are required to be carried, shall not be placed in the bow of the ship. They shall be stowed in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull aft.

(e) Davits shall be of approved design and shall be suitably placed to the satisfaction of the Administration. They shall be so disposed on one or more decks that the lifeboats placed under them can be safely lowered without interference from the operation of any other davits.

(f) Davits shall be as follows:

(i) luffing or gravity type for operating lifeboats weighing not more than 2,300 kilogrammes (2¼ tons) in their turning out condition;

(ii) gravity type for operating lifeboats weighing more than 2,300 kilogrammes (2¼ tons) in their turning out condition.

(g) Davits, falls, blocks and all other gear shall be of such strength that the lifeboats can be turned out manned by a launching crew and then safely lowered with the full complement of persons and equipment, with the ship listed to 15 degrees either way and with a 10 degrees trim.

(h) Skates or other suitable means shall be provided to facilitate launching the lifeboats against a list of 15 degrees.

(i) Means shall be provided for bringing the lifeboats against the ship's side and there holding them so that persons may be safely embarked.

(j) Lifeboats, together with the emergency boats required by Regulation 27 of this Chapter, shall be served by wire rope falls, together with winches of an approved type which, in the case of the emergency boats, shall be capable of quick recovery of those boats. Exceptionally, the Administration may allow manila rope falls or falls of another approved material with or without winches (except that the emergency boats shall be required to be served by winches which are capable of quick recovery of those boats) where they are satisfied that manila rope falls or falls of another approved material are adequate.

(k) At least two lifelines shall be fitted to the davit span, and the falls and lifelines shall be long enough to reach the water with the ship at its lightest seagoing draught and listed to 15 degrees either way. Lower fall blocks shall be fitted with a suitable ring or long link for attaching to the sling hooks unless an approved type of disengaging gear is fitted.

(l) Where mechanically-powered appliances are fitted for the recovery of the lifeboats, efficient hand gear shall also be provided. Where davits are recovered by action of the falls by power, safety devices shall be fitted which will automatically cut off the power before the davits come against the stops in order to avoid overstressing the wire rope falls or davits.

(m) Lifeboats attached to davits shall have the falls ready for service and arrangements shall be made for speedily, but not necessarily simultaneously, detaching the lifeboats from the falls. The point of attachment of the lifeboats to the falls shall be at such height above the gunwale as to ensure stability when lowering the lifeboats.

(n) (i) In passenger ships engaged on international voyages which are not short international voyages in which there are carried lifeboats and liferafts in accordance with sub-paragraph (b)(i) of Regulation 27 of this Chapter, there shall be provided approved launching devices sufficient in number in the opinion of the Administration to enable that number of liferafts which, together with the lifeboats, is required in accordance with that sub-paragraph to provide accommodation for all on board, to be put into the water loaded with the number of persons they are permitted to accommodate, in not more than thirty minutes in calm conditions. Approved launching devices so provided shall, so far as practicable, be distributed equally on each side of the ship and there shall never be less than one such device on each side. No such devices need, however, be provided for the additional liferafts required to be carried by sub-paragraph (b)(ii) of Regulation 27 of this Chapter for 25 per cent of all on board, but every liferaft carried in accordance with that sub-paragraph shall, where an approved launching device is provided in the ship, be of a type which is capable of being launched from such a device.

(ii) In passenger ships engaged on short international voyages, the number of approved launching devices to be provided shall be at the discretion of the Administration. The number of liferafts allocated to each such device carried shall not be more than the number which, in the opinion of the Administration, can be put into the water fully loaded with the number of persons they are permitted to carry by that device in not more than 30 minutes in calm conditions.

Regulation 30

Lighting for Decks, Lifeboats, Liferafts, etc.

(a) Provision shall be made for an electric or equivalent system of lighting sufficient for all the requirements of safety in the different parts of a passenger ship, and particularly for decks on which the lifeboats and liferafts are stowed. The self-contained emergency source of electrical power required by Regulation 25 of Chapter II-1 shall be capable of supplying where necessary this lighting system and also the lighting required by sub-paragraphs (a)(ii), (b)(ii) and (b)(iii) of Regulation 19 of this Chapter.

(b) The exit from every main compartment occupied by passengers or crew shall be continuously lighted by an emergency lamp. The power for these emergency lamps shall be so arranged that they will be supplied from the emergency source of power referred to in paragraph (a) of this Regulation in the event of failure of the main generating plant.

Regulation 31

Manning of Lifeboats and Liferafts

(a) A deck officer or certified lifeboatman shall be placed in charge of each lifeboat and a second-in-command shall also be nominated. The person in charge shall have a list of the lifeboat's crew, and shall see that the men placed under his orders are acquainted with their several duties.

(b) A man capable of working the motor shall be assigned to each motor lifeboat.

(c) A man capable of working the radio and searchlight installations shall be assigned to each lifeboat carrying this equipment.

(d) A man practised in the handling and operation of liferafts shall be assigned to each liferaft carried, except where in ships engaged on short international voyages the Administration is satisfied that this is not practicable.

Regulation 32

Certificated Lifeboatmen

(a) In passenger ships there shall be, for every lifeboat carried in order to comply with this Chapter, a number of lifeboatmen at least equal to that specified in the following table:

Prescribed complement of lifeboat	The minimum number of certificated lifeboatmen shall be
Less than 41 persons	2
From 41 to 61 persons	3
From 62 to 85 persons	4
Above 85 persons	5

(b) The allocation of the certificated lifeboatmen to each lifeboat remains within the discretion of the master.

(c) Certificates of efficiency shall be issued under the authority of the Administration. In order to obtain such a certificate an applicant shall prove that he has been trained in all the operations connected with launching lifeboats and other life-saving appliances and in the use of oars and propelling gear; that he is acquainted with the practical handling of lifeboats and of other life-saving equipment, and further, that he is capable of understanding and answering the orders relative to all kinds of life-saving appliances.

Regulation 33

Buoyant Apparatus

(a) No type of buoyant apparatus shall be approved unless it satisfies the following conditions:

(i) It shall be of such size and strength that it can be thrown from the place where it is stowed into the water without being damaged.

(ii) It shall not exceed 180 kilogrammes (400 lbs.) in weight unless suitable means to the satisfaction of the Administration are provided to enable it to be launched without lifting by hand.

(iii) It shall be of approved material and construction.

(iv) It shall be effective and stable when floating either way up.

(v) The air cases or equivalent buoyancy shall be placed as near as possible to the sides of the apparatus, and such buoyancy shall not be dependent upon inflation.

(vi) It shall be fitted with a painter and have a line securely becketed round the outside.

(b) The number of persons for which buoyant apparatus is certified shall be the number:

(i) ascertained by dividing the number of kilogrammes of iron which it is capable of supporting in fresh water by 14.5 (or the number of pounds divided by 32), or

(ii) equal to the number of millimetres in the perimeter divided by 305 (or the number of feet in the perimeter), whichever is the less.

Regulation 34

Number of Lifebuoys to be Provided

The minimum number of lifebuoys with which passenger ships are provided shall be fixed by the following table:

Length of ship		Minimum number of buoys
in metres	*in feet*	
Under 61	Under 200	8
61 and under 122	200 and under 400	12
122 and under 183	400 and under 600	18
183 and under 244	600 and under 800	24
244 and over	800 and over	30

PART C - CARGO SHIPS ONLY

Regulation 35

Number and Capacity of Lifeboats and Liferafts

(a) (i) Every cargo ship, except ships employed as whale factory ships, fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries, shall carry lifeboats on each side of the ship of such aggregate capacity as will accommodate all persons on board, and in addition shall carry liferafts sufficient to accommodate half that number.

Provided that, in the case of such cargo ships engaged on international voyages between near neighbouring countries, the Administration, if it is satisfied that the conditions of the voyage are such as to render the compulsory carriage of liferafts unreasonable or unnecessary, may to that extent exempt individual ships or classes of ships from this requirement.

(ii) (1) Subject to the provisions of sub-paragraph (ii)(2) of this paragraph, every tanker of 3,000 tons gross tonnage and upwards shall carry not less than four lifeboats, two of which shall be carried aft and two amidships, except that in tankers which have no amidships superstructure all lifeboats shall be carried aft.

(2) A tanker of 3,000 tons gross tonnage and upwards which has no amidships superstructure may be permitted by the Administration to carry two lifeboats only, provided that:

(aa) one lifeboat is carried aft on each side of the ship;

(bb) each such lifeboat shall not exceed 8.5 metres (28 feet) in length;

(cc) each such lifeboat shall be stowed as far forward as practicable, but at least so far forward that the after end of the lifeboat is one-and-a-half times the length of the lifeboat forward of the propeller; and

(dd) each such lifeboat shall be stowed as near sea level as is safe and practicable.

(b) (i) Every ship employed as a whale factory ship, every ship employed as a fish processing or canning factory ship and every ship engaged in the carriage of persons employed in the whaling, fish processing or canning industries shall carry:

(1) Lifeboats on each side of such aggregate capacity as will accommodate half the total number of persons on board; provided that the Administration may permit the substitution of lifeboats by liferafts of the same total capacity so however that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37½ per cent of all on board.

(2) Liferafts of sufficient aggregate capacity to accommodate half the total number of persons on board; provided that, if in ships employed as fish processing or canning factory ships, it is impracticable to carry lifeboats which comply fully with the requirements of this Chapter, the Administration may permit instead the carriage of other boats, which shall however provide not less than the accommodation required by this Regulation and shall have at least the buoyancy and equipment required by this Chapter for lifeboats.

(ii) Every ship employed as a whale factory ship, every ship employed as a fish processing or canning factory ship and every ship engaged in the carriage of persons employed in the whaling, fish processing or canning industries shall carry two boats – one on each side – for use in an emergency. These boats shall be of an approved type and shall be not more than 8.5 metres (28 feet) in length. They may be counted for the purposes of this paragraph provided that they comply fully with the requirements for lifeboats of this Chapter and for the purposes of Regulation 8 provided that in addition they comply with the requirements of Regulation 9, and, where appropriate, Regulation 14 of this Chapter. They shall be kept ready for immediate use while the ship is at sea. In ships in which the requirements of paragraph (g) of Regulation 36 of this Chapter are met by means of appliances fitted to the sides of the lifeboats, such appliances shall not be required to be fitted to the two boats provided to meet the requirements of this Regulation.

(c) Every cargo ship with no amidships superstructure having a registered length of 150 metres (492 feet) and upwards shall carry, in addition to the liferafts required under sub-paragraph (a)(i) of this Regulation, a liferaft capable of accommodating at least six persons which shall be stowed as far forward as is reasonable and practicable.

Regulation 36

Davits and Launching Arrangements

(a) In cargo ships lifeboats and liferafts shall be stowed to the satisfaction of the Administration.

(b) Every lifeboat shall be attached to a separate set of davits.

(c) Lifeboats and liferafts for which approved launching devices are required to be carried shall preferably be positioned as close to accommodation and service spaces as possible. They shall be stowed in such positions as to ensure safe launching, having particular regard to clearance from the propeller and steeply overhanging portions of the hull, with the object of ensuring so far as practicable that they can be launched down the straight side of the ship. If positioned forward they shall be stowed abaft the collision bulkhead in a sheltered position and in this respect the Administration shall give special consideration to the strength of the davits.

(d) Davits shall be of approved design and shall be suitably placed to the satisfaction of the Administration.

(e) In tankers of 1,600 tons gross tonnage and upwards, ships employed as whale factory ships, ships employed as fish processing or canning factory ships and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries, all davits shall be of the gravity type. In other ships, davits shall be as follows:

(i) luffing or gravity type for operating lifeboats weighing not more than 2,300 kilogrammes (2¼ tons) in their turning out condition;

(ii) gravity type for operating lifeboats weighing more than 2,300 kilogrammes (2¼ tons) in their turning out condition.

(f) Davits, falls, blocks and all other gear shall be of such strength that the lifeboats can be turned out manned by a launching crew and then safely lowered with the full complement of persons and equipment, with the ship listed to 15 degrees either way, and with a 10 degrees trim.

(g) Skates or other suitable means shall be provided to facilitate launching the lifeboats against a list of 15 degrees.

(h) Means shall be provided for bringing the lifeboats against the ship's side and there holding them so that persons may be safely embarked.

(i) Lifeboats, together with the emergency boats required by sub-paragraph (b)(ii) of Regulation 35 of this Chapter, shall be served by wire rope falls, together with winches of an approved type which, in the case of the emergency boats, shall be capable of quick recovery of those boats. Exceptionally, the Administration may allow manila rope falls or falls of another approved material with or without winches (except that the emergency boats shall be required to be served by winches which are capable of quick recovery of those boats) where they are satisfied that manila rope falls or falls of another approved material are adequate.

(j) At least two lifelines shall be fitted to the davit spans, and the falls and lifelines shall be long enough to reach the water with the ship at its lightest seagoing draught and listed to 15 degrees either way. Lower fall blocks shall be fitted with a suitable ring or long link for attaching to the sling hooks unless an approved type of disengaging gear is fitted.

(k) Where mechanically powered appliances are fitted for the recovery of the lifeboats, efficient hand gear shall also be provided. Where davits are recovered by action of the falls by power, safety devices shall be fitted which will automatically cut off the power before the davits come against the stops in order to avoid overstressing the wire rope falls or davits.

(l) Lifeboats shall have the falls ready for service, and arrangements shall be made for speedily, but not necessarily simultaneously, detaching the lifeboats from the falls. The point of attachment of the lifeboats to the falls shall be at such height above the gunwale as to ensure stability when lowering the lifeboats.

(m) In ships employed as whale factory ships, ships employed as fish processing or canning factory ships and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries, in which there are carried lifeboats and liferafts in accordance with sub-paragraph (b)(i)(2) of Regulation 35 no approved launching devices need be provided for the liferafts, but there shall be provided such devices sufficient in number, in the opinion of the Administration, to enable the liferafts carried in accordance with sub-paragraph (b)(i)(1) of that Regulation to be put into the water loaded with the number of persons they are permitted to accommodate, in not more than 30 minutes in calm conditions. Approved launching devices so provided shall, so far as practicable, be distributed equally on each side of the ship. Every liferaft carried on ships in which an approved launching device is required to be provided shall be of a type which is capable of being launched by such a device.

Regulation 37

Number of Lifebuoys to be Provided

At least eight lifebuoys of a type which satisfies the requirements of Regulation 21 of this Chapter shall be carried.

Regulation 38

Emergency Lighting

The lighting required by sub-paragraphs (a)(ii), (b)(ii) and (b)(iii) of Regulation 19 of this Chapter shall be capable of being supplied for at least three

hours by the emergency source of power required by Regulation 26 of Chapter II-1. In cargo ships of 1,600 tons gross tonnage and upwards the Administration shall ensure that the lighting of the alleyways, stairways and exits is such that the access of all persons on board to the launching stations and stowage positions of lifeboats and liferafts is not impeded.

CHAPTER IV

RADIOTELEGRAPHY AND RADIOTELEPHONY

PART A - APPLICATION AND DEFINITIONS

Regulation 1

Application

(a) Unless expressly provided otherwise, this Chapter applies to all ships to which the present Regulations apply.

(b) This Chapter does not apply to ships to which present Regulations would otherwise apply while such ships are being navigated within the Great Lakes of North America and their connecting and tributary waters as far east as the lower exit of the St. Lambert Lock at Montreal in the Province of Quebec, Canada.*

(c) No provision in this Chapter shall prevent the use by a ship or survival craft in distress of any means at its disposal to attract attention, make known its position and obtain help.

Regulation 2

Terms and Definitions

For the purpose of this Chapter the following terms shall have the meanings defined below. All other terms which are used in this Chapter and which are also defined in the Radio Regulations shall have the same meanings as defined in those Regulations:

(a) "Radio Regulations" means the Radio Regulations annexed to, or regarded as being annexed to, the most recent International Telecommunication Convention which may be in force at any time.

(b) "Radiotelegraph auto alarm" means an automatic alarm receiving apparatus which responds to the radiotelegraph alarm signal and has been approved.

(c) "Radiotelephone auto alarm" means an automatic alarm receiving apparatus which responds to the radiotelephone alarm signal and has been approved.

(d) "Radiotelephone station", "Radiotelephone installation" and "Watches - radiotelephone" shall be considered as relating to the medium frequency band, unless expressly provided otherwise.

(e) "Radio Officer" means a person holding at least a first or second class radiotelegraph operator's certificate, or a radiocommunication operator's general certificate for the maritime mobile service, complying with the provisions of the Radio Regulations, who is employed in the radiotelegraph station of a ship which is provided with such a station in compliance with the provisions of Regulation 3 or Regulation 4 of this Chapter.

(f) "Radiotelephone operator" means a person holding an appropriate certificate complying with the provisions of the Radio Regulations.

(g) "Existing installation" means:

(i) an installation wholly installed on board a ship before the date on which the present Convention enters into force irrespective of the date on which acceptance by the respective Administration takes effect; and

(ii) an installation part of which was installed on board a ship before the date of entry into force of the present Convention and the rest of which consists either of parts installed in replacement of identical parts, or parts which comply with the requirements of this Chapter.

(h) "New installation" means any installation which is not an existing installation.

Regulation 3

Radiotelegraph Station

Passenger ships irrespective of size and cargo ships of 1,600 tons gross tonnage and upwards, unless exempted under Regulation 5 of this Chapter, shall be fitted with a radiotelegraph station complying with the provisions of Regulations 9 and 10 of this Chapter.

Regulation 4

Radiotelephone Station

Cargo ships of 300 tons gross tonnage and upwards but less than 1,600 tons gross tonnage, unless fitted with a radiotelegraph station complying with the provisions of Regulations 9 and 10 of this Chapter shall, provided they are not exempted under Regulation 5 of this Chapter, be fitted with a radiotelephone station complying with the provisions of Regulations 15 and 16 of this Chapter.

* Such ships are subject to special requirements relative to radio for safety purposes, as contained in the relevant agreement between Canada and the United States of America.

Regulation 5

Exemptions from Regulations 3 and 4

(a) The Contracting Governments consider it highly desirable not to deviate from the application of Regulations 3 and 4 of this Chapter; nevertheless the Administration may grant to individual passenger or cargo ships exemptions of a partial and/or conditional nature, or complete exemption from the requirements of Regulation 3 or Regulation 4 of this Chapter.

(b) The exemptions permitted under paragraph (a) of this Regulation shall be granted only to a ship engaged on a voyage where the maximum distance of the ship from the shore, the length of the voyage, the absence of general navigational hazards, and other conditions affecting safety are such as to render the full application of Regulation 3 or Regulation 4 of this Chapter unreasonable or unnecessary. When deciding whether or not to grant exemptions to individual ships, Administrations shall have regard to the effect that exemptions may have upon the general efficiency of the distress service for the safety of all ships. Administrations should bear in mind the desirability of requiring ships which are exempted from the requirement of Regulation 3 of this Chapter to be fitted with a radiotelephone station which complies with the provisions of Regulations 15 and 16 of this Chapter as a condition of exemption.

(c) Each Administration shall submit to the Organization as soon as possible after the first of January in each year a report showing all exemptions granted under paragraphs (a) and (b) of this Regulation during the previous calendar year and giving the reasons for granting such exemptions.

PART B - WATCHES

Regulation 6

Watches - Radiotelegraph

(a) Each ship which in accordance with Regulation 3 or Regulation 4 of this Chapter is fitted with a radiotelegraph station shall, while at sea, carry at least one radio officer and, if not fitted with a radiotelegraph auto alarm shall, subject to the provisions of paragraph (d) of this Regulation, listen continuously on the radiotelegraph distress frequency by means of a radio officer using headphones or a loudspeaker.

(b) Each passenger ship which in accordance with Regulation 3 of this Chapter is fitted with a radiotelegraph station, if fitted with a radiotelegraph auto alarm, shall, subject to the provisions of paragraph (d) of this Regulation, and while at sea, listen on the radiotelegraph distress frequency by means of a radio officer using headphones or a loudspeaker, as follows:

(i) if carrying or certificated to carry 250 passengers or less, at least 8 hours listening a day in the aggregate;

(ii) if carrying or certificated to carry more than 250 passengers and engaged on a voyage exceeding 16 hours' duration between two consecutive ports, at least 16 hours' listening a day in the aggregate. In this case the ship shall carry at least two radio officers;

(iii) if carrying or certificated to carry more than 250 passengers and engaged on a voyage of less than 16 hours' duration between two consecutive ports, at least 8 hours' listening a day in the aggregate.

(c) (i) Each cargo ship which in accordance with Regulation 3 of this Chapter is fitted with a radiotelegraph station, if fitted with a radiotelegraph auto alarm, shall, subject to the provisions of paragraph (d) of this Regulation, and while at sea, listen on the radiotelegraph distress frequency by means of a radio officer using headphones or a loudspeaker, for at least 8 hours a day in the aggregate.

(ii) Each cargo ship of 300 tons gross tonnage and upwards but less than 1,600 tons gross tonnage which is fitted with a radiotelegraph station as a consequence of Regulation 4 of this Chapter, if fitted with a radiotelegraph auto alarm shall, subject to the provisions of paragraph (d) of this Regulation, and while at sea, listen on the radiotelegraph distress frequency by means of a radio officer using headphones or a loudspeaker, during such periods as may be determined by the Administration. Administrations shall, however, have regard to the desirability of requiring, whenever practicable, a listening watch of at least 8 hours a day in the aggregate.

(d) (i) During the period when a radio officer is required by this Regulation to listen on the radiotelegraph distress frequency, the radio officer may discontinue such listening during the time when he is handling traffic on other frequencies, or performing other essential radio duties, but only if it is impracticable to listen by split headphones or loudspeaker. The listening watch shall always be maintained by a radio officer using headphones or a loudspeaker during the silence periods provided for by the Radio Regulations.

The term "essential radio duties" in this paragraph includes urgent repairs of:

(1) equipment for radiocommunication used for safety;

(2) radio navigational equipment by order of the master.

(ii) In addition to the provisions of sub-paragraph (i) of this paragraph, on ships other than multi-radio officer passenger ships, the radio officer may, in exceptional cases, i.e. when it is impractical to listen by split headphones or loudspeaker, discontinue listening by order of the master in order to carry out maintenance required to prevent imminent malfunction of:

- equipment for radiocommunication used for safety;
- radio navigational equipment;
- other electronic navigational equipment including its repair;

provided that:

(1) the radio officer, at the discretion of the Administration concerned, is appropriately qualified to perform these duties; and

(2) the ship is fitted with a receiving selector which meets the requirements of the Radio Regulations;

(3) the listening watch is always maintained by a radio officer using headphones or loudspeaker during the silence periods provided for by the Radio Regulations.

(e) In all ships fitted with a radiotelegraph auto alarm this radiotelegraph auto alarm shall, while the ship is at sea, be in operation whenever there is no listening being kept under paragraphs (b), (c) or (d) of this Regulation and, whenever practicable, during direction-finding operations.

(f) The listening periods provided for by this Regulation, including those which are determined by the Administration, should be maintained preferably during periods prescribed for the radiotelegraph service by the Radio Regulations.

Regulation 7

Watches – Radiotelephone

(a) Each ship which is fitted with a radiotelephone station in accordance with Regulation 4 of this Chapter shall, for safety purposes, carry at least one radiotelephone operator (who may be the master, an officer or a member of the crew holding a certificate for radiotelephony) and shall, while at sea, maintain continuous watch on the radiotelephone distress frequency in the place on board from which the ship is usually navigated, by use of a radiotelephone distress frequency watch receiver, using a loudspeaker, a filtered loudspeaker or radiotelephone auto alarm.

(b) Each ship which in accordance with Regulation 3 or Regulation 4 of this Chapter is fitted with a radiotelegraph station shall, while at sea, maintain continuous watch on the radiotelephone distress frequency in a place to be determined by the Administration, by use of a radiotelephone distress frequency watch receiver, using a loudspeaker, a filtered loudspeaker or radiotelephone auto alarm.

Regulation 8

Watches – VHF Radiotelephone

Each ship provided with a Very High Frequency (VHF) radiotelephone station, in accordance with Regulation 18 of Chapter V, shall maintain a listening watch on the bridge for such periods and on such channels as may be required by the Contracting Government referred to in that Regulation.

PART C – TECHNICAL REQUIREMENTS

Regulation 9

Radiotelegraph Stations

(a) The radiotelegraph station shall be so located that no harmful interference from extraneous mechanical or other noise will be caused to the proper reception of radio signals. The station shall be placed as high in the ship as is practicable, so that the greatest possible degree of safety may be secured.

(b) The radiotelegraph operating room shall be of sufficient size and of adequate ventilation to enable the main and reserve radiotelegraph installations to be operated efficiently, and shall not be used for any purpose which will interfere with the operation of the radiotelegraph station.

(c) The sleeping accommodation of at least one radio officer shall be situated as near as practicable to the radiotelegraph operating room. In new ships, this sleeping accommodation shall not be within the radiotelegraph operating room.

(d) There shall be provided between the radiotelegraph operating room and the bridge and one other place, if any, from which the ship is navigated, an efficient two-way system for calling and voice communication which shall be independent of the main communication system on the ship.

(e) The radiotelegraph installation shall be installed in such a position that it will be protected against the harmful effects of water or extremes of temperature. It shall be readily accessible both for immediate use in case of distress and for repair.

(f) A reliable clock with a dial not less than 12.5 centimetres (5 inches) in diameter and a concentric seconds hand, the face of which is marked to indicate the silence periods prescribed for the radiotelegraph service by the Radio Regulations, shall be provided. It shall be securely mounted in the radiotelegraph operating room in such a position that the entire dial can be easily and accurately observed by the radio officer from the radiotelegraph operating position and from the position for testing the radiotelegraph auto alarm receiver.

(g) A reliable emergency light shall be provided in the radiotelegraph operating room, consisting of an electric lamp permanently arranged so as to provide satisfactory illumination of the operating controls of the main and reserve radiotelegraph installations and of the clock required by paragraph (f) of this Regulation. In new installations, this lamp shall, if supplied from the reserve source of energy required by sub-paragraph (a)(iii) of Regulation 10 of this Chapter, be controlled by two-way switches placed near the main entrance to the radiotelegraph operating room and at the radiotelegraph operating position, unless the layout of the radiotelegraph operating room does not warrant it. These switches shall be clearly labelled to indicate their purpose.

(h) Either an electric inspection lamp, operated from the reserve source of energy required by sub-paragraph (a) (iii) of Regulation 10 of this Chapter and provided with a flexible lead of adequate length, or a flashlight shall be provided and kept in the radiotelegraph operating room.

(i) The radiotelegraph station shall be provided with such spare parts, tools and testing equipment as will enable the radiotelegraph installation to be maintained in efficient working condition while at sea. The testing equipment shall include an instrument or instruments for measuring A.C. volts, D.C. volts and ohms.

(j) If a separate emergency radiotelegraph operating room is provided the requirements of paragraphs (d), (e), (f), (g) and (h) of this Regulation shall apply to it.

Regulation 10

Radiotelegraph Installations

(a) Except as otherwise expressly provided in this Regulation:

(i) The radiotelegraph station shall include a main installation and reserve installation, electrically separate and electrically independent of each other.

(ii) The main installation shall include a main transmitter, main receiver, radiotelephone distress frequency watch receiver, and main source of energy.

(iii) The reserve installation shall include a reserve transmitter, reserve receiver and reserve source of energy.

(iv) A main and a reserve antenna shall be provided and installed, provided that the Administration may except any ship from the provision of a reserve antenna if it is satisfied that the fitting of such an antenna is impracticable or unreasonable, but in such case a suitable spare antenna completely assembled for immediate installation shall be carried. In addition, sufficient antenna wire and insulators shall in all cases be provided to enable a suitable antenna to be erected. The main antenna, if suspended between supports liable to whipping, shall be suitably protected against breakage.

(b) In installations on cargo ships (except those on cargo ships of 1,600 tons gross tonnage and upwards installed on or after 19 November 1952), if the main transmitter complies with all the requirements for the reserve transmitter, the latter is not obligatory.

(c) (i) The main and reserve transmitters shall be capable of being quickly connected with and tuned to the main antenna, and the reserve antenna if one is fitted.

(ii) The main and reserve receivers shall be capable of being quickly connected with any antenna with which they are required to be used.

(d) All parts of the reserve installation shall be placed as high in the ship as is practicable, so that the greatest possible degree of safety may be secured.

(e) The main and reserve transmitters shall be capable of transmitting on the radiotelegraph distress frequency using a class of emission assigned by the Radio Regulations for that frequency. In addition, the main transmitter shall be capable of transmitting on at least two working frequencies in the authorized bands between 405 kHz and 535 kHz, using classes of emission assigned by the Radio Regulations for these frequencies. The reserve transmitter may consist of a ship's emergency transmitter, as defined in and limited in use by the Radio Regulations.

(f) The main and reserve transmitters shall, if modulated emission is prescribed by the Radio Regulations, have a depth of modulation of not less than 70 per cent and a note frequency between 450 amd 1,350 Hz.

(g) The main and reserve transmitters shall, when connected to the main antenna, have a minimum normal range as specified below, that is to say, they must be capable of transmitting clearly perceptible signals from ship to ship by

	Minimum normal range in miles	
	Main transmitter	Reserve transmitter
All passenger ships, and cargo ships of 1,600 tons gross tonnage and upwards	150	100
Cargo ships below 1,600 tons gross tonnage	100	75

day and under normal conditions and circumstances over the specified ranges.* (Clearly perceptible signals will normally be received if the R.M.S. value of the field strength at the receiver is at least 50 microvolts per metre.)

* In the absence of a direct measurement of the field strength the following data may be used as a guide for approximately determining the normal range:

Normal range in miles	Metre-amperes[1]	Total antenna power (watts)[2]
200	128	200
175	102	125
150	76	71
125	58	41
100	45	25
75	34	14

[1] This figure represents the product of the maximum height of the antenna above the deepest load water-line in metres and the antenna current in amperes (R.M.S. value). The values given in the second column of the table correspond to an average value of the ratio

$$\frac{\text{effective antenna height}}{\text{maximum antenna height}} = 0.47$$

This ratio varies with local conditions of the antenna and may vary between about 0.3 and 0.7.

[2] The values given in the third column of the table correspond to an average value of the ratio

$$\frac{\text{radiated antenna power}}{\text{total antenna power}} = 0.08$$

This ratio varies considerably according to the values of effective antenna height and antenna resistance.

(h) (i) The main and reserve receivers shall be capable of receiving the radiotelegraph distress frequency and the classes of emission assigned by the Radio Regulations for that frequency.

(ii) In addition, the main receiver shall permit the reception of such of the frequencies and classes of emission used for the transmission of time signals, meteorological messages and such other communications relating to safety of navigation as may be considered necessary by the Administration.

(iii) The radiotelephone distress frequency watch receiver shall be preset to this frequency. It shall be provided with a filtering unit or a device to silence the loudspeaker if on the bridge in the absence of a radiotelephone alarm signal. The device shall be capable of being easily switched in and out and may be used when, in the opinion of the master, conditions are such that maintenance of the listening watch would interfere with the safe navigation of the ship.

(iv) (1) A radiotelephone transmitter, if provided, shall be fitted with an automatic device for generating the radiotelephone alarm signal, so designed as to prevent actuation by mistake, and complying with the requirements of paragraph (e) of Regulation 16 of this Chapter. The device shall be capable of being taken out of operation at any time in order to permit the immediate transmission of a distress message.

(2) Arrangements shall be made to check periodically the proper functioning of the automatic device for generating the radiotelephone alarm signal on frequencies other than the radiotelephone distress frequency using a suitable artificial antenna.

(i) The main receiver shall have sufficient sensitivity to produce signals in headphones or by means of a loudspeaker when the receiver input is as low as 50 microvolts. The reserve receiver shall have sufficient sensitivity to produce such signals when the receiver input is as low as 100 microvolts.

(j) There shall be available at all times, while the ship is at sea, a supply of electrical energy sufficient to operate the main installation over the normal range required by paragraph (g) of this Regulation as well as for the purpose of charging any batteries forming part of the radiotelegraph station. The voltage of the supply for the main installation shall, in the case of new ships, be maintained within ± 10 per cent of the rated voltage. In the case of existing ships, it shall be maintained as near the rated voltage as possible and, if practicable, within ± 10 per cent.

(k) The reserve installation shall be provided with a source of energy independent of the propelling power of the ship and of the ship's electrical system.

(l) (i) The reserve source of energy shall preferably consist of accumulator batteries, which may be charged from the ship's electrical system, and shall under all circumstances be capable of being put into operation rapidly and of operating the reserve transmitter and receiver for at least six hours continuously under normal working conditions besides any of the additional loads mentioned in paragraphs (m) and (n) of this Regulation.*

(ii) The reserve source of energy is required to be of a capacity sufficient to operate simultaneously the reserve transmitter and the VHF installation, when fitted, for at least six hours unless a switching device is fitted to ensure alternate operation only. VHF usage of the reserve source of energy shall be limited to distress, urgency and safety communications. Alternatively, a separate reserve source of energy may be provided for the VHF installation.

(m) The reserve source of energy shall be used to supply the reserve installation and the automatic alarm signal keying device specified in paragraph (r) of this Regulation if it is electrically operated.

The reserve source of energy may also be used to supply:

(i) the radiotelegraph auto alarm;

(ii) the emergency light specified in paragraph (g) of Regulation 9 of this Chapter;

(iii) the direction-finder;

(iv) the VHF installation;

(v) the device for generating the radiotelephone alarm signal, if provided;

(vi) any device, prescribed by the Radio Regulations, to permit changeover from transmission to reception and vice versa.

Subject to the provisions of paragraph (n) of this Regulation, the reserve source of energy shall not be used other than for the purposes specified in this paragraph.

(n) Notwithstanding the provisions of paragraph (m) of this Regulation, the Administration may authorize the use in cargo ships of the reserve source of energy for a small number of low-power emergency circuits which are wholly confined to the upper part of the ship, such as emergency lighting on the boat deck, on condition that these can be readily disconnected if necessary, and that the source of energy is of sufficient capacity to carry the additional load or loads.

(o) The reserve source of energy and its switchboard shall be as high as practicable in the ship and readily accessible to the radio officer. The switchboard shall, wherever possible, be situated in a radio room; if it is not, it shall be capable of being illuminated.

(p) While the ship is at sea, accumulator batteries, whether forming part of the main installation or reserve installation, shall be brought up to the normal fully-charged condition daily.

(q) All steps shall be taken to eliminate so far as is possible the causes of, and to suppress, radio interference from electrical and other apparatus on board. If necessary, steps shall be taken to ensure that the antennae attached to broadcast receivers do not cause interference to the efficient or correct working of the radiotelegraph installation. Particular attention shall be paid to this requirement in the design of new ships.

(r) In addition to a means for manually transmitting the radiotelegraph alarm signal, an automatic radiotelegraph alarm signal keying device shall be provided, capable of keying the main and the reserve transmitters so as to transmit the radiotelegraph alarm signal. The device shall be capable of being taken out of operation at any time in order to permit immediate manual operation of the transmitter. If electrically operated, this keying device shall be capable of operation from the reserve source of energy.

(s) At sea, the reserve transmitter, if not used for communications, shall be tested daily using a suitable artificial antenna, and at least once during each voyage using the reserve antenna if installed. The reserve source of energy shall also be tested daily.

(t) All equipment forming part of the radiotelegraph installation shall be reliable, and shall be so constructed that it is readily accessible for maintenance purposes.

(u) Notwithstanding the provision of Regulation 4 of this Chapter, the Administration may, in the case of cargo ships of less than 1,600 tons gross tonnage, relax the full requirements of Regulation 9 of this Chapter and the present Regulation, provided that the standard of the radiotelegraph station shall in no case fall below the equivalent of that prescribed under Regulation 15 and Regulation 16 of this Chapter for radiotelephone stations, so far as applicable. In particular, in the case of cargo ships of 300 tons gross tonnage and upwards but less than 500 tons gross tonnage, the Administration need not require:

(i) a reserve receiver;

(ii) a reserve source of energy in existing installations;

(iii) protection of the main antenna against breakage by whipping;

(iv) the means of communication between the radiotelegraph station and the bridge to be independent of the main communication system;

(v) the range of the transmitter to be greater than 75 miles.

Regulation 11

Radiotelegraph Auto Alarms

(a) Any radiotelegraph auto alarm installed after 26 May 1965 shall comply with the following minimum requirements:

(i) In the absence of interference of any kind it shall be capable of being actuated, without manual adjustment, by any radiotelegraph alarm signal transmitted on the radiotelegraph distress frequency by any coast station, ship's emergency or survival craft transmitter operating in accordance with the Radio Regulations, provided that the strength of the signal at the receiver input is greater than 100 microvolts and less than 1 volt.

(ii) In the absence of interference of any kind, it shall be actuated by either three or four consecutive dashes when the dashes vary in length from 3.5 to as near 6 seconds as possible and the spaces vary in length between 1.5 seconds and the lowest practicable value, preferably not greater than 10 milliseconds.

(iii) It shall not be actuated by atmospherics or by any signal other than the radiotelegraph alarm signal, provided that the received signals do not in fact constitute a signal falling within the tolerance limits indicated in sub-paragraph (ii) above.

(iv) The selectivity of the radiotelegraph auto alarm shall be such as to provide a practically uniform sensitivity over a band extending not less than 4 kHz and not more than 8 kHz on each side of the radiotelegraph distress frequency and to provide outside this band a sensitivity which decreases as rapidly as possible in conformity with the best engineering practice.

(v) If practicable, the radiotelegraph auto alarm shall, in the presence of atmospherics or interfering signals, automatically adjust itself so that within a reasonably short time it approaches the condition in which it can most readily distinguish the radiotelegraph alarm signal.

(vi) When actuated by a radiotelegraph alarm signal, or in the event of failure of the apparatus, the radiotelegraph auto alarm shall cause a continuous audible warning to be given in the radiotelegraph operating room, in the radio officer's sleeping accommodation and on the bridge. If practicable, warning shall also be given in the case of failure of any part of the whole alarm receiving system. Only one switch for stopping the warning shall be provided and this shall be situated in the radiotelegraph operating room.

(vii) For the purpose of regularly testing the radiotelegraph auto alarm, the apparatus shall include a generator pre-tuned to the radiotelegraph distress frequency and a keying device by means of which a radiotelegraph alarm signal of the minimum strength indicated in sub-paragraph (i) above is produced. A means shall also be provided for attaching headphones for the purpose of listening to signals received on the radiotelegraph auto alarm.

* For the purpose of determining the electrical load to be supplied by the reserve source of energy, the following formula is recommended as a guide:
  ½ of the transmitter current consumption with the key down (mark)
  + ½ of the transmitter current consumption with the key up (space)
  + current consumption of receiver and additional circuits connected to the reserve source of energy.

(viii) The radiotelegraph auto alarm shall be capable of withstanding vibration, humidity and changes of temperature, equivalent to severe conditions experienced on board ships at sea, and shall continue to operate under such conditions.

(b) Before a new type of radiotelegraph auto alarm is approved, the Administration concerned shall be satisfied, by practical tests made under operating conditions equivalent to those obtaining in practice, that the apparatus complies with paragraph (a) of this Regulation.

(c) In ships fitted with a radiotelegraph auto alarm, its efficiency shall be tested by a radio officer at least once every 24 hours while at sea. If it is not in working order, the radio officer shall report that fact to the master or officer on watch on the bridge.

(d) A radio officer shall periodically check the proper functioning of the radiotelegraph auto alarm receiver, with its normal antenna connected, by listening to signals and by comparing them with similar signals received on the radiotelegraph distress frequency on the main installation.

(e) As far as practicable, the radiotelegraph auto alarm, when connected to an antenna shall not affect the accuracy of the direction-finder.

Regulation 12

Direction-Finders

(a) (i) The direction-finding apparatus required by Regulation 12 of Chapter V shall be efficient and capable of receiving signals with the minimum of receiver noise and of taking bearings from which the true bearing and direction may be determined.

(ii) It shall be capable of receiving signals on the radiotelegraph frequencies assigned by the Radio Regulations for the purposes of distress and direction-finding and for maritime radio beacons.

(iii) In the absence of interference the direction-finding apparatus shall have a sensitivity sufficient to permit accurate bearings being taken on a signal having a field strength as low as 50 microvolts per metre.

(iv) As far as is practicable, the direction-finding apparatus shall be so located that as little interference as possible from mechanical or other noise will be caused to the efficient determination of bearings.

(v) As far as is practicable, the direction-finding antenna system shall be erected in such a manner that the efficient determination of bearings will be hindered as little as possible by the close proximity of other antennae, derricks, wire halyards or other large metal objects.

(vi) An efficient two-way means of calling and voice communication shall be provided between the direction-finder and the bridge.

(vii) All direction-finders shall be calibrated to the satisfaction of the Administration on first installation. The calibration shall be verified by check bearings or by a further calibration whenever any changes are made in the position of any antennae or of any structures on deck which might affect appreciably the accuracy of the direction-finder. The calibration particulars shall be checked at yearly intervals, or as near thereto as possible. A record shall be kept of the calibrations and of any checks made of their accuracy.

(b) (i) Radio equipment for homing on the radiotelephone distress frequency shall be capable of taking direction-finding bearings on that frequency without ambiguity of sense within an arc of 30 degrees on either side of the bow.

(ii) When installing and testing the equipment referred to in this paragraph due regard should be given to the relevant recommendation of the International Radio Consultative Committee (CCIR).

(iii) All reasonable steps shall be taken to ensure the homing capability required by this paragraph. In cases where due to technical difficulties the homing capability cannot be achieved, Administrations may grant to individual ships exemptions from the requirements of this paragraph.

Regulation 13

Radiotelegraph Installation for Fitting in Motor Lifeboats

(a) The radiotelegraph installation required by Regulation 14 of Chapter III shall include a transmitter, a receiver and a source of energy. It shall be so designed that it can be used in an emergency by an unskilled person.

(b) The transmitter shall be capable of transmitting on the radiotelegraph distress frequency using a class of emission assigned by the Radio Regulations for that frequency. The transmitter shall also be capable of transmitting on the frequency, and of using a class of emission, assigned by the Radio Regulations for use by survival craft in the bands between 4,000 kHz and 27,500 kHz.

(c) The transmitter shall, if modulated emission is prescribed by the Radio Regulations, have a depth of modulation of not less than 70 per cent and a note frequency between 450 and 1,350 Hz.

(d) In addition to a key for manual transmissions, the transmitter shall be fitted with an automatic keying device for the transmission of the radiotelegraph alarm and distress signals.

(e) On the radiotelegraph distress frequency the transmitter shall have a minimum normal range (as specified in paragraph (g) of Regulation 10 of this Chapter) of 25 miles using the fixed antenna.*

* In the absence of a measurement of the field strength, it may be assumed that this range will be obtained if the product of the height of the antenna above the water-line and the antenna current (R.M.S. value) is 10 metre-amperes.

(f) The receiver shall be capable of receiving the radiotelegraph distress frequency and the classes of emission assigned by the Radio Regulations for that frequency.

(g) The source of energy shall consist of an accumulator battery with sufficient capacity to supply the transmitter for four hours continuously under normal working conditions. If the battery is of a type that requires charging, means shall be available for charging it from the ship's power supply. In addition there shall be a means for charging it after the lifeboat has been launched.

(h) When the power for the radiotelegraph installation and the searchlight required by Regulation 14 of Chapter III are drawn from the same battery, it shall have sufficient capacity to provide for the additional load of the searchlight.

(i) A fixed-type antenna will be provided together with means for supporting it at the maximum practicable height. In addition an antenna supported by a kite or balloon shall be provided if practicable.

(j) At sea a radio officer shall at weekly intervals test the transmitter using a suitable artificial antenna, and shall bring the battery up to full charge if it is of a type which requires charging.

Regulation 14

Portable Radio Apparatus for Survival Craft

(a) The apparatus required by Regulation 13 of Chapter III shall include a transmitter, a receiver, an antenna and a source of energy. It shall be so designed that it can be used in an emergency by an unskilled person.

(b) The apparatus shall be readily portable, watertight, capable of floating in sea water and capable of being dropped into the sea without damage. New equipment shall be as light-weight and compact as practicable and shall preferably be capable of use in both lifeboats and liferafts.

(c) The transmitter shall be capable of transmitting on the radiotelegraph distress frequency using a class of emission assigned by the Radio Regulations for that frequency, and, in the bands between 4,000 kHz and 27,500 kHz, of transmitting on the radiotelegraph frequency, and of using a class of emission assigned by the Radio Regulations for survival craft. However, the Administration may permit the transmitter to be capable of transmitting on the radiotelephone distress frequency, and of using a class of emission assigned by the Radio Regulations for that frequency, as an alternative or in addition to transmission on the radiotelegraph frequency assigned by the Radio Regulations for survival craft in the bands between 4,000 kHz and 27,500 kHz.

(d) The transmitter shall, if modulated emission is prescribed by the Radio Regulations, have a depth of modulation of not less than 70 per cent and in the case of radiotelegraph emission have a note frequency between 450 and 1,350 Hz.

(e) In addition to a key for manual transmissions, the transmitter shall be fitted with an automatic keying device for the transmission of the radiotelegraph alarm and distress signals. If the transmitter is capable of transmitting on the radiotelephone distress frequency, it shall be fitted with an automatic device, complying with the requirements of paragraph (e) of Regulation 16 of this Chapter, for transmitting the radiotelephone alarm signal.

(f) The receiver shall be capable of receiving the radiotelegraph distress frequency and the classes of emission assigned by the Radio Regulations for that frequency. If the transmitter is capable of transmitting on the radiotelephone distress frequency the receiver shall also be capable of receiving that frequency and a class of emission assigned by the Radio Regulations for that frequency.

(g) The antenna shall be either self-supporting or capable of being supported by the mast of a lifeboat at the maximum practicable height. In addition it is desirable that an antenna supported by a kite or balloon shall be provided if practicable.

(h) The transmitter shall supply an adequate radio frequency power* to the antenna required by paragraph (a) of this Regulation and shall preferably derive its supply from a hand generator. If operated from a battery, the battery shall comply with conditions laid down by the Administration to ensure that it is of a durable type and is of adequate capacity.

(i) At sea a radio officer or a radiotelephone operator, as appropriate, shall at weekly intervals test the transmitter, using a suitable artificial antenna and shall bring the battery up to full charge if it is of a type which requires charging.

(j) For the purpose of this Regulation, new equipment means equipment supplied to a ship after the date of entry into force of the present Convention.

Regulation 15

Radiotelephone Stations

(a) The radiotelephone station shall be in the upper part of the ship and so located that it is sheltered to the greatest possible extent from noise which might impair the correct reception of messages and signals.

(b) There shall be efficient communication between the radiotelephone station and the bridge.

(c) A reliable clock shall be securely mounted in such a position that the entire dial can be easily observed from the radiotelephone operating position.

* It may be assumed that the purposes of this Regulation will be satisfied by the following performance:
At least 10 watts input to the anode of the final stage or a radio-frequency output of at least 2.0 watts (A2 emission) at 500 kHz into an artificial antenna having an effective resistance of 15 ohms and 100×10^{-12} farads capacitance in series. The depth of modulation shall be at least 70 per cent.

(d) A reliable emergency light shall be provided, independent of the system which supplies the normal lighting of the radiotelephone installation, and permanently arranged so as to be capable of providing adequate illumination of the operating controls of the radiotelephone installation, of the clock required by paragraph (c) of this Regulation and of the card of instructions required by paragraph (f).

(e) Where a source of energy consists of a battery or batteries, the radiotelephone station shall be provided with a means of assessing the charge condition.

(f) A card of instructions giving a clear summary of the radiotelephone distress procedure shall be displayed in full view of the radiotelephone operating position.

Regulation 16

Radiotelephone Installations

(a) The radiotelephone installation shall include transmitting and receiving equipment, and appropriate sources of energy (referred to in the following paragraphs as "the transmitter", "the receiver", "the radiotelephone distress frequency watch receiver", and "the source of energy" respectively).

(b) The transmitter shall be capable of transmitting on the radiotelephone distress frequency and on at least one other frequency in the bands between 1,605 kHz and 2,850 kHz, using the classes of emission assigned by the Radio Regulations for these frequencies. In normal operation a double sideband transmission or a single sideband transmission with full carrier (i.e., A3H) shall have a depth of modulation of at least 70 per cent at peak intensity. Modulation of a single sideband transmission with reduced or suppressed carrier (A3A, A3J) shall be such that the intermodulation products shall not exceed the values given in the Radio Regulations.

(c) (i) In the case of cargo ships of 500 tons gross tonnage and upwards but less than 1,600 tons gross tonnage the transmitter shall have a minimum normal range of 150 miles, i.e., it shall be capable of transmitting clearly perceptible signals from ship to ship by day and under normal conditions and circumstances over this range.* (Clearly perceptible signals will normally be received if the R.M.S. value of the field strength produced at the receiver by the unmodulated carrier is at least 25 microvolts per metre.)

(ii) In the case of cargo ships of 300 tons gross tonnage and upwards but less than 500 tons gross tonnage:

(1) for existing installations the transmitter shall have a minimum normal range of at least 75 miles; and

(2) for new installations the transmitter shall produce a power in the antenna of at least 15 watts (unmodulated carrier).

(d) The transmitter shall be fitted with a device for generating the radiotelephone alarm signal by automatic means so designed as to prevent actuation by mistake. The device shall be capable of being taken out of operation at any time in order to permit the immediate transmission of a distress message. Arrangements shall be made to check periodically the proper functioning of the device on frequencies other than the radiotelephone distress frequency using a suitable artificial antenna.

(e) The device required by paragraph (d) of this Regulation shall comply with the following requirements:

(i) The tolerance of the frequency of each tone shall be ± 1.5 per cent.

(ii) The tolerance on the duration of each tone shall be ± 50 milliseconds.

(iii) The interval between successive tones shall not exceed 50 milliseconds.

(iv) The ratio of the amplitude of the stronger tone to that of the weaker shall be within the range 1 to 1.2.

(f) The receiver required by paragraph (a) of this Regulation shall be capable of receiving the radiotelephone distress frequency and at least one other frequency available for maritime radiotelephone stations in the bands between 1,605 kHz and 2,850 kHz, using the classes of emission assigned by the Radio Regulations for these frequencies. In addition the receiver shall permit the reception of such other frequencies, using the classes of emission assigned by the Radio Regulations, as are used for the transmission by radiotelephony of meteorological messages and such other communications relating to the safety of navigation as may be considered necessary by the Administration. The receiver shall have sufficient sensitivity to produce signals by means of a loudspeaker when the receiver input is as low as 50 microvolts.

(g) The radiotelephone distress frequency watch receiver shall be preset to this frequency. It shall be provided with a filtering unit or a device to silence the loudspeaker in the absence of a radiotelephone alarm signal. The device shall be capable of being easily switched in and out and may be used when, in the opinion of the master, conditions are such that maintenance of the listening watch would interfere with the safe navigation of the ship.

(h) To permit rapid change-over from transmission to reception when manual switching is used, the control for the switching device shall, where practicable, be located on the microphone or the telephone handset.

(i) While the ship is at sea, there shall be available at all times a main source of energy sufficient to operate the installation over the normal range required by paragraph (c) of this Regulation. If batteries are provided they shall under all circumstances have sufficient capacity to operate the transmitter and receiver for at least six hours continuously under normal working conditions.* In installations in cargo ships of 500 tons gross tonnage and upwards but less than 1,600 tons gross tonnage made on or after 19 November 1952, a reserve source of energy shall be provided in the upper part of the ship unless the main source of energy is so situated.

(j) The reserve source of energy, if provided, may be used only to supply:

(i) the radiotelephone installation;

(ii) the emergency light required by paragraph (d) of Regulation 15 of this Chapter;

(iii) the device required by paragraph (d) of this Regulation, for generating the radiotelephone alarm signal; and

(iv) the VHF installation.

(k) Notwithstanding the provisions of paragraph (j) of this Regulation, the Administration may authorize the use of the reserve source of energy, if provided, for a direction-finder, if fitted, and for a number of low-power emergency circuits which are wholly confined to the upper part of the ship, such as emergency lighting on the boat deck, on condition that the additional loads can be readily disconnected, and that the source of energy is of sufficient capacity to carry them.

(l) While at sea, any battery provided shall be kept charged so as to meet the requirements of paragraph (i) of this Regulation.

(m) An antenna shall be provided and installed and, if suspended between supports liable to whipping, shall in the case of cargo ships of 500 tons gross tonnage and upwards but less than 1,600 tons gross tonnage be protected against breakage. In addition, there shall be a spare antenna completely assembled for immediate replacement or, where this is not practicable, sufficient antenna wire and insulators to enable a spare antenna to be erected. The necessary tools to erect an antenna shall also be provided.

Regulation 17

VHF Radiotelephone Stations

(a) When a VHF radiotelephone station is provided in accordance with Regulation 18 of Chapter V, it shall be in the upper part of the ship and include a VHF radiotelephone installation complying with the provisions of this Regulation and comprising a transmitter and receiver, a source of power capable of actuating them at their rated power levels, and an antenna suitable for efficient radiating and receiving signals at the operating frequencies.

(b) Such a VHF installation shall conform to the requirements laid down in the Radio Regulations for equipment used in the VHF Maritime Mobile Radiotelephone Service and shall be capable of operation on those channels specified by the Radio Regulations and as may be required by the Contracting Government referred to in Regulation 18 of Chapter V.

(c) The Contracting Government shall not require the transmitter R.F. carrier power output to be greater than 10 watts. The antenna shall, in so far as is practicable, have an unobstructed view in all directions.**

(d) Control of the VHF channels required for navigational safety shall be immediately available on the bridge convenient to the conning position and, where necessary, facilities should also be available to permit radiocommunications from the wings of the bridge.

Regulation 18

Radiotelephone Auto Alarms

(a) The radiotelephone auto alarm shall comply with the following minimum requirements:

(i) the frequencies of maximum response of the tuned circuits, and other tone selecting devices, shall be subject to a tolerance of ± 1.5 per cent in each instance; and the response shall not fall below 50 per cent of the maximum response for frequencies within 3 per cent of the frequency of maximum response;

(ii) in the absence of noise and interference, the automatic receiving equipment shall be capable of operating from the alarm signal in a period of not less than four and not more than six seconds;

(iii) the automatic receiving equipment shall respond to the alarm signal, under conditions of intermittent interference caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the equipment;

(iv) the automatic receiving equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal;

(v) the automatic receiving equipment shall be effective beyond the range at which speech transmission is satisfactory;

* In the absence of field strength measurements, it may be assumed that this range will be obtained by a power in the antenna of 15 watts (unmodulated carrier) with an antenna efficiency of 27 per cent.

* For the purpose of determining the electrical load to be supplied by batteries required to have six hours reserve capacity, the following formula is recommended as a guide:
½ of the current consumption necessary for speech transmission
+ current consumption of receiver
+ current consumption of all additional loads to which the batteries may supply energy in time of distress or emergency.

** For guidance purposes, it is assumed that each ship would be fitted with a vertically polarized unity gain antenna at a nominal height of 9.15 metres (30 feet) above water, a transmitter R.F. power output of 10 watts, and a receiver sensitivity of 2 microvolts across the input terminals for 20 db signal-to-noise ratio.

(vi) the automatic receiving equipment shall be capable of withstanding vibration, humidity, changes of temperature and variations in power supply voltage equivalent to the severe conditions experienced on board ships at sea, and shall continue to operate under such conditions;

(vii) the automatic receiving equipment should, as far as practicable, give warning of faults that would prevent the apparatus from performing its normal functions during watch hours.

(b) Before a new type of radiotelephone auto alarm is approved, the Administration concerned shall be satisfied by practical tests, made under operating conditions equivalent to those obtained in practice, that the apparatus complies with paragraph (a) of this Regulation.

PART D – RADIO LOGS

Regulation 19

Radio Logs

(a) The radio log (diary of the radio service) required by the Radio Regulations for a ship which is fitted with a radiotelegraph station in accordance with Regulation 3 or Regulation 4 of this Chapter shall be kept in the radiotelegraph operating room during the voyage. Every radio officer shall enter in the log his name, the times at which he goes on and off watch, and all incidents connected with the radio service which occur during his watch which may appear to be of importance to safety of life at sea. In addition, there shall be entered in the log:

(i) the entries required by the Radio Regulations;

(ii) details of the maintenance, including a record of the charging of the batteries, in such form as may be prescribed by the Administration;

(iii) a daily statement that the requirement of paragraph (p) of Regulation 10 of this Chapter has been fulfilled;

(iv) details of the tests of the reserve transmitter and reserve source of energy made under paragraph (s) of Regulation 10 of this Chapter;

(v) in ships fitted with a radiotelegraph auto alarm details of tests made under paragraph (c) of Regulation 11 of this Chapter;

(vi) details of the maintenance of the batteries, including a record of the charging (if applicable) required by paragraph (j) of Regulation 13 of this Chapter, and details of the tests required by that paragraph in respect of the transmitters fitted in motor lifeboats;

(vii) details of the maintenance of the batteries, including a record of the charging (if applicable) required by paragraph (i) of Regulation 14 of this Chapter, and details of the tests required by that paragraph in respect of portable radio apparatus for survival craft;

(viii) the time at which the listening watch was discontinued in accordance with paragraph (d) of Regulation 6 of this Chapter, together with the reason and the time at which the listening watch was resumed.

(b) The radio log (diary of the radio service) required by the Radio Regulations for a ship which is fitted with a radiotelephone station in accordance with Regulation 4 of this Chapter shall be kept at the place where listening watch is maintained. Every qualified operator, and every master, officer or crew member carrying out a listening watch in accordance with Regulation 7 of this Chapter, shall enter in the log, with his name, the details of all incidents connected with the radio service which occur during his watch which may appear to be of importance to safety of life at sea. In addition, there shall be entered in the log:

(i) the details required by the Radio Regulations;

(ii) the time at which listening watch begins when the ship leaves port, and the time at which it ends when the ship reaches port;

(iii) the time at which listening watch is for any reason discontinued, together with the reason, and the time at which listening watch is resumed;

(iv) details of the maintenance of the batteries (if provided), including a record of the charging required by paragraph (l) of Regulation 16 of this Chapter;

(v) details of the maintenance of the batteries, including a record of the charging (if applicable) required by paragraph (i) of Regulation 14 of this Chapter, and details of the tests required by that paragraph in respect of portable radio apparatus for survival craft.

(c) Radio logs shall be available for inspection by the officers authorized by the Administration to make such inspection.

CHAPTER V

SAFETY OF NAVIGATION

Regulation 1

Application

This Chapter, unless otherwise expressly provided in this Chapter, applies to all ships on all voyages, except ships of war and ships solely navigating the Great Lakes of North America and their connecting and tributary waters as far east as the lower exit of the St. Lambert Lock at Montreal in the Province of Quebec, Canada.

Regulation 2

Danger Messages

(a) The master of every ship which meets with dangerous ice, a dangerous derelict, or any other direct danger to navigation, or a tropical storm, or encounters sub-freezing air temperatures associated with gale force winds causing severe ice accretion on superstructures, or winds of force 10 or above on the Beaufort scale for which no storm warning has been received, is bound to communicate the information by all the means at his disposal to ships in the vicinity, and also to the competent authorities at the first point on the coast with which he can communicate. The form in which the information is sent is not obligatory. It may be transmitted either in plain language (preferably English) or by means of the International Code of Signals. It should be broadcast to all ships in the vicinity and sent to the first point on the coast to which communication can be made, with a request that it be transmitted to the appropriate authorities.

(b) Each Contracting Government will take all steps necessary to ensure that when intelligence of any of the dangers specified in paragraph (a) of this Regulation is received, it will be promptly brought to the knowledge of those concerned and communicated to other interested Governments.

(c) The transmission of messages respecting the dangers specified is free of cost to the ships concerned.

(d) All radio messages issued under paragraph (a) of this Regulation shall be preceded by the Safety Signal, using the procedure as prescribed by the Radio Regulations as defined in Regulation 2 of Chapter IV.

Regulation 3

Information required in Danger Messages

The following information is required in danger messages:

(a) *Ice, Derelicts and other Direct Dangers to Navigation*

(i) The kind of ice, derelict or danger observed.

(ii) The position of the ice, derelict or danger when last observed.

(iii) The time and date (Greenwich Mean Time) when danger last observed.

(b) *Tropical Storms* (Hurricanes in the West Indies, Typhoons in the China Sea, Cyclones in Indian waters, and storms of a similar nature in other regions)

(i) A statement that a tropical storm has been encountered. This obligation should be interpreted in a broad spirit, and information transmitted whenever the master has good reason to believe that a tropical storm is developing or exists in his neighbourhood.

(ii) Time, date (Greenwich Mean Time) and position of ship when the observation was taken.

(iii) As much of the following information as is practicable should be included in the message:

- barometric pressure, preferably corrected (stating millibars, millimetres, or inches, and whether corrected or uncorrected);
- barometric tendency (the change in barometric pressure during the past three hours);
- true wind direction;
- wind force (Beaufort scale);
- state of the sea (smooth, moderate, rough, high);
- swell (slight, moderate, heavy) and the true direction from which it comes. Period or length of swell (short, average, long) would also be of value;
- true course and speed of ship.

(c) *Subsequent Observations*

When a master has reported a tropical or other dangerous storm, it is desirable, but not obligatory, that further observations be made and transmitted hourly, if practicable, but in any case at intervals of not more than three hours, so long as the ship remains under the influence of the storm.

(d) *Winds of force 10 or above on the Beaufort scale for which no storm warning has been received*

This is intended to deal with storms other than the tropical storms referred to in paragraph (b) of this Regulation; when such a storm is encountered, the message should contain similar information to that listed under that paragraph but excluding the details concerning sea and swell.

(e) *Sub-freezing air temperatures associated with gale force winds causing severe ice accretion on superstructures*

(i) Time and date (Greenwich Mean Time).

(ii) Air temperature.

(iii) Sea temperature (if practicable).

(iv) Wind force and direction

Examples

Ice

TTT Ice. Large berg sighted in 4605 N., 4410 W., at 0800 GMT. May 15.

Derelicts

TTT Derelict. Observed derelict almost submerged in 4006 N., 1243 W., at 1630 GMT. April 21.

Danger to Navigation

TTT Navigation. Alpha lightship not on station. 1800 GMT. January 3.

Tropical Storm

TTT Storm. 0030 GMT. August 18. 2004 N., 11354 E. Barometer corrected 994 millibars, tendency down 6 millibars. Wind NW., force 9, heavy squalls. Heavy easterly swell. Course 067, 5 knots.

TTT Storm. Appearances indicate approach of hurricane. 1300 GMT. September 14. 2200 N., 7236 W. Barometer corrected 29.64 inches, tendency down .015 inches. Wind NE., force 8, frequent rain squalls. Course 035, 9 knots.

TTT Storm. Conditions indicate intense cyclone has formed. 0200 GMT. May 4. 1620 N., 9203 E. Barometer uncorrected 753 millimetres, tendency down 5 millimetres. Wind S. by W., force 5. Course 300, 8 knots.

TTT Storm. Typhoon to southeast. 0300 GMT. June 12. 1812 N., 12605 E. Barometer falling rapidly. Wind increasing from N.

TTT Storm. Wind force 11, no storm warning received. 0300 GMT. May 4. 4830 N., 30 W. Barometer corrected 983 millibars, tendency down 4 millibars. Wind SW., force 11 veering. Course 260, 6 knots.

Icing

TTT experiencing severe icing. 1400 GMT. March 2. 69 N., 10 W. Air temperature 18. Sea temperature 29. Wind NE., force 8.

Regulation 4

Meteorological Services

(a) The Contracting Governments undertake to encourage the collection of meteorological data by ships at sea and to arrange for their examination, dissemination and exchange in the manner most suitable for the purpose of aiding navigation. Administrations shall encourage the use of instruments of a high degree of accuracy, and shall facilitate the checking of such instruments upon request.

(b) In particular, the Contracting Governments undertake to co-operate in carrying out, as far as practicable, the following meteorological arrangements:

(i) To warn ships of gales, storms and tropical storms, both by the issue of radio messages and by the display of appropriate signals at coastal points.

(ii) To issue daily, by radio, weather bulletins suitable for shipping, containing data of existing weather, waves and ice, forecasts and, when practicable, sufficient additional information to enable simple weather charts to be prepared at sea and also to encourage the transmission of suitable facsimile weather charts.

(iii) To prepare and issue such publications as may be necessary for the efficient conduct of meteorological work at sea and to arrange, if practicable, for the publication and making available of daily weather charts for the information of departing ships.

(iv) To arrange for selected ships to be equipped with tested instruments (such as a barometer, a barograph, a psychrometer, and suitable appáratus for measuring sea temperature) for use in this service, and to take meteorological observations at main standard times for surface synoptic observations (at least four times daily, whenever circumstances permit) and to encourage other ships to take observations in a modified form, particularly when in areas where shipping is sparse; these ships to transmit their observations by radio for the benefit of the various official meteorological services, repeating the information for the benefit of ships in the vicinity. When in the vicinity of a tropical storm, or of a suspected tropical storm, ships should be encouraged to take and transmit their observations at more frequent intervals whenever practicable, bearing in mind navigational preoccupations of ships' officers during storm conditions.

(v) To arrange for the reception and transmission by coast radio stations of weather messages from and to ships. Ships which are unable to communicate direct with shore shall be encouraged to relay their weather messages through ocean weather ships or through other ships which are in contact with shore.

(vi) To encourage all masters to inform ships in the vicinity and also shore stations whenever they experience a wind speed of 50 knots or more (force 10 on the Beaufort scale).

(vii) To endeavour to obtain a uniform procedure in regard to the international meteorological services already specified, and, as far as is practicable, to conform to the Technical Regulations and recommendations made by the World Meteorological Organization, to which the Contracting Governments may refer for study and advice any meteorological question which may arise in carrying out the present Convention.

(c) The information provided for in this Regulation shall be furnished in form for transmission and transmitted in the order of priority prescribed by the Radio Regulations, and during transmission "to all stations" of meteorological information, forecasts and warnings, all ship stations must conform to the provisions of the Radio Regulations.

(d) Forecasts, warnings, synoptic and other meteorological reports intended for ships shall be issued and disseminated by the national service in the best position to serve various zones and areas, in accordance with mutual arrangements made by the Contracting Governments concerned.

Regulation 5

Ice Patrol Service

(a) The Contracting Governments undertake to continue an ice patrol and a service for study and observation of ice conditions in the North Atlantic. During the whole of the ice season the south-eastern, southern and south-western limits of the regions of icebergs in the vicinity of the Grand Banks of Newfoundland shall be guarded for the purpose of informing passing ships of the extent of this dangerous region; for the study of ice conditions in general; and for the purpose of affording assistance to ships and crews requiring aid within the limits of operation of the patrol ships. During the rest of the year the study and observation of ice conditions shall be maintained as advisable.

(b) Ships and aircraft used for the ice patrol service and the study and observation of ice conditions may be assigned other duties by the managing Government, provided that such other duties do not interfere with their primary purpose or increase the cost of this service.

Regulation 6

Ice Patrol. Management and Cost

(a) The Government of the United States of America agrees to continue the management of the ice patrol service and the study and observation of ice conditions, including the dissemination of information received therefrom. The Contracting Governments specially interested in these services undertake to contribute to the expense of maintaining and operating these services; each contribution to be based upon the total gross tonnage of the vessels of each contributing Government passing through the regions of icebergs guarded by the Ice Patrol; in particular, each Contracting Government specially interested undertakes to contribute annually to the expense of maintaining and operating these services a sum determined by the ratio which the total gross tonnage of that Contracting Government's vessels passing during the ice season through the regions of icebergs guarded by the Ice Patrol bears to the combined total gross tonnage of the vessels of all contributing Governments passing during the ice season through the regions of icebergs guarded by the Ice Patrol. Non-contracting Governments specially interested may contribute to the expense of maintaining and operating these services on the same basis. The managing Government will furnish annually to each contributing Government a statement of the total cost of maintaining and operating the Ice Patrol and of the proportionate share of each contributing Government.

(b) Each of the contributing Governments has the right to alter or discontinue its contribution, and other interested Governments may undertake to contribute to the expense. The contributing Government which avails itself of this right will continue responsible for its current contribution up to 1 September following the date of giving notice of intention to alter or discontinue its contribution. To take advantage of the said right it must give notice to the managing Government at least six months before the said 1 September.

(c) If, at any time, the United States Government should desire to discontinue these services, or if one of the contributing Governments should express a wish to relinquish responsibility for its pecuniary contribution, or to have its contribution altered, or another Contracting Government should desire to undertake to contribute to the expense, the contributing Governments shall settle the question in accordance with their mutual interests.

(d) The contributing Governments shall have the right by common consent to make from time to time such alterations in the provisions of this Regulation and of Regulation 5 of this Chapter as appear desirable.

(e) Where this Regulation provides that a measure may be taken after agreement among the contributing Governments, proposals made by any Contracting Government for effecting such a measure shall be communicated to the managing Government which shall approach the other contributing Governments with a view to ascertaining whether they accept such proposals, and the results of the enquiries thus made shall be sent to the other contributing Governments and the Contracting Government making the proposals. In particular, the arrangements relating to contributions to the cost of the services shall be reviewed by the contributing Governments at intervals not exceeding three years. The managing Government shall initiate the action necessary to this end.

Regulation 7

Speed Near Ice

When ice is reported on or near his course the master of every ship at night is bound to proceed at a moderate speed or to alter his course so as to go well clear of the danger zone.

Regulation 8

Routeing

(a) The practice of following, particularly in converging areas, routes adopted for the purpose of separation of traffic including avoidance of passage through areas designated as areas to be avoided by ships or certain classes of ships, or for the purpose of avoiding unsafe conditions, has contributed to the safety of navigation and is recommended for use by all ships concerned.

(b) The Organization is recognized as the only international body for establishing and adopting measures on an international level concerning routeing and areas to be avoided by ships or certain classes of ships. It will collate and disseminate to Contracting Governments all relevant information.

(c) The selection of the routes and the initiation of action with regard to them, and the delineation of what constitutes converging areas, will be primarily the responsibility of the Governments concerned. In the development of routeing schemes which impinge upon international waters, or such other schemes they may wish adopted by the Organization, they will give due consideration to relevant information published by the Organization.

(d) Contracting Governments will use their influence to secure the appropriate use of adopted routes and will do everything in their power to ensure adherence to the measures adopted by the Organization in connexion with routeing of ships.

(e) Contracting Governments will also induce all ships proceeding on voyages in the vicinity of the Grand Banks of Newfoundland to avoid, as far as practicable, the fishing banks of Newfoundland north of latitude 43° N and to pass outside regions known or believed to be endangered by ice.

Regulation 9

Misuse of Distress Signals

The use of an international distress signal, except for the purpose of indicating that a ship or aircraft is in distress, and the use of any signal which may be confused with an international distress signal, are prohibited on every ship or aircraft.

Regulation 10

Distress Messages – Obligations and Procedures

(a) The master of a ship at sea, on receiving a signal from any source that a ship or aircraft or survival craft thereof is in distress, is bound to proceed with all speed to the assistance of the persons in distress informing them if possible that he is doing so. If he is unable or, in the special circumstances of the case, considers it unreasonable or unnecessary to proceed to their assistance, he must enter in the logbook the reason for failing to proceed to the assistance of the persons in distress.

(b) The master of a ship in distress, after consultation, so far as may be possible, with the masters of the ships which answer his call for assistance, has the right to requisition such one or more of those ships as he considers best able to render assistance, and it shall be the duty of the master or masters of the ship or ships requisitioned to comply with the requisition by continuing to proceed with all speed to the assistance of persons in distress.

(c) The master of a ship shall be released from the obligation imposed by paragraph (a) of this Regulation when he learns that one or more ships other than his own have been requisitioned and are complying with the requisition.

(d) The master of a ship shall be released from the obligation imposed by paragraph (a) of this Regulation, and, if his ship has been requisitioned, from the obligation imposed by paragraph (b) of this Regulation, if he is informed by the persons in distress or by the master of another ship which has reached such persons that assistance is no longer necessary.

(e) The provisions of this Regulation do not prejudice the International Convention for the unification of certain rules with regard to Assistance and Salvage at Sea, signed at Brussels on 23 September 1910, particularly the obligation to render assistance imposed by Article 11 of that Convention.

Regulation 11

Signalling Lamps

All ships of over 150 tons gross tonnage, when engaged on international voyages, shall have on board an efficient daylight signalling lamp which shall not be solely dependent upon the ship's main source of electrical power.

Regulation 12

Shipborne Navigational Equipment

(a) All ships of 1,600 tons gross tonnage and upwards shall be fitted with a radar of a type approved by the Administration. Facilities for plotting radar readings shall be provided on the bridge in those ships.

(b) All ships of 1,600 tons gross tonnage and upwards, when engaged on international voyages, shall be fitted with radio direction-finding apparatus complying with the provisions of Regulation 12 of Chapter IV. The Administration may, in areas where it considers it unreasonable or unnecessary for such apparatus to be carried, exempt any ship of less than 5,000 tons gross tonnage from this requirement, due regard being had to the fact that radio direction-finding apparatus is of value both as a navigational instrument and as an aid to locating ships, aircraft or survival craft.

(c) All ships of 1,600 tons gross tonnage and upwards, when engaged on international voyages, shall be fitted with a gyro-compass in addition to the magnetic compass. The Administration, if it considers it unreasonable or unnecessary to require a gyro-compass, may exempt any ship of less than 5,000 tons gross tonnage from this requirement.

(d) All new ships of 500 tons gross tonnage and upwards, when engaged on international voyages, shall be fitted with an echo-sounding device.

(e) Whilst all reasonable steps shall be taken to maintain the apparatus in an efficient condition, malfunction of the radar equipment, the gyro-compass or the echo-sounding device shall not be considered as making the ship unseaworthy or as a reason for delaying the ship in ports where repair facilities are not readily available.

(f) All new ships of 1,600 tons gross tonnage and upwards, when engaged on international voyages, shall be fitted with radio equipment for homing on the radiotelephone distress frequency complying with the relevant provisions of paragraph (b) of Regulation 12 of Chapter IV.

Regulation 13

Manning

The Contracting Governments undertake, each for its national ships, to maintain, or, if it is necessary, to adopt, measures for the purpose of ensuring that, from the point of view of safety of life at sea, all ships shall be sufficiently and efficiently manned.

Regulation 14

Aids to Navigation

The Contracting Governments undertake to arrange for the establishment and maintenance of such aids to navigation, including radio beacons and electronic aids as, in their opinion, the volume of traffic justifies and the degree of risk requires, and to arrange for information relating to these aids to be made available to all concerned.

Regulation 15

Search and Rescue

(a) Each Contracting Government undertakes to ensure that any necessary arrangements are made for coast watching and for the rescue of persons in distress at sea round its coasts. These arrangements should include the establishment, operation and maintenance of such maritime safety facilities as are deemed practicable and necessary having regard to the density of the seagoing traffic and the navigational dangers and should, so far as possible, afford adequate means of locating and rescuing such persons.

(b) Each Contracting Government undertakes to make available information concerning its existing rescue facilities and the plans for changes therein, if any.

Regulation 16

Life-Saving Signals

The following signals shall be used by life-saving stations and maritime rescue units when communicating with ships or persons in distress and by ships or persons in distress when communicating with life-saving stations and maritime rescue units. The signals used by aircraft engaged in search and rescue operations to direct ships are indicated in paragraph (d) below. An illustrated table describing the signals listed below shall be readily available to the officer of the watch of every ship to which this Chapter applies.

(a) Replies from life-saving stations or maritime rescue units to distress signals made by a ship or person:

Signal	*Signification*
By day – Orange smoke signal or combined light and sound signal (thunderlight) consisting of three single signals which are fired at intervals of approximately one minute. *By night* – White star rocket consisting of three single signals which are fired at intervals of approximately one minute.	"You are seen – assistance will be given as soon as possible." (Repetition of such signals shall have the same meaning.)

If necessary the day signals may be given at night or the night signals by day.

(b) Landing signals for the guidance of small boats with crews or persons in distress:

Signal	*Signification*
By day – Vertical motion of a white flag or the arms or firing of a green star-signal or signalling the code letter "K" (–·–) given by light or sound-signal apparatus. *By night* – Vertical motion of a white light or flare, or firing of a green star-signal or signalling the code letter "K" (–·–) given by light or sound-signal apparatus. A range (indication of direction) may be given by placing a steady white light or flare at a lower level and in line with the observer.	"This is the best place to land."

Signal	*Signification*
By day – Horizontal motion of a white flag or arms extended horizontally or firing of a red star-signal or signalling the code letter "S" (···) given by light or sound-signal apparatus. *By night* – Horizontal motion of a white light or flare or firing of a red star-signal or signalling the code letter "S" (···) given by light or sound-signal apparatus.	"Landing here highly dangerous."
By day – Horizontal motion of a white flag, followed by the placing of the white flag in the ground and the carrying of another white flag in the direction to be indicated or firing of a red star-signal vertically and a white star-signal in the direction towards the better landing place or signalling the code letter "S" (···) followed by the code letter "R" (·–·) if a better landing place for the craft in distress is located more to the right in the direction of approach or the code letter "L" (·–··) if a better landing place for the craft in distress is located more to the left in the direction of approach.	"Landing here highly dangerous. A more favourable location for landing is in the direction indicated."

By night – Horizontal motion of a white light or flare, followed by the placing of the white light or flare on the ground and the carrying of another white light or flare in the direction to be indicated or firing of a red star-signal vertically and a white star-signal in the direction towards the better landing place or signalling the code letter "S" (···) followed by code letter "R" (·—·) if a better landing place for the craft in distress is located more to the right in the direction of approach or the code letter "L" (·—··) if a better landing place for the craft in distress is located more to the left in the direction of approach.	"Landing here highly dangerous. A more favourable location for landing is in the direction indicated."

(c) Signals to be employed in connexion with the use of shore life-saving apparatus:

Signal	*Signification*
By day – Vertical motion of a white flag or the arms or firing of a green star-signal. *By night* – Vertical motion of a white light or flare or firing of a green star-signal.	In general – "Affirmative." Specifically: "Rocket line is held." "Tail block is made fast." "Hawser is made fast." "Man is in the breeches buoy." "Haul away."
By day – Horizontal motion of a white flag or arms extended horizontally or firing of a red star-signal. *By night* – Horizontal motion of a white light or flare or firing of a red star-signal.	In general – "Negative." Specifically: "Slack away." "Avast hauling."

(d) Signals used by aircraft engaged on search and rescue operations to direct ships towards an aircraft, ship or person in distress (see explanatory Note below):

(i) The following procedures performed in sequence by an aircraft mean that the aircraft is directing a surface craft towards an aircraft or a surface craft in distress:

(1) circling the surface craft at least once;

(2) crossing the projected course of the surface craft close ahead at a low altitude, opening and closing the throttle or changing the propeller pitch;

(3) heading in the direction in which the surface craft is to be directed.

Repetition of such procedures has the same meaning.

(ii) The following procedure performed by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required:

– crossing the wake of the surface craft close astern at a low altitude, opening and closing the throttle or changing the propeller pitch.

Note: Advance notification of changes in these signals will be given by the Organization as necessary.

Regulation 17

Pilot Ladders and Mechanical Pilot Hoists

Ships engaged on voyages in the course of which pilots are likely to be employed shall comply with the following requirements:

(a) *Pilot Ladders*

(i) The ladder shall be efficient for the purpose of enabling pilots to embark and disembark safely, kept clean and in good order and may be used by officials and other persons while a ship is arriving at or leaving a port.

(ii) The ladder shall be secured in a position so that it is clear from any possible discharges from the ship, that each step rests firmly against the ship's side, that it is clear so far as is practicable of the finer lines of the ship and that the pilot can gain safe and convenient access to the ship after climbing not less than 1.5 metres (5 feet) and not more than 9 metres (30 feet). A single length of ladder shall be used capable of reaching the water from the point of access to the ship; in providing for this due allowance shall be made for all conditions of loading and trim of the ship and for an adverse list of 15 degrees. Whenever the distance from sea level to the point of access to the ship is more than 9 metres (30 feet), access from the pilot ladder to the ship shall be by means of an accommodation ladder or other equally safe and convenient means.

(iii) The steps of the pilot ladder shall be:

(1) of hardwood, or other material of equivalent properties, made in one piece free of knots, having an efficient non-slip surface; the four lowest steps may be made of rubber of sufficient strength and stiffness or of other suitable material of equivalent characteristics;

(2) not less than 480 millimetres (19 inches) long, 115 millimetres (4½ inches) wide, and 25 millimetres (1 inch) in depth, excluding any non-slip device;

(3) equally spaced not less than 300 millimetres (12 inches) nor more than 380 millimetres (15 inches) apart and be secured in such a manner that they will remain horizontal.

(iv) No pilot ladder shall have more than two replacement steps which are secured in position by a method different from that used in the original construction of the ladder and any steps so secured shall be replaced as soon as reasonably practicable by steps secured in position by the method used in the original construction of the ladder. When any replacement step is secured to the side ropes of the ladder by means of grooves in the sides of the step, such grooves shall be in the longer sides of the step.

(v) The side ropes of the ladder shall consist of two uncovered manila ropes not less than 60 millimetres (2¼ inches) in circumference on each side. Each rope shall be continuous with no joints below the top step. Two man-ropes properly secured to the ship and not less than 65 millimetres (2½ inches) in circumference and a safety line shall be kept at hand ready for use if required.

(vi) Battens made of hardwood, or other material of equivalent properties, in one piece and not less than 1.80 metres (5 feet 10 inches) long shall be provided at such intervals as will prevent the pilot ladder from twisting. The lowest batten shall be on the fifth step from the bottom of the ladder and the interval between any batten and the next shall not exceed 9 steps.

(vii) Means shall be provided to ensure safe and convenient passage on to or into and off the ship between the head of the pilot ladder or of any accommodation ladder or other appliance provided. Where such passage is by means of a gateway in the rails or bulwark, adequate handholds shall be provided. Where such passage is by means of a bulwark ladder, such ladder shall be securely attached to the bulwark rail or platform and two handhold stanchions shall be fitted at the point of boarding or leaving the ship not less than 0.70 metre (2 feet 3 inches) nor more than 0.80 metre (2 feet 7 inches) apart. Each stanchion shall be rigidly secured to the ship's structure at or near its base and also at a higher point, shall be not less than 40 millimetres (1½ inches) in diameter and shall extend not less than 1.20 metres (3 feet 11 inches) above the top of the bulwark.

(viii) Lighting shall be provided at night such that both the pilot ladder overside and also the position where the pilot boards the ship shall be adequately lit. A lifebuoy equipped with a self-igniting light shall be kept at hand ready for use. A heaving line shall be kept at hand ready for use if required.

(ix) Means shall be provided to enable the pilot ladder to be used on either side of the ship.

(x) The rigging of the ladder and the embarkation and disembarkation of a pilot shall be supervised by a responsible officer of the ship.

(xi) Where on any ship constructional features such as rubbing bands would prevent the implementation of any of these provisions, special arrangements shall be made to the satisfaction of the Administration to ensure that persons are able to embark and disembark safely.

(b) *Mechanical Pilot Hoists*

(i) A mechanical pilot hoist, if provided, and its ancillary equipment shall be of a type approved by the Administration. It shall be of such design and construction as to ensure that the pilot can be embarked and disembarked in a safe manner including a safe access from the hoist to the deck and *vice versa*.

(ii) A pilot ladder complying with the provisions of paragraph (a) of this Regulation shall be kept on deck adjacent to the hoist and available for immediate use.

Regulation 18

VHF Radiotelephone Stations

When a Contracting Government requires ships navigating in an area under its sovereignty to be provided with a Very High Frequency (VHF) radiotelephone station to be used in conjunction with a system which it has established in order to promote safety of navigation, such station shall comply with the provisions of Regulation 17 of Chapter IV and shall be operated in accordance with Regulation 8 of Chapter IV.

Regulation 19

Use of the Automatic Pilot

(a) In areas of high traffic density, in conditions of restricted visibility and in all other hazardous navigational situations where the automatic pilot is used, it shall be possible to establish human control of the ship's steering immediately.

(b) In circumstances as above, it shall be possible for the officer of the watch to have available without delay the services of a qualified helmsman who shall be ready at all times to take over steering control.

(c) The change-over from automatic to manual steering and *vice versa* shall be made by or under the supervision of a responsible officer.

Regulation 20

Nautical Publications

All ships shall carry adequate and up-to-date charts, sailing directions, lists of lights, notices to mariners, tide tables and all other nautical publications necessary for the intended voyage.

Regulation 21

International Code of Signals

All ships which in accordance with the present Convention are required to carry a radiotelegraph or a radiotelephone installation shall carry the International Code of Signals. This publication shall also be carried by any other ship which in the opinion of the Administration has a need to use it.

CHAPTER VI

CARRIAGE OF GRAIN

PART A - GENERAL PROVISIONS

Regulation 1

Application

Unless expressly provided otherwise, this Chapter, including Parts A, B and C, applies to the carriage of grain in all ships to which the present Regulations apply.

Regulation 2

Definitions

(a) The term "grain" includes wheat, maize (corn), oats, rye, barley, rice, pulses, seeds and processed forms thereof, whose behaviour is similar to that of grain in its natural state.

(b) The term "filled compartment" refers to any compartment in which, after loading and trimming as required under Regulation 3, the bulk grain is at its highest possible level.

(c) The term "partly filled compartment" refers to any compartment wherein bulk grain is not loaded in the manner prescribed in paragraph (b) of this Regulation.

(d) The term "angle of flooding" (θ_f) means an angle of heel at which openings in the hull, superstructures or deckhouses, which cannot be closed weathertight, immerse. In applying this definition, small openings through which progressive flooding cannot take place need not be considered as open.

Regulation 3

Trimming of Grain

All necessary and reasonable trimming shall be performed to level all free grain surfaces and to minimize the effect of grain shifting.

(a) In any "filled compartment", the bulk grain shall be trimmed so as to fill all the spaces under the decks and hatch covers to the maximum extent possible.

(b) After loading, all free grain surfaces in "partly filled compartments" shall be level.

(c) The Administration issuing the document of authorization may, under Regulation 9 of this Chapter, grant dispensation from trimming in those cases where the underdeck void geometry resulting from free flowing grain into a compartment, which may be provided with feeding ducts, perforated decks or other similar means, is taken into account to its satisfaction when calculating the void depths.

Regulation 4

Intact Stability Requirements

(a) The calculations required by this Regulation shall be based upon the stability information provided in accordance with Regulation 19 of Chapter II-1, of the present Convention, or with the requirements of the Administration issuing the document of authorization under Regulation 10 of this Chapter.

(b) The intact stability characteristics of any ship carrying bulk grain shall be shown to meet, throughout the voyage, at least the following criteria after taking into account in the manner described in Part B, the heeling moments due to grain shift:

(i) the angle of heel due to the shift of grain shall be not greater than 12 degrees except that an Administration giving authorization in accordance with Regulation 10 of this Chapter may require a lesser angle of heel if it considers that experience shows this to be necessary;*

(ii) in the statical stability diagram, the net or residual area between the heeling arm curve and the righting arm curve up to the angle of heel of maximum difference between the ordinates of the two curves, or 40 degrees or the "angle of flooding" (θ_f), whichever is the least, shall in all conditions of loading be not less than 0.075 metre-radians; and

(iii) the initial metacentric height, after correction for the free surface effects of liquids in tanks, shall be not less than 0.30 metre.

(c) Before loading bulk grain the master shall, if so required by the Contracting Government of the country of the port of loading, demonstrate the ability of the ship at all stages of any voyage to comply with the stability criteria required by paragraph (b) of this Regulation using the information approved and issued under Regulations 10 and 11 of this Chapter.

(d) After loading, the master shall ensure that the ship shall be upright before proceeding to sea.

Regulation 5

Longitudinal Divisions and Saucers

(a) In both "filled compartments" and "partly filled compartments", longitudinal divisions may be provided as a device either to reduce the adverse heeling effect of grain shift or to limit the depth of cargo used for securing the grain surface. Such divisions shall be fitted grain-tight and constructed in accordance with the provisions of Section I of Part C of this Chapter.

(b) In a "filled compartment", a division, if fitted to reduce the adverse effects of grain shift, shall:

(i) in a 'tween-deck compartment extend from deck to deck; and

(ii) in a hold extend downwards from the underside of the deck or hatch covers as described in Section II of Part B of this Chapter.

Except in the case of linseed and other seeds having similar properties, a longitudinal division beneath a hatchway may be replaced by a saucer formed in the manner described in Section I of Part C of this Chapter.

(c) In a "partly filled compartment", a division, if fitted, shall extend from one-eighth of the maximum breadth of the compartment above the level of the grain surface and to the same distance below the grain surface. When used to limit the depth of overstowing, the height of the centreline division shall be at least 0.6 metre above the level grain surface.

(d) Furthermore, the adverse heeling effects of grain shift may be reduced by tightly stowing the wings and ends of a compartment with bagged grain or other suitable cargo adequately restrained from shifting.

Regulation 6

Securing

(a) Unless account is taken of the adverse heeling effect due to grain shift in accordance with these Regulations, the surface of the bulk grain in any "partly filled compartment" shall be level and topped off with bagged grain tightly stowed and extending to a height of not less than one-sixteenth of the maximum breadth of the free grain surface or 1.2 metres, whichever is the greater. Instead of bagged grain, other suitable cargo exerting at least the same pressure may be used.

(b) The bagged grain or such other suitable cargo shall be supported in the manner described in Section II of Part C of this Chapter. Alternatively, the bulk grain surface may be secured by strapping or lashing as described in that Section.

Regulation 7

Feeders and Trunks

If feeders or trunks are fitted, proper account shall be taken of the effects thereof when calculating the heeling moments as described in Section III of Part B of this Chapter. The strength of the divisions forming the boundaries of such feeders shall conform with the provisions of Section I of Part C of this Chapter.

Regulation 8

Combination Arrangements

Lower holds and 'tween-deck spaces in way thereof may be loaded as one compartment provided that, in calculating transverse heeling moments, proper account is taken of the flow of grain into the lower spaces.

Regulation 9

Application of Parts B and C

An Administration or a Contracting Government on behalf of an Administration may authorize departure from the assumptions contained in Parts B and C of this Chapter in those cases where it considers this to be justified having regard to the provisions for loading or the structural arrangements, provided the stability criteria in paragraph (b) of Regulation 4 of this Chapter are met. Where such authorization is granted under this Regulation, particulars shall be included in the document of authorization or grain loading data.

Regulation 10

Authorization

(a) A document of authorization shall be issued for every ship loaded in accordance with the Regulations of this Chapter either by the Administration or an organization recognized by it or by a Contracting Government on behalf of the Administration. It shall be accepted as evidence that the ship is capable of complying with the requirements of these Regulations.

(b) The document shall accompany and refer to the grain loading stability booklet provided to enable the master to meet the requirements of paragraph (c) of Regulation 4 of this Chapter. This booklet shall meet the requirements of Regulation 11 of this Chapter.

* For example, the permissible angle of heel might be limited to the angle of heel at which the edge of the weather deck would be immersed in still water.

(c) Such a document, grain loading stability data and associated plans may be drawn up in the official language or languages of the issuing country. If the language used is neither English nor French, the text shall include a translation into one of these languages.

(d) A copy of such a document, grain loading stability data and associated plans shall be placed on board in order that the master, if so required, shall produce them for the inspection of the Contracting Government of the country of the port of loading.

(e) A ship without such a document of authorization shall not load grain until the master demonstrates to the satisfaction of the Administration or the Contracting Government of the port of loading on behalf of the Administration that the ship in its proposed loaded condition will comply with the requirements of these Regulations.

Regulation 11

Grain Loading Information

This information shall be sufficient to allow the master to determine in all reasonable loading conditions the heeling moments due to grain shift calculated in accordance with Part B of this Chapter. It shall include the following:

(a) Information which shall be approved by the Administration or by a Contracting Government on behalf of the Administration:

(i) curves or tables of grain heeling moments for every compartment, filled or partly filled, or combination thereof, including the effects of temporary fittings;

(ii) tables of maximum permissible heeling moments or other information sufficient to allow the master to demonstrate compliance with the requirements of paragraph (c) of Regulation 4 of this Chapter;

(iii) details of the scantlings of any temporary fittings and where applicable the provisions necessary to meet the requirements of Section I(E) of Part C of this Chapter;

(iv) typical loaded service departure and arrival conditions and where necessary, intermediate worst service conditions;

(v) a worked example for the guidance of the master;

(vi) loading instructions in the form of notes summarizing the requirements of this Chapter.

(b) Information which shall be acceptable to the Administration or to a Contracting Government on behalf of the Administration:

(i) ship's particulars;

(ii) lightship displacement and the vertical distance from the intersection of the moulded base line and midship section to the centre of gravity (KG);

(iii) table of free surface corrections;

(iv) capacities and centres of gravity.

Regulation 12

Equivalents

Where an equivalent accepted by the Administration in accordance with Regulation 5 of Chapter I of this Convention is applied, particulars shall be included in the document of authorization or grain loading data.

Regulation 13

Exemptions for Certain Voyages

The Administration, or a Contracting Government on behalf of the Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any of the requirements of Regulations 3 to 12 of this Chapter unreasonable or unnecessary, exempt from those particular requirements individual ships or classes of ships.

PART B - CALCULATION OF ASSUMED HEELING MOMENTS

SECTION I - DESCRIPTION OF THE ASSUMED VOIDS AND METHOD OF CALCULATING INTACT STABILITY

SECTION II - ASSUMED VOLUMETRIC HEELING MOMENT OF A FILLED COMPARTMENT

SECTION III - ASSUMED VOLUMETRIC HEELING MOMENT OF FEEDERS AND TRUNKS

SECTION IV - ASSUMED VOLUMETRIC HEELING MOMENT OF PARTLY FILLED COMPARTMENTS

SECTION V - ALTERNATIVE LOADING ARRANGEMENTS FOR EXISTING SHIPS

SECTION I - DESCRIPTION OF THE ASSUMED VOIDS AND METHOD OF CALCULATING INTACT STABILITY

(A) GENERAL

(a) For the purpose of calculating the adverse heeling moment due to a shift of cargo surface in ships carrying bulk grain it shall be assumed that:

(i) In "filled compartments" which have been trimmed in accordance with Regulation 3 of this Chapter a void exists under all boundary surfaces having an inclination to the horizontal less than 30 degrees and that the void is parallel to the boundary surface having an average depth calculated according to the formula:

$$Vd = Vd_1 + 0.75(d - 600)\ mm$$

Where:

Vd = Average void depth in mm;

Vd_1 = Standard void depth from Table I below;

d = Actual girder depth in mm.

In no case shall Vd be assumed to be less than 100 mm.

TABLE I

Distance from hatchend or hatchside to boundary of compartment	Standard void depth Vd_1
metres	*mm*
0.5	570
1.0	530
1.5	500
2.0	480
2.5	450
3.0	440
3.5	430
4.0	430
4.5	430
5.0	430
5.5	450
6.0	470
6.5	490
7.0	520
7.5	550
8.0	590

Notes on Table I:

For distances greater than 8.0 metres the standard void depth Vd_1 shall be linearly extrapolated at 80 mm increase for each 1.0 metre increase in distance. Where there is a difference in depth between the hatchside girder or its continuation and the hatchend beam the greater depth shall be used except that:

(1) when the hatchside girder or its continuation is shallower than the hatchend beam the voids abreast the hatchway may be calculated using the lesser depth; and

(2) when the hatchend beam is shallower than the hatchside girder or its continuation the voids fore and aft of the hatchway inboard of the continuation of the hatchside girder may be calculated using the lesser depth;

(3) where there is a raised deck clear of a hatchway the average void depth measured from the underside of the raised deck shall be calculated using the standard void depth in association with a girder depth of the hatchend beam plus the height of the raised deck.

(ii) In "filled compartments" which are not trimmed in accordance with Regulation 3 of this Chapter and where the boundary surface has an inclination to the horizontal which is less than 30 degrees, the cargo surface has an inclination of 30 degrees to the horizontal after loading.

(iii) Within filled hatchways and in addition to any open void within the hatch cover there is a void of average depth of 150 mm measured down to the grain surface from the lowest part of the hatch cover or the top of the hatchside coaming, whichever is the lower.

(b) The description of the pattern of grain surface behaviour to be assumed in "partly filled compartments" is shown in Section IV of this Part.

(c) For the purpose of demonstrating compliance with the stability criteria in paragraph (b) of Regulation 4 of this Chapter (see Figure 1), the ship's stability calculations shall be normally based upon the assumption that the centre of gravity of cargo in a "filled compartment" is at the volumetric centre of the whole cargo space. In those cases where the Administration authorizes account to be taken of the effect of assumed underdeck voids on the vertical position of the centre of gravity of the cargo in "filled compartments" it will be necessary to

compensate for the adverse effect of the vertical shift of grain surfaces by increasing the assumed heeling moment due to the transverse shift of grain as follows:

total heeling moment = 1.06 × calculated transverse heeling moment.

In all cases the weight of cargo in a "filled compartment" shall be the volume of the whole cargo space divided by the stowage factor.

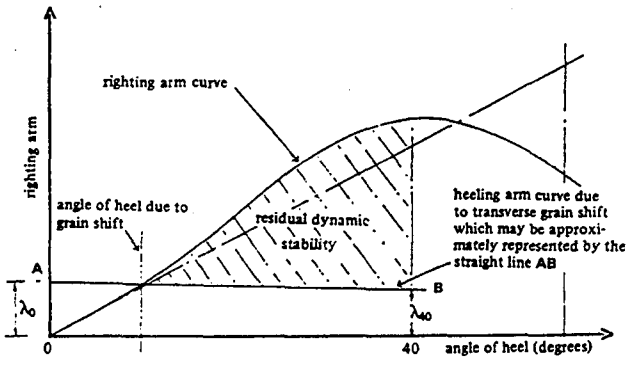


Figure 1

Notes on Figure 1:

(1) Where:

$$\lambda_0 = \frac{\text{Assumed Volumetric Heeling Moment due to Transverse Shift}}{\text{Stowage Factor} \times \text{Displacement}};$$

$\lambda_{40} = 0.8 \times \lambda_0$;

Stowage factor = Volume per unit weight of grain cargo;

Displacement = Weight of ship, fuel, fresh water, stores etc. and cargo.

(2) The righting arm curve shall be derived from cross-curves which are sufficient in number to accurately define the curve for the purpose of these requirements and shall include cross-curves at 12 degrees and 40 degrees.

(d) In "partly filled compartments" the adverse effect of the vertical shift of grain surfaces shall be taken into account as follows:

total heeling moment = 1.12 × calculated transverse heeling moment.

(e) Any other equally effective method may be adopted to make the compensation required in paragraphs (c) and (d) above.

SECTION II - ASSUMED VOLUMETRIC HEELING MOMENT OF A FILLED COMPARTMENT

(A) GENERAL

(a) The pattern of grain surface movement relates to a transverse section across the portion of the compartment being considered and the resultant heeling moment should be multiplied by the length to obtain the total moment for that portion.

(b) The assumed transverse heeling moment due to grain shifting is a consequence of final changes of shape and position of voids after grain has moved from the high side to the low side.

(c) The resulting grain surface after shifting shall be assumed to be at 15 degrees to the horizontal.

(d) In calculating the maximum void area that can be formed against a longitudinal structural member, the effects of any horizontal surfaces, e.g. flanges or face bars, shall be ignored.

(e) The total areas of the initial and final voids shall be equal.

(f) A discontinuous longitudinal division shall be considered effective over its full length.

(B) ASSUMPTIONS

In the following paragraphs it is assumed that the total heeling moment for a compartment is obtained by adding the results of separate considerations of the following portions:

(a) *Before and abaft hatchways:*

(i) If a compartment has two or more main hatchways through which loading may take place the depth of the underdeck void for the portion(s) between such hatchways shall be determined using the fore and aft distance to the midpoint between the hatchways.

(ii) After the assumed shift of grain the final void pattern shall be as shown in Figure 2 below:

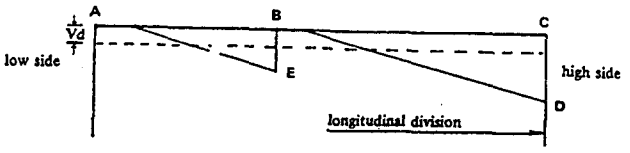


Figure 2

Notes on Figure 2:

(1) If the maximum void area which can be formed against the girder at B is less than the initial area of the void under AB, i.e. AB × Vd, the excess area shall be assumed to transfer to the final void on the high side.

(2) If the longitudinal division at C is one which has been provided in accordance with sub-paragraph (b)(ii) of Regulation 5 of this Chapter it shall extend to at least 0.6 metre below D or E whichever gives the greater depth.

(b) *In and abreast hatchways:*

After the assumed shift of grain the final void pattern shall be as shown in the following Figure 3 or Figure 4.

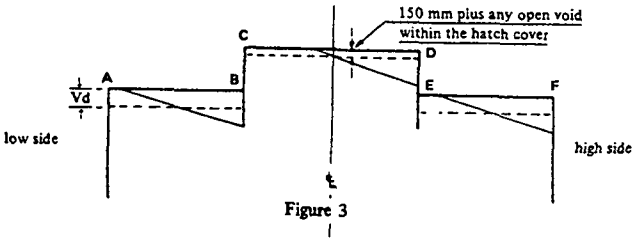


Figure 3

Notes on Figure 3:

(1) AB Any area in excess of that which can be formed against the girder at B shall transfer to the final void area in the hatchway.

(2) CD Any area in excess of that which can be formed against the girder at E shall transfer to the final void area on the high side.

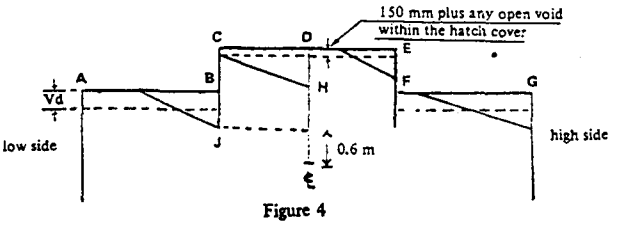


Figure 4

Notes on Figure 4:

(1) If the centreline division is one which has been provided in accordance with sub-paragraph (b)(ii) of Regulation 5 of this Chapter it shall extend to at least 0.6 metre below H or J whichever gives the greater depth.

(2) The excess void area from AB shall transfer to the low side half of the hatchway in which two separate final void areas will be formed viz. one against the centreline division and the other against the hatchside coaming and girder on the high side.

(3) If a bagged saucer or bulk bundle is formed in a hatchway it shall be assumed, for the purpose of calculating transverse heeling moment, that such a device is at least equivalent to the centreline division.

(C) COMPARTMENTS LOADED IN COMBINATION

The following paragraphs describe the pattern of void behaviour which shall be assumed when compartments are loaded in combination:

(a) *Without effective centreline divisions:*

(i) Under the upper deck – as for the single deck arrangement described in Section II(B) of this Part.

(ii) Under the second deck – the area of void available for transfer from the low side, i.e. original void area less area against the hatchside girder, shall be assumed to transfer as follows:

one half to the upper deck hatchway and one quarter each to the high side under the upper and second deck.

(iii) Under the third and lower decks – the void areas available for transfer from the low side of each of these decks shall be assumed to transfer in equal quantities to all the voids under the decks on the high side and the void in the upper deck hatchway.

(b) *With effective centreline divisions which extend into the upper deck hatchway:*

(i) At all deck levels abreast the division the void areas available for transfer from the low side shall be assumed to transfer to the void under the low side half of the upper deck hatchway.

(ii) At the deck level immediately below the bottom of the division the void area available for transfer from the low side shall be assumed to transfer as follows:

one half to the void under the low side half of the upper deck hatchway and the remainder in equal quantities to the voids under the decks on the high side.

(iii) At deck levels lower than those described in sub-paragraphs (i) and (ii) of this paragraph the void area available for transfer from the low side of each of those decks shall be assumed to transfer in equal quantities to the voids in each of the two halves of the upper deck hatchway on each side of the division and the voids under the decks on the high side.

(c) *With effective centreline divisions which do not extend into the upper deck hatchway:*

Since no horizontal transfer of voids may be assumed to take place at the same deck level as the division the void area available for transfer from the low side at this level shall be assumed to transfer above the division to voids on the high sides in accordance with the principles of paragraphs (a) and (b) above.

SECTION III - ASSUMED VOLUMETRIC HEELING MOMENT OF FEEDERS AND TRUNKS

(A) SUITABLY PLACED WING FEEDERS (See Figure 5)

It may be assumed that under the influence of ship motion underdeck voids will be substantially filled by the flow of grain from a pair of longitudinal feeders provided that:

(a) the feeders extend for the full length of the deck and that the perforations therein are adequately spaced;

(b) the volume of each feeder is equal to the volume of the underdeck void outboard of the hatchside girder and its continuation.

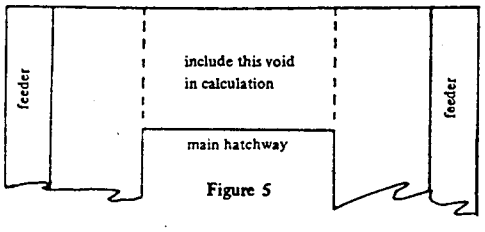


Figure 5

(B) TRUNKS SITUATED OVER MAIN HATCHWAYS

After the assumed shift of grain the final void pattern shall be as shown in Figure 6.

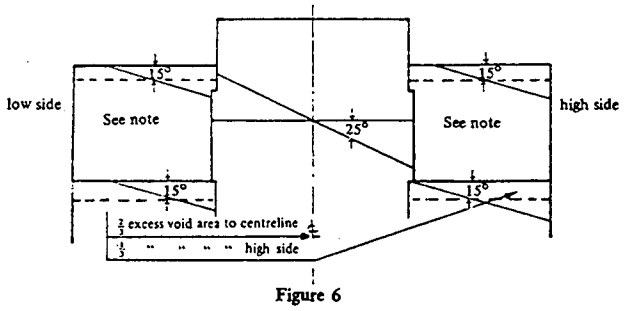


Figure 6

Note on Figure 6:

If the wing spaces in way of the trunk cannot be properly trimmed in accordance with Regulation 3 of this Chapter it shall be assumed that a 25 degree surface shift takes place.

SECTION IV - ASSUMED VOLUMETRIC HEELING MOMENT OF PARTLY FILLED COMPARTMENTS

(A) GENERAL

When the free surface of the bulk grain has not been secured in accordance with Regulation 6 of this Chapter it shall be assumed that the grain surface after shifting shall be at 25 degrees to the horizontal.

(B) DISCONTINUOUS LONGITUDINAL DIVISIONS

In a compartment in which the longitudinal divisions are not continuous between the transverse boundaries, the length over which any such divisions are effective as devices to prevent full width shifts of grain surfaces shall be taken to be the actual length of the portion of the division under consideration less two-sevenths of the greater of the transverse distances between the division and its adjacent division or ship's side.

This correction does not apply in the lower compartments of any combination loading in which the upper compartment is either a "filled compartment" or a "partly filled compartment".

SECTION V - ALTERNATIVE LOADING ARRANGEMENTS FOR EXISTING SHIPS

(A) GENERAL

A ship loaded in accordance with either Sub-Section (B) or Sub-Section (C) below shall be considered to have intact stability characteristics at least equivalent to the requirements of paragraph (b) of Regulation 4 of this Chapter. Documents of authorization permitting such loadings shall be accepted under the provisions of paragraph (e) of Regulation 10 of this Chapter.

For the purpose of this Part, the term "Existing Ship" means a ship, the keel of which is laid before the date of coming into force of this Chapter.

(B) STOWAGE OF SPECIALLY SUITABLE SHIPS

(a) Notwithstanding anything contained in Part B of this Chapter, bulk grain may be carried without regard to the requirements specified therein in ships which are constructed with two or more vertical or sloping grain-tight longitudinal divisions suitably disposed to limit the effect of any transverse shift of grain under the following conditions:

(i) as many holds and compartments as possible shall be full and trimmed full;

(ii) for any specified arrangement of stowage the ship will not list to an angle greater than 5 degrees at any stage of the voyage where:

(1) in holds or compartments which have been trimmed full the grain surface settled 2 per cent by volume from the original surface and shifts to an angle of 12 degrees with that surface under all boundaries of these holds and compartments which have an inclination of less than 30 degrees to the horizontal;

(2) in "partly filled compartments or holds" free grain surfaces settle and shift as in sub-paragraph (ii)(1) of this paragraph or to such larger angle as may be deemed necessary by the Administration, or by a Contracting Government on behalf of the Administration, and grain surfaces if overstowed in accordance with Regulation 5 of this Chapter shift to an angle of 8 degrees with the original levelled surfaces. For the purpose of sub-paragraph (ii) of this paragraph shifting boards, if fitted, will be considered to limit the transverse shift of the surface of the grain;

(iii) the master is provided with a grain loading plan covering the stowage arrangements to be adopted and a stability booklet, both approved by the Administration, or by a Contracting Government on behalf of the Administration, showing the stability conditions upon which the calculations given in sub-paragraph (ii) of this paragraph are based.

(b) The Administration, or a Contracting Government on behalf of the Administration, shall prescribe the precautions to be taken against shifting in all other conditions of loading of ships designed in accordance with paragraph (B)(a) of this Section which meet the requirements of sub-paragraphs (ii) and (iii) of that paragraph.

(C) SHIPS WITHOUT DOCUMENTS OF AUTHORIZATION

A ship not having on board documents of authorization issued in accordance with Regulations 4 and 10 of this Chapter may be permitted to load bulk grain under the requirements of Sub-Section (B) of this Section or provided that:

(a) All "filled compartments" shall be fitted with centreline divisions extending for the full length of such compartments which extend downwards from the underside of the deck or hatch covers to a distance below the deck line of at least one-eighth of the maximum breadth of the compartment or 2.4 metres, whichever is the greater except that saucers constructed in accordance with Section II of Part C may be accepted in lieu of a centreline division in and beneath a hatchway.

(b) All hatches to "filled compartments" shall be closed and covers secured in place.

(c) All free grain surfaces in "partly filled compartments" shall be trimmed level and secured in accordance with Section II of Part C.

(d) Throughout the voyage the metacentric height after correction for the free surface effects of liquids in tanks shall be 0.3 metre or that given by the following formula, whichever is the greater:

$$GM_R = \frac{L\ B\ Vd\ (0.25\ B - 0.645\ \sqrt{Vd\ B})}{SF \times \Delta \times 0.0875}$$

Where:

L = total combined length of all full compartments;

B = moulded breadth of vessel;

SF = stowage factor;

Vd = calculated average void depth as per paragraph (a)(i) of Section I(A) of this Part;

Δ = displacement.

PART C - GRAIN FITTINGS AND SECURING

SECTION I - STRENGTH OF GRAIN FITTINGS

(A) General (including working stresses)

(B) Divisions loaded on both sides

(C) Divisions loaded on one side only

(D) Saucers

(E) Bundling of bulk

(F) Securing hatch covers of filled compartments

SECTION II - SECURING OF PARTLY FILLED COMPARTMENTS

(A) Strapping or lashing

(B) Overstowing arrangements

(C) Bagged grain

SECTION I - STRENGTH OF GRAIN FITTINGS

(A) GENERAL

(a) *Timber*

All timber used for grain fittings shall be of good sound quality and of a type and grade which has been proved to be satisfactory for this purpose. The actual finished dimensions of the timber shall be in accordance with the dimensions hereinafter specified in this Part. Plywood of an exterior type bonded with waterproof glue and fitted so that the direction of the grain in the face plies is perpendicular to the supporting uprights or binder may be used provided that its strength is equivalent to that of solid timber of the appropriate scantlings.

(b) *Working Stresses*

When calculating the dimensions of divisions loaded on one side, using the Tables in paragraphs (a) and (b) of Sub-Section (C) of this Section, the following working stresses should be adopted:

For divisions of steel.....2000 kg per square cm

For divisions of wood.....160 kg per square cm

(c) *Other Materials*

Materials other than wood or steel may be approved for such divisions provided that proper regard has been paid to their mechanical properties.

(d) *Uprights*

(i) Unless means are provided to prevent the ends of uprights being dislodged from their sockets, the depth of housing at each end of each upright shall be not less than 75 mm. If an upright is not secured at the top, the uppermost shore or stay shall be fitted as near thereto as is practicable.

(ii) The arrangements provided for inserting shifting boards by removing a part of the cross-section of an upright shall be such that the local level of stresses is not unduly high.

(iii) The maximum bending moment imposed upon an upright supporting a division loaded on one side shall normally be calculated assuming that the ends of the uprights are freely supported. However, if an Administration is satisfied that any degree of fixity assumed will be achieved in practice, account may be taken of any reduction in the maximum bending moment arising from any degree of fixity provided at the ends of the upright.

(e) *Composite Section*

Where uprights, binders or any other strength members are formed by two separate sections, one fitted on each side of a division and inter-connected by through bolts at adequate spacing, the effective section modules shall be taken as the sum of the two moduli of the separate sections.

(f) *Partial Division*

Where divisions do not extend to the full depth of the hold such divisions and their uprights shall be supported or stayed so as to be as efficient as those which do extend to the full depth of the hold.

(B) DIVISIONS LOADED ON BOTH SIDES

(a) *Shifting Boards*

(i) Shifting boards shall have a thickness of not less than 50 mm and shall be fitted grain-tight and where necessary supported by uprights.

(ii) The maximum unsupported span for shifting boards of various thicknesses shall be as follows:

Thickness	*Maximum Unsupported Span*
50 mm	2.5 metres
60 mm	3.0 metres
70 mm	3.5 metres
80 mm	4.0 metres

If thicknesses greater than these are provided the maximum unsupported span will vary directly with the increase in thickness.

(iii) The ends of all shifting boards shall be securely housed with 75 mm minimum bearing length.

(b) *Other Materials*

Divisions formed by using materials other than wood shall have a strength equivalent to the shifting boards required in paragraph (a) of this Sub-Section.

(c) *Uprights*

(i) Steel uprights used to support divisions loaded on both sides shall have a section modulus given by

$$W = a \times W_1$$

Where:

W = section modulus in cm^3;

a = horizontal span between uprights in metres.

The section modulus per metre span W_1 shall be not less than that given by the formula:

$W_1 = 14.8\,(h_1 - 1.2)\ cm^3$ per metre;

Where:

h_1 is the vertical unsupported span in metres and shall be taken as the maximum value of the distance between any two adjacent stays or between the stay or either end of the upright. Where this distance is less than 2.4 metres the respective modulus shall be calculated as if the actual value was 2.4 metres.

(ii) The moduli of wood uprights shall be determined by multiplying by 12.5 the corresponding moduli for steel uprights. If other materials are used their moduli shall be at least that required for steel increased in proportion to the ratio of the permissible stresses for steel to that of the material used. In such cases attention shall be paid also to the relative rigidity of each upright to ensure that the deflection is not excessive.

(iii) The horizontal distance between uprights shall be such that the unsupported spans of the shifting boards do not exceed the maximum span specified in sub-paragraph (ii) of paragraph (a) of this Sub-Section.

(d) *Shores*

(i) Wood shores, when used, shall be in a single piece and shall be securely fixed at each end and heeled against the permanent structure of the ship except that they shall not bear directly against the side plating of the ship.

(ii) Subject to the provisions of sub-paragraphs (iii) and (iv) below, the minimum size of wood shores shall be as follows:

Length of Shore in metres	*Rectangular Section*	*Diameter of Circular Section*
	mm	mm
Not exceeding 3 m	150 × 100	140
Over 3 m but not exceeding 5 m	150 × 150	165
Over 5 m but not exceeding 6 m	150 × 150	180
Over 6 m but not exceeding 7 m	200 × 150	190
Over 7 m but not exceeding 8 m	200 × 150	200
Exceeding 8 m	200 × 150	215

Shores of 7 metres or more in length shall be securely bridged at approximately mid-length.

(iii) When the horizontal distance between the uprights differs significantly from 4 metres, the moments of inertia of the shores may be changed in direct proportion.

(iv) Where the angle of the shore to the horizontal exceeds 10 degrees the next larger shore to that required by sub-paragraph (ii) of this paragraph shall be fitted provided that in no case shall the angle between any shore and the horizontal exceed 45 degrees.

(e) *Stays*

Where stays are used to support divisions loaded on both sides, they shall be fitted horizontally or as near thereto as practicable, well secured at each end and formed of steel wire rope. The sizes of the wire rope shall be determined assuming that the divisions and upright which the stay supports are uniformly loaded at 500 kg/m^2. The working load so assumed in the stay shall not exceed one-third of its breaking load.

(C) DIVISIONS LOADED ON ONE SIDE ONLY

(a) *Longitudinal Divisions*

The load in kg per metre length of the division shall be taken to be as follows:

TABLE I[1]

h (m) \ B (m)	2	3	4	5	6	7	8	10
1.5	850	900	1010	1225	1500	1770	2060	2645
2.0	1390	1505	1710	1985	2295	2605	2930	3590
2.5	1985	2160	2430	2740	3090	3435	3800	4535
3.0	2615	2845	3150	3500	3885	4270	4670	5480
3.5	3245	3525	3870	4255	4680	5100	5540	6425
4.0	3890	4210	4590	5015	5475	5935	6410	7370
4.5	4535	4890	5310	5770	6270	6765	7280	8315
5.0	5185	5570	6030	6530	7065	7600	8150	9260
6.0	6475	6935	7470	8045	8655	9265	9890	11150
7.0	7765	8300	8910	9560	10245	10930	11630	13040
8.0	9055	9665	10350	11075	11835	12595	13370	14930
9.0	10345	11030	11790	12590	13425	14260	15110	16820
10.0	11635	12395	13230	14105	15015	15925	16850	18710

h = height of grain in metres from the bottom of the division[2]
B = transverse extent of the bulk grain in metres

For other values of h or B the loads shall be determined by linear interpolation or extrapolation as necessary.

[1] For the purpose of converting the above loads into British units (ton/ft) 1 kg per metre length shall be taken to be equivalent to 0.0003 ton per foot length.

[2] Where the distance from a division to a feeder or hatchway is 1 metre or less, the height – h – shall be taken to the level of the grain within that hatchway or feeder. In all cases the height shall be taken to the overhead deck in way of the division.

(b) *Transverse Divisions*

The load in kg per metre length of the division shall be taken to be as follows:

TABLE II[1]

h (m)	L (m) 2	3	4	5	6	7	8	10	12	14	16
1.5	670	690	730	780	835	890	935	1000	1040	1050	1050
2.0	1040	1100	1170	1245	1325	1400	1470	1575	1640	1660	1660
2.5	1460	1565	1675	1780	1880	1980	2075	2210	2285	2305	2305
3.0	1925	2065	2285	2340	2470	2590	2695	2845	2925	2950	2950
3.5	2425	2605	2770	2930	3075	3205	3320	3480	3570	3595	3595
4.0	2950	3160	3355	3535	3690	3830	3950	4120	4210	4235	4240
4.5	3495	3725	3940	4130	4295	4440	4565	4750	4850	4880	4885
5.0	4050	4305	4535	4735	4910	5060	5190	5385	5490	5525	5530
6.0	5175	5465	5720	5945	6135	6300	6445	6655	6775	6815	6825
7.0	6300	6620	6905	7150	7365	7445	7700	7930	8055	8105	8115
8.0	7425	7780	8090	8360	8590	8685	8950	9200	9340	9395	9410
9.0	8550	8935	9275	9565	9820	9930	10205	10475	10620	10685	10705
10.0	9680	10095	10460	10770	11045	11270	11460	11745	11905	11975	11997

h = height of grain in metres from the bottom of the division[2]
L = longitudinal extent of the bulk grain in metres

For other values of h or L the loads shall be determined by linear interpolation or extrapolation as necessary.

(c) *Vertical Distribution of the Loads*

The total load per unit length of divisions shown in the Tables I and II above may, if considered necessary, be assumed to have a trapezoidal distribution with height. In such cases, the reaction loads at the upper and lower ends of a vertical member or upright are not equal. The reaction loads at the upper end expressed as percentages of the total load supported by the vertical member or upright shall be taken to be those shown in Tables III and IV below.

TABLE III

LONGITUDINAL DIVISIONS LOADED ON ONE SIDE ONLY

Bearing Reaction at the Upper End of Upright as Percentage of Load (Table I)

h (m)	B (m) 2	3	4	5	6	7	8	10
1.5	43.3	45.1	45.9	46.2	46.2	46.2	46.2	46.2
2	44.5	46.7	47.6	47.8	47.8	47.8	47.8	47.8
2.5	45.4	47.6	48.6	48.8	48.8	48.8	48.8	48.8
3	46.0	48.3	49.2	49.4	49.4	49.4	49.4	49.4
3.5	46.5	48.8	49.7	49.8	49.8	49.8	49.8	49.8
4	47.0	49.1	49.9	50.1	50.1	50.1	50.1	50.1
4.5	47.4	49.4	50.1	50.2	50.2	50.2	50.2	50.2
5	47.7	49.4	50.1	50.2	50.2	50.2	50.2	50.2
6	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
7	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
8	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
9	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
10	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2

B = transverse extent of the bulk grain in metres

For other values of h or B the reaction loads shall be determined by linear interpolation or extrapolation as necessary.

TABLE IV

TRANSVERSE DIVISIONS LOADED ON ONE SIDE ONLY

Bearing Reaction at the Upper End of Upright as Percentage of Load (Table II)

h (m)	L (m) 2	3	4	5	6	7	8	10	12	14	16
1.5	37.3	38.7	39.7	40.6	41.4	42.1	42.6	43.6	44.3	44.8	45.0
2	39.6	40.6	41.4	42.1	42.7	43.1	43.6	44.3	44.7	45.0	45.2
2.5	41.0	41.8	42.5	43.0	43.5	43.8	44.2	44.7	45.0	45.2	45.2
3	42.1	42.8	43.3	43.8	44.2	44.5	44.7	45.0	45.2	45.3	45.3
3.5	42.9	43.5	43.9	44.3	44.6	44.8	45.0	45.2	45.3	45.3	45.3
4	43.5	44.0	44.4	44.7	44.9	45.0	45.2	45.4	45.4	45.4	45.4
5	43.9	44.3	44.6	44.8	45.0	45.2	45.3	45.5	45.5	45.5	45.5
6	44.2	44.5	44.8	45.0	45.2	45.3	45.4	45.6	45.6	45.6	45.6
7	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
8	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
9	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
10	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6

L = longitudinal extent of the bulk grain in metres

For other values of h or L the reaction loads shall be determined by linear interpolation or extrapolation as necessary.

[1] For the purpose of converting the above loads into British units (ton/ft) 1 kg per metre length shall be taken to be equivalent to 0.0003 ton per foot length.

[2] Where the distance from a division to a feeder or hatchway is 1 metre or less, the height – h – shall be taken to the level of the grain within that hatchway or feeder. In all cases the height shall be taken to the overhead deck in way of the division.

The strength of the end connexions of such vertical members or uprights may be calculated on the basis of the maximum load likely to be imposed at either end. These loads are as follows:

Longitudinal Divisions

Maximum load at the top.....50% of the appropriate total load from Table I

Maximum load at the bottom.....55% of the appropriate total load from Table I

Transverse Divisions

Maximum load at the top.....45% of the appropriate total load from Table II

Maximum load at the bottom.....60% of the appropriate total load from Table II

The thickness of horizontal wooden boards may also be determined having regard to the vertical distribution of the loading represented by Tables III and IV above and in such cases

$$t = 10a\sqrt{\frac{p \times k}{h \times 213.3}}$$

Where:

t = thickness of board in mm;

a = horizontal span of the board i.e. distance between uprights in metres;

h = head of grain to the bottom of the division in metres;

p = total load per unit length derived from Table I or II in kilogrammes;

k = factor dependent upon vertical distribution of the loading.

When the vertical distribution of the loading is assumed to be uniform, i.e. rectangular, k shall be taken as equal to 1.0. For a trapezoidal distribution

$$k = 1.0 + 0.06(50 - R)$$

Where:

R is the upper end bearing reaction taken from Table III or IV.

(d) *Stays or Shores*

The sizes of stays and shores shall be so determined that the loads derived from Tables I and II in the preceding paragraphs (a) and (b) shall not exceed one-third of the breaking loads.

(D) SAUCERS

When a saucer is used to reduce the heeling moments in a "filled compartment", its depth, measured from the bottom of the saucer to the deck line, shall be as follows:

For ships with a moulded breadth of up to 9.1 metres, not less than 1.2 metres.

For ships with a moulded breadth of 18.3 metres or more, not less than 1.8 metres.

For ships with a moulded breadth between 9.1 metres and 18.3 metres, the minimum depth of the saucer shall be calculated by interpolation.

The top (mouth) of the saucer shall be formed by the underdeck structure in the way of the hatchway, i.e. hatchside girders or coamings and hatchend beams. The saucer and hatchway above shall be completely filled with bagged grain or other suitable cargo laid down on a separation cloth or its equivalent and stowed tightly against adjacent structures and the portable hatchway beams if the latter are in place.

(E) BUNDLING OF BULK

As an alternative to filling the saucer with bagged grain or other suitable cargo a bundle of bulk grain may be used provided that:

(a) The saucer is lined with a material acceptable to the Administration having a tensile strength of not less than 274 kg per 5 cm strip and which is provided with suitable means for securing at the top.

(b) As an alternative to paragraph (a) above a material acceptable to the Administration having a tensile strength of not less than 137 kg per 5 cm strip may be used if the saucer is constructed as follows:

Athwartship lashings acceptable to the Administration shall be placed inside the saucer formed in the bulk grain at intervals of not more than 2.4 metres. These lashings shall be of sufficient length to permit being drawn up tight and secured at the top of the saucer.

Dunnage not less than 25 mm in thickness or other suitable material of equal strength and between 150 to 300 mm in width shall be placed fore and aft over these lashings to prevent the cutting or chafing of the material which shall be placed thereon to line the saucer.

(c) The saucer shall be filled with bulk grain and secured at the top except that when using material approved under paragraph (b) above further dunnage shall be laid on top after lapping the material before the saucer is secured by setting up the lashings.

(d) If more than one sheet of material is used to line the saucer they shall be joined at the bottom either by sewing or a double lap.

(e) The top of the saucer shall be coincidental with the bottom of the beams when these are in place and suitable general cargo or bulk grain may be placed between the beams on top of the saucer.

(F) SECURING HATCH COVERS OF FILLED COMPARTMENTS

If there is no bulk grain or other cargo above a "filled compartment" the hatch covers shall be secured in an approved manner having regard to the weight and permanent arrangements provided for securing such covers.

The documents of authorization issued under Regulation 10 of this Chapter shall include reference to the manner of securing considered necessary by the Administration issuing such documents.

SECTION II – SECURING OF PARTLY FILLED COMPARTMENTS

(A) STRAPPING OR LASHING

(a) When, in order to eliminate heeling moments in "partly filled compartments", strapping or lashing is utilized, the securing shall be accomplished as follows:

(i) The grain shall be trimmed and levelled to the extent that it is very slightly crowned and covered with burlap separation cloths, tarpaulins or the equivalent.

(ii) The separation cloths and/or tarpaulins shall overlap at least 1.8 metres.

(iii) Two solid floors of rough 25 mm by 150 mm to 300 mm lumber shall be laid with the top floor running longitudinally and nailed to an athwartships bottom floor. Alternatively, one solid floor of 50 mm lumber, running longitudinally and nailed over the top of a 50 mm bottom bearer not less than 150 mm wide, may be used. The bottom bearers shall extend the full breadth of the compartment and shall be spaced not more than 2.4 metres apart. Arrangements utilizing other materials and deemed by an Administration to be equivalent to the foregoing may be accepted.

(iv) Steel wire rope (19 mm diameter or equivalent), doubled steel strapping (50 mm × 1.3 mm and having a breaking load of at least 5000 kg), or chain of equivalent strength, each of which shall be set tight by means of a 32 mm turnbuckle, may be used for lashings. A winch tightener, used in conjunction with a locking arm, may be substituted for the 32 mm turnbuckle when steel strapping is used, provided suitable wrenches are available for setting up as necessary. When steel strapping is used, not less than three crimp seals shall be used for securing the ends. When wire is used, not less than four clips shall be used for forming eyes in the lashings.

(v) Prior to the completion of loading the lashing shall be positively attached to the framing at a point approximately 450 mm below the anticipated final grain surface by means of either a 25 mm shackle or beam clamp of equivalent strength.

(vi) The lashings shall be spaced not more than 2.4 metres apart and each shall be supported by a bearer nailed over the top of the fore and aft floor. This bearer shall consist of not less than 25 mm by 150 mm lumber or its equivalent and shall extend the full breadth of the compartment.

(vii) During the voyage the strapping shall be regularly inspected and set up where necessary.

(B) OVERSTOWING ARRANGEMENTS

Where bagged grain or other suitable cargo is utilized for the purpose of securing "partly filled compartments", the free grain surface shall be covered with a separation cloth or equivalent or by a suitable platform. Such platforms shall consist of bearers spaced not more than 1.2 metres apart and 25 mm boards laid thereon spaced not more than 100 mm apart. Platforms may be constructed of other materials provided they are deemed by an Administration to be equivalent.

(C) BAGGED GRAIN

Bagged grain shall be carried in sound bags which shall be well filled and securely closed.

CHAPTER VII

CARRIAGE OF DANGEROUS GOODS

Regulation 1

Application

(a) Unless expressly provided otherwise, this Chapter applies to the carriage of dangerous goods in all ships to which the present Regulations apply.

(b) The provisions of this Chapter do not apply to ship's stores and equipment or to particular cargoes carried in ships specially built or converted as a whole for that purpose, such as tankers.

(c) The carriage of dangerous goods is prohibited except in accordance with the provisions of this Chapter.

(d) To supplement the provisions of this Chapter each Contracting Government shall issue, or cause to be issued, detailed instructions on the safe packing and stowage of specific dangerous goods or categories of dangerous goods which shall include any precautions necessary in their relation to other cargo.

Regulation 2

Classification

Dangerous goods shall be divided into the following classes:

Class 1 – Explosives.

Class 2 – Gases: compressed, liquefied or dissolved under pressure.

Class 3 – Inflammable* liquids.

Class 4.1 – Inflammable solids.

Class 4.2 – Inflammable solids, or substances, liable to spontaneous combustion.

Class 4.3 – Inflammable solids, or substances, which in contact with water emit inflammable gases.

Class 5.1 – Oxidizing substances.

Class 5.2 – Organic peroxides.

Class 6.1 – Poisonous (toxic) substances.

Class 6.2 – Infectious substances.

Class 7 – Radioactive substances.

Class 8 – Corrosives.

Class 9 – Miscellaneous dangerous substances, that is any other substance which experience has shown, or may show, to be of such a dangerous character that the provisions of this Chapter should apply to it.

Regulation 3

Packing

(a) The packing of dangerous goods shall be:

(i) well made and in good condition;

(ii) of such a character that any interior surface with which the contents may come in contact is not dangerously affected by the substance being conveyed; and

(iii) capable of withstanding the ordinary risks of handling and carriage by sea.

(b) Where the use of absorbent or cushioning material is customary in the packing of liquids in receptacles that material shall be:

(i) capable of minimizing the dangers to which the liquid may give rise;

(ii) so disposed as to prevent movement and ensure that the receptacle remains surrounded; and

(iii) where reasonably possible of sufficient quantity to absorb the liquid in the event of breakage of the receptacle.

(c) Receptacles containing dangerous liquids shall have an ullage at the filling temperature sufficient to allow for the highest temperature during the course of normal carriage.

(d) Cylinders or receptacles for gases under pressure shall be adequately constructed, tested, maintained and correctly filled.

(e) Empty receptacles which have been used previously for the carriage of dangerous goods shall themselves be treated as dangerous goods unless they have been cleaned and dried or, when the nature of the former contents permit with safety, have been closed securely.

Regulation 4

Marking and Labelling

Each receptacle containing dangerous goods shall be marked with the correct technical name (trade names shall not be used) and identified with a distinctive label or stencil of the label so as to make clear the dangerous character. Each receptacle shall be so labelled except receptacles containing chemicals packed in limited quantities and large shipments which can be stowed, handled and identified as a unit.

Regulation 5

Documents

(a) In all documents relating to the carriage of dangerous goods by sea where the goods are named the correct technical name of the goods shall be used (trade names shall not be used) and the correct description given in accordance with the classification set out in Regulation 2 of this Chapter.

(b) The shipping documents prepared by the shipper shall include, or be accompanied by, a certificate or declaration that the shipment offered for carriage is properly packed, marked and labelled and in proper condition for carriage.

(c) Each ship carrying dangerous goods shall have a special list or manifest setting forth, in accordance with Regulation 2 of this Chapter, the dangerous goods on board and the location thereof. A detailed stowage plan which identifies by class and sets out the location of all dangerous goods on board may be used in place of such special list or manifest.

* "Inflammable" has the same meaning as "flammable".

Regulation 6

Stowage Requirements

(a) Dangerous goods shall be stowed safely and appropriately according to the nature of the goods. Incompatible goods shall be segregated from one another.

(b) Explosives (except ammunition) which present a serious risk shall be stowed in a magazine which shall be kept securely closed while at sea. Such explosives shall be segregated from detonators. Electrical apparatus and cables in any compartment in which explosives are carried shall be designed and used so as to minimize the risk of fire or explosion.

(c) Goods which give off dangerous vapours shall be stowed in a well ventilated space or on deck.

(d) In ships carrying inflammable liquids or gases special precautions shall be taken where necessary against fire or explosion.

(e) Substances which are liable to spontaneous heating or combustion shall not be carried unless adequate precautions have been taken to prevent the outbreak of fire.

Regulation 7

Explosives in Passenger Ships

(a) In passenger ships the following explosives only may be carried:

(i) safety cartridges and safety fuses;

(ii) small quantities of explosives not exceeding 9 kilogrammes (20 pounds) total net weight;

(iii) distress signals for use in ships or aircraft, if the total weight of such signals does not exceed 1,016 kilogrammes (2,240 pounds);

(iv) except in ships carrying unberthed passengers, fireworks which are unlikely to explode violently.

(b) Notwithstanding the provisions of paragraph (a) of this Regulation additional quantities or types of explosives may be carried in passenger ships in which there are special safety measures approved by the Administration.

CHAPTER VIII

NUCLEAR SHIPS

Regulation 1

Application

This Chapter applies to all nuclear ships except ships of war.

Regulation 2

Application of other Chapters

The Regulations contained in the other Chapters of the present Convention apply to nuclear ships except as modified by this Chapter.

Regulation 3

Exemptions

A nuclear ship shall not, in any circumstances, be exempted from compliance with any Regulations of this Convention.

Regulation 4

Approval of Reactor Installation

The design, construction and standards of inspection and assembly of the reactor installation shall be subject to the approval and satisfaction of the Administration and shall take account of the limitations which will be imposed on surveys by the presence of radiation.

Regulation 5

Suitability of Reactor Installation for Service on Board Ship

The reactor installation shall be designed having regard to the special conditions of service on board ship both in normal and exceptional circumstances of navigation.

Regulation 6

Radiation Safety

The Administration shall take measures to ensure that there are no unreasonable radiation or other nuclear hazards, at sea or in port, to the crew, passengers or public, or to the waterways or food or water resources.

Regulation 7

Safety Assessment

(a) A Safety Assessment shall be prepared to permit evaluation of the nuclear power plant and safety of the ship to ensure that there are no unreasonable radiation or other hazards, at sea or in port, to the crew, passengers or public, or to the waterways or food or water resources. The Administration, when satisfied, shall approve such Safety Assessment which shall always be kept up-to-date.

(b) The Safety Assessment shall be made available sufficiently in advance to the Contracting Governments of the countries which a nuclear ship intends to visit so that they may evaluate the safety of the ship.

Regulation 8

Operating Manual

A fully detailed Operating Manual shall be prepared for the information and guidance of the operating personnel in their duties on all matters relating to the operation of the nuclear power plant and having an important bearing on safety. The Administration, when satisfied, shall approve such Operating Manual and a copy shall be kept on board the ship. The Operating Manual shall always be kept up-to-date.

Regulation 9

Surveys

Survey of nuclear ships shall include the applicable requirements of Regulation 7 of Chapter I, or of Regulations 8, 9 and 10 of Chapter I, except in so far as surveys are limited by the presence of radiation. In addition, the surveys shall include any special requirements of the Safety Assessment. They shall in all cases, notwithstanding the provisions of Regulations 8 and 10 of Chapter I, be carried out not less frequently than once a year.

Regulation 10

Certificates

(a) The provisions of paragraph (a) of Regulation 12 of Chapter I and of Regulation 14 of Chapter I shall not apply to nuclear ships.

(b) A Certificate, called a Nuclear Passenger Ship Safety Certificate shall be issued after inspection and survey to a nuclear passenger ship which complies with the requirements of Chapters II-1, II-2, III, IV and VIII, and any other relevant requirements of the present Regulations.

(c) A Certificate, called a Nuclear Cargo Ship Safety Certificate shall be issued after inspection and survey to a nuclear cargo ship which satisfies the requirements for cargo ships on survey set out in Regulation 10 of Chapter I, and complies with the requirements of Chapters II-1, II-2, III, IV and VIII and any other relevant requirements of the present Regulations.

(d) Nuclear Passenger Ship Safety Certificates and Nuclear Cargo Ship Safety Certificates shall state: "That the ship, being a nuclear ship, complied with all requirements of Chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship".

(e) Nuclear Passenger Ship Safety Certificates and Nuclear Cargo Ship Safety Certificates shall be valid for a period of not more than 12 months.

(f) Nuclear Passenger Ship Safety Certificates and Nuclear Cargo Ship Safety Certificates shall be issued either by the Administration or by any person or organization duly authorized by it. In every case, that Administration assumes full responsibility for the certificate.

Regulation 11

Special Control

In addition to the control established by Regulation 19 of Chapter I, nuclear ships shall be subject to special control before entering the ports and in the ports of Contracting Governments, directed towards verifying that there is on board a valid Nuclear Ship Safety Certificate and that there are no unreasonable radiation or other hazards at sea or in port, to the crew, passengers or public, or to the waterways or food or water resources.

Regulation 12

Casualties

In the event of any accident likely to lead to an environmental hazard the master of a nuclear ship shall immediately inform the Administration. The master shall also immediately inform the competent Governmental authority of the country in whose waters the ship may be, or whose waters the ship approaches in a damaged condition.

APPENDIX

Form of Safety Certificate for Passenger Ships

PASSENGER SHIP SAFETY CERTIFICATE

(*Official Seal*) (*Country*)

for $\frac{\text{an}}{\text{a short}}$ international voyage.

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Particulars of voyages, if any, sanctioned under Regulation 27(c) (vii) of Chapter III	Date on which keel was laid (see NOTE below)

$\frac{\text{The}}{\text{I, the undersigned}}$ (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship has been duly surveyed in accordance with the provisions of the Convention referred to above.

II. That the survey showed that the ship complied with the requirements of the Regulations annexed to the said Convention as regards:

(1) the structure, main and auxiliary boilers and other pressure vessels and machinery;

(2) the watertight subdivision arrangements and details;

(3) the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side at amidships (Regulation 11 of Chapter II-1)	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
C.1	.....	.....
C.2	.....	.....
C.3	.....	.....

III. That the life-saving appliances provide for a total number of ..... persons and no more, viz.:

..... lifeboats (including ..... motor lifeboats) capable of accommodating ..... persons, and ..... motor lifeboats fitted with radiotelegraph installation and searchlight (included in the total lifeboats shown above) and ..... motor lifeboats fitted with searchlight only (also included in the total lifeboats shown above), requiring ..... certificated lifeboatmen;

..... liferafts, for which approved launching devices are required, capable of accommodating ..... persons; and

..... liferafts, for which approved launching devices are not required, capable of accommodating ..... persons;

..... buoyant apparatus capable of supporting ..... persons;

..... lifebuoys;

..... life-jackets.

IV. That the lifeboats and liferafts were equipped in accordance with the provisions of the Regulations.

V. That the ship was provided with a line-throwing appliance and portable radio apparatus for survival craft in accordance with the provisions of the Regulations.

VI. That the ship complied with the requirements of the Regulations as regards radiotelegraph installations, viz.:

	Requirements of Regulations	Actual provision
Hours of listening by operator	.....	.....
Number of operators	.....	.....
Whether auto alarm fitted	.....	.....
Whether main installation fitted	.....	.....
Whether reserve installation fitted	.....	.....
Whether main and reserve transmitters electrically separated or combined	.....	.....
Whether direction-finder fitted	.....	.....
Whether radio equipment for homing on the radiotelephone distress frequency fitted	.....	.....
Whether radar fitted	.....	.....
Number of passengers for which certificated	.....	.....

VII. That the functioning of the radiotelegraph installations for motor lifeboats and/or the portable radio apparatus for survival craft, if provided, complied with the provisions of the Regulations.

VIII. That the ship complied with the requirements of the Regulations as regards fire-detecting and fire-extinguishing appliances, radar, echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals, and distress signals in accordance with the provisions of the Regulations and also the International Regulations for Preventing Collisions at Sea in force.

IX. That in all other respects the ship complied with the requirements of the Regulations, so far as these requirements apply thereto.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue the certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1952, 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

In the case of a ship which is converted as provided in Regulation I(b)(i) of Chapter II-1 or Regulations 1(a)(i) of Chapter II-2 of the Convention, the date on which the work of conversion was begun should be given.

Form of Safety Construction Certificate for Cargo Ships

CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Date on which keel was laid (see NOTE below)

$\frac{\text{The}}{\text{I, the undersigned}}$ (*Name*) Government certifies / (*Name*) certify

That the above-mentioned ship has been duly surveyed in accordance with the provisions of Regulation 10 of Chapter I of the Convention referred to above, and that the survey showed that the condition of the hull, machinery and equipment, as defined in the above Regulation, was in all respects satisfactory and that the ship complied with the applicable requirements of Chapter II-1 and Chapter II-2 (other than that relating to fire-extinguishing appliances and fire control plans).

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue the certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1952, 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

Form of Safety Equipment Certificate for Cargo Ships

CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Date on which keel was laid (see NOTE below)

$\frac{\text{The}}{\text{I, the undersigned}}$ (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship has been duly inspected in accordance with the provisions of the Convention referred to above.

II. That the inspection showed that the life-saving appliances provided for a total number of ..... persons and no more viz.:

..... lifeboats on port side capable of accommodating ..... persons;

..... lifeboats on starboard side capable of accommodating ..... persons;

..... motor lifeboats (included in the total lifeboats shown above), including ..... motor lifeboats fitted with radiotelegraph installation and searchlight, and ..... motor lifeboats fitted with searchlight only;

..... liferafts, for which approved launching devices are required, capable of accommodating ..... persons; and

..... liferafts, for which approved launching devices are not required, capable of accommodating ..... persons;

..... lifebuoys;

..... life-jackets.

III. That the lifeboats and liferafts were equipped in accordance with the provisions of the Regulations annexed to the Convention.

IV. That the ship was provided with a line-throwing apparatus and portable radio apparatus for survival craft in accordance with the provisions of the Regulations.

V. That the inspection showed that the ship complied with the requirements of the said Convention as regards fire-extinguishing appliances and fire control plans, echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals, in accordance with the provisions of the Regulations and the International Regulations for Preventing Collisions at Sea in force.

VI. That in all other respects the ship complied with the requirements of the Regulations so far as these requirements apply thereto.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue the certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1952, 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

Form of Safety Radiotelegraphy Certificate for Cargo Ships

CARGO SHIP SAFETY RADIOTELEGRAPHY CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Date on which keel was laid (see NOTE below)

I, the undersigned / The (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship complies with the provisions of the Regulations annexed to the Convention referred to above as regards radiotelegraphy and radar:

	Requirements of Regulations	Actual provision
Hours of listening by operator	.....	.....
Number of operators	.....	.....
Whether auto alarm fitted	.....	.....
Whether main installation fitted	.....	.....
Whether reserve installation fitted	.....	.....
Whether main and reserve transmitters electrically separated or combined	.....	.....
Whether direction-finder fitted	.....	.....
Whether radio equipment for homing on the radiotelephone distress frequency fitted	.....	.....
Whether radar fitted	.....	.....

II. That the functioning of the radiotelegraphy installation for motor lifeboats and/or the portable radio apparatus for survival craft, if provided, complies with the provisions of the said Regulations.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue this certificate:

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1952, 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

Form of Safety Radiotelephony Certificate for Cargo Ships

CARGO SHIP SAFETY RADIOTELEPHONY CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Date on which keel was laid (see NOTE below)

I, the undersigned / The (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship complies with the provisions of the Regulations annexed to the Convention referred to above as regards Radiotelephony:

	Requirements of Regulations	Actual provision
Hours of listening	.....	.....
Number of operators	.....	.....

II. That the functioning of the portable radio apparatus for survival craft, if provided, complies with the provisions of the said Regulations.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue this certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1952, 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

Form of Exemption Certificate

EXEMPTION CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage

I, the undersigned / The (*Name*) Government certifies / (*Name*) certify

That the above-mentioned ship is, under the authority conferred by Regulation ..... of Chapter ..... of the Regulations annexed to the Convention referred to above, exempted from the requirements of † .... of the Convention on the voyages..... to.....

* Insert here the conditions, if any, on which the exemption certificate is granted. *

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue this certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

† Insert here references to Chapters and Regulations, specifying particular paragraphs.

Form of Safety Certificate for Nuclear Passenger Ships

NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	Particulars of voyages, if any, sanctioned under Regulation 27(c) (vii) of Chapter III	Date on which keel was laid (see NOTE below)

The / I, the undersigned — (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship has been duly surveyed in accordance with the provisions of the Convention referred to above.

II. That the ship, being a nuclear ship, complied with all requirements of Chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship.

III. That the survey showed that the ship complied with the requirements of the Regulations annexed to the said Convention as regards:

(1) the structure, main and auxiliary boilers and other pressure vessels and machinery;

(2) the watertight subdivision arrangements and details;

(3) the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side at amidships (Regulation 11 of Chapter II-1)	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
C.1	.....	.....
C.2	.....	.....
C.3	.....	.....

IV. That the life-saving appliances provided for a total number of ..... persons and no more, viz.:

..... lifeboats (including ..... motor lifeboats) capable of accommodating ..... persons, and ..... motor lifeboats fitted with radiotelegraph installation and searchlight (included in the total lifeboats shown above) and ..... motor lifeboats fitted with searchlight only (also included in the total lifeboats shown above), requiring ..... certificated lifeboatmen;

..... liferafts, for which approved launching devices are required, capable of accommodating ..... persons; and

..... liferafts, for which approved launching devices are not required, capable of accommodating ..... persons;

..... buoyant apparatus capable of supporting ..... persons;

..... lifebuoys;

..... life-jackets.

V. That the lifeboats and liferafts were equipped in accordance with the provisions of the Regulations.

VI. That the ship was provided with a line-throwing appliance and portable radio apparatus for survival craft, in accordance with the provisions of the Regulations.

VII. That the ship complied with the requirements of the Regulations as regards radiotelegraph installations, viz.:

	Requirements of Regulations	Actual provision
Hours of listening by operator	.....	.....
Number of operators	.....	.....
Whether auto alarm fitted	.....	.....
Whether main installation fitted	.....	.....
Whether reserve installation fitted	.....	.....
Whether main and reserve transmitters electrically separated or combined	.....	.....
Whether direction-finder fitted	.....	.....
Whether radio equipment for homing on the radiotelephone distress frequency fitted	.....	.....
Whether radar fitted	.....	.....
Number of passengers for which certificated	.....	.....

VIII. That the functioning of the radiotelegraph installations for motor lifeboats and/or the portable radio apparatus for survival craft, if provided, complied with the provisions of the Regulations.

IX. That the ship complied with the requirements of the Regulations as regards fire-detecting and fire-extinguishing appliances, radar echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals in accordance with the provisions of the Regulations and also the International Regulations for Preventing Collisions at Sea in force.

X. That in all other respects the ship complied with the requirements of the Regulations, so far as these requirements apply thereto.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue the certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

In the case of a ship which is converted as provided in Regulation 1(b)(i) of Chapter II-1 or Regulation 1(a)(i) of Chapter II-2, the date on which the work of conversion was begun should be given.

Form of Safety Certificate for Nuclear Cargo Ships

NUCLEAR CARGO SHIP SAFETY CERTIFICATE

(*Official Seal*) (*Country*)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of Ship	*Distinctive Number or Letters*	*Port of Registry*	*Gross Tonnage*	*Date on which keel was laid (see NOTE below)*

The / I, the undersigned — (*Name*) Government certifies / (*Name*) certify

I. That the above-mentioned ship has been duly surveyed in accordance with the provisions of the Convention referred to above.

II. That the ship, being a nuclear ship, complied with all requirements of Chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship.

III. That the survey showed that the ship satisfied the requirements set out in Regulation 10 of Chapter I of the Convention as to hull, machinery and equipment, and complied with the relevant requirements of Chapter II-1 and Chapter II-2.

IV. That the life-saving appliances provide for a total number of ..... persons and no more, viz.:

..... lifeboats on port side capable of accommodating ..... persons;

..... lifeboats on starboard side capable of accommodating ..... persons;

..... motor lifeboats (included in the total lifeboats shown above) including ..... motor lifeboats fitted with radiotelegraph installation and searchlight, and ..... motor lifeboats fitted with searchlight only;

..... liferafts, for which approved launching devices are required, capable of accommodating ..... persons; and

..... liferafts for which approved launching devices are not required, capable of accommodating ..... persons;

..... lifebuoys;

..... life-jackets.

V. That the lifeboats and liferafts were equipped in accordance with the provisions of the Regulations annexed to the Convention.

VI. That the ship was provided with a line-throwing apparatus and portable radio apparatus for survival craft in accordance with the provisions of the Regulations.

VII. That the ship complied with the requirements of the Regulations as regards radiotelegraph installations, viz.:

	Requirements of Regulations	Actual provision
Hours of listening by operator	.....	.....
Number of operators	.....	.....
Whether auto alarm fitted	.....	.....
Whether main installation fitted	.....	.....
Whether reserve installation fitted	.....	.....
Whether main and reserve transmitters electrically separated or combined	.....	.....
Whether direction-finder fitted	.....	.....
Whether radio equipment for homing on the radiotelephone distress frequency fitted	.....	.....
Whether radar fitted	.....	.....

VIII. That the functioning of the radiotelegraph installations for motor lifeboats, and/or the portable radio apparatus for survival craft, if provided, complied with the provisions of the Regulations.

IX. That the inspection showed that the ship complied with the requirements of the said Convention as regards fire-extinguishing appliances, radar, echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals in accordance with the provisions of the Regulations and the International Regulations for Preventing Collisions at Sea in force.

X. That in all other respects the ship complied with the requirements of the Regulations so far as these requirements apply thereto.

This certificate is issued under the authority of the Government. It will remain in force until

Issued at the day of 19

Here follows the seal or signature of the authority entitled to issue the certificate.

(*Seal*)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(*Signature*)

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for the year 1965 and the year of the coming into force of the International Convention for the Safety of Life at Sea, 1974, in which cases the actual date should be given.

ATTACHMENT 2

RESOLUTIONS ADOPTED BY THE INTERNATIONAL CONFERENCE ON SAFETY OF LIFE AT SEA, 1974

Resolution 1

Comprehensive Revision of the International Convention for the Safety of Life at Sea, 1974

THE CONFERENCE,

HAVING CONCLUDED the International Convention for the Safety of Life at Sea, 1974, to replace the International Convention for the Safety of Life at Sea, 1960,

NOTING that the substantive changes to the technical provisions of the 1960 Convention now incorporated in the 1974 Convention have been limited to:

(a) amendments to the 1960 Convention which have been adopted by the Assembly of the Inter-Governmental Maritime Consultative Organization; and

(b) new Regulations recommended by the Assembly for inclusion in the 1974 Convention,

RECOGNIZING the need for a comprehensive revision of the technical provisions of the 1974 Convention to reflect technological developments,

RECOGNIZING also that the 1974 Convention provides in Article VIII improved amendment procedures to enable such revised technical provisions to be adopted and brought into force in an expeditious manner,

TAKING NOTE of the work being carried out or envisaged by the Maritime Safety Committee of the Organization with a view to extensive revision of the Safety Convention,

INVITES the Organization to pursue its work in this field as a matter of high priority so that the technical provisions of the 1974 Convention may be revised as necessary, with particular reference to the items covered by the recommendations in the Appendix hereto.

APPENDIX

Recommendations for Further Improvement of International Regulations for the Safety of Life at Sea

1. **Intact Stability of Ships**

THE CONFERENCE,

NOTING:

(a) that the "Recommendation on Intact Stability of Passenger and Cargo Ships under 100 metres in Length" adopted by the Assembly of the Organization by Resolution A.167(ES.IV), as amended by Resolution A.206(VII), may not always be appropriate especially in relation to new types of ships of novel design and construction, and

(b) that in some cases special provisions may be required in respect of the intact stability of ships of 100 metres in length or more,

RECOMMENDS that steps be taken to formulate improved international standards on intact stability of ships taking into account, *inter alia*, external forces affecting ships in a seaway which may lead to capsizing or to unacceptable angles of heel.

2. **Subdivision of Ships other than Passenger Ships**

THE CONFERENCE,

NOTING diverse practices in various countries and the provisions of the International Convention on Load Lines, 1966, and the International Convention for the Prevention of Pollution from Ships, 1973, so far as they relate to subdivision of ships other than passenger ships,

BEING OF THE OPINION that the same basic approach to safety of life at sea should be adopted, so far as practicable, in relation to all persons aboard ships, whether passengers or crew,

RECOMMENDS that efforts be made to formulate international requirements on subdivision of ships other than passenger ships, having regard *inter alia* to the compatibility of such requirements with practical service conditions.

3. **Fire Safety Requirements for Ships**

THE CONFERENCE,

NOTING:

(a) that fire safety requirements for cargo ships, except tankers, and for passenger ships carrying not more than 36 passengers are still in many respects unsatisfactory and should be improved, and

(b) that fire safety requirements for novel craft and special purpose ships are still under consideration,

RECOMMENDS that further steps be taken to introduce comprehensive fire safety requirements for those types of ships.

4. **Life-Saving Appliances**

THE CONFERENCE,

NOTING that the Maritime Safety Committee of the Organization has decided that a total revision of Chapter III of the Convention should be carried out as a matter of priority and that the preparatory work for such a revision has commenced,

CONCURRING with the decisions taken by the Maritime Safety Committee in this matter,

RECOMMENDS that this work should be completed as soon as possible.

5. **Main Propulsion Machinery**

THE CONFERENCE,

NOTING increases in ship size and power, and in the complexity and power rating of machinery,

RECOGNIZING the importance of reliable main propulsion machinery so as to ensure safe navigation, in particular while manoeuvring,

RECOMMENDS continued work on the development of regulations in this respect for the construction, control and maintenance of main propulsion machinery.

6. **Periodically Unattended Machinery Spaces**

THE CONFERENCE,

NOTING the increasing use of automation in ships,

CONSIDERING the dependence of ship safety on the efficiency and reliability of the equipment involved, as well as the reduction in the number of crew resulting from automation in ships,

RECOMMENDS that safety requirements be developed covering all aspects of automated and remotely controlled installations, and that special attention be given to the determination of the minimum number of crew needed to deal with emergency situations.

7. **Nuclear Ships**

THE CONFERENCE,

NOTING progress in nuclear engineering, experience gained by a number of countries in operating ships with nuclear propulsion units and the expected increase in the use of nuclear propulsion in ships,

RECOMMENDS the revision of the relevant provisions of the Convention in respect of nuclear ships.

8. **Safety Measures for Certain Types of Ships**

THE CONFERENCE,

TAKING INTO ACCOUNT the development of certain types of ships to which the provisions of the Convention for passenger or cargo ships are not applicable or for which those provisions are not adequate or suitable,

RECOGNIZING the need for future modifications to the Convention in this respect,

RECOMMENDS that the development and refinement of specific safety requirements for special purpose ships, novel craft, ships carrying chemicals and liquefied gases in bulk and other new types of ships be continued.

9. **Unification of Definitions and Provisions in Different Conventions and Codes**

THE CONFERENCE,

NOTING that the International Convention for the Safety of Life at Sea, 1974, and other Conventions and Codes prepared under the auspices of the Organization contain, in relation to the same subject matter, different definitions and provisions,

RECOMMENDS that continued efforts be made to achieve unification of definitions and provisions used in the same context in different documents.

10. **Amalgamation of Conventions**

THE CONFERENCE,

NOTING the common aims of the International Convention for the Safety of Life at Sea, 1974, and the International Convention on Load Lines, 1966, in respect of safety at sea,

RECOMMENDS that efforts be made to amalgamate these Conventions.

11. **Carriage of Dangerous Goods**

THE CONFERENCE,

NOTING the rapid increase in the carriage of dangerous goods by different modes of transport,

REALIZING the need to ensure the safe and economical transport of dangerous goods by unification of national, regional and international rules governing the carriage, stowage and handling of dangerous goods by all modes of transport,

RECOMMENDS that the Organization should continue its work in co-operation with other international organizations concerned and in particular the United Nations Committee of Experts on the Transport of Dangerous Goods with a view to the adoption of a self-contained International Convention on the Carriage of Dangerous Goods by all Modes of Transport at the earliest practicable opportunity.

Resolution 2

Rapid Amendment Procedure and Entry into Force of the International Convention for the Safety of Life at Sea, 1974

THE CONFERENCE,

BEING AWARE of its principal objectives as set forth in Resolution A.304(VIII) of the Assembly of the Inter-Governmental Maritime Consultative Organization,

TAKING NOTE of paragraph (a) of Article I of the International Convention for the Safety of Life at Sea, 1974, by which the Contracting Governments undertake to give effect to the provisions of the Convention and the Annex thereto,

NOTES with particular interest Article VIII of the Convention which provides for a simplified procedure for bringing into force future amendments to the technical provisions of the Annex to the Convention,

REALIZES that the effectiveness of that amendment procedure largely depends on there being national procedures for rapid acceptance of amendments,

URGES States to become parties to the Convention as soon as possible and to give effect to later amendments thereto with the minimum of delay:

Resolution 3

Voting Rights in the Maritime Safety Committee for the Adoption of Amendments

THE CONFERENCE,

RECALLING that one of the main objectives of the Conference was to incorporate improved amendment procedures in a new Convention to replace the International Convention for the Safety of Life at Sea, 1960,

HAVING CONCLUDED the International Convention for the Safety of Life at Sea, 1974, to replace the 1960 Convention,

NOTING that the provisions of Article VIII of the 1974 Convention enable amendments to the Convention to be adopted by a two-thirds majority of Contracting Governments present and voting in the Maritime Safety Committee of the Inter-Governmental Maritime Consultative Organization, whether or not they are Members of the Organization,

NOTING that the Assembly of the Organization at its fifth extraordinary session decided by Resolution A.317(ES.V) that the Organization should consider amending the Convention of the Organization in order, *inter alia*, to provide that the Maritime Safety Committee of the Organization could follow voting procedures as provided for in other Conventions when exercising functions conferred upon it by such Conventions,

RECOGNIZING that the interpretation of the Convention of the Organization is the prerogative of the Assembly of the Organization in accordance with Article 55 of that Convention,

RECOMMENDS that the Assembly so exercise its prerogative when interpreting the Convention of the Organization as to enable the Maritime Safety Committee to follow voting procedures for adopting amendments to the 1974 Convention as provided for in Article VIII thereof.

Resolution 4

Recommendations of the 1960 Safety Conference and Resolutions of the Assembly of the Organization Related to Regulations of the International Convention for the Safety of Life at Sea, 1974

THE CONFERENCE,

HAVING REVIEWED briefly the Recommendations of the International Conference on Safety of Life at Sea, 1960,

INVITES the attention of the Contracting Governments to those Recommendations which are still applicable,

RECOMMENDS that consideration, within the Organization or in co-operation with other organizations as appropriate, should continue to be given to those Recommendations which so far have only been partially implemented, and that, in implementing those Recommendations, account should be taken of developments which have taken place since the 1960 Conference,

FURTHER RECOMMENDS that Contracting Governments, when implementing the Convention for the Safety of Life at Sea, 1974, should take account of all relevant Resolutions adopted by the Assembly of the Organization and in particular those which explain, supplement or enlarge upon the technical provisions of the 1960 Convention which are still applicable, such as Resolutions A.123(V), A.163(ES.IV), A.166(ES.IV), A.167(ES.IV), A.206(VII), A.210(VII), A.211(VII), A.214(VII), A.215(VII), A.266(VIII) and A.270(VIII) in respect of Chapters II-1 and II-2,

URGES Contracting Governments concerned to accept, as an equivalent to Part B of Chapter II-1 of the 1974 Convention, the "Regulations on Subdivision and Stability of Passenger Ships as an Equivalent to Part B of Chapter II of the International Convention for the Safety of Life at Sea, 1960" adopted by the Assembly of the Organization by Resolution A.265(VIII), when applied in their entirety.

Resolution 5

Recommendations on the Use of a System of Units in the International Convention for the Safety of Life at Sea, 1974

THE CONFERENCE,

AGREEING that in the future only one system of units should be used in the Convention for the Safety of Life at Sea,

RECOGNIZING that at the present point in time it is impracticable to eliminate imperial units from the International Convention for the Safety of Life at Sea, 1974,

RECOMMENDS that the Organization in its future work should bear in mind that it is desirable to express values in the metric system of units only, and to express unit values in round figures where this can be done without prejudice to existing standards or commercially accepted practices,

INVITES the Organization to study also the "Système International d'Unités" with a view to its use in the International Convention for the Safety of Life at Sea, 1974, as and when appropriate.

ATTACHMENT 3

RECOMMENDATIONS APPLICABLE TO NUCLEAR SHIPS

NOTE: Throughout the following Recommendations, "the present Convention" means the International Convention for the Safety of Life at Sea, 1974. Attention is drawn to the Regulations concerning nuclear ships in Chapter VIII of the present Convention.

1. **General Safety of Nuclear Ships**

(a) Since a casualty involving the non-nuclear features of a nuclear ship, such as a steering gear failure, fire or collision, and so forth, could endanger the nuclear power plant, it is desirable that these features should provide for the maximum practicable safety. A nuclear ship should comply with the relevant requirements of the present Convention, the Administration and a recognized Classification Society. Components and systems such as watertight subdivision, fire protection, bilge pumping arrangements, fire-extinguishing arrangements, electrical installations, steering gear, astern power, stability and navigational aids should receive special consideration to ensure that adequate protection is given to the ship to minimize the hazards peculiar to the nuclear power plant. Consideration should be given to the results of past marine casualties involving similar size ships with the intent of preventing the dangerous uncontrolled release of radioactive or toxic materials in the event of similar casualties.

(b) Special attention should be given to general structural strength of nuclear ships and to the local strength of structures in and around the reactor compartment.

(c) A nuclear ship should remain afloat and have sufficient stability when not less than any two adjacent main watertight compartments are flooded, in all anticipated conditions of loading.

(d) Fire protection systems and the watertight integrity should be at least equivalent to the highest standards of the present Convention.

2. **General Requirements of Nuclear Power Plant**

(a) It should be demonstrated by calculation and experiment that the properties of the plant and the nature of the enclosure provide the maximum practicable protection against accidents or failures resulting in unreasonable radiation at sea or in port, to the crew, passengers or public, or to the waterways, or food or water resources.

(b) The reactor installation should be designed to prevent an uncontrolled chain reaction under all foreseeable operational and accident conditions including sinking of the ship.

(c) A nuclear ship equipped with a single-reactor nuclear power plant, the dependability of which has not been proven, should be provided with an emergency propulsion plant capable of propelling the ship at a navigable speed. Such emergency propulsion plant should be in a state of readiness whenever the ship is navigating in territorial waters.

(d) The nuclear power plant should be such as to ensure manœuvrability equivalent to that of a similar conventional ship.

(e) Requirements for standby emergency components for the conventional portions of the nuclear power plant should be in accordance with those for a similar conventional ship. Standby and emergency nuclear components should be considered and developed in relation to the type of nuclear power plant used.

(f) Where standby systems are essential to the safe operation of the reactor installation, they should be so separated from the main systems as to give maximum protection in the event of an accident.

(g) An emergency source of power should be provided which is capable of furnishing power to the components necessary for safely shutting down the reactor installation and retaining it in a safe condition.

(h) The reactor compartment should contain no inflammable* materials other than those necessary for use in the reactor installation.

(i) Reactor materials which are chemically reactive with air or water to a dangerous degree should not be used unless it can be shown that adequate safeguards are incorporated in the particular system.

(j) The machinery and reactor installation should be designed to operate satisfactorily under seagoing conditions having regard to the ship's attitude, accelerations and vibrations.

(k) Reactor cooling systems should provide for the safe removal of decay heat from the reactor and should prevent excessive temperature conditions under all foreseeable operational and accident conditions at angles of heel and list within the stability range. Failure of decay heat removal facilities should not result in the release of hazardous amounts of radioactive or toxic materials from the enclosure of the reactor installation.

(l) Adequate reactor controls, protective devices and instrumentation should be provided.

(m) Necessary controls and instrumentation should be arranged to permit control of the reactor installation from outside its enclosure.

3. **Protection and Enclosure of Reactor Installation**

(a) The reactor installation should be so arranged, protected and securely fastened as to minimize the probability of its damage in the event of a ship accident.

(b) The reactor installation should be provided with enclosures, systems, or arrangements which in the event of damage to its components will prevent the release of hazardous amounts of radioactive or toxic materials into service and accommodation spaces and the ship's environment. These outer enclosures, systems, or arrangements should be subjected to suitable tests to demonstrate satisfactory performance under all foreseeable conditions of accident.

(c) The enclosures, systems or arrangements should be located in such a manner as to minimize damage in the event of collision or grounding. In construction, arrangements should be made, if practicable, to facilitate the possible salvage of the reactor or of its essential parts from the vessel in the event of shipwreck, without adversely affecting the safety of the reactor installation under normal conditions.

(d) Facilities should be provided to ensure that fires within and without the reactor installation do not impair the integrity of the enclosures, systems, or arrangements provided, or the arrangements provided for safely shutting down the reactor installation and retaining it in a safe condition.

4. **Shielding and Radiation Safety**

(a) A nuclear power plant should be provided with reliable biological shielding to protect persons on board ship or within the immediate vicinity of the ship against hazardous effect of radiation under normal and accident conditions. Maximum permissible levels of radiation in accommodation and service spaces should be in accordance with international levels when established.

(b) Maintenance and operation instructions in regard to appropriate radiation protection should be worked out for every nuclear ship. Knowledge of these instructions by the nuclear power plant personnel should be periodically checked by the Administration.

(c) Radiation monitoring instruments should be installed at appropriate locations. These should give warning in the event of any radiation exceeding a predetermined safe level.

5. **Radioactive Wastes**

(a) Special arrangements should be provided for the safe temporary storage, where necessary, and for the safe disposal of solid, liquid and gaseous radioactive wastes.

(b) Monitoring devices should be provided for these waste disposal systems. These should give warning and, if necessary, take action in the event of any radiation exceeding a predetermined safe level.

(c) The maximum permissible levels of radiation for waste disposal on the high seas should be in accordance with international levels when established.

6. **Fuelling and Maintenance**

(a) Reactor fuelling should be carried out exclusively at locations suitably equipped for this purpose.

(b) Arrangements should be provided to ensure that de-fuelling, re-fuelling, servicing and maintenance can be carried out without unacceptable exposure of personnel to radiation and without hazardous release of radioactive or toxic materials to the environment.

7. **Manning**

The master, officers and members of the crew of a nuclear ship should possess qualifications and have undergone proper training appropriate to their responsibilities and duties in accordance with arrangements provided by the Administration. Such personnel should also be instructed as to the precautions to be taken in the matter of radiological protection.

8. **Operating Manual**

The Operating Manual should provide detailed operating procedures for the various equipment and systems under normal and accident conditions, as well as provide for the maintenance of adequate records of operation, radiation levels, waste disposal, and tests and inspections pertinent to the safety of the reactor installation.

9. **Safety Assessment**

(a) The Safety Assessment should include sufficiently detailed information to permit qualified personnel to assess the safety of the ship and its power plant, including standards and procedures followed, and to determine whether initial and continued performance will be safe. Typical items which the safety assessment should include are a description of the ship; propulsion and reactor systems; a discussion of the operation under normal sea, port and emergency conditions; a description of reactor control; protection and enclosure; radiation protection; radioactive waste disposal; fuelling; standby and emergency components; test procedures; manning and training requirements; and an evaluation of credible accidents which indicates that the hazards are minimized. The Safety Assessment should indicate that the reactor installation does not constitute an undue hazard, to the crew, passengers or the public, or to the waterways, or food or water resources.

(b) The content of the Safety Assessment should not be considered limited to the information suggested herein, and such additional specific data as necessary should be made available. The complete Safety Assessment should be prepared for the first installation of a reactor type in a ship type. For second and following generation reactor and ship types where performance and safety have been demonstrated, acceptance may be based on an analysis of deviations from the previous design.

10. **Publication of Requirements**

The Contracting Governments should publish any special requirements which they make regarding the approach, entry into, or stay in their ports of a nuclear ship.

11. **Special Control**

After the safety of the nuclear ship and its nuclear power plant has been properly established, the following actions should, in general, be adequate to determine their safe operational conditions:

(a) Examination of the daily log of the behaviour of the nuclear power plant and equipment, covering a reasonable period of between one week to one month including the stay in the last port.

(b) Determination that the nuclear power plant is properly certified and that any periodic checks required by the Operating Manual have been complied with.

(c) Determination that radiation levels in areas within the ship and in the vicinity of the ship which are accessible to shore personnel are not in excess of maximum permissible levels specified by the Operating Manual to be determined by examination of the ship's records or by independent measurement.

(d) Determination of the quantity and activity of radioactive waste stored aboard the ship by examination of the ship's records or by independent measurement, and of the procedures and programme for any disposal.

(e) Determination that the reactor installation protection and enclosure is intact, and that any programme involving a breach of its integrity complies with the requirements of the Operating Manual.

(f) Determination that conventional and emergency arrangements and equipment, the reliability of which is essential when navigating in narrow waters, are in efficient operating condition.

* "Inflammable" has the same meaning as "flammable".

DOCUMENTO 1

CONVENÇÃO INTERNACIONAL PARA A SALVAGUARDA DA VIDA HUMANA NO MAR, 1974

Os Governos Contratantes:

Desejando promover a salvaguarda da vida humana no mar pelo estabelecimento de acordos comuns, princípios e regras uniformes conducentes a esse fim;

Considerando que o melhor meio de atingir este fim é a conclusão de uma Convenção que substitua a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, tendo em conta as alterações ocorridas desde que aquela Convenção foi concluída;

acordam nas seguintes disposições:

ARTIGO I

Obrigações gerais decorrentes da Convenção

a) Os Governos Contratantes comprometem-se a tornar efectivas as disposições da presente Convenção e do seu Anexo, o qual constitui uma parte integrante da presente Convenção. Qualquer referência à presente Convenção constitui uma referência simultânea ao Anexo.

b) Os Governos Contratantes comprometem-se a promulgar todas as leis, decretos, ordens e regulamentos e a tomar todas as medidas que possam vir a ser necessárias para dar à presente Convenção pleno e completo efeito, a fim de garantir que, sob o ponto de vista da salvaguarda da vida humana, um navio está apto para o serviço ao qual é destinado.

ARTIGO II

Aplicação

A presente Convenção aplica-se aos navios autorizados a arvorar a bandeira dos Estados cujos Governos são Governos Contratantes.

ARTIGO III

Leis e regulamentos

Os Governos Contratantes comprometem-se a comunicar e depositar junto do Secretário-Geral da Organização Marítima Consultiva Intergovernamental (a seguir designada por «Organização»):

a) Uma lista dos organismos não governamentais que são autorizados a agir por sua conta na aplicação das medidas respeitantes à salvaguarda da vida humana no mar, a fim de os Governos Contratantes a levarem ao conhecimento dos seus funcionários;

b) O texto das leis, decretos e regulamentos que tiverem sido promulgados sobre as diferentes matérias que estão dentro do âmbito da presente Convenção;

c) Um número suficiente de exemplares dos certificados passados por esse Governo, em conformidade com as disposições da presente Convenção, para serem entregues aos Governos Contratantes, que os levarão ao conhecimento dos seus funcionários.

ARTIGO IV

Casos de força maior

a) Um navio que, no momento de largar para uma viagem, não esteja sujeito às prescrições da presente Convenção não pode ser obrigado a submeter-se a elas por motivo de desvio da sua rota originado por mau tempo ou por qualquer outra causa de força maior.

b) As pessoas que estiverem a bordo de um navio por motivos de força maior ou em consequência de obrigação imposta ao comandante de transportar náufragos, ou quaisquer outras pessoas, não serão tomadas em linha de conta quando se tratar de verificar a aplicação ao navio de qualquer das prescrições da presente Convenção.

ARTIGO V

Transporte de pessoas em caso de emergência

a) Um Governo Contratante pode autorizar que um navio transporte maior número de pessoas do que aquele que seria permitido noutras circunstâncias pela presente Convenção, quando se trate de evacuar pessoas de um território com o fim de as subtrair a uma ameaça à segurança das suas vidas.

b) Uma autorização desta natureza não priva os restantes Governos Contratantes do direito, que lhes pertence, de inspecção a estes navios, nos termos da presente Convenção, quando eles se encontrem em portos desses Governos.

c) O Governo Contratante que concede aquela autorização deve comunicar esse facto ao Secretário-Geral da Organização, juntamente com um relatório sobre as circunstâncias que motivaram a concessão de tal autorização.

ARTIGO VI

Tratados e convenções anteriores

a) A presente Convenção substitui e anula entre os Governos Contratantes a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, assinada em Londres em 17 de Junho de 1960.

b) Todos os outros tratados, convenções ou acordos relacionados com a salvaguarda da vida humana no mar, ou com assuntos que com ela tenham ligação, actualmente em vigor entre Governos que sejam partes na presente Convenção continuam em vigor durante o prazo que lhes é fixado no que diz respeito a:

i) Navios aos quais se não aplica a presente Convenção;

ii) Navios aos quais se aplica a presente Convenção apenas sobre os pontos que não fazem parte das prescrições expressas na presente Convenção.

c) Contudo, na medida em que tais tratados, convenções ou acordos estejam em oposição às prescrições da presente Convenção, estas devem prevalecer.

d) Todas as matérias que não sejam expressamente consideradas na presente Convenção ficam sujeitas à legislação dos Governos Contratantes.

ARTIGO VII

Regras especiais resultantes de acordos

Quando, de acordo com a presente Convenção, tiverem sido estabelecidas regras especiais, por acordo entre todos, ou entre alguns dos Governos Contra-

tantes, essas regras devem ser comunicadas ao Secretário-Geral da Organização, a fim de as levar ao conhecimento de todos os Governos Contratantes.

ARTIGO VIII

Alterações

a) A presente Convenção pode ser alterada por qualquer dos processos previstos nos parágrafos seguintes.

b) Alterações depois de apreciação feita pela Organização:

i) Qualquer alteração proposta por um Governo Contratante deve ser submetida à consideração do Secretário-Geral da Organização, o qual a fará circular por todos os Membros da Organização e todos os Governos Contratantes, pelo menos, seis meses antes da data em que deverá ser estudada;

ii) Qualquer alteração proposta e distribuída como acima indicado deverá ser enviada ao Comité de Segurança Marítima da Organização para que este a examine;

iii) Os Governos dos Estados Contratantes, sejam ou não membros da Organização, têm direito a participar nas deliberações do Comité de Segurança Marítima para exame e adopção de alterações;

iv) As alterações deverão ser adoptadas pela maioria de dois terços dos Governos Contratantes presentes e votantes no Comité de Segurança Marítima alargado de acordo com o estipulado na alínea *iii*) do presente parágrafo, adiante referido como «Comité de Segurança Marítima alargado», na condição de que pelo menos um terço dos Governos Contratantes esteja presente no momento da votação;

v) As alterações adoptadas de acordo com o disposto na alínea *iv*) do presente parágrafo devem ser enviadas pelo Secretário-Geral da Organização a todos os Governos Contratantes para aceitação;

vi) — 1) Qualquer alteração a um artigo da Convenção ou ao capítulo I do Anexo é considerada aceite a partir da data em que a tenham aceite dois terços dos Governos Contratantes;

2) Qualquer alteração ao Anexo, com excepção do capítulo I, é considerada aceite:

aa) No fim de dois anos, a contar da data em que foi comunicada aos Governos Contratantes para aceitação; ou

bb) No fim de um prazo diferente, o qual não deverá ser inferior a um ano, se assim for determinado na altura da sua adopção pela maioria de dois terços dos Governos Contratantes presentes e votantes no Comité de Segurança Marítima alargado.

Contudo, se dentro do período estipulado mais de um terço dos Governos Contratantes, ou os Governos Contratantes cujas frotas mercantes na totalidade representem no mínimo cinquenta por cento da tonelagem bruta da frota mercante mundial, notificarem o Secretário-Geral da Organização que recusam a alteração, esta é considerada não aceite;

vii) — 1) Uma alteração a um artigo da Convenção ou ao capítulo I do Anexo entra em vigor, para os Governos Contratantes que a tenham aceite, seis meses depois da data em que tenha sido considerada aceite, e, em relação a cada Governo Contratante que a tenha aceite depois dessa data, seis meses depois da data da aceitação pelo referido Governo Contratante;

2) Uma alteração ao Anexo, com excepção do capítulo I, entra em vigor em relação a todos os Governos Contratantes, excepto os que tenham objectado à alteração em virtude do previsto na alínea *vi*), 2), do presente parágrafo e que não tenham retirado as suas objecções, seis meses depois da data em que se considere ter sido aceite. Não obstante, antes da data fixada para a entrada em vigor de uma alteração, qualquer Governo Contratante pode notificar o Secretário-Geral da Organização que se exime da obrigação de lhe dar efectividade durante um período não superior a um ano, a partir da data de entrada em vigor da alteração, ou por um período maior que seja fixado no momento da adopção da alteração por uma maioria de dois terços dos Governos Contratantes presentes e votantes no Comité de Segurança Marítima ampliado.

c) Alteração por uma conferência:

i) A pedido formulado por um Governo Contratante e apoiado por um terço, pelo menos, dos Governos Contratantes, a Organização convoca uma conferência dos Governos Contratantes, para apreciar possíveis alterações à presente Convenção;

ii) Qualquer alteração adoptada por esta Conferência por uma maioria de dois terços dos Governos Contratantes presentes e votantes é comunicada pelo Secretário-Geral da Organização a todos os Governos Contratantes para fins de aceitação;

iii) A não ser que a Conferência decida de outro modo, a alteração será considerada como tendo sido aceite e entrará em vigor de acordo com o procedimento especificado respectivamente nas alíneas *vi*) e *vii*) do parágrafo *b*) do presente artigo, contanto que as referências feitas nas referidas alíneas ao Comité de Segurança Marítima alargado sejam tomadas como referências à Conferência.

d) — *i*) Um Governo Contratante que tenha aceite uma alteração ao Anexo quando aquele já tenha entrado em vigor não é obrigado a tornar extensivos os privilégios da presente Convenção aos certificados passados a um navio autorizado a arvorar a bandeira de um Estado cujo Governo, em conformidade com o previsto na alínea *vi*), 2), do parágrafo *b*) do presente artigo, tenha objectado à alteração e não tenha retirado tal objecção, mas só quando tais certificados se relacionem com assuntos cobertos pela alteração em questão;

ii) Um Governo Contratante que tenha aceite uma alteração ao Anexo quando aquela tenha já entrado em vigor deve tornar extensivos os privilégios da presente Convenção aos certificados passados a um navio autorizado a arvorar a bandeira de um Estado cujo Governo, em conformidade com o previsto na alínea *vii*), 2), do parágrafo *b*) do presente artigo, tenha notificado o Secretário-Geral da Organização que se exime da obrigação de dar efectividade à referida alteração.

e) Salvo disposição em contrário, qualquer alteração à presente Convenção efectuada em conformidade com o disposto no presente artigo que tenha relação com a estrutura do navio é aplicada somente a navios cuja quilha tenha sido assente, ou cuja construção se encontre numa fase equivalente, na data de entrada em vigor da alteração ou posteriormente.

f) Qualquer declaração de aceitação ou objecção a uma alteração ou qualquer notificação prevista na alínea *vii*), 2), do parágrafo *b*) do presente artigo deve ser dirigida por escrito ao Secretário-Geral da Organização, que informa todos os Governos Contratantes desta comunicação e da data em que foi recebida.

g) O Secretário-Geral da Organização informa todos os Governos Contratantes de quaisquer alterações que entrem em vigor como previsto no presente artigo, assim como a data de entrada em vigor de cada uma.

ARTIGO IX

Assinatura, ratificação, aceitação, aprovação e adesão

a) A presente Convenção está aberta para assinatura na sede da Organização de 1 de Novembro de 1974 até 1 de Julho de 1975 e em seguida manter-se-á aberta à adesão. Os Estados podem tornar-se partes da presente Convenção por:

i) Assinatura sem reserva quanto à ratificação, aceitação ou aprovação; ou

ii) Assinatura sob reserva de ratificação, aceitação ou aprovação, seguida de ratificação, aceitação ou aprovação; ou

iii) Adesão.

b) A ratificação, aceitação, aprovação ou adesão efectuam-se pelo depósito de um instrumento junto do Secretário-Geral da Organização.

c) O Secretário-Geral da Organização informa os Governos de todos os Estados que assinaram a presente Convenção ou que a ela aderiram da assinatura ou depósito do instrumento de ratificação, aceitação, aprovação ou adesão e a data do seu depósito.

ARTIGO X

Entrada em vigor

a) A presente Convenção entra em vigor doze meses depois da data em que se tenham tornado partes desta Convenção, de acordo com o artigo IX, pelo menos, vinte e cinco Estados cujas frotas mercantes representem, no total, pelo menos, 50 % da tonelagem de arqueação bruta da frota mercante mundial.

b) Qualquer instrumento de ratificação, aceitação, aprovação ou adesão depositado depois da data da entrada em vigor da presente Convenção produz efeito três meses depois da data do depósito.

c) Qualquer instrumento de ratificação, aceitação, aprovação ou adesão depositado depois da data em que uma alteração à presente Convenção é considerada ter sido aceite, de acordo com o artigo VIII, aplica-se à Convenção na sua forma modificada.

ARTIGO XI

Denúncia

a) A presente Convenção pode ser denunciada por qualquer Governo Contratante, em qualquer altura, depois de decorrido um período de cinco anos a contar da data na qual a Convenção entra em vigor para esse Governo.

b) A denúncia é efectuada por depósito de um instrumento de denúncia junto do Secretário-Geral da Organização, o qual notifica todos os outros Governos Contratantes de qualquer instrumento de denúncia recebido e da data do seu depósito, bem como da data em que cada denúncia produz efeito.

c) A denúncia produz efeito um ano após a recepção do instrumento de denúncia pelo Secretário-Geral da Organização, a não ser que nele se especifique outro prazo mais longo.

ARTIGO XII

Depósito e registo

a) A presente Convenção é depositada junto do Secretário-Geral da Organização, o qual deve enviar cópias autenticadas aos Governos de todos os Estados que tenham assinado a presente Convenção ou a ela tenham aderido.

b) Logo que a presente Convenção entre em vigor, o texto é enviado pelo Secretário-Geral da Organização ao Secretário-Geral das Nações Unidas, para registo e publicação, de acordo com o artigo 102.º da Carta das Nações Unidas.

ARTIGO XIII

Línguas

A presente Convenção é elaborada num exemplar único em línguas chinesa, inglesa, francesa, russa e espanhola, fazendo igualmente fé todos os textos. Serão elaboradas traduções oficiais em línguas árabe, alemã e italiana, que serão depositadas com o exemplar original assinado.

Em testemunho do que os abaixo assinados, devidamente autorizados para este efeito pelos seus Governos, firmaram a presente Convenção.

Feita em Londres no dia 1 de Novembro de 1974.

ANEXO

CAPÍTULO I

Disposições gerais

PARTE A

Aplicação, definições, etc.

Regra 1

Aplicação

a) Salvo indicação em contrário, as presentes regras aplicam-se apenas a navios que efectuem viagens internacionais.

b) As categorias de navios a que se aplicam as disposições de cada capítulo e a extensão em que são aplicáveis são definidas com mais precisão em cada capítulo.

Regra 2

Definições

Para os fins de aplicação das presentes regras, salvo indicação em contrário:

a) «Regras» significa as regras contidas no Anexo da presente Convenção;

b) «Administração» significa o Governo do Estado cuja bandeira o navio está autorizado a usar;

c) «Aprovado» significa aprovado pela Administração;

d) «Viagem internacional» designa uma viagem desde um país ao qual se aplica a presente Convenção até um porto situado fora desse país, ou inversamente;

e) «Passageiro» significa toda a pessoa que não seja:

i) O comandante ou membro da tripulação ou outra pessoa empregada ou ocupada, sob qualquer forma, a bordo do navio em serviços que a este digam respeito;

ii) Uma criança de menos de 1 ano de idade;

f) «Navio de passageiros» significa todo o navio que transporte mais de doze passageiros;

g) «Navio de carga» significa todo o navio que não é navio de passageiros;

h) «Navio-tanque» significa todo o navio de carga construído ou adaptado para o transporte a granel de cargas líquidas de natureza inflamável;

i) «Navio de pesca» siginifica todo o navio usado para a captura de peixe, baleias, focas, morsas e outros recursos vivos do mar;

j) «Navio nuclear» significa todo o navio provido de uma fonte de energia nuclear;

k) «Navio novo» significa todo o navio cuja quilha foi assente ou que se encontre em fase equivalente de construção na data ou depois da data de entrada em vigor da presente Convenção;

l) «Navio existente» significa todo o navio que não é um navio novo;

m) «Uma milha» equivale a 1852 m (6080 pés).

Regra 3

Excepções

a) As presentes regras, salvo indicação em contrário, não são aplicáveis a:

i) Navios de guerra ou de transporte de tropas;

ii) Navios de carga de menos de 500 t de arqueação bruta;

iii) Navios sem propulsão mecânica;

iv) Navios de madeira, de construção primitiva;

v) Iates de recreio que se não dediquem ao tráfego comercial;

vi) Navios de pesca.

b) Salvas as disposições expressas no capítulo V, nada do que figura nas presentes regras se aplica aos navios que naveguem exclusivamente nos grandes lagos da América do Norte e no rio de S. Lourenço, nas paragens limitadas a leste por uma linha recta que vai do Cap des Rosiers à West Point, ilha Anticosti e, ao norte da ilha Anticosti, pelo meridiano 63.

Regra 4

Isenções

a) Pode ser isento pela Administração de algumas das prescrições das presentes regras qualquer navio que, embora não seja empregado usualmente em viagens internacionais, tenha de empreender, por circunstâncias excepcionais, uma única viagem internacional, desde que satisfaça as disposições sobre segurança que, na opinião da Administração, sejam suficientes para a viagem que pretende empreender.

b) A Administração pode isentar qualquer navio que apresente características novas do cumprimento de qualquer das disposições dos capítulos II-1, II-2, III e IV das presentes regras, cuja aplicação possa dificultar seriamente as investigações tendentes a melhorar essas características, assim como a sua aplicação a navios que efectuem viagens internacionais. Um tal navio deve, contudo, satisfazer aos requisitos de segurança que, na opinião da Administração, sejam adequados ao serviço a que o navio se destina e que, garantindo a total segurança do navio, sejam aceites pelos Governos dos Estados que ele escale. A Administração que conceder qualquer isenção deve participar à Organização os pormenores e razões da mesma, dos quais a Organização dará conhecimento aos outros Governos Contratantes, para sua informação.

Regra 5

Equivalências

a) Quando as presentes regras determinem que sejam instalados ou existam a bordo de um navio certas instalações, materiais, dispositivos ou aparelhos, ou determinados tipos dos mesmos, ou que se tomem certas disposições particulares, a Administração pode consentir que sejam instalados ou existam outras instalações, materiais, dispositivos ou aparelhos, ou tipos diversos, ou se tomem disposições diversas, se se provar por experiências ou outra forma que tais instalações, materiais, dispositivos ou aparelhos, seus tipos ou disposições, têm uma eficácia pelo menos igual à que é exigida pelas presentes regras.

b) Qualquer Administração que autorize nesses termos a substituição de uma instalação, material, dispositivo ou aparelho, ou dos seus tipos ou disposições, deve comunicar tais características à Organização, com um relatório das experiências feitas, e a Organização deve dar conhecimento dele aos outros Governos Contratantes, para informação dos seus funcionários.

PARTE B

Vistorias e certificados

Regra 6

Inspecção e vistoria

A inspecção e vistoria de navios, no que diz respeito à aplicação das disposições das presentes regras, e a concessão de isenções de cumprimento de algumas das prescrições nelas contidas, devem ser efectuadas por funcionários do país em que o navio está registado, podendo o Governo de qualquer país nomear para tal efeito inspectores idóneos ou delegar tais funções em organismos por ele reconhecidos. Em qualquer destes casos o Governo respectivo garante a integridade e a eficiência da inspecção e vistoria.

Regra 7

Vistorias a navios de passageiros

a) Um navio de passageiros deve ser submetido às vistorias abaixo especificadas:

i) Uma vistoria antes de o navio entrar em serviço;

ii) Uma vistoria periódica de doze em doze meses;

iii) Vistorias suplementares sempre que seja necessário.

b) As vistorias acima especificadas devem ser feitas como segue:

i) A vistoria antes de o navio entrar em serviço compreenderá uma inspecção completa da sua estrutura, máquinas e equipamentos, incluíndo a vistoria em seco do fundo do navio e a vistoria exterior e interior das caldeiras. Esta vistoria deve ser feita de modo a poder verificar-se com segurança se a disposição geral, os materiais, os escantilhões da estrutura, as caldeiras, os outros recipientes sujeitos a pressão e os seus acessórios, as máquinas principais e auxiliares, as instalações eléctrica e radioeléctrica, as instalações radiotelegráficas das embarcações salva-vidas com motor, os equipamentos de radiocomunicações portáteis para embarcações e jangadas salva-vidas, os meios de salvação, as instalações de prevenção, detecção e extinção de incêndios, o radar, a sonda acústica, a girobússola, as escadas de piloto, as escadas mecânicas de piloto e outros equipamentos satisfazem completamente às exigências da presente Convenção e às das leis, decretos, ordens e regulamentos promulgados pela Administração em obediência às prescrições da presente Convenção, para o serviço a que o navio é destinado. A vistoria deve ser feita de modo a garantir que a qualidade e o acabamento de todas as partes do navio e do seu equipamento satisfazem para todos os efeitos e que o navio está provido de faróis, marcas, meios de sinalização sonora e sinais de socorro exigidos pela presente Convenção e pelas disposições do Regulamento Internacional para Evitar Abalroamentos no Mar em vigor;

ii) A vistoria periódica incluirá a inspecção da estrutura, das caldeiras e dos outros recipientes sujeitos a pressão, das máquinas e equipamentos, incluindo a vistoria em seco do fundo do navio. A vistoria deve ser feita de modo a poder verificar-se que o navio, no que diz respeito à estrutura, caldeiras e outros recipientes sujeitos a pressão e seus acessórios, máquinas principais e auxiliares, instalação eléctrica e radioeléctrica, instalações radiotelegráficas das embarcações salva-vidas com motor, equipamentos de radiocomunicações portáteis para embarcações e jangadas salva-vidas, meios de salvação, instalações de prevenção, detecção e extinção de incêndios, radar, sonda acústica, girobússola, escadas de pilotos, escadas mecânicas de piloto e restante equipamento está em condições satisfatórias e pronto para o serviço a que se destina e que satisfaz às exigências da presente Convenção e às das leis, decretos, ordens e regulamentos promulgados pela Administração em obediência às prescrições da presente Convenção. Os faróis, marcas, meios de sinalização sonora e sinais de socorro existentes a bordo devem também ser submetidos à vistoria acima mencionada, para verificar se satisfazem às exigências da presente Convenção e do Regulamento Internacional para Evitar Abalroamentos no Mar em vigor;

iii) Sempre que ocorra um acidente ou se descubra um defeito que ponha em risco a segurança do navio ou a completa eficiência dos meios de salvação ou de outros equipamentos, ou quando se efectuem importantes reparações ou alterações, deve ser feita uma vistoria geral ou parcial, conforme as circunstâncias. A vistoria deve ser efectuada de modo a poder verificar se foram efectivamente feitas as reparações necessárias, se o material e mão-de-obra dessas reparações ou alterações são satisfatórios para todos os efeitos e se o navio satisfaz sob todos os pontos de vista às prescrições da presente Convenção e às das leis, decretos, ordens e regulamentos promulgados pela Administração em obediência às prescrições da presente Convenção e do Regulamento Internacional para Evitar Abalroamentos no Mar em vigor.

c) — *i*) As leis, decretos e regulamentos a que se refere o parágrafo *b*) da presente regra devem, para todos os efeitos, ser tais que a sua observância garanta que, sob o ponto de vista da segurança da vida humana, o navio é apropriado ao serviço a que se destina;

ii) Estas leis, decretos, ordens e regulamentos devem, além do mais, fixar as condições no que respeita às provas hidráulicas a fazer antes e depois da entrada em serviço ou outras provas aceitáveis em alternativa, às caldeiras principais e auxiliares, às uniões, aos encanamentos de vapor, aos reservatórios de alta pressão, aos tanques de combustível líquido para motores de combustão interna, incluindo os métodos de prova e os intervalos entre duas provas consecutivas.

Regra 8

Vistorias aos meios de salvação e outro equipamento de navios de carga

Com excepção das instalações radiotelegráficas das embarcações salva-vidas com motor ou dos equipamentos portáteis de radiocomunicações das embarcações e jangadas salva-vidas, os meios de salvação, sonda acústica, a girobússola, as instalações de extinção de incêndios dos navios de carga a que se referem os capítulos II-1, II-2, III e V das presentes regras devem ser sujeitos a vistoria inicial e vistorias subsequentes como está previsto para os navios de passageiros na regra 7 do presente capítulo, substituindo 12 meses por 24 meses na alínea *ii*) do parágrafo *a*) dessa regra. As vistorias devem abranger os planos de combate ao incêndio a bordo de navios novos, assim como escadas de pilotos, escadas mecânicas de pilotos, faróis, marcas e aparelhos de sinalização sonora, a bordo de navios novos e existentes, com o fim de se verificar se satisfazem em todos os pontos às prescrições da presente Convenção e do Regulamento Internacional para Evitar Abalroamentos no Mar em vigor, quando aplicável.

Regra 9

Vistorias às instalações radioeléctrica e de radar de navios de carga

As instalações radioeléctrica e de radar dos navios de carga a que se aplicam os capítulos IV e V e qualquer instalação radiotelegráfica das embarcações salva-vidas com motor ou equipamentos radioeléctricos portáteis para embarcações e jangadas salva-vidas existentes a bordo, de acordo com as prescrições do capítulo III, devem ser sujeitas a vistoria

inicial e vistorias subsequentes, como está previsto na regra 7 do presente capítulo para os navios de passageiros.

Regra 10

Vistoria do casco, da máquina e do equipamento de navios de carga

O casco, as máquinas e o equipamento (além das partes para que foi passado um certificado de segurança de equipamento para navio de carga, um certificado de segurança da radiotelegrafia para navio de carga ou um certificado de segurança radiotelefónica para navio de carga) de um navio de carga devem ser vistoriados depois do seu acabamento e seguidamente com os intervalos de tempo julgados necessários pela Administração, de modo a garantir que o seu estado seja inteiramente satisfatório. As vistorias devem verificar que a disposição geral, os materiais e escantilhões da estrutura, as caldeiras, os outros recipientes sujeitos a pressão e seus auxiliares, as máquinas principais e auxiliares, as instalações eléctricas e todo o equipamento satisfazem sob todos os aspectos ao serviço a que o navio é destinado.

Regra 11

Conservação das condições após a vistoria

Após ter sido completada qualquer das vistorias efectuadas em obediência às prescrições das regras 7, 8, 9 ou 10 do presente capítulo, não deve ser feita qualquer alteração nas disposições das estruturas, nas máquinas, nos equipamentos, etc., que foram objecto de vistoria, sem que a Administração a autorize.

Regra 12

Concessão de certificados

a) — *i*) Após inspecção e vistoria de um navio de passageiros em que se verifique que este satisfaz às exigências dos capítulos II-1, II-2, III e IV e a todas as prescrições aplicáveis das presentes regras, é passado um certificado, designado por «certificado de segurança para navio de passageiros»;

ii) Um certificado de segurança de construção para navio de carga é passado, depois de vistoria, a um navio de carga que satisfaça às prescrições aplicáveis a navios de carga estabelecidas na regra 10 do presente capítulo e ainda às disposições aplicáveis dos capítulos II-1 e II-2, com excepção das que se referem a meios de extinção e planos de combate a incêndios;

iii) Um certificado designado por certificado de segurança do equipamento para navio de carga é passado, depois de vistoria, ao navio de carga que satisfaça às prescrições aplicáveis dos capítulos II-1, II-2 e III e a todas as outras prescrições aplicáveis das presentes regras;

iv) Um certificado designado por «certificado de segurança radiotelegráfica para navio de carga» é passado, depois de vistoria, ao navio de carga provido de uma instalação radiotelegráfica que satisfaça às prescrições do capítulo IV e a todas as outras prescrições aplicáveis das presentes regras;

v) Um certificado, designado por «certificado de segurança radiotelefónica para navio de carga», é passado, depois de vistoria, ao navio de carga provido de uma instalação radiotelefónica que satisfaça às prescrições do capítulo IV e a todas as outras prescrições aplicáveis das presentes regras;

vi) Quando for concedida uma dispensa a um navio, em aplicação e em conformidade com as prescrições das presentes regras, é passado um certificado, designado por «certificado de dispensa», adicionalmente aos certificados prescritos no presente parágrafo;

vii) Os certificados de segurança para navio de passageiros, os certificados de segurança de construção para navio de carga, os certificados de segurança de equipamento para navio de carga, os certificados de segurança radiotelegráfica para navio de carga, os certificados de segurança radiotelefónica para navio de carga e os certificados de dispensa são passados, quer pela Administração, quer por entidade para tal devidamente autorizada pela Administração. Em todos os casos a Administração assume inteira responsabilidade pelos certificados.

b) Apesar das disposições da presente Convenção, um certificado passado em aplicação e conformidade com as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, que esteja ainda válido na data em que a presente Convenção entrar em vigor no país cuja Administração concedeu o referido certificado, mantém a sua validade até à expiração do prazo respectivo, nos termos da regra 14 do capítulo I da Convenção de 1960.

c) Um Governo Contratante não passará certificados nos termos das prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, de 1960, 1948 ou de 1929, depois da data em que a presente Convenção entrar em vigor no seu país.

Regra 13

Concessão de certificados por outro Governo

Qualquer dos Governos Contratantes pode, a pedido da Administração, ordenar que um navio seja submetido a vistoria e, se ficar convencido de que as prescrições das presentes regras estão cumpridas, conceder-lhe certificados, de harmonia com as prescrições das presentes regras. Todo o certificado assim concedido deve conter menção de que o é a pedido do Governo do país onde o navio está ou vai ser registado e terá a mesma força dos certificados concedidos de acordo com a regra 12 deste capítulo, e como tal será reconhecido.

Regra 14

Validade dos certificados

a) Os certificados que não sejam certificados de segurança de construção para navio de carga, certificados de segurança de equipamento para navio de carga e certificados de dispensa não devem ser passados por período de validade superior a doze meses. Os certificados de segurança de equipamento para navio de carga não devem ser passados por período de validade superior a vinte e quatro meses.

Os certificados de dispensa não devem ter validade superior à dos certificados a que se referem.

b) Se se realizar uma vistoria nos dois meses que precedem o termo do período de validade para que tinha sido primitivamente passado um certificado de segurança radiotelegráfica para navio de carga ou um certificado de segurança radiotelefónica para navio de carga, respeitantes a navios de carga de arqueação bruta igual ou superior a 300 t, mas inferior a 500 t, este certificado pode ser retirado e passado novo certificado cuja validade terminará doze meses depois da data em que terminava o referido prazo.

c) Quando um navio se não encontrar em porto do país onde está registado ao expirar o prazo de um seu certificado, a validade deste pode ser prorrogada pela Administração, mas tal prorrogação só pode ser concedida com o fim de permitir que o navio complete a sua viagem para o país onde está registado ou onde deve ser vistoriado, e isto somente quando tal medida se afigure oportuna e razoável.

d) Nenhum certificado pode ser, assim, prorrogado por espaço de tempo superior a cinco meses, e um navio ao qual tenha sido concedida tal prorrogação não fica por este motivo com o direito, depois de chegar ao país onde está registado ou ao porto onde deve ser vistoriado, de largar novamente sem que obtenha novo certificado.

e) Um certificado que não tenha sido prorrogado de acordo com as disposições precedentes da presente regra pode ser prorrogado pela Administração por um período de graça que não exceda um mês além da data de expiração de validade nele indicada.

Regra 15

Tipo dos certificados

a) Todos os certificados devem ser redigidos na língua ou línguas oficiais do país que os concede.

b) O tipo dos certificados deve ser o dos modelos dados no apêndice às presentes regras. A disposição tipográfica dos modelos de certificados deve ser exactamente reproduzida nos certificados concedidos ou nas suas cópias autênticas, e as indicações neles insertas ou nas cópias autênticas devem sê-lo em letras romanas e em algarismos árabes.

Regra 16

Afixação de certificados

Todos os certificados ou suas cópias autênticas concedidos em obediência às presentes regras devem ser afixados no navio em local bem visível e de fácil acesso.

Regra 17

Aceitação dos certificados

Os certificados concedidos por um Governo Contratante devem ser aceites pelos outros Governos Contratantes como tendo o mesmo valor que os certificados por eles concedidos.

Regra 18

Anexos aos certificados

a) Se no decurso de determinada viagem o número de pessoas transportadas num navio for inferior ao número total indicado no certificado de segurança para navio de passageiros e se, por consequência, esse navio tem a faculdade, de acordo com as prescrições das presentes regras, de ser equipado com um número de embarcações salva-vidas e outros meios de salvação inferior ao mencionado naquele certificado, pode ser emitido um anexo por qualquer das entidades mencionadas nas regras 12 e 13 do presente capítulo.

b) Este anexo deve especificar que naquelas circunstâncias não são infringidas as prescrições das presentes regras. Deve ser apenso ao certificado que ele substitui no que diz respeito aos meios de salvação, e é válido unicamente para a viagem para que foi emitido.

Regra 19

Fiscalização

Qualquer navio possuidor de um certificado concedido em virtude das disposições da regra 12 ou da regra 13 do presente capítulo está sujeito, nos portos dos outros Governos Contratantes, à fiscalização por parte de funcionários para tal devidamente autorizados por esses Governos, devendo a fiscalização limitar-se a verificar a existência a bordo de certificado válido. Este certificado deve ser aceite, a menos que haja motivos evidentes para crer que o estado do navio ou do seu equipamento não corresponde substancialmente às indicações desse certificado. Em tal caso, o funcionário que realize a fiscalização deve tomar as medidas necessárias para impedir a largada do navio até que ele possa sair para o mar sem perigo para os passageiros e tripulação. No caso de a fiscalização dar lugar a qualquer intervenção, o funcionário que a efectuar deve informar imediatamente e por escrito o cônsul do país onde o navio está registado de todas as circunstâncias que tornaram necessária essa intervenção, devendo ser enviado um relatório desses factos à Organização.

Regra 20

Benefícios

Os benefícios da presente Convenção não podem ser reclamados em favor de qualquer navio que não possua os certificados exigidos válidos.

PARTE C

Acidentes

Regra 21

Acidentes

a) Cada Administração compromete-se a efectuar inquéritos sobre qualquer acidente acontecido a qualquer dos seus navios sujeitos às disposições da presente Convenção, quando julgue que esse inquéri-

to pode ajudar a determinar as modificações que seria desejável introduzir nas presentes regras.

b) Cada Governo Contratante compromete-se a fornecer à Organização todas as informações pertinentes relativas às conclusões de tais inquéritos. Nenhum relatório ou recomendação da Organização, baseado em tais informações, deve revelar a identidade ou a nacionalidade dos navios a que dizem respeito ou, de qualquer modo, imputar a responsabilidade desse acidente a um navio ou pessoa ou deixar presumir a sua responsabilidade.

CAPÍTULO II-1

Construção — Subdivisão e estabilidade, máquinas e instalações eléctricas

PARTE A

Generalidades

Regra 1

Aplicação

a) — *i*) Salvo indicação em contrário, o presente capítulo aplica-se a navios novos;

ii) Os navios de passageiros e navios de carga existentes devem obedecer ao seguinte:

1) No caso de navios cuja quilha tenha sido assente ou cuja construção se encontrava numa fase equivalente na data ou depois da data da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, a Administração deve verificar a observância das prescrições aplicadas, em virtude das disposições do capítulo II dessa Convenção, aos navios novos, tal como são definidos naquele capítulo;

2) No caso de navio cuja quilha tenha sido assente ou cuja construção se encontrava numa fase equivalente na data ou depois da data da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1948, mas antes da data da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, a Administração deve velar pela observância das prescrições aplicadas, em virtude das disposições do capítulo II da Convenção de 1948, aos navios novos, tal como são definidos naquele capítulo;

3) No caso de navios cuja quilha tenha sido assente ou cuja construção se encontrava numa fase equivalente antes da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1948, a Administração deve velar pela observância das prescrições aplicáveis aos navios existentes pelas disposições do capítulo II da citada Convenção tal como são definidos naquele capítulo;

4) A Administração deve decidir quais as disposições do presente capítulo que não figuravam no capítulo II da Convenção de 1948 nem no capítulo II da Convenção de 1960 que devem ser aplicadas aos navios existentes tal como são definidos na presente Convenção;

iii) Qualquer navio em que se efectuem reparações, alterações, modificações e a consequente instalação de equipamentos deve continuar a satisfazer, pelo menos, às prescrições que já lhe eram anteriormente aplicáveis. Em regra, qualquer navio existente que se encontre nessas condições deve satisfazer, em grau não inferior ao de anteriormente, às prescrições aplicáveis a um navio novo. As reparações, alterações e modificações de grande importância e a consequente instalação de equipamentos devem satisfazer às prescrições aplicáveis a um navio novo até ao ponto em que a Administração o julgue razoável e praticável.

b) Para fins de aplicação do presente capítulo:

i) Navio de passageiros novo é um navio de passageiros cuja quilha foi assente ou cuja construção se encontrava numa fase equivalente na data ou depois da data da entrada em vigor da presente Convenção ou um navio de carga que foi transformado em navio de passageiros na mesma data ou após esta. Todos os outros navios de passageiros são considerados navios existentes;

ii) Navio de carga novo é um navio de carga cuja quilha foi assente ou cuja construção se encontrava numa fase equivalente na data da entrada em vigor da presente Convenção ou após esta data.

c) Se a Administração considerar que a ausência de riscos e as condições da viagem são tais que não seja razoável nem necessária a aplicação de quaisquer prescrições concretas deste capítulo, pode isentar dessas prescrições determinados navios ou classes de navios pertencentes ao seu país, desde que eles no decurso da sua viagem não se afastem mais de 20 milhas da costa mais próxima.

d) Os navios de passageiros que, em virtude das disposições do parágrafo *c*) da regra 27 do capítulo III, forem autorizados a transportar um número de pessoas superior àquele que pode ser acomodado nas suas embarcações salva-vidas devem obedecer às disposições do parágrafo *e*) da regra 5 do presente capítulo relativas à compartimentagem e às disposições especiais conexas sobre permeabilidade que constam do parágrafo *d*) da regra 4 do presente capítulo, a menos que a Administração entenda que, dada a natureza e condições da viagem, é suficiente que tais navios obedeçam apenas às outras determinações das regras do presente capítulo e do capítulo II-2 da presente Convenção.

e) No caso de navios de passageiros empregados no transporte de grande número de passageiros em tráfegos especiais, como seja no transporte de peregrinos, a Administração pode isentar tais navios, quando pertencentes ao seu país, das exigências do presente capítulo, desde que entenda que tais exigências não são praticáveis, e que satisfaçam integralmente as disposições seguintes:

i) Regulamento anexo ao Acordo sobre os Navios de Passageiros Que Efectuem Transportes Especiais, 1971; e

ii) Regulamento anexo ao Protocolo sobre os Locais Habitados a Bordo de Navios de Passageiros Que Efectuem Transportes Especiais, 1973, quando este entrar em vigor.

Regra 2

Definições

Para os fins de aplicação do presente capítulo, salvo indicação em contrário:

a) — *i*) Linha de carga de compartimentagem é uma linha de água utilizada no cálculo de compartimentagem do navio;

ii) Linha de carga máxima de compartimentagem é a linha de água correspondente à imersão máxima autorizada pelas regras de compartimentagem aplicáveis;

b) Comprimento do navio é o comprimento medido entre perpendiculares passando pelas extremidades da linha de carga máxima de compartimentagem;

c) Boca do navio é a largura máxima medida entre as faces externas da ossada ao nível (ou abaixo do nível) da linha de carga de compartimentagem;

d) Imersão é a distância vertical entre a linha base na ossada, a meio navio, e a linha de compartimentagem considerada;

e) Pavimento das anteparas é o pavimento mais elevado até ao qual se elevam as anteparas transversais estanques;

f) Linha de segurança é uma linha traçada no costado, abaixo da face superior do pavimento das anteparas, à borda, igual ou superior a 76 mm (3 polegadas);

g) Permeabilidade de um espaço é a percentagem desse espaço que pode ser ocupada pela água.

O volume de um espaço que se estende para cima da linha de segurança deve ser medido apenas até essa linha;

h) Espaço das máquinas deve ser considerado como compreendido entre a linha base na ossada e a linha de segurança e entre as anteparas estanques transversais principais que limitam os espaços destinados às máquinas principais e auxiliares, às caldeiras que servem para a propulsão e a todos os paióis permanentes de carvão.

No caso de disposições pouco usuais, a Administração pode definir quais os limites dos espaços das máquinas;

i) Espaços para passageiros são os destinados à acomodação e serventia dos passageiros, excluídos os locais destinados às bagagens, armazéns, paióis de mantimentos e locais para malas postais.

Para fins de aplicação das disposições das regras 4 e 5 do presente capítulo, os espaços abaixo da linha de segurança destinados à acomodação e serventia dos tripulantes devem ser considerados como espaços para passageiros;

j) Em qualquer caso, os volumes e as superfícies serão calculados na ossada.

PARTE B

Compartimentagem e estabilidade (1)

(A parte B aplica-se somente a navios de passageiros, salvo a regra 19, que se aplica também a navios de carga)

Regra 3

Comprimento alagável

a) O comprimento alagável em qualquer ponto do comprimento do navio deve ser determinado por um método de cálculo em que sejam tidas em consideração as formas, a imersão e outras características do navio em questão.

b) Num navio com pavimento das anteparas contínuo, o comprimento alagável num determinado ponto é a porção máxima do comprimento do navio, com centro no ponto em questão, que pode ser alagado, na hipótese das condições definidas na regra 4 do presente capítulo, sem que o navio mergulhe além da linha de segurança.

c) — *i*) No caso de navios sem pavimento das anteparas contínuo, o comprimento alagável em qualquer ponto pode ser determinado considerando-se uma linha de segurança contínua que, em ponto algum esteja a menos de 76 mm (3 polegadas) abaixo da parte superior do pavimento à amurada, até ao qual as anteparas e o costado são mantidos estanques;

ii) Se uma parte da linha de segurança adoptada estiver sensivelmente abaixo do pavimento até ao qual as anteparas são mantidas estanques, a Administração pode autorizar derrogações limitadas às condições de estanquidade das zonas das anteparas que estão acima da linha de segurança e imediatamente abaixo do pavimento superior mais próximo.

Regra 4

Permeabilidade

a) As hipóteses consideradas na regra 3 do presente capítulo são relativas às permeabilidades dos espaços abaixo da linha de segurança.

Para determinação do comprimento alagável deve ser adoptada uma permeabilidade média uniforme ao longo de todo o comprimento de cada um dos espaços seguintes do navio, considerados abaixo da linha de segurança:

i) O espaço das máquinas, tal como é definido na regra 2 do presente capítulo;

ii) A parte do navio a vante do espaço das máquinas;

iii) A parte do navio a ré do espaço das máquinas.

b) — *i*) A permeabilidade média uniforme no espaço das máquinas deve ser calculada pela fórmula:

$$85 + 10\left(\frac{a-c}{v}\right)$$

onde:

a = volume dos espaços para passageiros, definidos segundo a disposição da regra 2 do presente capítulo, que estão situados abaixo da linha de segurança e compreendidos nos limites do espaço das máquinas;

c = volume das cobertas, abaixo da linha de segurança, compreendido nos limites do espaço das máquinas e que são destinadas a carga, carvão ou provisões de bordo;

v = volume total do espaço das máquinas abaixo da linha de segurança;

ii) Quando for demonstrado, a contento da Administração, que a permeabilidade média calculada directamente é menor do que a que resulta da aplicação

(1) Em vez das prescrições desta parte podem ser utilizadas as «Regras de compartimentagem e estabilidade para navios de passageiros equivalentes à parte B do capítulo II da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960», adoptadas pela Organização, mediante a Resolução A.265 (VIII), com a condição de serem aplicadas na sua totalidade.

da fórmula acima, pode ser adoptado o valor directamente calculado. Para fins deste cálculo directo a permeabilidade dos espaços para passageiros, tais como eles são definidos na regra 2 do presente capítulo, deve ser tomada como igual a 95, a de todos os espaços para carga, carvão ou provisões de bordo deve ser tomada como igual a 60 e a do duplo fundo, tanques de óleo combustível e outros tanques deve ter um valor a aprovar, caso por caso.

c) Salvo nos casos considerados no parágrafo *d*) da presente regra, a permeabilidade média uniforme ao longo da parte do navio a vante (ou a ré) do espaço das máquinas deve ser determinada pela fórmula

$$63 + 35\,\frac{a}{v}$$

onde:

a = volume dos espaços para passageiros, tais como são definidos na regra 2 do presente capítulo, que estão situados abaixo da linha de segurança, a vante (ou à ré) do espaço das máquinas;

v = volume total da parte do navio abaixo da linha de segurança a vante (ou a ré) do espaço das máquinas.

d) No caso de um navio autorizado nos termos do parágrafo *c*) da regra 27 do capítulo III a transportar um número de pessoas que exceda a lotação das embarcações salva-vidas instaladas a bordo e que, nos termos do parágrafo *d*) da regra 1 do presente capítulo, deva obedecer a determinações especiais, a permeabilidade média uniforme ao longo da parte do navio a vante (ou a ré) do espaço das máquinas deve ser calculada pela fórmula

$$95 - 35\,\frac{b}{v}$$

onde:

b = volume dos espaços a vante (ou a ré) do espaço das máquinas situados abaixo da linha de segurança e acima dos topos das cavernas, dos duplos fundos e dos piques, conforme os casos, e que são apropriados para serem usados como espaços para carga, paióis de carvão ou de óleo combustível, paióis de bordo, casas de bagagem ou de malas postais, paióis de amarra e tanques de água doce;

v = volume total da parte do navio abaixo da linha de segurança a vante (ou a ré) do espaço das máquinas.

No caso de navios empregados em serviços em que os porões de carga não são em geral ocupados por grandes quantidades de carga, parte alguma desses espaços deve ser incluída no cálculo de «*b*».

e) No caso de disposições pouco usuais, a Administração pode autorizar, ou exigir, um cálculo directo da permeabilidade média da parte do navio situada a vante (ou a ré) do espaço das máquinas. Para a execução de tal cálculo a permeabilidade dos espaços para passageiros, tais como são definidos na regra 2, deve ser tomada igual a 95, a dos espaços de máquinas igual a 85, a dos espaços para carga, carvão e provisões de bordo igual a 60 e a dos duplos fundos, tanques de óleo combustível e outros tanques igual a número a aprovar, caso por caso.

f) Se um compartimento, numa coberta, compreendido entre duas anteparas estanques transversais, contiver qualquer espaço para passageiros ou tripulantes, o volume total desse compartimento, exceptuado o dos espaços completamente fechados por anteparas metálicas permanentes e destinados a outros fins, deve ser considerado como espaço para passageiros. Contudo, se o espaço em questão destinado a passageiros ou tripulantes estiver completamente rodeado por anteparas metálicas permanentes, só o espaço assim encerrado entre tais anteparas deve ser contado como espaço para passageiros.

Regra 5

Comprimento admissível dos compartimentos

a) Os navios devem ser tão eficazmente compartimentados quanto possível, tendo em vista a natureza do serviço ao qual são destinados. O grau de compartimentagem deve variar com o comprimento do navio e com o serviço a que se destina, de tal forma que o mais alto grau de compartimentagem corresponda aos navios de maior comprimento essencialmente empregados no transporte de passageiros.

b) *Factor de subdivisão.* — O comprimento máximo admissível de um compartimento que tenha o seu centro num ponto qualquer do comprimento do navio deduz-se do comprimento alagável, multiplicando este por um factor apropriado, denominado factor de subdivisão.

O factor de subdivisão deve depender do comprimento do navio e, para um comprimento dado, deve variar segundo a natureza do serviço a que o navio se destina.

O seu valor deve diminuir de maneira regular e contínua:

i) À medida que o comprimento do navio aumenta; e

ii) Desde um valor A aplicável a navios destinados essencialmente ao transporte de carga a um valor B aplicável a navios destinados essencialmente ao transporte de passageiros.

As variações dos factores A e B são dadas pelas fórmulas (I) e (II) seguintes, em que L é o comprimento do navio, como é definido pela regra 2 do presente capítulo:

L em metros:

$$A = \frac{58{,}2}{L - 60} + 0{,}18 \quad (L = 131 \text{ ou mais}) \qquad \text{(I)}$$

L em pés:

$$A = \frac{190}{L - 198} + 0{,}18 \quad (L = 430 \text{ ou mais}) \qquad \text{(I)}$$

L em metros:

$$B = \frac{30{,}3}{L - 42} + 0{,}18 \quad (L = 79 \text{ ou mais}) \qquad \text{(II)}$$

L em pés:

$$B = \frac{100}{L - 138} + 0{,}18 \quad (L = 260 \text{ ou mais}) \qquad \text{(II)}$$

c) *Critério de serviço.* — Para um navio de dado comprimento o factor de subdivisão apropriado deve ser determinado pelo critério de serviço (designado em seguida por «critério»), cujo valor é obtido pelas fórmulas (III) e (IV) seguintes, onde:

C_s = critério;
L = comprimento do navio, tal como é definido pela regra 2 do presente capítulo;
M = volume do espaço das máquinas, como é definido na regra 2 do presente capítulo, com a adição do volume de todos os tanques permanentes de óleo combustível que estejam situados acima do duplo fundo e a vante ou a ré do espaço das máquinas.
P = volume total do espaço para passageiros abaixo da linha de segurança, conforme a definição da regra 2 do presente capítulo;
V = volume total do navio abaixo da linha de segurança;
$P_1 = KN$, onde:

N = número de passageiros para o qual o navio é lotado;
K = 0,056 L, se L e V são medidos, respectivamente, em metros e metros cúbicos (ou 0,6 L, se L e V são medidos em pés e pés cúbicos, respectivamente).

Quando o valor de KN é maior do que a soma de P com o volume total dos espaços realmente destinados a passageiros acima da linha de segurança, deve tomar-se para valor P_1 o valor daquela soma ou $\frac{2}{3}$ KN, se este for maior do que aquele.

Se P_1 é maior do que P, ter-se-á:

$$C_s = 72\ \frac{M + 2P_1}{V + P_1 - P} \qquad \text{(III)}$$

noutros casos ter-se-á:

$$C_s = 72\ \frac{M + 2P}{V} \qquad \text{(IV)}$$

Nos navios em que o pavimento das anteparas não é contínuo, os volumes devem ser calculados até às linhas de segurança realmente utilizadas para a determinação do comprimento alagável.

d) *Prescrições para a compartimentagem de navios que não sejam abrangidos pelo parágrafo e) da presente regra:*

i) A compartimentagem a ré do pique de vante de navios de comprimento igual ou superior a 131 m (430 pés), cujo critério é igual ou inferior a 23, é regulada pelo factor A, dado pela fórmula (I); a daqueles cujo critério é igual ou superior a 123 é regulada pelo factor B, dado pela fórmula (II), e a daqueles cujo critério está compreendido entre 23 e 123, pelo factor F, obtido por interpolação linear entre os factores A e B, segundo a fórmula:

$$F = A - \frac{(A - B)(C_s - 23)}{100} \qquad \text{(V)}$$

Contudo, quando o critério for igual ou superior a 45 e, simultaneamente, o factor de subdivisão determinado pela fórmula (V) for inferior ou igual a 0,65, mas superior a 0,5, a compartimentagem do navio a ré do pique de vante será estabelecida pelo factor de subdivisão 0,5.

Quando o valor do factor F for menor do que 0,40 e se puder justificar, a contento da Administração, que não é praticável adoptar esse valor num compartimento do espaço das máquinas do navio considerado, a compartimentagem desse compartimento pode ser regulada por um factor de valor superior, que não deve, contudo, em qualquer caso, exceder o valor de 0,40;

ii) A compartimentagem a ré do pique de vante de navios cujo comprimento for inferior a 131 m (430 pés), mas não inferior a 79 m (260 pés), e cujo critério for igual a S dado pela fórmula:

L em metros:

$$S = \frac{3574 - 25L}{13}$$

L em pés:

$$S = \frac{9382 - 20L}{34}$$

deve ser regulada pelo factor igual à unidade; a daqueles cujo critério for igual ou superior a 123, pelo factor B, dado pela fórmula (II), e a daqueles cujo critério estiver compreendido entre S e 123, pelo factor F, obtido pela interpolação linear entre a unidade e o factor B, segundo a fórmula:

$$F = 1 - \frac{(1 - B)(C_s - S)}{123 - S} \qquad \text{(VI)}$$

iii) A compartimentagem a ré do pique de vante de navios de comprimento inferior a 131 m (430 pés), mas não inferior a 79 m (260 pés), cujo critério for menor do que S, e a de todos os navios de comprimento inferior a 79 m (260 pés), deve ser regulada pelo factor igual à unidade, a menos que em certos casos se possa provar, a contento da Administração, que não é praticável adoptar esse factor em qualquer parte do navio, caso em que a Administração pode conceder certas tolerâncias, na medida em que entenda que elas são justificáveis pelas circunstâncias;

iv) As prescrições da alínea *iii*) do presente parágrafo aplicam-se também a navios de qualquer comprimento que são lotados para um número de passageiros superior a doze, mas não ultrapassando o menor dos dois números seguintes:

$\frac{L^2}{650}$ (L em metros) = $\frac{L^2}{7000}$ (L em pés) ou 50, aquele que for menor.

e) *Regras especiais de compartimentagem para navios que, em virtude das disposições do parágrafo c) da regra 27 do capítulo III, são autorizados a transportar um número de pessoas superior ao que pode ser acomodado nas suas embarcações salva-vidas e que são obrigados pelo parágrafo d) da regra I do presente capítulo a satisfazer as disposições especiais:*

i) — 1) No caso de navios essencialmente destinados ao transporte de passageiros, a compartimenta-

gem a ré do pique de vante deve ser regulada pelo factor 0,50 ou por aquele que for determinado, de acordo com os parágrafos *c*) e *d*) da presente regra, se inferior a 0,50;

2) No caso de navios deste tipo, de comprimento inferior a 91,50 m (300 pés), se a Administração reconhecer que não é praticável o emprego de tal factor num compartimento, pode permitir que o comprimento desse compartimento seja regulado por um factor maior, desde que esse factor seja o mais baixo que for praticável e razoável aplicar nessas circunstâncias;

ii) Se, no caso de um navio qualquer, de comprimento inferior ou não a 91,50 m (300 pés), a necessidade de transportar apreciáveis quantidades de carga torna impraticável a aplicação de factor não superior a 0,50 para regular a compartimentagem a ré do pique de vante, o grau de compartimentagem deve ser regulado de acordo com o disposto nas alíneas seguintes 1) a 5), subordinadamente à condição de que a Administração, quando reconheça que a estrita aplicação dessas disposições, sob qualquer ponto de vista, não é razoável, pode autorizar uma outra disposição de anteparas estanques que se justifique pelas suas qualidades e não diminua a eficiência geral da compartimentagem:

1) São aplicáveis as disposições do parágrafo *c*) da presente regra, relativas ao critério de serviço, salvo no cálculo do valor de P_1 para passageiros com beliche, onde o valor a atribuir a K é o maior dos dois valores K tal como está definido no parágrafo *c*) da presente regra, ou 3,55 m³ (125 pés cúbicos). Para passageiros sem beliche o valor K a adoptar é 3,55 m³ (125 pés cúbicos);

2) O factor B do parágrafo *b*) da presente regra deve ser substituído pelo factor BB, determinado pela seguinte fórmula:

L em metros:

$$BB = \frac{17,6}{L - 33} + 0,20 \quad (L = 55 \text{ ou mais})$$

L em pés:

$$BB = \frac{57,6}{L - 108} + 0,20 \quad (L = 180 \text{ ou mais})$$

3) A compartimentagem a ré do pique de vante de navios de comprimento igual ou superior a 131 m (430 pés) que tenham um critério igual ou inferior a 23 deve ser regulada pelo factor A, dado pela fórmula (1) do parágrafo *b*) da presente regra; a daqueles cujo critério é 123 ou mais é regulada pelo factor BB, dado pela fórmula da alínea *ii*), 2), do presente parágrafo, e a daqueles cujo critério está compreendido entre 23 e 123 é regulada pelo factor F, obtido por interpolação linear entre os factores A e BB, usando a fórmula:

$$F = A - \frac{(A - BB)\ (C_s - 23)}{100}$$

excepto no caso em que o valor de F assim obtido seja inferior a 0,50; neste caso o factor a empregar será o menor dos valores: 0,50 ou o valor calculado segundo a disposição da alínea *i*) do parágrafo *d*) da presente regra;

4) A compartimentagem a ré do pique de vante de navios de comprimento inferior a 131 m (430 pés), mas não inferior a 55 m (180 pés), que tenham um critério igual a S_1 dado pela fórmula:

L em metros:

$$S_1 = \frac{3712 - 25\ L}{19}$$

L em pés:

$$S_1 = \frac{1950 - 4\ L}{10}$$

deve ser regulada pelo factor igual à unidade; a daqueles cujo critério é igual ou superior a 123 deve ser regulada pelo factor BB, dado pela fórmula da alínea *ii*), 2), do presente parágrafo; a daqueles cujo critério está compreendido entre S_1 e 123 será regulada pelo factor F, obtido por interpolação linear entre a unidade e o factor BB, usando a fórmula:

$$F = 1 - \frac{(1 - BB)\ (C_s - S_1)}{123 - S_1}$$

salvo se em qualquer dos dois últimos casos considerados o factor F assim obtido for inferior a 0,50, porque, nesse caso, a compartimentagem deve ser regulada por um factor que não exceda 0,50;

5) A compartimentagem a ré do pique de vante de navios de comprimento inferior a 131 m (430 pés), mas não inferior a 55 m (180 pés), e cujo critério seja inferior a S_1, e a de todos os navios de comprimento inferior a 55 m (180 pés), devem ser reguladas pelo factor igual à unidade, a não ser que a Administração reconheça ser impraticável aplicar este factor a determinados compartimentos, caso em que a Administração pode conceder certas tolerâncias, no que diz respeito a tais compartimentos que lhe pareçam justificadas pelas circunstâncias a considerar, com a condição de que o compartimento extremo a ré e o maior número possível de compartimentos a vante (compreendidos entre a antepara de colisão e a extremidade de ré do espaço das máquinas) não tenham comprimento superior ao comprimento admissível.

Regra 6

Prescrições especiais relativas a compartimentagem

a) Quando, numa ou mais zonas do navio, as anteparas estanques são prolongadas até um pavimento mais alto do que as do resto do navio e se deseje beneficiar para o cálculo do comprimento alagável desse prolongamento em altura das anteparas, podem, para esse fim, considerar-se linhas de segurança separadas para cada uma dessas zonas do navio, na condição de:

i) O costado do navio deve ser prolongado, a todo o comprimento, de ambos os bordos até ao pavimento correspondente à linha de segurança mais elevada e todas as aberturas na chapa do costado em toda a extensão do navio, situadas abaixo daquele pavimento, são consideradas, para efeitos da regra 14 do presente capítulo, como estando abaixo da linha de segurança; e

ii) Os dois compartimentos adjacentes ao «salto» no pavimento das anteparas devem estar cada um

deles dentro dos comprimentos admissíveis correspondentes às respectivas linhas de segurança e, além disso, os seus comprimentos combinados não devem exceder o dobro do comprimento admissível calculado em relação à linha de segurança mais baixa.

b) — *i*) Um compartimento pode ter comprimento superior ao comprimento admissível fixado pelas prescrições da regra 5 do presente capítulo, desde que o comprimento combinado de cada par de compartimentos adjacentes, compreendendo em cada par o compartimento em questão, não exceda o menor dos dois valores: o comprimento alagável ou duas vezes o comprimento admissível;

ii) Se um dos dois compartimentos adjacentes estiver situado dentro do espaço das máquinas e o segundo fora desse espaço e a permeabilidade média da zona do navio na qual está situado o segundo compartimento for diferente da do espaço das máquinas, o comprimento combinado dos dois compartimentos deve ser fixado tomando por base a média das permeabilidades das duas zonas do navio onde estão situados os referidos compartimentos;

iii) Quando os dois compartimentos adjacentes têm factores de subdivisão diferentes, o comprimento combinado dos dois compartimentos deve ser calculado proporcionalmente.

c) Nos navios de comprimento igual ou superior a 100 m (330 pés) uma das anteparas transversais principais, a ré do pique de vante, deve ser instalada a uma distância da perpendicular a vante não superior ao comprimento admissível.

d) É permitido um recesso numa antepara transversal principal desde que esse recesso não ultrapasse em parte alguma duas superfícies verticais, uma a cada bordo, situadas a uma distância do costado não superior a um quinto da boca do navio, tal como é definida na regra 2 do presente capítulo, distância medida perpendicularmente ao plano de simetria do navio no plano correspondente à linha de carga máxima de compartimentagem.

Todas as partes de um recesso que ultrapassem os limites acima fixados deverão ser consideradas como um salto e ser-lhes-ão aplicáveis as prescrições do parágrafo *e*) da presente regra.

e) Uma antepara transversal principal pode ser em salto desde que satisfaça a uma das condições seguintes:

i) O comprimento combinado dos dois compartimentos separados pela antepara em questão não deve exceder 90 % do comprimento alagável ou duas vezes o comprimento admissível, salvo nos navios cujo factor de subdivisão é superior a 0,9, porque neste caso o comprimento combinado dos dois compartimentos em questão não deve exceder o comprimento admissível;

ii) Deve ser prevista uma compartimentagem suplementar, pelo través do salto, para manter o mesmo grau de segurança que seria garantido se a antepara fosse plana;

iii) O compartimento sobre o qual se estende o salto não deve exceder o comprimento admissível correspondente a uma linha de segurança situada 76 mm (3 polegadas) abaixo do salto.

f) Quando uma antepara transversal principal apresente um recesso ou um salto, deve ser usada uma antepara plana equivalente para a determinação da compartimentagem.

g) Se a distância entre duas anteparas transversais principais adjacentes, ou entre as anteparas planas equivalentes, ou a distância entre dois planos verticais passando pelos pontos mais próximos dos saltos, se eles existem, for inferior ao menor dos dois comprimentos, 3,05 m (10 pés) mais 3 % do comprimento do navio ou 10,67 m (35 pés), só uma destas anteparas será aceite como fazendo parte da compartimentagem do navio tal como é previsto pela regra 5 do presente capítulo.

h) Quando um compartimento estanque transversal principal for, por sua vez, compartimentado e puder ser estabelecido, a contento da Administração, que, após uma avaria que se estenda sobre o menor dos dois comprimentos, 3,05 m (10 pés) mais 3 % do comprimento do navio ou 10,67 m (35 pés), o conjunto do compartimento principal não é alagado, pode ser autorizado um aumento proporcional do comprimento admissível em relação ao que seria calculado sem considerar a compartimentagem suplementar. Neste caso o volume da reserva de flutuabilidade suposto intacto do lado oposto ao da avaria não deve ser superior ao que é suposto intacto do lado da avaria.

i) Quando o factor de subdivisão previsto for igual ou inferior a 0,5, o comprimento combinado de dois compartimentos adjacentes quaisquer não deve exceder o comprimento alagável.

Regra 7

Estabilidade dos navios em caso de avaria

a) O navio intacto deve ter estabilidade suficiente, em todas as condições de serviço, que lhe permita suportar a fase final de alagamento de qualquer compartimento principal que esteja dentro dos limites do comprimento alagável.

Quando dois compartimentos principais adjacentes estiverem separados por uma antepara em salto nas condições estabelecidas no parágrafo *e*), alínea *i*), da regra 6 do presente capítulo, a estabilidade do navio intacto deve ser tal que ele possa suportar o alagamento desses dois compartimentos adjacentes.

Quando o factor de subdivisão previsto for igual ou inferior a 0,50, mas superior a 0,33, a estabilidade do navio intacto deve ser tal que ele possa suportar o alagamento de quaisquer dois compartimentos principais adjacentes.

Quando o factor de subdivisão for igual ou inferior a 0,33, a estabilidade do navio intacto deve ser tal que ele possa suportar o alagamento de quaisquer três compartimentos principais adjacentes.

b) — *i*) As exigências do parágrafo *a*) da presente regra serão determinadas por cálculos que estejam de acordo com as disposições dos parágrafos *c*), *d*) e *f*) da presente regra e que tenham em consideração as proporções e as características do projecto do navio e a disposição e a configuração dos compartimentos avariados. Os cálculos serão executados considerando o navio nas piores condições de serviço possíveis, sob o ponto de vista de estabilidade;

ii) Quando for prevista a instalação de pavimentos, duplos cascos ou anteparas longitudinais suficientemente estanques para retardar fortemente a passagem da água, deve ser dada, nos cálculos, a consideração devida a tais disposições, a contento da Administração;

iii) Nos casos em que a Administração tenha dúvidas sobre a extensão do diagrama de estabilidade depois da avaria, pode exigir que seja feito o respectivo estudo.

c) Para efeitos de cálculos de estabilidade em avaria, as permeabilidades de volume e de superfície serão consideradas como tendo os valores seguintes:

Espaços	Permeabilidade
Destinados a carga, carvão ou provisões	60
Ocupados por locais habitados	95
Ocupados por máquinas	85
Destinados a líquidos	0 ou 95

escolhendo destes dois últimos números o que dê como resultado exigências mais severas.

Podem ser adoptadas permeabilidades de superfície mais elevadas para os espaços que, na proximidade da linha de água em avaria, não têm superfície apreciável de máquinas ou de locais habitados e para os espaços que geralmente não são ocupados por quantidades apreciáveis de carga ou mantimentos.

d) As dimensões de avaria devem ser tomadas como sendo as seguintes:

i) *Extensão longitudinal.* — O menor dos dois valores 3,05 m (10 pés) mais 3% do comprimento do navio ou 10,67 m (35 pés). Quando o factor de subdivisão previsto for igual ou inferior a 0,33, a extensão longitudinal de avaria deve supor-se aumentada conforme for necessário para abranger duas anteparas estanques principais consecutivas quaisquer;

ii) *Extensão transversal* (medida internamente a partir do costado e perpendicularmente ao plano de simetria do navio ao nível da linha de carga máxima de compartimentagem). — Uma distância de um quinto da boca do navio tal como ela é definida na regra 2 do presente capítulo; e

iii) *Extensão vertical.* — Da linha de base na ossada (linha de água zero) para cima sem limite;

iv) Se uma avaria de extensão inferior à indicada nas alíneas *i*), *ii*) e *iii*) do presente parágrafo der origem a condições mais severas sob o ponto de vista do ângulo de inclinação ou da altura metacêntrica residual, tal avaria será considerada nos cálculos.

e) O alagamento assimétrico deve ser reduzido ao mínimo, por disposições apropriadas. Quando for necessário corrigir grandes ângulos de inclinação, os meios empregados devem ser, se praticamente possível, automáticos mas, nos casos em que são previstos comandos das condutas de equilíbrio, a sua manobra deve poder fazer-se de um ponto situado acima do pavimento das anteparas.

Estes dispositivos e os seus comandos devem ser aprovados pela Administração, assim como o valor do ângulo máximo de adornamento antes de alcançado o equilíbrio. Quando forem exigidos meios de equilíbrio, este deve ser obtido num tempo não superior a quinze minutos.

O comandante do navio disporá das instruções necessárias relativas ao uso dos meios de equilíbrio (1).

(1) Veja a «Recomendação de um método uniforme para cumprir as disposições relativas ao alagamento simétrico de navios de passageiros», adoptada pela Organização na Resolução A.266 (VIII).

f) As condições finais do navio após avaria e no caso de alagamento assimétrico, depois de terem sido tomadas as medidas necessárias para o seu equilíbrio, devem ser as seguintes:

i) Em caso de alagamento simétrico, a altura metacêntrica residual deve ser positiva e não inferior a 0,05 m (2 polegadas). Deve ser calculada pelo método de deslocamento constante;

ii) No caso de alagamento assimétrico, o ângulo de inclinação total não deve exceder 7°, salvo em casos especiais, em que a Administração pode aceitar um ângulo de inclinação adicional devido à assimetria do alagamento, desde que a inclinação final não seja, em caso algum, superior a 15°;

iii) Em caso algum a linha de segurança deve ficar imersa na condição final do alagamento. Se se considerar provável que, durante uma fase intermédia do alagamento, a linha de segurança venha a ficar submersa, a Administração pode exigir todos os estudos e disposições que entenda necessários para a segurança do navio.

g) Ao comandante do navio devem ser fornecidos os dados necessários para manter o navio em condições de serviço, com estabilidade suficiente, no estado de intacto, para que possa suportar avarias nas hipóteses mais desfavoráveis atrás consideradas. No caso de navios com dispositivos de estabilização transversal, devem ser fornecidas ao comandante informações sobre as condições de estabilidade nas quais foram baseados os cálculos dos ângulos de inclinação, e o mesmo deve ser avisado de que pode resultar uma inclinação excessiva, em caso de avaria, se o navio se encontrar, no estado de intacto, em condições menos vantajosas de estabilidade.

h) — *i*) A Administração não pode autorizar derrogações às exigências relativas à estabilidade em caso de avaria, a menos que se possa demonstrar que, em qualquer condição de serviço, a altura metacêntrica do navio no estado de intacto, necessária para satisfazer as exigências anteriores, é excessiva para a natureza do tráfego em que o navio se emprega;

ii) Só em casos excepcionais devem ser autorizadas derrogações às exigências relativas à estabilidade em caso de avaria e subordinadamente à condição de que a Administração entenda serem as proporções, disposições e outras características do navio as mais favoráveis que, para efeitos de estabilidade após avarias, podem ser prática e razoavelmente adoptadas, atendendo às circunstâncias particulares do serviço do navio.

Regra 8

Lastro

Quando é necessário lastro líquido, a água de lastro não deve, em regra, ser embarcada nos tanques de combustível. Os navios em que não seja praticamente possível evitar a admissão de água nos tanques de combustível devem ser equipados com depuradores de água poluída que satisfaçam a Administração, a não ser que sejam previstos outros meios, admitidos pela Administração para a evacuação da água de lastro poluída.

Regra 9

Anteparas dos piques, anteparas do espaço de máquinas, túneis dos veios, etc.

a) — *i*) Um navio deve ser provido de uma antepara do pique de vante, ou antepara de colisão, que deve ser estanque até ao pavimento das anteparas. Esta antepara deve ser instalada a uma distância da perpendicular a vante não superior a 3,05 m (10 pés) mais 5% do comprimento do navio, e não inferior a 5% desse comprimento;

ii) Se o navio tem uma superstrutura comprida a vante, a antepara do pique deve prolongar-se e manter-se estanque às intempéries até ao pavimento acima do pavimento das anteparas. O prolongamento dessa antepara não tem de estar necessariamente no mesmo plano da antepara do pique, desde que a sua distância até à perpendicular a vante não seja inferior a 5% do comprimento do navio e a parte do pavimento das anteparas que forme o salto seja tornada efectivamente estanque às intempéries.

b) Devem ser instaladas anteparas, separando o espaço das máquinas, tal como é definido na regra 2 do presente capítulo, dos espaços para a carga e para passageiros a ré ou a vante e uma antepara do pique de ré. Estas anteparas devem ser estanques até ao pavimento das anteparas. A antepara do pique da ré pode, contudo, formar um salto abaixo do pavimento das anteparas, desde que não seja diminuído por isso o grau de segurança do navio, no que diz respeito a compartimentagem.

c) Em todos os casos, as mangas dos veios devem ficar em espaços estanques, de volume reduzido. O bucim deve ficar situado em túnel estanque ou outro espaço estanque separado do compartimento da manga e de volume tal que, uma vez alagado por avaria no bucim, a linha de segurança não fique submersa.

Regra 10

Duplos fundos

a) Deve ser instalado um duplo fundo, correndo desde a antepara do pique de vante até à antepara do pique de ré, na medida em que isso for praticável e compatível com as características e utilização normal do navio:

i) Em navios de comprimento igual ou superior a 50 m (165 pés) e inferior a 61 m (200 pés) deve ser instalado um duplo fundo, que se estenderá, pelo menos, da antepara de vante do espaço de máquinas até à antepara do pique de vante ou tão próximo dela quanto for possível;

ii) Em navios de comprimento igual ou superior a 61 m (200 pés) e inferior a 76 m (249 pés) deve ser instalado um duplo fundo, pelo menos, fora do espaço de máquinas, estendendo-se até às anteparas do pique de vante e do pique de ré ou tão próximo destas quanto for possível;

iii) Em navios de comprimento igual ou superior a 76 m (249 pés) deve ser instalado um duplo fundo, a meio navio, estendendo-se até às anteparas dos piques de vante e de ré ou tão próximo destas quanto possível.

b) Quando for exigido um duplo fundo, a sua altura deve ser fixada a contento da Administração e deve ir até ao costado, de modo a proteger o fundo até ao encolamento. Considera-se satisfatória esta protecção quando a linha de intercepção da chapa marginal com a chaparia do encolamento não tiver ponto algum abaixo de um plano horizontal que passe pelo ponto do traçado na ossada, em que a baliza de meio navio é cortada por uma recta inclinada de 25° sobre a horizontal e tirada por um ponto da linha-base situada à distância da mediania igual a metade da boca de construção.

c) Os pequenos poços instalados nos duplos fundos para receber as aspirações das bombas de esgoto dos porões, etc., não devem ser mais profundos do que o necessário. Em caso algum a sua profundidade deve ser superior à altura do duplo fundo da mediania, diminuída de 457 mm (18 polegadas); os poços não devem também ir abaixo do plano horizontal definido no parágrafo *b*) da presente regra.

São permitidos, contudo, poços que vão até ao forro exterior, na extremidade de ré dos túneis de veios de navios de hélice.

Podem também ser permitidos outros poços (por exemplo: os tanques de óleo lubrificante debaixo das máquinas principais) se a Administração entender que as disposições de conjunto garantem uma protecção equivalente à que é assegurada por um duplo fundo, conforme as prescrições da presente regra.

d) Não é necessário instalar duplo fundo em correspondência de compartimento estanque de dimensões reduzidas destinado exclusivamente a transporte de líquidos desde que, no entender da Administração, a segurança do navio em caso de avaria no fundo ou no costado não fique diminuída por aquele facto.

e) No caso de navios aos quais são aplicáveis as disposições do parágrafo *d*) da regra I do presente capítulo e que são empregados num serviço regular dentro dos limites de uma viagem internacional curta, tal como é definida na regra 2 do capítulo III, a Administração pode autorizar a dispensa de duplo fundo numa parte qualquer de um navio cuja compartimentagem seja feita obedecendo a um factor de subdivisão não superior a 0,50, desde que entenda que a instalação de um duplo fundo na parte considerada não é compatível com as características do navio e a sua exploração normal.

Regra 11

Determinação, marcação e registo das linhas de carga de compartimentagem

a) A fim de ser assegurado o grau de compartimentagem exigido, deve ser determinada e marcada no costado do navio uma linha de carga correspondente ao calado adoptado para o cálculo de compartimentagem. Um navio que tenha espaços adaptados a ser ocupados, quer por passageiros, quer por carga, pode, caso o armador assim o deseje, ter uma ou mais linhas de carga adicionais, marcadas de modo a corresponder aos calados de compartimentagem correspondentes que possam ser aprovados pela Administração para as condições de exploração consideradas.

b) As linhas de carga de compartimentagem calculadas e marcadas devem ser registadas no certificado de segurança para navio de passageiros e

devem ser designadas: pela notação C.1, a que diz respeito ao caso em que o navio se emprega principalmente no transporte de passageiros; e por C.2, C.3, etc., as que digam respeito a outros casos de utilização do navio.

c) O bordo livre correspondente a cada uma destas linhas de carga deve ser medido no mesmo lugar e a partir da mesma linha de pavimento que são empregados para os bordos livres, determinados de harmonia com a Convenção Internacional das Linhas de Carga em vigor.

d) O bordo livre correspondente a cada linha de carga de compartimentagem aprovada e as condições de exploração correspondentes devem ser claramente indicados no certificado de segurança para navio de passageiros.

e) Em caso algum deve uma linha de carga de compartimentagem ser marcada acima da mais alta linha de carga em água salgada correspondente à resistência da estrutura do navio ou à Convenção Internacional das Linhas de Carga em vigor.

f) Seja qual for a posição das marcas das suas linhas de carga de compartimentagem, um navio não pode em caso algum ser carregado até à imersão da linha de carga correspondente à estação do ano e à região em que se encontra, calculada de acordo com a Convenção Internacional das Linhas de Carga em vigor.

g) Um navio não pode em caso algum ser carregado de tal modo que, quando em água salgada, fique submersa a marca da linha de carga de compartimentagem correspondente à natureza da viagem que vai empreender e às condições de serviço.

Regra 12

Construção e prova inicial das anteparas estanques, etc.

a) Cada antepara estanque de compartimentagem, quer seja transversal quer longitudinal, deve ser construída de modo tal que possa suportar, com uma margem de resistência conveniente, a pressão devida à mais alta coluna de água que possa ter de suportar em caso de avaria do navio e nunca inferior à pressão devida à coluna de água até à linha de segurança. A construção destas anteparas deve ser feita a contento da Administração.

b) — *i*) Os saltos e recessos das anteparas devem ser estanques e tão resistentes como a própria antepara, no sítio em que existem;

ii) Nos pontos em que um pavimento ou antepara estanque é atravessado por balizas ou vaus, a estanquidade de tal antepara ou pavimento naqueles pontos deve ser conseguida sem aplicação de madeira ou cimento.

c) Não é obrigatório encher com água os compartimentos principais para os mesmos serem experimentados. Quando não se fizer a prova por enchimento, é obrigatória uma prova à agulheta; esta prova deve ser efectuada na fase mais avançada possível do acabamento do navio. Em todos os casos deve ser feita uma minuciosa inspecção das anteparas estanques.

d) O pique de vante, duplos fundos (incluindo as quilhas em canal ou tubulares) e o revestimento interno dos cascos duplos devem ser submetidos a uma prova de pressão hidráulica correspondente a uma altura de uma coluna de água, como prescrito no parágrafo *a*) da presente regra.

e) Os tanques destinados a conter líquidos, que façam parte da compartimentagem do navio, devem ser experimentados, para verificação da sua estanquidade, por meio de coluna de água até à linha de carga máxima de compartimentagem ou até dois terços do pontal, medido do topo da quilha à linha de segurança na zona dos tanques, se este valor da altura for maior do que o anterior. Em caso algum a altura da coluna de água deve ser inferior a 0,92 m (3 pés) acima do tecto do tanque.

f) As provas mencionadas nos parágrafos *d*) e *e*) da presente regra têm por fim verificar que as estruturas da compartimentagem são estanques à água e não devem ser consideradas como provas de aptidão de cada compartimento para receber combustíveis líquidos ou para quaisquer outros fins, para as quais pode ser exigida uma prova de carácter mais severo, atendendo à altura que o líquido pode atingir no tanque ou nos encanamentos que o servem.

Regra 13

Abertura nas anteparas estanques

a) O número de aberturas nas anteparas estanques deve ser reduzido ao mínimo compatível com as características e a boa exploração do navio; devem ser previstos meios apropriados para fechar essas aberturas.

b) — *i*) Quando os encanamentos, embornais, cabos eléctricos, etc., tiverem de atravessar anteparas estanques de compartimentagem, devem ser tomadas disposições que assegurem a integridade de estanquidade das anteparas;

ii) Não são permitidas nas anteparas estanques de compartimentagem torneiras ou válvulas que não façam parte de um sistema de encanamentos;

iii) Não deve ser usado chumbo ou outro material sensível ao calor nos circuitos que atravessem anteparas estanques de compartimentagem, quando a deterioração desses circuitos, em caso de incêndio, comprometa a integridade de estanquidade das anteparas.

c) — *i*) Não são permitidas portas, portas de visita ou aberturas de acesso:

1) Na antepara de colisão, abaixo da linha de segurança;

2) Nas anteparas estanques transversais que separem um local de carga de outro local de carga adjacente ou de um paiol de carvão permanente ou de reserva, excepto nos casos previstos no parágrafo 1) da presente regra;

ii) Salvo os casos previstos na alínea *iii*) do presente parágrafo, a antepara de colisão, abaixo da linha de segurança, não pode ser atravessada por mais de um encanamento, para serviço do líquido contido no pique de vante, devendo o encanamento estar provido de válvula de haste roscada accionada de um ponto acima do pavimento das anteparas. O corpo da válvula deve ser fixado à antepara de colisão do lado de dentro do pique;

iii) Se o pique de vante estiver dividido para receber duas espécies diferentes de líquidos, a Adminis-

tração pode permitir que a antepara de colisão seja atravessada, abaixo da linha de segurança, por dois encanamentos, cada um dos quais satisfazendo as prescrições da alínea *ii*) do presente parágrafo, desde que a Administração reconheça que não há outra solução prática senão a instalação do segundo encanamento e que a segurança do navio se mantém, tendo em conta a compartimentagem suplementar do pique de vante.

d) — *i*) As portas estanques montadas nas anteparas entre paióis permanentes de carvão e de reserva devem estar sempre acessíveis, excepto nos casos previstos na alínea *ii*) do parágrafo *k*) da presente regra referente às portas dos paióis de coberta;

ii) Devem ser tomadas disposições apropriadas, por meio de divisórias ou de outro modo, que impeçam que o carvão venha interferir com o encerramento das portas estanques dos paióis de carvão.

e) Nos espaços que contêm as máquinas principais e auxiliares, incluindo as caldeiras que servem para fins de propulsão e todos os paióis permanentes de carvão, não deve haver mais de uma porta em cada antepara estanque principal transversal, com excepção das portas dos paióis de carvão e dos túneis das linhas de veios. Se o navio tiver duas ou mais linhas de veios, os túneis devem ser ligados por uma passagem de intercomunicação. Esta passagem não deve ter senão uma porta de comunicação com o espaço reservado às máquinas, no caso de duas linhas de veios; quando houver mais de duas linhas de veios não devem ser instaladas mais de duas portas. Todas estas portas devem ser de corrediça e estar montadas de modo que os topos das suas soleiras sejam tão altos quanto possível. O aparelho manual para manobrar estas portas acima do pavimento das anteparas deve estar situado fora do espaço das máquinas, se isso for possível sem prejuízo da instalação conveniente do mecanismo correspondente.

f) — *i*) As portas estanques devem ser de corrediça, de charneira ou de tipo equivalente. Não são permitidas portas constituídas por painéis fixados apenas por parafusos ou portas que fecham apenas pela acção da gravidade ou pela acção de um peso;

ii) As portas de corrediça podem ser:

De simples comando manual; ou
Accionadas por uma fonte de energia, além do comando manual;

iii) As portas estanques autorizadas podem portanto ser divididas em três classes:

Classe 1 — Portas de charneira;
Classe 2 — Portas de corrediça de comando manual;
Classe 3 — Portas de corrediça accionadas por uma fonte de energia além do comando manual;

iv) Os comandos de todas as portas estanques que sejam accionados por uma fonte de energia, ou não, devem ser capazes de assegurar o fecho da porta com o navio adornado de 15° para um ou outro bordo;

v) As portas estanques de qualquer classe devem ser munidas de indicadores de abertura que permitam verificar, de todos os postos de manobra de onde as portas não são visíveis, se elas estão abertas ou fechadas. No caso de alguma das portas estanques, de qualquer classe, não estar instalada de modo a poder ser fechada de um posto central de manobra, deve existir um meio de comunicação directo, mecânico, eléctrico, telefónico ou qualquer outro, que permita ao oficial de quarto entrar rapidamente em comunicação com a pessoa encarregada, conforme instruções prévias, de fechar a porta em questão.

g) As portas de charneira (classe 1) devem ter meios para fechar rapidamente, manobráveis de cada um dos lados da antepara, como, por exemplo, ferrolhos rotativos.

h) As portas de corrediça de comando manual (classe 2) podem ser de movimento horizontal ou vertical. O mecanismo deve poder ser manobrado localmente dos dois lados da porta e, ainda, de um ponto acessível situado acima do pavimento das anteparas, por rotação de uma manivela ou por outro sistema que apresente as mesmas garantias de segurança e seja de tipo aprovado. Pode ser concedida dispensa de manobra dos dois lados quando a sua instalação for praticamente impossível pela disposição dos locais. No caso de manobra manual, o tempo necessário para fechar completamente a porta, com o navio na posição direita, não deve exceder 90 segundos.

i) — *i*) As portas de corrediça accionadas por uma fonte de energia (classe 3) podem ser de movimento vertical ou horizontal. Quando for exigido que uma porta seja manobrada por uma fonte de energia de um posto central de manobra, o mecanismo deve estar disposto de modo que a porta possa ser manobrada localmente, dos dois lados, por meio da mesma fonte de energia. A porta deve tornar a fechar-se automaticamente se for aberta localmente depois de ter sido fechada pelo posto central de manobra, devendo também existir um dispositivo local para manter a porta fechada, sem que possa ser aberta do posto central de manobra. Os manípulos de manobra local, em comunicação com o mecanismo movido pela fonte de energia, devem estar montados de um e de outro lado da antepara e dispostos de modo que uma pessoa que passe pela porta possa manter os dois manípulos em posição de abertura, mas não possa fazer funcionar involuntariamente o mecanismo de fechar. As portas de corrediça movidas por fontes de energia devem ser providas de comando manual manobrável dos dois lados da porta e, também, de um ponto acessível situado acima do pavimento das anteparas, por um movimento de rotação contínua, ou por outro movimento que dê as mesmas garantias de segurança e seja de tipo aprovado. Deve haver meios para avisar, por sinal sonoro, que o movimento da porta foi posto em marcha e vai continuar até fechar completamente. A duração do encerramento da porta deve ser suficiente para garantir a segurança;

ii) Deve haver pelo menos duas fontes de energia independentes capazes de abrir e fechar todas as portas do sistema, cada uma das quais deve ser suficiente para garantir a manobra simultânea de todas as portas. As duas fontes de energia devem ser comandadas da estação central na ponte, a qual terá todos os indicadores necessários para verificar que cada uma das duas fontes de energia está em condições de garantir o serviço de modo satisfatório;

iii) No caso de manobra hidráulica, cada fonte de energia deve ser constituída por uma bomba capaz de fechar todas as portas num período de tempo não superior a 60 segundos. Devem também existir, para o conjunto da instalação, acumuladores hidráulicos de capacidade suficiente para fazer funcionar as portas três vezes sucessivas, pelo menos, isto é, fechar-abrir-fechar. O fluido usado deve ser incongelável para as temperaturas susceptíveis de serem encontradas pelo navio durante o seu serviço.

j) — *i*) Só são permitidas portas estanques de charneira (classe 1) em espaços destinados a passageiros, tripulantes e a locais de serviço que fiquem acima de um pavimento cuja base inferior, no seu ponto mais baixo, à amurada, esteja, pelo menos, 2,13 m (7 pés) acima da linha de carga máxima de compartimentagem;

ii) As portas estanques cuja soleira está situada acima da linha de carga máxima, mas abaixo da linha definida na alínea precedente, devem ser do tipo de corrediça e podem ser de comando manual (classe 2), salvo em navios que efectuem viagens internacionais curtas e cujo factor de subdivisão seja igual ou inferior a 0,5, caso em que todas as portas devem ser manobradas por fontes de energia. O emprego de fontes de energia é exigido para a manobra das portas existentes na passagem de condutas dos porões frigoríficos e de condutas de ventilação ou de tiragem forçada, quando essas condutas atravessarem mais do que uma antepara principal estanque de compartimentagem.

k) — *i*) As portas estanques que tenham de ser ocasionalmente abertas quando o navio está no mar, e cuja soleira fica abaixo da linha de carga máxima de compartimentagem, devem ser de corrediça. Devem ser aplicadas as seguintes regras:

1) Se o número destas portas (excluindo as portas de entrada para os túneis das linhas de veios) for superior a cinco, todas estas portas, e também as das entradas dos túneis da linha de veios, das condutas de ventilação ou de tiragem forçada devem ser manobradas por meio de fontes de energia (classe 3) e poder ser simultaneamente fechadas de um posto central de manobra na ponte;

2) Se o número destas portas (excluindo as portas de entrada dos túneis das linhas de veios) estiver compreendido entre um e cinco:

a) Se o navio não tiver espaços de passageiros abaixo do pavimento das anteparas, as referidas portas podem ser manobradas à mão (classe 2);

b) Se o navio tiver espaços de passageiros abaixo do pavimento das anteparas, todas as portas acima citadas devem ser movidas por fontes de energia (classe 3) e poder ser simultaneamente fechadas de um posto central de manobra na ponte;

3) Se em qualquer navio não houver, no total, mais de duas portas estanques no espaço destinado às máquinas e nas anteparas que limitam esse espaço, a Administração pode autorizar para essas duas portas o emprego apenas de manobra manual (classe 2);

ii) Se existirem nos paióis de carvão nas cobertas abaixo do pavimento das anteparas portas estanques de corrediça que tenham de ser ocasionalmente abertas no mar, para rechego do carvão, é exigido o emprego de fontes de energia para a manobra destas portas. A abertura e o encerramento destas portas devem ser mencionados no diário de bordo.

l) — *i*) Sempre que a Administração o reconheça indispensável, podem ser instaladas portas estanques, de construção adequada, nas anteparas estanques das cobertas de carga. Estas portas podem ser do tipo de charneira, de rolar ou de correr, e não devem ter comando à distância. Devem ser montadas ao nível mais elevado e o mais afastadas do costado que seja possível, compativelmente com a sua utilização prática, mas em caso algum os seus bordos verticais exteriores poderão ficar a uma distância do costado inferior a um quinto da boca do navio, como é definida na regra 2 do presente capítulo, sendo essa distância medida perpendicularmente ao plano de simetria longitudinal do navio, ao nível da linha de carga máxima de compartimentagem;

ii) Estas portas devem ser fechadas antes do início da viagem e devem manter-se fechadas durante todo o tempo de navegação; as horas da sua abertura à chegada do navio ao porto e do seu encerramento antes da partida do navio do porto devem ser registadas no diário de bordo. Se algumas destas portas ficar acessível durante a viagem, deve ser instalado um dispositivo que impeça a sua abertura sem autorização. Quando existirem portas deste tipo, o seu número e a sua disposição devem ser objecto de exame especial pela Administração.

m) O emprego de chapas desmontáveis nas anteparas estanques não é permitido, salvo dentro do espaço das máquinas. Tais chapas devem ser sempre colocadas nos seus lugares antes de o navio sair do porto e não podem ser retiradas durante a navegação, excepto em caso de imperiosa necessidade. Ao tornar a colocá-las nos seus lugares, devem ser tomadas as precauções necessárias para assegurar que as respectivas juntas fiquem perfeitamente estanques.

n) Todas as portas estanques devem conservar-se fechadas durante a navegação, excepto quando for necessário abri-las para serviço do navio, mas, neste caso, devem estar sempre prontas a ser imediatamente fechadas.

o) — *i*) Se os troncos ou túneis para acesso dos alojamentos da tripulação às casas das caldeiras ou para passagem de encanamentos ou para qualquer outro fim atravessarem anteparas transversais principais, tais troncos ou túneis devem ser estanques e estar de acordo com as disposições da regra 16 do presente capítulo. O acesso, pelo menos, a uma das extremidades de cada tronco ou túnel, se for utilizado como passagem no mar, deve fazer-se por meio de um poço estanque de altura tal que a sua saída esteja acima da linha de segurança. O acesso à outra extremidade pode fazer-se através de porta estanque, do tipo exigido pela sua localização no navio. Estes troncos ou túneis não devem, em caso algum, atravessar a antepara de colisão;

ii) Quando for previsto que condutas ou túneis para tiragem forçada tenham de atravessar anteparas estanques transversais principais, deve tal caso ser considerado de forma especial pela Administração.

Regra 14

Aberturas no costado situadas abaixo da linha de segurança

a) O número de aberturas no costado deve ser reduzido ao mínimo compatível com as características de projecto do navio e com a sua eficiente utilização.

b) A disposição e eficiência dos meios para fechar qualquer abertura no costado devem corresponder ao fim em vista e à localização de tais aberturas e devem, de modo geral, ser a contento da Administração.

c) — *i*) Se, numa coberta, o bordo inferior da abertura de uma vigia qualquer estiver abaixo de uma linha traçada paralelamente à linha de intersecção do pavimento das anteparas com o costado e tendo o seu ponto mais baixo 2,5 % da boca do navio acima da linha de carga máxima de compartimentagem, todas as vigias dessa coberta devem ser do tipo fixo, isto é, não devem poder ser abertas;

ii) Todas as vigias cujos bordos inferiores estão abaixo da linha de segurança, além daquelas que, por virtude do disposto na alínea *i*) do presente parágrafo, têm de ser do tipo fixo, devem ser de construção tal que ninguém as possa abrir sem autorização do comandante do navio;

iii) — 1) Se, numa coberta, o bordo inferior de uma vigia qualquer, daquelas a que se refere a alínea *ii*) do presente parágrafo, estiver abaixo de uma linha traçada paralelamente à linha de intercepção do pavimento das anteparas com o costado e tendo o seu ponto mais baixo 1,37 m (4,5 pés) mais 2,5 % da boca do navio acima da linha de água quando o navio sai de qualquer porto, todas as vigias nessa coberta devem ser fechadas à chave e de forma estanque antes de o navio largar e não devem ser abertas antes de o navio chegar ao porto seguinte. Ao aplicar as disposições do presente parágrafo deve ter-se em conta o facto de o navio, eventualmente, estar a flutuar em água doce;

2) As horas de abertura de tais vigias no porto e as de as fechar à chave antes da partida devem ser registadas no diário de bordo prescrito pela Administração;

3) Para navios que tenham uma ou mais vigias colocadas de tal modo que lhes sejam aplicáveis as disposições da alínea *iii*), 1), do presente parágrafo, quando o navio estiver flutuando na sua linha de carga máxima de compartimentagem, pode a Administração indicar qual o calado médio limite para o qual aquelas vigias terão o seu bordo inferior acima da linha paralela à intercepção do pavimento das anteparas com o costado e cujo ponto mais baixo esteja 1,37 m (4,5 pés) mais 2,5 % da boca do navio acima da linha de água correspondente a este calado médio, para o qual, portanto, é admissível que o navio largue do porto sem que lhe sejam previamente fechadas à chave aquelas vigias ou que possam ser abertas no mar sob responsabilidade do comandante durante a viagem para o porto seguinte. Nas zonas tropicais, tais como são definidas na Convenção Internacional das Linhas de Carga em vigor, este calado médio pode ser aumentado de 0,305 m (1 pé).

d) Todas as vigias devem ser providas de portas de tempo de charneira, dispostas de modo que possam segura e eficazmente ser fechadas e apertadas de forma a obter-se a vedação estanque, exceptuando-se, contudo, aquelas que existam para ré de um oitavo do comprimento do navio, a contar da perpendicular a vante, e acima de uma linha traçada paralelamente à intercepção do pavimento das anteparas com o costado e tendo o seu ponto mais baixo à altura de 3,66 m (12 pés) mais 2,5 % da boca do navio acima da linha de carga máxima de compartimentagem, as quais poderão ser tampas amovíveis dentro dos alojamentos de passageiros que não sejam passageiros de coberta, salvo se a Convenção Internacional das Linhas de Carga em vigor exigir que essas portas estejam permanentemente montadas na sua posição própria. As portas amovíveis devem ser arrumadas próximo das vigias a que são destinadas.

e) As vigias e suas portas, que não sejam acessíveis durante a navegação, devem ser fechadas e travadas antes de o navio largar do porto.

f) — *i*) Não devem ser instaladas vigias em espaços destinados exclusivamente a transporte de carga ou carvão;

ii) Podem, contudo, ser instaladas vigias em espaços destinados alternativamente ao transporte de carga ou de passageiros, mas, nesse caso, devem as vigias ser construídas de modo que não seja possível a qualquer pessoa abri-las, nem às suas portas de tempo, sem consentimento do comandante do navio;

iii) Quando em tais espaços se transporte carga, as vigias e suas portas de tempo devem ser fechadas à chave, de forma a ficarem estanques, antes de a carga ser embarcada, e a hora em que as vigias forem fechadas deve ser registada no diário de navegação prescrito pela Administração.

g) Não devem ser instaladas vigias de ventilação automática no costado abaixo da linha de segurança sem que para isso a Administração dê autorização especial.

h) O número de embornais, descargas de encanamentos de serviço sanitário e aberturas semelhantes no casco deve ser reduzido ao mínimo, quer fazendo com que uma descarga sirva ao maior número possível de encanamentos sanitários ou outros, quer de qualquer outra forma satisfatória.

i) — *i*) Todas as tomadas de água e descargas no fundo e no costado devem ser providas de dispositivos eficientes e acessíveis que impeçam a eventual entrada de água no navio. O emprego de chumbo ou outro material sensível ao calor é proibido nos encanamentos de tomadas de água e descargas para o mar ou para qualquer outro uso em que a deterioração desses encanamentos em caso de incêndio possa provocar perigo de alagamento;

ii) — 1) Excepto nos casos previstos na alínea *iii*) do presente parágrafo, cada descarga separada partindo de espaços situados abaixo da linha de segurança e que atravessa a chaparia exterior do casco deve ser provida, quer de uma válvula automática de não retorno munida de meios directos de obturação accionados de um ponto situado acima do pavimento das anteparas, quer, alternativamente, de duas válvulas automáticas de não retorno sem meios directos de comando, das quais a superior deve estar situada num ponto acima da linha de carga máxima de compartimentagem que seja sempre acessível para visita em condições de serviço e ser de um tipo tal que normalmente esteja fechada;

2) Quando sejam empregadas válvulas com comando directo de obturação, a posição de comando das válvulas situada acima do pavimento das anteparas deve ser facilmente acessível em qualquer circunstância e devem ser instalados indicadores que mostrem se a válvula está fechada ou aberta;

iii) As tomadas de água e descargas principais e auxiliares em comunicação com as máquinas devem ser providas de torneiras e/ou de válvulas intercaladas em locais facilmente acessíveis entre os encanamentos e a chapa do casco ou entre os encanamentos e as caixas fixadas ao casco.

j) — *i*) Os portalós e as portas de carga e de carvão instalados abaixo da linha de segurança devem ser suficientemente resistentes, ser eficazmente fechados de forma estanque antes de o navio sair do porto e manter-se fechados durante todo o tempo de navegação;

ii) Tais aberturas não devem, em caso algum, ser instaladas de modo que a parte inferior fique abaixo da linha de carga máxima de compartimentagem.

k) — *i*) As aberturas interiores das dalas para descarga de cinzas ou lixo, etc., devem ser providas de tampas eficientes;

ii) Se estas aberturas interiores estiverem situadas abaixo da linha de segurança, a tampa deve ser estanque e, além disso, deve haver uma válvula automática de não retorno instalada na conduta em local facilmente acessível acima da linha de carga máxima de compartimentagem. Quando a conduta não está em serviço, tanto a tampa como a válvula devem estar fechadas e fixadas nessa posição.

Regra 15

Construção e provas iniciais das portas estanques, vigias, etc.

a) — *i*) O traçado, os materiais utilizados e a construção de todas as portas estanques, vigias, portalós, portas de carvão e de cargas, válvulas, encanamentos, dalas de cinza e dalas de lixo, considerados nas presentes regras, devem satisfazer as exigências da Administração;

ii) Os caixilhos das portas estanques verticais não devem apresentar quaisquer ranhuras na parte inferior onde se possa acumular lixo que impeça a porta de fechar bem;

iii) Todas as torneiras e válvulas das tomadas de água ou descarga para o mar situadas abaixo do pavimento das anteparas, assim como as suas ligações ao casco, devem ser de aço, de bronze ou de qualquer outro material dúctil aprovado. O ferro fundido ordinário e os materiais similares não devem ser utilizados.

b) Cada porta estanque deve ser submetida a prova hidráulica sob uma pressão correspondente à altura de água até ao pavimento das anteparas. Esta prova deve ser feita antes da entrada em serviço do navio, quer antes quer depois de a porta estar montada a bordo.

Regra 16

Construção e provas iniciais dos pavimentos estanques, troncos, etc.

a) Os pavimentos, troncos, túneis, quilhas, em canal ou tubulares, e condutas de ventilação que sejam estanques devem ser de resistência equivalente à das anteparas estanques situadas ao mesmo nível. Os meios empregados para os tornar estanques e os dispositivos usados para fechar as aberturas neles existentes devem satisfazer as exigências da Administração. As condutas de ventilação e os troncos estanques devem elevar-se, pelo menos, até ao nível do pavimento das anteparas.

b) Os troncos, túneis e condutas de ventilação estanques devem ser submetidos a uma prova de estanquidade de agulheta, depois de concluídos. A prova dos pavimentos estanques pode ser efectuada à agulheta ou por alagamento.

Regra 17

Estanquidade acima da linha de segurança

a) A Administração pode exigir que sejam tomadas todas as medidas praticáveis e razoáveis para evitar a entrada e o movimento de água acima do pavimento das anteparas. Tais medidas podem consistir na montagem de anteparas estanques parciais ou de balizas largas. Quando estas anteparas parciais ou balizas largas estão instaladas sobre o pavimento das anteparas no prolongamento ou na imediata proximidade das anteparas estanques principais devem ser ligadas de modo estanque ao pavimento e ao costado, de modo a restringir o escoamento da água ao longo do pavimento quando o navio esteja inclinado por avaria. Se uma antepara estanque parcial não estiver no prolongamento da antepara estanque abaixo do pavimento das anteparas, este pavimento deve ser estanque no espaço compreendido entre as anteparas.

b) O pavimento das anteparas ou outro pavimento acima deste deve ser estanque à intempérie, de modo que, em condições ordinárias de mar, não deixe passar água para baixo. Todas as aberturas feitas num pavimento exposto ao tempo devem ter braçolas de altura e resistência suficientes, e ser munidas de meios eficazes que permitam fechá-las rapidamente e torná-las estanques ao mar. Se o pavimento tem borda falsa, devem existir aberturas e/ou portas de tempo e embornais para descarregar rapidamente a água dos pavimentos expostos à intempérie, em todas as condições de tempo.

c) As vigias, portalós, portas de carga e carvão e outros meios para fechar aberturas do costado acima da linha de segurança devem ser de traçado e construção eficientes e de resistência suficiente em relação aos espaços onde são montados e à sua posição relativamente à linha de carga máxima de compartimentagem.

d) Deve haver portas de tempo interiores de construção resistente e dispostas para fechar rapidamente de modo estanque as vigias nos locais que ficam abaixo do pavimento imediatamente acima do pavimento das anteparas.

Regra 18

Meios de esgoto dos navios de passageiros

a) Todos os navios devem ser providos de uma eficaz instalação de esgoto que permita aspirar e esgotar qualquer compartimento estanque, tão completamente quanto possível, depois de avaria e com o navio direito ou inclinado, com excepção dos compartimentos que sejam permanentemente utilizados co-

mo reservatórios de combustível líquido ou de água. Para este fim são geralmente necessárias aspirações laterais, a não ser nos compartimentos estreitos das extremidades do navio, nos quais uma só aspiração pode ser considerada suficiente. Nos compartimentos de forma fora do normal podem ser exigidas aspirações suplementares. Devem ser tomadas disposições que assegurem que a água aflua às aspirações do compartimento. Em certos compartimentos, nos quais a Administração considere inconveniente a instalação de meios de esgoto, pode ser concedida dispensa da sua aplicação, se os cálculos feitos nos termos do parágrafo *b*) da regra 7 do presente capítulo mostrarem que a segurança do navio não será diminuída. Devem ser instalados meios eficazes para o esgoto de água dos porões frigoríficos.

b) — *i*) Os navios devem ser providos, pelo menos, de três bombas accionadas mecanicamente e ligadas ao colector principal de esgoto, podendo uma delas ser accionada pela máquina principal. Quando o critério de serviço é igual ou superior a 30, o navio deve ser dotado de mais uma bomba independente accionada mecanicamente;

ii) O quadro a seguir indica o número de bombas exigível:

Critério de serviço	Inferior a 30	Igual ou superior a 30
Bomba movida pela máquina principal (podendo ser substituída por uma bomba independente)	1	1
Bombas independentes	2	3

iii) As bombas de serviço sanitário, as bombas de lastro e de serviço geral podem ser aceites como bombas de esgoto independentes quando tiverem as necessárias ligações com os encanamentos de esgoto.

c) Sempre que possível, as bombas de esgoto accionadas mecanicamente devem ser instaladas em compartimentos estanques separados e dispostos ou situados de tal modo que a mesma avaria não possa ocasionar rápida e simultaneamente o alagamento de todos eles. Se as máquinas e caldeiras estiverem instaladas em dois ou mais compartimentos estanques, as bombas susceptíveis de serem utilizadas no serviço de esgoto devem ser distribuídas tanto quanto possível por esses compartimentos.

d) Em navios de comprimento igual ou superior a 91,5 m (300 pés), ou cujo critério de serviço seja igual ou superior a 30, devem ser tomadas as medidas necessárias para que, pelo menos, uma das bombas accionadas mecanicamente possa ser normalmente utilizada no caso de o navio ser invadido pelo mar. Esta condição considera-se satisfeita se:

i) Uma das bombas exigidas for uma bomba de emergência de tipo submersível aprovado com a sua fonte de energia situada acima do pavimento das anteparas; ou

ii) As bombas e as suas fontes de energia forem dispostas de tal modo ao longo do comprimento do navio que, em qualquer hipótese de alagamento que o navio possa suportar, pelo menos uma bomba esteja situada num compartimento não alagado.

e) Cada uma das bombas de esgoto exigidas, com excepção das bombas suplementares que podem ser instaladas apenas para os compartimentos dos piques, deve estar disposta de modo a poder aspirar de qualquer compartimento cujo esgoto é exigido por aplicação das disposições da parágrafo *a*) da presente regra.

f) — *i*) Cada bomba de esgoto accionada mecanicamente deve ser capaz de aspirar a água através do colector principal de esgoto com velocidade não inferior a 122 m (400 pés) por minuto. As bombas de esgoto independentes accionadas mecanicamente e instaladas no espaço das máquinas devem ter aspirações directas dos diversos compartimentos na condição de que não serão exigidas mais de duas aspirações em cada compartimento. Quando existem duas ou mais aspirações deve estar pelo menos uma a bombordo e outra a estibordo. A Administração pode exigir que as bombas de esgoto independentes accionadas mecanicamente e instaladas noutros compartimentos tenham aspirações directas separadas. As aspirações directas devem ser convenientemente dispostas e as que estiverem situadas em qualquer compartimento do espaço das máquinas devem ser de diâmetro não inferior ao diâmetro do colector principal de aspiração;

ii) Em navios que utilizem carvão como combustível deve ser instalada na casa das caldeiras, além de outras aspirações previstas por esta regra, uma mangueira flexível, de comprimento e diâmetro convenientes, que possa ser ligada à aspiração de uma bomba independente accionada mecanicamente.

g) — *i*) No espaço das máquinas, além da aspiração ou das aspirações directas prescritas no parágrafo *f*) da presente regra, deve haver uma aspiração directa da bomba de circulação principal ao nível de esgoto do local e provida de válvula de não retorno. O diâmetro desta aspiração directa não deve ser inferior a dois terços do diâmetro da aspiração do mar da referida bomba, no caso de navios a vapor, e terá diâmetro igual, no caso de navios a motor;

ii) Se, na opinião da Administração, a bomba de circulação principal não convém para este fim, a aspiração directa de emergência pode ser feita pela maior bomba independente accionada mecanicamente, devendo o diâmetro da aspiração de esgoto ser igual ao diâmetro da aspiração do mar da bomba considerada. O débito desta bomba, quando aspira nestas condições, deve ser superior ao débito exigido às bombas de esgoto da instalação, de uma quantidade que a Administração considere satisfatória;

iii) As hastes de comando das válvulas da tomada de água e das aspirações directas devem vir bastante acima do estrado da casa das máquinas;

iv) Quando o combustível for ou puder ser carvão, e se não houver anteparas estanques entre as máquinas e as caldeiras, deve haver uma descarga directa para o mar ou, em alternativa, uma derivação à descarga da bomba de circulação para qualquer bomba de circulação que seja utilizada de acordo com a alínea *i*) do presente parágrafo.

h) — *i*) Todos os encanamentos das bombas exigidas para o serviço de esgoto de porões de carga ou compartimentos das máquinas devem ser inteiramente separados dos encanamentos que possam ser usados para encher ou esgotar tanques onde seja transportada água ou combustível líquido;

ii) Tanto no interior como debaixo dos paióis de carvão e dos tanques de combustível líquido, assim como nas casas das máquinas ou das caldeiras, incluindo os locais onde estejam situados tanques de decantação de óleo ou bombas de óleo combustível, os encanamentos devem ser de aço ou de outro material aprovado.

i) O diâmetro do colector principal de esgoto deve ser calculado pelas fórmulas seguintes, podendo o diâmetro interior real do colector ter o valor normalizado mais próximo julgado aceitável pela Administração:

$$d = 1{,}68 \sqrt{L\,(B+P)} + 25$$

onde:

d = diâmetro interno do colector em milímetros;
L e B são o comprimento e a boca do navio em metros como definidos na regra 2 do presente capítulo;
P = pontal do navio, na ossada, até ao pavimento das anteparas em metros;

ou:

$$d = \sqrt{\frac{L\,(B+P)}{2500}} + 1$$

onde:

d = diâmetro interno do colector em polegadas;
L e B são o comprimento e a boca do navio em pés como definidos na regra 2 do presente capítulo;
P = pontal do navio, na ossada, até ao pavimento das anteparas em pés.

O diâmetro das derivações deve ser determinado por meio de regras a estabelecer pela Administração.

j) O sistema de encanamentos de esgoto e de lastro deve ser disposto de tal modo que não seja possível a passagem da água do mar ou dos tanques de lastro para os espaços destinados a carga ou a máquinas ou de um compartimento para outro. Em particular, devem ser tomadas medidas que impeçam que um *deep tank* que tenha aspirações derivadas do colector de esgoto ou de encanamentos de lastro possa, por inadvertência, ser alagado pela água do mar quando contenha carga ou ser esgotado através de um encanamento de esgoto quando contenha lastro líquido.

k) Devem ser tomadas medidas que impeçam que um compartimento servido por um encanamento de esgoto seja inundado em caso de avaria ou rotura desse encanamento, por encalhe ou abalroamento, em outro compartimento. Para este efeito, quando um encanamento está situado a uma distância do forro exterior inferior a um quinto da boca do navio (medida perpendicularmente ao plano de simetria do navio ao nível da linha de carga máxima de compartimentagem) ou instalado dentro de uma quilha tubular, deve ser provido de válvula de não retorno no compartimento em que está a aspiração.

l) Todas as caixas de distribuição, torneiras e válvulas que façam parte do sistema de encanamentos de esgoto devem estar em locais que sejam facilmente acessíveis em circunstâncias normais. Devem ser instaladas de modo que, na hipótese de alagamento, seja possível fazer aspirar uma das bombas de esgoto de um compartimento qualquer; além disso, a avaria de uma bomba ou do seu encanamento de ligação ao colector principal, quando situados a uma distância do forro exterior inferior a um quinto da boca do navio, não deve impedir a utilização do resto da instalação de esgoto. Se há apenas um sistema de encanamentos comum a todas as bombas, as torneiras e válvulas necessárias para regular as diferentes aspirações devem poder ser comandadas de local situado acima do pavimento das anteparas. Se, além do sistema principal de esgotos, houver um sistema de emergência, este deve ser independente do sistema principal e disposto de modo que uma bomba possa aspirar de qualquer compartimento em caso de alagamento; neste caso, só é exigido que as torneiras e válvulas necessárias ao funcionamento do sistema de emergência sejam comandadas de um local acima do pavimento das anteparas.

m) Todos os dispositivos de comando das torneiras e válvulas mencionadas no parágrafo *l*) da presente regra que possam ser manobrados de locais acima do pavimento das anteparas devem estar marcados de forma precisa nos locais de manobra e ser munidos de indicadores que mostrem se os órgãos de accionamento interessados estão abertos ou fechados.

Regra 19

Informações sobre estabilidade de navios de passageiros e de navios de carga (1)

a) Todos os navios de passageiros e de carga devem ser sujeitos, depois de concluídos, a uma prova destinada a determinar os seus elementos de estabilidade. O comandante deve receber todas as informações necessárias para que possa obter de modo simples e rápido indicações exactas da estabilidade em qualquer condição de serviço; uma cópia destas informações deve ser entregue à Administração.

b) Quando um navio sofra modificações que afectem de modo apreciável os elementos de estabilidade fornecidos ao comandante, devem ser-lhe fornecidos novos elementos devidamente corrigidos. Se for necessário, deve ser feita nova prova de estabilidade.

c) A Administração pode dispensar a prova de estabilidade de um navio se existirem elementos de base deduzidos da prova de estabilidade de outro navio idêntico e for provado, a contento da Administração, que se pode obter, a partir desses elementos, informação segura sobre a estabilidade do navio em causa.

d) A Administração pode também dispensar a prova de estabilidade de um navio, ou de uma categoria de navios, especialmente destinados ao transporte de líquidos ou minério a granel, quando os elementos existentes de navios semelhantes demonstrarem claramente que, dadas as suas proporções e arranjo, o navio terá, em todas as condições de carga prováveis, altura metacêntrica mais do que suficiente.

---

(1) Veja a «Recomendação sobre estabilidade intacta de navios de passageiros e de navios de carga com um comprimento inferior a 100 m», adoptada pela Organização mediante a Resolução A.167 (ES.IV) e as alterações a esta Recomendação, adoptadas pela Organização mediante a Resolução A.206 (VII).

Regra 20

Planos para limitação de avarias

Devem estar permanentemente afixados, para orientação do oficial responsável pelo navio, planos que indiquem claramente, para cada pavimento e porão, os limites dos compartimentos estanques, as aberturas que neles existem com os meios de as fechar e a localização dos respectivos comandos, assim como as disposições a tomar para corrigir qualquer inclinação do navio causada por alagamento. Serão também postos à disposição dos oficiais do navio cadernos contendo as mesmas informações.

Regra 21

Marcação, manobras e inspecções periódicas das portas estanques, etc.

a) Esta regra aplica-se aos navios novos e aos navios existentes.

b) Deve proceder-se semanalmente a exercícios de manobra das portas estanques, vigias, válvulas, mecanismos para fechar os embornais, os estractores de cinzas e as dalas para lixo. Nos navios empregados em viagens de duração superior a uma semana deve realizar-se um exercício completo antes de o navio largar do seu ponto de partida e, posteriormente, outros, à razão de, pelo menos, um por semana, durante a viagem. Em todos os navios as portas estanques accionadas mecanicamente e as portas de charneira das anteparas transversais principais que são utilizadas durante a navegação devem ser manobradas diariamente.

c) — *i*) As portas estanques, incluindo todos os mecanismos e indicadores a elas ligados, todas as válvulas que é necessário fechar para se tornar estanque um compartimento e ainda todas as válvulas que comandam a manobra do equilíbrio transversal em caso de avaria devem ser periodicamente inspeccionadas, pelo menos uma vez por semana, quando o navio estiver no mar;

ii) As referidas portas, válvulas e mecanismos devem ter indicações que permitam a sua manobra com o máximo de segurança.

Regra 22

Menções no diário de bordo

a) Esta regra aplica-se aos navios novos e aos navios existentes.

b) As portas estanques de charneira, chapas desmontáveis, vigias, portalós, portas de carga e de carvão e outras aberturas que, por determinação das presentes regras, devem conservar-se fechadas durante a navegação, devem ser fechadas antes de o navio deixar o porto. As horas de encerramento e de abertura (se ela for permitida pelas presentes regras) devem ser inscritas no diário de bordo, conforme for exigido pela Administração.

c) No diário de bordo devem ser registados todos os exercícios e inspecções exigidos pela regra 21 do presente capitulo, com indicação expressa de todos os defeitos observados.

PARTE C

Máquinas e instalações eléctricas (1)

(Esta parte aplica-se aos navios de passageiros e aos navios de carga)

Regra 23

Generalidades

a) As instalações eléctricas nos navios de passageiros devem ser tais que:

i) Os serviços essenciais à segurança do navio estejam assegurados em todas as circunstâncias de emergência;

ii) Seja assegurada a segurança dos passageiros, tripulantes e do navio contra os acidentes de origem eléctrica.

b) Os navios de carga devem satisfazer às regras 26, 27, 28, 29, 30 e 32 do presente capítulo.

Regra 24

Fonte principal de energia eléctrica nos navios de passageiros

a) Em todos os navios de passageiros em que a energia eléctrica é o único meio de assegurar o funcionamento dos serviços auxiliares indispensáveis à propulsão e à segurança do navio deve haver, pelo menos, dois grupos geradores principais.

A potência destes grupos deve ser tal que, com um dos grupos parados, seja ainda possível garantir o funcionamento dos serviços mencionados na alínea *i*) do parágrafo *a*) da regra 23 do presente capítulo.

b) Nos navios de passageiros em que há apenas uma estação geradora principal, o quadro principal de distribuição deve estar situado na mesma zona principal de incêndio. Quando houver mais de uma estação geradora principal é aceitável que haja um só quadro de distribuição principal.

Regra 25

Fonte de energia eléctrica de emergência nos navios de passageiros

a) Deve haver uma fonte autónoma de energia eléctrica de emergência acima do pavimento das anteparas e fora dos rufos do aparelho propulsor. A sua localização, em relação à fonte ou fontes principais de energia, deve ser tal que, no entender da Administração, um incêndio ou outro acidente no espaço das máquinas, tal como é definido no parágrafo *h*) da regra 2 do presente capítulo, não afecte a alimentação ou a distribuição da energia de emergência. A localização não pode ser a vante da antepara de colisão.

b) A potência disponível deve ser suficiente para alimentar todos os serviços que a Administração

(1) Veja a «Recomendação sobre as medidas de segurança aplicáveis a casas de máquinas periodicamente não assistidas de navios de carga que completam as normalmente consideradas necessárias para casas das máquinas assistidas», adoptada pela Organização mediante a Resolução A.211 (VII).

considere necessários para a segurança dos passageiros e da tripulação numa situação de emergência, tendo em consideração os serviços que podem ter de funcionar simultaneamente. Ter-se-á em especial atenção: a iluminação de emergência dos postos de embarque nas embarcações salva-vidas, tanto no convés como às amuradas, em todos os corredores, escadas e saídas, nos locais das máquinas e nos postos de segurança definidos no parágrafo *f)* da regra 3 do capítulo II-2, o funcionamento da bomba da instalação automática de água pulverizada e a alimentação das luzes de navegação e de lâmpadas de sinais de dia, se alimentados pela fonte principal de energia. A potência deve poder ser mantida durante um período de trinta e seis horas, excepto quando, nos casos de navios que efectuem regularmente viagens de curta duração, a Administração puder aceitar uma menor duração se ela própria considerar que se obtém o mesmo grau de segurança.

c) A fonte de energia de emergência pode ser:

i) Um gerador accionado por motor próprio, com alimentação independente de combustível e sistema de arranque aprovado. O combustível utilizado não deverá ter ponto de inflamação inferior a 43°C (110°F);

ii) Uma bateria de acumuladores capaz de suportar a carga de emergência sem necessidade de ser carregada e sem queda excessiva de tensão.

d) — *i)* Quando a energia eléctrica de emergência for fornecida por um gerador, deve haver uma fonte temporária de energia de emergência, constituída por uma bateria de acumuladores com capacidade suficiente para:

1) Alimentar a iluminação de emergência continuamente, durante meia hora;

2) Fechar as portas estanques (se de comando eléctrico), mas não sendo necessário que sejam fechadas todas ao mesmo tempo;

3) Fazer funcionar os sinalizadores (se accionados electricamente) que indiquem se as portas estanques de accionamento mecânico estão abertas ou fechadas;

4) Fazer funcionar os sinais sonoros (se actuados electricamente) avisadores de que as portas estanques de accionamento mecânico estão em movimento para fechar.

As disposições devem ser tais que a fonte temporária de energia de emergência entre automaticamente em serviço no caso de interrupção da alimentação eléctrica principal;

ii) Quando a fonte de energia de emergência for constituída por uma bateria de acumuladores, deve haver dispositivos para assegurar a sua entrada em serviço automaticamente, alimentando a instalação de iluminação de emergência, no caso de interrupção da alimentação eléctrica principal.

e) Deve haver um dispositivo de sinalização, nos locais das máquinas, de preferência no quadro eléctrico principal, para indicar quando qualquer bateria de acumuladores, instalada para cumprir as prescrições da presente regra, está à descarga.

f) — *i)* O quadro eléctrico de emergência deve ser instalado tão próximo quanto possível da fonte de energia de emergência;

ii) Quando a fonte de energia de emergência for constituída por um gerador, o quadro eléctrico de emergência deve estar no mesmo local do gerador, a não ser que de tal resulte inconveniente para o funcionamento do referido quadro;

iii) Nenhuma bateria de acumuladores, instalada em cumprimento das prescrições da presente regra, deve ser montada no mesmo compartimento onde está o quadro eléctrico de emergência;

iv) A Administração pode autorizar que o quadro de emergência seja alimentado pelo quadro principal em serviço normal.

g) O conjunto da instalação de emergência deve ser previsto de modo a poder funcionar com o navio adornado de 22,5° e ou com caimento de 10°.

h) Deve ser prevista a prova periódica da fonte de energia de emergência e da fonte temporária de energia, se existir, incluindo a prova dos dispositivos automáticos.

Regra 26

Fonte de energia eléctrica de emergência nos navios de carga

a) Navios de carga de arqueação bruta igual ou superior a 5000 t:

i) Nos navios de carga de arqueação bruta igual ou superior a 5000 t deve haver uma fonte autónoma de energia de emergência situada a contento da Administração, acima do pavimento contínuo mais elevado e fora dos rufos dos locais das máquinas, de modo a garantir o seu funcionamento no caso de incêndio ou outro acidente que provoque a avaria da instalação eléctrica principal;

ii) A potência disponível deve ser suficiente para alimentar todos os serviços que no entender da Administração sejam necessários à segurança de todas as pessoas a bordo em caso de emergência, tendo em atenção os serviços que podem ter de funcionar simultaneamente. Serão tidos especialmente em consideração:

1) A iluminação de emergência dos postos de embarque nas embarcações, salva-vidas no convés e à amurada, em todos os corredores, escadas e saídas principais, nos locais das máquinas e da estação geradora principal, na ponte e na casa da navegação;

2) O sinal de alarme geral;

3) Os faróis de navegação, se exclusivamente eléctricos, e a lâmpada para sinais durante o dia, se alimentados pela fonte de energia eléctrica principal.

A alimentação deve ser garantida por um período de seis horas;

iii) A fonte de energia de emergência pode ser:

1) Uma bateria de acumuladores capaz de suportar a carga de emergência sem necessidade de ser carregada e sem queda excessiva de tensão;

2) Um gerador accionado por um motor próprio, com alimentação independente de combustível e com sistema de arranque aceite pela Administração. O combustível utilizado não deve ter ponto de inflamação inferior a 43°C (110°F);

iv) O conjunto da instalação de emergência deve ser previsto de modo a poder funcionar com o navio adornado de 22,5° e ou com caimento de 10°;

v) Devem ser tomadas as medidas necessárias para a prova periódica do conjunto de instalação de emergência.

b) Navios de carga de arqueação bruta inferior a 5000 t:

i) Nos navios de carga de arqueação bruta inferior a 5000 t deve haver uma fonte autónoma de energia de emergência, localizada a contento da Administração e capaz de alimentar a iluminação nos locais de lançamento à água e de arrumação a bordo dos meios de salvação prescritos na alínea *ii*) do parágrafo *a*) e alíneas *ii*) e *iii*) do parágrafo *b*) da regra 19 do capítulo III, assim como de todos os outros serviços que a Administração considere necessários, tendo em conta a regra 38 do capítulo III;

ii) A energia para estes serviços deve poder ser garantida durante pelo menos três horas;

iii) Estes navios ficam também sujeitos às prescrições das alíneas *iii*), *iv*) e *v*) do parágrafo *a*) da presente regra.

Regra 27

Precauções contra contactos acidentais, incêndio e outros acidentes de origem eléctrica

a) Navios de passageiros e navios de carga:

i) — 1) Todas as partes metálicas descobertas das máquinas e do equipamento eléctrico que não são destinadas a estar sob tensão, mas que são susceptíveis de o estar em consequência de defeito, devem estar ligadas à massa (casco). Todos os aparelhos eléctricos devem ser construídos e instalados de modo que não ofereçam perigo de acidente em funcionamento normal;

2) As carcaças metálicas das lâmpadas portáteis (gambiarras), das ferramentas e dos aparelhos semelhantes, que fazem parte do equipamento do navio e que são alimentados a tensão superior a uma tensão de segurança a fixar pela Administração, devem ser ligados à massa (casco) por um condutor apropriado, a não ser quando tenham sido tomadas precauções equivalentes como duplo isolamento ou ligação por um transformador de isolamento. A Administração pode exigir que as lâmpadas portáteis (gambiarras), as ferramentas ou os aparelhos semelhantes destinados a serem utilizados em locais húmidos sejam objecto de precauções especiais suplementares;

ii) Os quadros eléctricos, principal e de emergência, devem ter fácil acesso pela frente e pela retaguarda sem perigo para o pessoal de serviço. Os lados, a retaguarda e, onde necessário, a frente destes quadros devem ser convenientemente resguardados. Haverá tapetes ou estrados não condutores à frente e à retaguarda, onde for necessário. As peças descobertas, cuja tensão em relação à massa (casco) excede uma tensão a especificar pela Administração, não devem ser instalados na frente de qualquer quadro;

iii) — 1) Quando se usa a distribuição com retorno pela massa (casco), devem ser tomadas precauções especiais, conforme entenda a Administração;

2) O retorno pelo casco não deve ser utilizado nos navios-tanques;

iv) — 1) Todas as bainhas e armaduras metálicas dos cabos devem ser contínuas, no sentido eléctrico do termo, e ligadas à massa (casco);

2) Quando se tratar de cabos sem bainha nem armadura metálica e puder haver perigo de incêndio por um defeito de origem eléctrica, a Administração exigirá que se tomem precauções especiais;

v) Os aparelhos de iluminação devem ser dispostos de modo a evitar elevação de temperatura que possa danificar os condutores e a impedir que os materiais na vizinhança aqueçam exageradamente;

vi) Os condutores devem ser suportados de maneira a evitar o desgaste por atrito ou qualquer outra deterioração;

vii) Cada circuito separado deve ser protegido contra curtos-circuitos. Cada circuito separado deve ser também protegido contra sobrecargas, salvo no caso da regra 30 do presente capítulo ou quando a Administração conceder dispensas.

A intensidade admissível de cada circuito deve ser indicada de modo permanente, assim como o calibre ou a regulação do dispositivo apropriado de protecção contra sobrecargas;

viii) As baterias de acumuladores devem estar convenientemente abrigadas e os compartimentos destinados principalmente a este fim devem ser de construção adequada e ventilados eficazmente.

b) Somente para navios de passageiros:

i) Os sistemas de distribuição devem ser dispostos de modo que um incêndio numa qualquer das zonas principais de incêndio não interfira com os serviços essenciais de qualquer outra zona principal de incêndio. Esta exigência considera-se satisfeita se os circuitos principais e de emergência que passam através de uma zona qualquer são separados, tanto vertical como horizontalmente, por uma distância tão grande quanto possível;

ii) Os cabos eléctricos devem ser de tipo não propagador da chama, a aprovar pela Administração, que pode exigir para eles medidas de segurança mais elevadas em certos compartimentos do navio, com o fim de evitar incêndios ou explosões;

iii) Nos locais onde podem acumular-se misturas inflamáveis não deve instalar-se nenhum equipamento eléctrico, a não ser que seja de tipo que não possa provocar a ignição da mistura considerada, como, por exemplo, o equipamento antideflagrante;

iv) Todos os circuitos de iluminação de porões ou tanques devem poder ser comandados por interruptor situado fora do compartimento;

v) As ligações de todos os condutores, com excepção dos circuitos de comunicações em baixa tensão, devem ser exclusivamente feitas em caixas de junção ou de derivação. Todas estas caixas ou acessórios de instalação devem ser construídos de modo a impedir a propagação de incêndio que se origine dentro dessas caixas ou acessórios. As juntas por torçada só podem ser permitidas quando feitas por método aprovado, de modo que se conservem as propriedades mecânicas e eléctricas primitivas do cabo;

vi) A instalação de cabos e condutores eléctricos dos circuitos de comunicações interiores essenciais para a segurança e dos alarmes de emergência deve ser feita de modo a não passarem por cozinhas, espaços de máquinas e outros espaços fechados com elevado risco de incêndio, excepto nos casos em que seja necessário estabelecer comunicações ou dar alarmes dentro desses espaços. Nos casos em que o tipo de construção ou as dimensões reduzidas dos navios não permitam o cumprimento destas regras devem ser tomadas as medidas, a contento da Administração, que assegurem a protecção da parte destas ins-

talações que atravessem cozinhas, espaços de máquinas e outros espaços fechados com elevado risco de incêndio.

c) Somente para navios de carga:

Os dispositivos que possam dar origem a arcos eléctricos não devem ser instalados nos compartimentos destinados principalmente a baterias de acumuladores, a não ser que sejam de tipo antideflagrante.

Regra 28

Marcha a ré

a) Navios de passageiros e navios de carga:

Em todos os navios a potência de marcha a ré deve ser suficiente para garantir o bom governo do navio em todas as circunstâncias normais.

b) Somente para navios de passageiros:

A possibilidade de inverter o sentido da impulsão do hélice em tempo conveniente, nas condições normais de manobra, e parar o navio a partir da marcha a vante à velocidade máxima de serviço, deve ser demonstrada nas primeiras provas do navio.

Regra 29

Aparelho de governo (1)

a) Navios de passageiros e de carga:

i) Todos os navios devem ser equipados com um aparelho de governo principal e um aparelho de governo auxiliar, a contento da Administração;

ii) O aparelho de governo principal deve ser de construção suficientemente robusta e deve permitir o governo do navio à máxima velocidade de serviço. O aparelho de governo principal e a madre do leme devem ser calculados de forma a não se avariarem à máxima velocidade de marcha a ré;

iii) O aparelho de governo auxiliar deve ser de construção suficientemente robusta, deve permitir o governo do navio a velocidade aceitável de navegação e deve poder ser posto rapidamente em serviço, em caso de emergência;

iv) A posição exacta do leme, quando este for accionado mecanicamente, deve ser indicada no posto de manobra principal (casa do leme).

b) Somente para navios de passageiros:

i) O aparelho de governo principal deve ser capaz de mover o leme da posição de 35° a um bordo a 35° ao outro bordo, com o navio à velocidade máxima de serviço em marcha a vante. O tempo para mover o leme de 35° a um bordo a 30° ao outro bordo não deve ser superior a 28 segundos à máxima velocidade de serviço;

ii) O aparelho de governo auxiliar deve ser accionado mecanicamente, em todos os navios para os quais a Administração determina um diâmetro da madre do leme, na altura do sector, superior a 228,6 mm (9 polegadas);

iii) Quando as unidades motoras do aparelho de governo principal e sua ligações são montadas em duplicado, a contento da Administração, e cada unidade motora permita que o aparelho de governo satisfaça as exigências da alínea *i)* do presente parágrafo, não é necessário o aparelho auxiliar de governo;

iv) Quando a Administração exige uma madre de leme cujo diâmetro, na altura do sector, é superior a 228,6 mm (9 polegadas), deve haver um posto secundário de manobra do leme, em local que satisfaça a Administração. Os dispositivos de comando a distância do posto de manobra principal e do posto de manobra secundário devem ser instalados a contento da Administração, de modo que a avaria de um dos dispositivos não tenha como consequência a impossibilidade de governar o navio com o outro dispositivo;

v) Deve haver meios, que satisfaçam a Administração, para a transmissão de ordens da ponte para o posto secundário de manobra do leme.

c) Somente para navios de carga:

i) O aparelho auxiliar de governo deve ser accionado mecanicamente, quando a Administração exige um diâmetro de madre de leme, na altura do sector, superior a 355,6 mm (14 polegadas);

ii) Quando as unidades motoras do aparelho de governo principal e suas ligações são montadas em duplicado, a contento da Administração, e cada unidade permite satisfazer as condições da alínea *iii)* do parágrafo *a)* da presente regra, não é necessário o aparelho de governo auxiliar, desde que as duas unidades e suas ligações, em funcionamento simultâneo, permitam satisfazer as condições da alínea *ii)* do parágrafo *a)* da presente regra.

Regra 30

Aparelhos de governo eléctricos e electro-hidráulicos (1)

a) Navios de passageiros e navios de carga:

Os indicadores de funcionamento dos motores dos aparelhos de governo eléctricos e electro-hidráulicos devem ser instalados num local apropriado, a contento da Administração.

b) Navios de passageiros de qualquer tonelagem e navios de carga de arqueação bruta igual ou superior a 5000 t:

i) Os aparelhos de governo eléctricos ou electro-hidráulicos devem ser alimentados por dois circuitos a partir do quadro principal. Um dos circuitos pode passar pelo quadro de emergência, se existir.

Cada circuito deve ser dimensionado para alimentar todos os motores que lhe estão normalmente ligados, e que funcionam simultaneamente. Quando há dispositivos de comutação na casa da máquina do leme para permitir que um qualquer dos circui-

(1) Veja a «Recomendação sobre o aparelho de governo de navios grandes», adoptada pela Organização mediante a Resolução A.210 (VII).

(1) Veja a «Recomendação sobre o aparelho de governo de navios grandes», adoptada pela Organização mediante a Resolução A.210 (VII).

tos alimente qualquer motor ou gupo de motores, o dimensionamento de cada circuito deve ser suficiente para a condição de carga mais elevada.

Os circuitos devem estar separados em toda a sua extensão, tanto quanto possível;

ii) Os circuitos e motores referidos só devem ter protecção contra curtos-circuitos.

c) *Navios de carga de menos de 5000 t de arqueação bruta:*

i) Quando a energia eléctrica é a única fonte de energia, tanto para o aparelho de governo principal como para o aparelho de governo auxiliar, devem ser satisfeitas as prescrições das alíneas *i*) e *ii*) do parágrafo *b*) da presente regra; contudo, se o aparelho de governo auxiliar for accionado por um motor cuja utilização principal respeita a outros serviços, a exigência da alínea *ii*) do parágrafo *b*) pode não ser cumprida, desde que a Administração entenda que é satisfatório o sistema de protecção;

ii) Os motores dos aparelhos de governo principal eléctricos ou electro-hidráulicos, assim como o circuito ou circuitos que os alimentam, só devem ser protegidos contra curtos-circuitos.

Regra 31

Localização da instalação de emergência nos navios de passageiros

A fonte de energia eléctrica de emergência, as bombas de incêndio de emergência, as bombas de esgoto de emergência, as baterias de garrafas de anidrido carbónico para a extinção de incêndios e outras instalações de emergência essenciais para a segurança do navio não devem ser instaladas a vante da antepara de colisão.

Regra 32

Comunicação entre a ponte e a casa das máquinas

Todos os navios devem ter dois meios de comunicação de ordens da ponte para a casa das máquinas. Um dos meios deve ser constituído por um telégrafo de máquina.

CAPÍTULO II-2

Construção — Prevenção, detecção e extinção de incêndios

PARTE A

Generalidades (1)

Regra 1

Aplicação

a) Para fins de aplicação do presente capítulo:

i) Navio de passageiros novo é um navio de passageiros cuja quilha foi assente, ou cuja construção se encontrava numa fase equivalente na data, ou depois da data da entrada em vigor da presente Convenção, ou um navio de carga que foi transformado em navio de passageiros na mesma data ou após esta. Todos os outros navios de passageiros são considerados navios existentes;

ii) Navio de carga novo é um navio de carga cuja quilha foi assente, ou cuja construção se encontrava numa fase equivalente na data da entrada em vigor da presente Convenção ou após esta data;

iii) Qualquer navio em que se efectuem reparações, alterações, modificações e a consequente instalação de equipamentos deve continuar a satisfazer, pelo menos, às prescrições que já lhe eram anteriormente aplicáveis. Em regra, qualquer navio existente que se encontre nessas condições deve satisfazer em grau não inferior do que anteriormente às prescrições aplicáveis a um navio novo.

As reparações, alterações e modificações de grande importância e a consequente instalação de equipamentos devem satisfazer às prescrições aplicáveis a um navio novo até ao ponto em que a Administração o julgue razoável e praticável.

b) Salvo indicação em contrário:

i) As regras 4 a 16 da parte A do presente capítulo aplicam-se a navios novos;

ii) A parte B do presente capítulo aplica-se a navios de passageiros novos que transportem mais de 36 passageiros;

iii) A parte C do presente capítulo aplica-se a navios de passageiros novos que não transportem mais de 36 passageiros;

iv) A parte D do presente capítulo aplica-se a navios de carga novos;

v) A parte E do presente capítulo aplica-se a navios-tanques novos;

c) — *i*) A parte F do presente capítulo aplica-se a navios de passageiros existentes que transportem mais de 36 passageiros;

ii) Os navios de passageiros existentes que não transportem mais de 36 passageiros e os navios de carga existentes devem cumprir as disposições seguintes:

1) No caso de navios cuja quilha tenha sido assente, ou cuja construção se encontrava numa fase equivalente na data ou depois da data da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, a Administração deve verificar a observância das prescrições aplicadas em virtude das disposições do capítulo II dessa Convenção aos navios novos, tal como são definidos naquele capítulo;

2) No caso de navios cuja quilha tenha sido assente, ou cuja construção se encontrava numa fase equivalente na data ou depois da data de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1948, mas antes da data da entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, a Administração deve velar pela observância das prescrições aplicadas em virtude das disposições do capítulo II da Convenção de 1948 aos navios novos, tal como são definidos naquele capítulo;

3) No caso de navios cuja quilha tenha sido assente, ou cuja construção se encontrava numa fase equivalente antes da entrada em vigor da Convenção

(1) Veja a «Recomendação sobre medidas de segurança para casas de máquinas de navios de carga periodicamente não assistidas, esclarecendo-se que tais medidas complementam as normalmente necessárias para uma casa de máquinas assistida», aprovada pela Organização mediante a Resolução A.211 (VII).

Internacional para a Salvaguarda da Vida Humana no Mar, 1948, a Administração deve velar pela observância das prescrições aplicadas aos navios existentes pelas disposições do capítulo II da citada Convenção, tal como são definidas naquele capítulo.

d) A Administração deve decidir quais as disposições do presente capítulo que não figuravam no capítulo II da Convenção de 1948 nem no capítulo II da Convenção de 1960 que devem ser aplicadas aos navios existentes, tal como são definidas na presente Convenção, em adição às prescrições da alínea *i*) do parágrafo *c*) da presente regra.

e) Se a Administração considerar que a ausência de riscos e as condições da viagem são tais que não seja razoável nem necessária a aplicação de quaisquer prescrições concretas deste capítulo, pode isentar dessas prescrições determinados navios ou classes de navios pertencentes ao seu país, desde que eles no decurso da sua viagem não se afastem mais de 20 milhas da costa mais próxima.

f) No caso de navios de passageiros empregados no transporte de grande número de passageiros em tráfegos especiais, como seja o transporte de peregrinos, a Administração pode isentar tais navios, quando pertencentes ao seu país, das exigências do presente capítulo, desde que entenda que tais exigências não são praticáveis e que satisfaçam integralmente às disposições seguintes:

i) Regulamento anexo ao Acordo sobre Navios de Passageiros Que Efectuem Transportes Especiais, 1971;

ii) Regulamento anexo ao Protocolo sobre os Locais Habitados a Bordo de Navios de Passageiros Que Efectuem Transportes Especiais, 1973, quando este entrar em vigor.

Regra 2

Princípios fundamentais

O objectivo do presente capítulo é exigir aos navios a maior eficiência possível na prevenção, detecção e extinção de incêndios. Os princípios fundamentais, a seguir indicados, servem de base às regras deste capítulo e nelas estão incluídos conforme se considera conveniente, tendo em atenção o tipo de navio e o risco potencial de incêndio existente:

a) Divisão do navio em zonas verticais principais por anteparas com resistência mecânica e térmica;

b) Separação dos locais habitados das restantes partes do navio por anteparas com resistência mecânica e térmica;

c) Uso restrito de materiais combustíveis;

d) Detecção de qualquer incêndio no local em que tenha origem;

e) Contenção e extinção de qualquer incêndio no local em que tenha origem;

f) Protecção dos meios de fuga e dos acessos a posições de combate a incêndios;

g) Pronta disponibilidade dos dispositivos de extinção de incêndios;

h) Redução ao mínimo do risco de inflamação dos gases emanados pela carga.

Regra 3

Definições

Para os efeitos do presente capítulo, salvo indicação em contrário:

a) «Material incombustível» indica um material que não arde nem emite vapores inflamáveis em quantidade suficiente para se auto-inflamar quando aquecido a uma temperatura de cerca de 750°C (1382°F); esta característica deve ser determinada de modo satisfatório para a Administração através de um ensaio de prova reconhecido (1). Qualquer outro material é considerado como «material combustível»;

b) «Prova-tipo de fogo» é aquela em que as amostras das anteparas ou pavimentos são expostas num forno de provas, a temperaturas que correspondam aproximadamente às da curva tipo tempo-temperatura. As amostras devem ter uma superfície exposta não inferior a 4,65 m² (50 pés quadrados) e uma altura (comprimento, no caso de um pavimento) não inferior a 2,44 m (8 pés), assemelhando-se o mais possível à construção prevista e que tenha, quando for o caso, pelo menos, um junta. A curva tipo tempo-temperatura é dada por uma curva contínua que passa pelos seguintes pontos:

No fim dos primeiros 5 minutos — 538°C (1000°F);
No fim dos primeiros 10 minutos — 704°C (1300°F);
No fim dos primeiros 30 minutos — 843°C (1550°F);
No fim dos primeiros 60 minutos — 927°C (1700°F).

c) «Divisórias da classe A» são as divisórias constituídas por anteparas e pavimentos que reúnam as condições seguintes:

i) Serem construídas de aço ou outro material equivalente;

ii) Serem convenientemente reforçadas;

iii) Serem construídas de modo a impedir a passagem de fumo e de chamas no fim de uma prova-tipo de fogo de uma hora de duração;.

iv) Estarem isoladas com materiais incombustíveis aprovados, de modo que a temperatura média da face não exposta não suba mais do que 139°C (250°F) acima da temperatura inicial, e que a temperatura em qualquer ponto, incluindo qualquer junta que possa existir, não suba mais do que 180°C (325°F) acima da temperatura inicial, nos intervalos de tempo seguintes:

Classe A-60 — 60 minutos;
Classe A-30 — 30 minutos;
Classe A-15 — 15 minutos;
Classe A-0 — 0 minutos.

v) A Administração pode exigir que se realize o ensaio de um protótipo de uma antepara ou de um pavimento para verificar se são satisfeitas as prescri-

---

(1) Veja a «Recomendação sobre um método de prova para certificar da incombustibilidade dos materiais de construção naval», adoptada pela Organização mediante a Resolução A.270 (VIII).

ções mencionadas, relativas à integridade e elevação de temperatura (1).

d) «Divisórias da classe B» são as divisórias constituídas por anteparas, pavimentos, tectos ou forros que reúnam as seguintes condições:

i) Serem construídas de forma a impedir a passagem de chamas, pelo menos até ao fim da primeira meia hora da prova-tipo de fogo;

ii) Terem um grau de isolamento tal que a temperatura média da face não exposta não suba mais que 139°C (250°F) acima da temperatura inicial e que a temperatura em qualquer ponto não suba mais do que 225°C (405°F) acima da temperatura inicial, nos intervalos de tempo seguintes:

Classe B-15 — 15 minutos;
Classe B-0 — 0 minutos;

iii) Serem construídas de materiais incombustíveis aprovados, e todos os materiais utilizados na sua construção e montagem devem ser também incombustíveis, excepto quando, em conformidade com o disposto nas partes C e D do presente capítulo, não esteja excluída a utilização de materiais combustíveis; neste caso devem cumprir a limitação de elevação de temperatura prescrita na alínea *ii*) do presente parágrafo até ao final da primeira meia hora da prova-tipo de fogo;

iv) A Administração pode exigir que se realize um ensaio com uma divisória protótipo para verificar se são satisfeitas as prescrições mencionadas, relativas à integridade e elevação de temperatura (1).

e) As «Divisórias da classe C» devem ser construídas com materiais incombustíveis aprovados. Não se torna necessário que satisfaçam as prescrições relativas à passagem de fumo e das chamas nem à limitação de elevação de temperatura.

f) «Tectos ou revestimentos contínuos de classe B» são os tectos ou revestimentos da classe B que terminam unicamente numa divisória de classe A ou B.

g) «Aço ou outro material equivalente». Sempre que esta expressão apareça no texto deve entender-se por «material equivalente» qualquer material que, por qualidades intrínsecas ou devido ao isolamento de que é dotado, tenha propriedades de resistência mecânica e de integridade equivalentes às do aço, depois de ter sido exposto ao fogo durante a prova-tipo (por exemplo, uma liga de alumínio com um isolamento apropriado).

h) «Fraco poder de propagação da chama». Esta expressão significa que a superfície assim indicada se opõe suficientemente a propagação da chama, característica esta que será demonstrada de modo satisfatório perante a Administração através de um ensaio apropriado.

i) «Zonas verticais principais» são as zonas em que o casco, superstruturas e casotas ficam divididas por anteparas da classe A. O seu comprimento médio acima do pavimento das anteparas não deve ultrapassar, em geral, 40 m (131 pés).

j) «Locais habitados» são aqueles que são utilizados como locais de reunião, corredores, locais para serviços sanitários, camarotes, escritórios, alojamentos da tripulação, barbearias, copas isoladas, armários de serviço e espaços similares.

k) «Locais de reunião» são as partes de locais habitados que são utilizados como átrios, salas de jantar, salas de estar e outros espaços similares de carácter permanente.

l) «Locais de serviço» são os utilizados como cozinhas, despensas, paióis (excepto copas isoladas e armários de serviço), paiol do correio, paióis para valores, oficinas que não façam parte dos locais de máquinas, e outros espaços similares, bem como o acesso a tais espaços.

m) «Locais de carga» são todos os locais utilizados para o transporte de carga (incluindo tanques de carga líquida) e os acessos a esses espaços.

n) «Locais de categoria especial» são os locais fechados situados acima ou abaixo do pavimento das anteparas e destinados ao transporte de veículos motorizados que levem nos seus depósitos combustível para a sua própria propulsão, locais esses em que tais veículos possam entrar e sair conduzidos e a que tenham acesso os passageiros.

o) «Locais de máquinas de categoria A» são todos os locais que contêm:

i) Motores de combustão interna utilizados para a propulsão principal, ou para outros fins, em que esses motores tenham no conjunto uma potência total não inferior a 373 kW; ou

ii) Qualquer caldeira alimentada com óleo combustível, ou instalações de combustível líquido, assim como os troncos de acesso a esses locais.

p) «Locais de máquinas» são todos os locais de máquinas da categoria A e todos aqueles que contenham máquinas propulsoras, caldeiras, instalações de combustível líquido, máquinas a vapor e motores de combustão interna, geradores e maquinaria eléctrica principal, estações para o embarque de combustível, máquinas de refrigeração, estabilização, ventilação e ar condicionado e espaços similares e troncos de acesso a tais espaços.

q) «Instalação de combustível líquido» consiste no equipamento que serve para preparar o combustível que alimenta as caldeiras, os aquecedores de combustível para motores de combustão interna e inclui quaisquer bombas de combustível, filtros e aquecedores de combustível que trabalhem a uma pressão superior a 1,8 kg por centímetro quadrado (25 libras por polegada quadrada).

r) «Postos de segurança» são os locais onde estão instalados os aparelhos de rádio, ou os aparelhos principais de navegação, ou os postos principais de detecção e extinção de incêndios, ou o grupo gerador de emergência.

s) «Locais que contenham mobiliário e utensílios com reduzido risco de incêndio», para efeitos de aplicação da regra 20 do presente capítulo, são os locais que contenham mobiliário e utensílios cujo risco de incêndio é reduzido (quer se trate de camarotes, espaços públicos, oficinas ou outras classes de alojamento), em que:

i) Todos os móveis com gavetas e armários, tais como secretárias, armários, toucadores, escrivaninhas ou guarda-louça, devem ser totalmente construídos com materiais incombustíveis aprovados, embora se possa aplicar folheado combustível no revestimento das superfícies utilizáveis, desde que não exceda 2 mm (1/12 de polegada) de espessura;

(1) Veja a «Recomendação sobre procedimentos de provas de incêndio para as divisórias de classes A e B», aprovadas pela Organização mediante as Resoluções A.163 (ES.IV) e A.215 (VII).

ii) Todos os móveis não fixos, tais como cadeiras, sofás ou mesas, devem ser construídos com armação de materiais incombustíveis;

iii) Todos os reposteiros, cortinas e outros materiais têxteis suspensos devem ter, na medida que a Administração considere satisfatório, propriedades de resistência à propagação da chama não inferiores às da lã pesando 0,8 kg por metro quadrado (24 onças por jarda quadrada);

iv) Todos os revestimentos de pisos devem ter, na medida que a Administração considere satisfatório, propriedades de resistência à propagação da chama não inferiores às de um material equivalente em lã, utilizado para este mesmo fim; ou

v) Todas as superfícies expostas das anteparas, revestimentos e tectos devem ter características de fraco poder de propagação da chama.

t) «Pavimento das anteparas» é o pavimento mais elevado até ao qual se elevam as anteparas transversais estanques.

u) «Porte bruto» é a diferença, expressa em toneladas métricas, entre o deslocamento do navio em água com uma densidade de 1,025 correspondente a linha de carga de Verão e o navio leve.

v) «Navio leve» é o deslocamento do navio, expresso em toneladas métricas, sem carga, combustível, óleo lubrificante, lastro de água, água doce, água de alimentação das caldeiras nos tanques, nem provisões de consumo e sem passageiros e tripulantes e respectiva bagagem.

w) «Navio de carga combinado» é um navio-tanque projectado para transportar hidrocarbonetos ou, em alternativa, cargas sólidas a granel.

Regra 4

Planos de combate a incêndios

Em todos os navios novos e existentes devem estar permanentemente expostos, para orientação dos oficiais de bordo, planos de arranjo geral do navio que indiquem claramente, em cada pavimento, os postos de segurança, as diversas zonas limitadas por divisórias da classe A, as secções limitadas por divisórias da classe B (se existirem), assim como todos os pormenores relativos a avisadores de incêndio, sistemas de detecção, instalação automática de água pulverizada sob pressão (se existir), dispositivos de extinção de incêndios, meios de acesso aos diversos compartimentos, pavimentos, etc., e instalação de ventilação com detalhes sobre a localização dos comandos de paragem dos ventiladores, a posição das válvulas de borboleta e os números de identificação dos ventiladores que servem cada zona.

Em alternativa, se a Administração julgar conveniente, os referidos pormenores podem ser reunidos num livro, do qual deve ser fornecido um exemplar a cada oficial, deve existir sempre um exemplar desse livro em local acessível. Os planos e livros devem ser mantidos em dia, neles se registando as alterações que forem efectuadas, no mais curto espaço de tempo.

A descrição contida nos referidos planos e livros deve ser escrita no idoma do país a que o navio pertença. Se esse idioma não for o inglês nem o francês, deve ser acompanhado de uma tradução num destes idiomas. Além disso, as instruções relativas à manutenção e ao funcionamento das instalações de bordo para combate e contenção de incêndios devem ser reunidas num caderno facilmente utilizável e localizado num posto acessível.

Regra 5

Bombas, colector, bocas e mangueiras de incêndio

a) *Capacidade total das bombas de incêndio:*

i) Nos navios de passageiros as bombas de incêndio exigidas devem ser capazes de fornecer em serviço de incêndio, à pressão abaixo indicada, uma quantidade de água não inferior a dois terços da quantidade que devem comprimir as bombas de esgoto quando utilizadas no serviço de esgoto;

ii) Nos navios de carga as bombas de incêndio exigidas, além da bomba de emergência (se existir), devem ser capazes de fornecer em serviço de incêndio, à pressão requerida, uma quantidade de água não inferior a quatro terços da quantidade que cada uma das bombas de esgoto independentes de um navio de passageiros das mesmas dimensões deve poder debitar em serviço de esgoto, de harmonia com a regra 18 do capítulo II-1. Em caso algum será exigido a um navio de carga que o débito total das bombas exceda 180 m^3 por hora em serviço de incêndio.

b) *Bombas de incêndio:*

i) As bombas de incêndio devem ser independentes, isto é, não devem ser accionadas pelo motor propulsor. Podem ser aceites como bombas de incêndio as bombas sanitárias, as de lastro e esgoto de porões e de serviço geral, desde que não sejam normalmente usadas para aspirar combustível, e que, no caso de servirem ocasionalmente para trasfega ou aspiração de combustível, tenham dispositivos convenientes de permutação;

ii) — 1) Nos navios de passageiros que transportem mais do que 36 passageiros, o débito de cada bomba de incêndio exigida deve ser, pelo menos, igual a 80 % do quociente que se obtém dividindo o débito total prescrito pelo número mínimo de bombas de incêndio exigidas. Cada bomba deve, em qualquer caso, ser suficientemente potente para alimentar os dois jactos de água prescritos. As bombas de incêndio devem poder alimentar o colector principal de incêndios nas condições prescritas. Quando o número de bombas instaladas for superior ao número exigido, o débito destas bombas adicionais deve ser fixado a contento da Administração;

2) Em todos os outros tipos de navios o débito de cada bomba de incêndio (com excepção da bomba de emergência prescrita pela regra 52 do presente capítulo) deve ser pelo menos igual a 80 % do quociente que se obtém dividindo o débito total prescrito pelo número de bombas de incêndio exigidas. Cada bomba deve, em qualquer caso, ser suficientemente potente para alimentar os dois jactos de água prescritos. As bombas de incêndio devem poder alimentar o colector principal de incêndios nas condições prescritas.

Quando o número de bombas instaladas for superior ao número exigido, o débito destas bombas adi-

cionais deve ser fixado a contento da Administração;

iii) As bombas de incêndio devem ser munidas de válvulas de segurança, sempre que possam comprimir a água a pressão superior à que foi considerada no cálculo dos encanamentos, bocas de incêndio e mangueiras. Estas válvulas devem ser montadas e reguladas de modo a evitar pressão excessiva em qualquer ponto da rede principal de incêndio.

c) Pressão no colector principal de incêndio:

i) O diâmetro do colector principal e dos encanamentos de incêndio deve ser suficiente para garantir a distribuição efectiva da água debitada por duas bombas de incêndio em funcionamento simultâneo, salvo o caso dos navios de carga, em que esse diâmetro pode ser apenas suficiente para garantir o débito de 140 m^3 por hora.

ii) Com as duas bombas em serviço simultâneo, debitando, pelas agulhetas prescritas no parágrafo *g*) da presente regra, a quantidade de água prescrita na alínea *i*) do presente parágrafo, através de quaisquer bocas, devem manter-se as pressões mínimas seguintes em todas as bocas de incêndio:

Navios de passageiros:

4000 t de arqueação bruta ou mais — 3,2 kg por centímetro quadrado (45 libras por polegada quadrada);

1000 t de arqueação bruta ou mais, mas menos de 4000 t — 2,8 kg por centímetro quadrado (40 libras por polegada quadrada);

Menos de 1000 t de arqueação bruta — a contento da Administração.

Navios de carga:

6000 t de arqueação bruta ou mais — 2,8 kg por centímetro quadrado (40 libras por polegada quadrada);

1000 t de arqueação bruta ou mais, mas menos de 6000 t — 2,6 kg por centímetro quadrado (37 libras por polegada quadrada);

Menos de 1000 t de arqueação bruta — a contento da Administração.

d) Número e distribuição das bocas de incêndio:

O número e a distribuição das bocas de incêndio devem ser tais que pelo menos dois jactos de água, não provenientes da mesma boca, um dos quais alimentado por uma só quartela de mangueira, possam ser dirigidos sobre um ponto qualquer do navio normalmente acessível aos passageiros ou à tripulação durante a navegação.

e) Encanamentos e bocas de incêndio:

i) Nos colectores principais de incêndio e nas bocas de incêndio não devem utilizar-se materiais cujas propriedades sejam facilmente alteradas pelo calor, a não ser que estejam convenientemente protegidos. Os encanamentos e as bocas de incêndio devem estar dispostos de modo que as mangueiras possam ser montadas facilmente. Nos navios susceptíveis de transportar cargas de convés, a distribuição das bocas de incêndio deve ser tal que o seu acesso seja sempre fácil, e os encanamentos devem ser instalados, na medida do possível, de modo a não serem danificados pelas referidas cargas. Salvo quando houver uma mangueira e uma agulheta para cada boca de incêndio a bordo do navio, as uniões das mangueiras e das agulhetas devem ser completamente intermutáveis.

ii) Cada mangueira deve ser servida por uma torneira ou uma válvula instalada de modo que permita desligar qualquer das mangueiras quando as bombas de incêndio estão em funcionamento.

f) Mangueiras de incêndio:

As mangueiras de incêndio devem ser de material aprovado pela Administração e de comprimento suficiente para poderem projectar um jacto de água sobre qualquer local em que a sua utilização possa ser necessária. O comprimento máximo será fixado a contento da Administração. Cada mangueira deve ter uma agulheta e as uniões necessárias. As mangueiras prescritas no presente capítulo como «mangueiras de incêndio», assim como os acessórios e ferramentas necessários, devem estar sempre prontos a ser utilizados e arrumados em locais bem visíveis na proximidade das bocas de incêndio ou uniões. Adicionalmente, nos locais interiores dos navios de passageiros que transportem mais de 36 passageiros, as mangueiras devem estar permanentemente ligadas às respectivas bocas de incêndio.

g) Agulhetas:

i) Para efeitos do presente capítulo, as agulhetas das mangueiras devem ter diâmetros normalizados de 12 mm ($^1/_2$ polegada), 16 mm ($^5/_8$ de polegada) e 19 mm ($^3/_4$ de polegada) ou diâmetros tão próximos quanto possível destes valores. O emprego de agulhetas de diâmetro superior pode ser autorizado desde que a Administração o julgue necessário.

ii) Não é necessário utilizar agulhetas de diâmetro superior a 12 mm ($^1/_2$ polegada) nos locais habitados e nos de serviço.

iii) Nos locais de máquinas e nos locais exteriores o diâmetro das agulhetas deve ser tal que permita o maior débito possível de dois jactos alimentados pela bomba mais pequena, com a pressão mencionada no parágrafo *c*) da presente regra, e não deve ser necessário que esse diâmetro exceda 19 mm ($^3/_4$ de polegada).

iv) Nos locais de máquinas ou locais similares onde o risco de derramamento de óleo combustível exista, as agulhetas devem ser próprias para pulverizar a água sobre o óleo, ou, em alternativa, devem ser de efeito duplo (jacto-pulverização).

h) União internacional de ligação a terra:

Os flanges da união internacional de ligação a terra, exigida a bordo pelo presente capítulo, devem estar de acordo com as dimensões normalizadas especificadas no seguinte quadro:

Descrição	Dimensões
Diâmetro exterior	178 mm (7 polegadas).
Diâmetro interior	64 mm ($2^1/_2$ polegadas).

Descrição	Dimensões
Diâmetro da circunferência de furação.	132 mm (5 1/4 polegadas).
Furação	4 furos de 19 mm (3/4 de polegada) de diâmetro, equidistantemente colocados sobre a circunferência de furação e rasgados até ao bordo exterior do flange.
Espessura do flange	14,5 mm (9/16 de polegada) como mínimo.
Parafusos e porcas	4 jogos de 16 mm de diâmetro (5/8 de polegada) e 50 mm de comprimento (2 polegadas).

A união deve ser construída de material adequado para a pressão de serviço de 10,5 kg por centímetro quadrado (150 libras por polegada quadrada). A flange deve ter de um lado uma face plana e do outro lado deve ter permanentemente montada uma união que possa servir nas bocas de incêndio ou mangueiras do navio. Esta união deve conservar-se a bordo com uma junta de material adequado para a pressão de serviço de 10,5 kg por centímetro quadrado (150 libras por polegada quadrada), assim como com quatro parafusos de 16 mm (5/8 de polegada) de diâmetro e de 50 mm (2 polegadas) de comprimento e oito anilhas.

Regra 6

Pormenores diversos

a) Se existirem a bordo radiadores eléctricos, devem estar fixos no seu lugar e construídos de modo a reduzir ao mínimo os riscos de incêndio. Não devem ser instalados radiadores cujo elemento aquecedor exponha os artigos de vestuário, cortinados e materiais idênticos ao risco de se carbonizarem ou incendiarem devido ao calor libertado pelo elemento.

b) Não se devem utilizar películas de suporte nitro-celuloso nos aparelhos cinematográficos de bordo.

Regra 7

Extintores de incêndio

a) Todos os extintores de incêndio devem ser de modelo e características aprovadas.

i) A capacidade dos extintores portáteis prescritos, de fluido não deve ser superior a 13,5 l (3 galões) nem inferior a 9 l (2 galões). Os extintores de outro tipo devem ser equivalentes, sob o ponto de vista de manuseamento, aos extintores de fluido de 13,5 l (3 galões), no máximo, e, sob o ponto de vista de eficácia, aos extintores de fluido de 9 l (2 galões), como mínimo;

ii) A Administração deve determinar as equivalências entre extintores.

b) O número de cargas de reserva será fixado pela Administração.

c) Não devem ser empregados extintores que no entender da Administração utilizem como agente de extinção um produto que emita espontaneamente ou durante a utilização gases tóxicos em quantidades perigosas para as pessoas.

d) Uma unidade portátil lança-espuma é formada por uma agulheta misturadora ar-espuma capaz de ser ligada ao colector de incêndios por intermédio de uma mangueira e um depósito portátil contendo, pelo menos, 20 l (4,5 galões) de líquido espumífero mais um depósito sobressalente. A agulheta deve ter uma capacidade efectiva de produção de espuma própria para extinguir incêndios em óleos combustíveis com um débito não inferior a 1,5 m^3 (53 pés cúbicos) por minuto.

e) Os extintores devem ser examinados periodicamente e sujeitos às provas que a Administração possa exigir.

f) Um dos extintores portáteis destinado a ser empregado em determinado local deve ser colocado junto da entrada desse local.

Regra 8

Instalações fixas de extinção de incêndios por gás

a) Não devem ser empregados agentes de extinção que no entender da Administração emitam espontaneamente ou durante a utilização gases tóxicos em quantidades perigosas para as pessoas.

b) Quando se use o gás como meio de extinção de incêndios, os encanamentos necessários para a condução do gás devem ser munidos de válvulas ou torneiras marcadas de modo a indicarem claramente os compartimentos servidos pelos respectivos encanamentos. Devem ser tomadas as disposições necessárias para impedir que o gás possa ser enviado por inadvertência para qualquer compartimento. Quando os locais de carga equipados com tais sistemas de protecção de incêndio forem usados como locais para passageiros, a ligação com a distribuição de gás deve ser suprimida enquanto esses locais forem utilizados por passageiros.

c) Os encanamentos devem ser dispostos de modo a garantirem uma eficaz distribuição do gás extintor.

d) — *i*) Quando se emprega o dióxido de carbono como agente extintor nos porões de carga, a quantidade de gás disponível deve corresponder a um volume de gás livre igual pelo menos a 30% do volume bruto do maior porão de carga susceptível de ser isolado;

ii) Quando se emprega o dióxido de carbono como agente extintor nos locais de máquinas da categoria A, a quantidade de gás transportado deve ser suficiente para dar um volume de gás livre pelo menos igual ao maior dos dois volumes seguintes:

1) 40% do volume bruto do maior compartimento, volume este que inclui o rufo até ao nível em que a superfície horizontal é igual ou inferior a 40% da área horizontal do local considerado, medida a meia distância entre a parte superior do tanque e a parte inferior do rufo;

2) 35% do volume total do maior espaço, incluindo o rufo.

No entanto, as percentagens acima mencionadas podem ser reduzidas a 35% e 30%, respectivamente, para navios de carga de arqueação bruta inferior

a 2000 t. No caso de dois ou mais locais de máquinas da categoria A não serem completamente separados entre si, o conjunto desses locais deve ser considerado como um único compartimento;

iii) Quando o volume de ar livre contido nos reservatórios de ar de um local de máquinas da categoria A for tal que a sua descarga no interior desse local, em caso de incêndio, possa originar uma grande diminuição da eficácia da instalação fixa de extinção de incêndios, a Administração deve exigir uma quantidade adicional de dióxido de carbono;

iv) Quando o dióxido de carbono é o agente extintor usado tanto nos porões de carga como nos locais de máquinas da categoria A, não é necessário que a quantidade de gás seja superior ao máximo prescrito para a protecção do maior dos compartimentos, quer seja um porão de carga ou uma casa de máquinas;

v) Para aplicação do presente parágrafo *d*), o volume ocupado pelo dióxido de carbono deve ser calculado na base de 0,56 m³ por quilograma (9 pés cúbicos por libra);

vi) Quando o dióxido de carbono é usado como agente extintor nos locais de máquinas da categoria A, o sistema fixo de encanamentos deve ser tal que possa descarregar 85 % do volume de gás no local considerado em menos de dois minutos;

vii) A casa das garrafas de dióxido de carbono deve estar situada em local seguro, facilmente acessível e ventilado com a eficácia que a Administração julgue suficiente. As entradas para estes compartimentos devem ser, de preferência, feitas a partir de um pavimento descoberto e devem ser sempre independentes dos compartimentos protegidos. As portas de acesso devem ser estanques ao gás e as anteparas e pavimentos de separação de tais compartimentos devem ser estanques ao gás e convenientemente isolados.

e) — *i*) Quando no navio for produzido um gás diferente do dióxido de carbono ou do vapor cuja utilização esteja de acordo com o estipulado no parágrafo *f*) da presente regra, e tal gás for utilizado como agente extintor, deve ser um produto gasoso de combustão cujo teor em oxigénio, monóxido de carbono, elementos corrosivos e elementos combustíveis sólidos tenham sido reduzidos no mínimo permitido;

ii) Quando se utilizar este gás como agente extintor numa instalação fixa de extinção de incêndios para proteger locais de máquinas da categoria A, a protecção deve ser equivalente à que se obtém com uma instalação fixa de dióxido de carbono;

iii) Quando se utilizar este gás como agente extintor numa instalação fixa de extinção de incêndios para proteger locais de carga, a quantidade de gás disponível deve ser suficiente para fornecer em cada hora um volume de gás livre igual a 25 % do maior compartimento protegido e durante um período de 72 horas.

f) Em geral, a Administração não deve permitir o uso do vapor como agente extintor de uma instalação fixa de extinção de incêndios de navios novos. Quando o uso de vapor for permitido pela Administração, deve ser usado exclusivamente em áreas restritas como um aditamento ao meio de extinção exigido, e com a condição de que a caldeira ou caldeiras utilizadas para fornecer este vapor tenham uma produção horária de pelo menos 1 kg de vapor por cada 0,75 m³ (1 libra de vapor por cada 12 pés cúbicos) do volume bruto do maior compartimento protegido. Além de satisfazer as prescrições antecedentes, a instalação deve ajustar-se em todos os aspectos ao que seja determinado pela Administração e deve responder a critérios que esta considere satisfatórios.

g) Deve haver meios para emitir automaticamente um sinal sonoro que dê o aviso de lançamento de gás em qualquer local onde normalmente o pessoal tenha acesso. O alarme deve tocar durante um período de tempo suficiente antes de ser lançado o gás.

h) Os meios de comando de qualquer instalação fixa de extinção de incêndios por gás devem ser facilmente acessíveis, de accionamento simples e estarem agrupados no menor número possível de pontos e em locais não susceptíveis de ficarem isolados por um incêndio que se produza nos locais protegidos.

Regra 9

Instalação fixa de extinção de incêndios por espuma dos locais de máquinas

a) Qualquer instalação fixa regulamentar de extinção por espuma nos locais de máquinas deve poder fornecer, através de orifícios fixos de descarga, uma quantidade de espuma suficiente para cobrir com uma espessura de 150 mm (6 polegadas) a mais extensa superfície em que se possa espalhar o combustível líquido. A instalação deve produzir espuma própria para extinguir incêndio em óleos combustíveis. Devem existir meios para obter uma eficaz distribuição de espuma através de um sistema fixo de encanamentos com válvulas e torneiras de comando e respectivos orifícios de descarga, de modo que se possa dirigir eficazmente a espuma utilizando pulverizadores fixos para os pontos dentro dos locais protegidos onde o risco de incêndio seja maior. A relação de expansão da espuma deve ser, no máximo, 12 para 1.

b) Os meios de comando de qualquer destas instalações devem ser facilmente acessíveis, de accionamento simples e estarem agrupados no menor número possível de pontos e em locais não susceptíveis de ficarem isolados por um incêndio que se produza nos locais protegidos.

Regra 10

Instalações fixas de extinção de incêndios por espuma de alta expansão nos locais de máquinas

a) — *i*) Qualquer instalação fixa de espuma de alta expansão exigida em locais de máquinas deve poder descarregar rapidamente por orifícios de descarga uma quantidade de espuma suficiente para encher o maior espaço a ser protegido, à razão de, pelo menos, 1 m (3,3 pés) de espessura por minuto. A quantidade de líquido espumífero disponível deve ser suficiente para produzir um volume de espuma igual a cinco vezes o volume do maior compartimento a ser protegido. A relação de expansão da espuma deve ser, no máximo, 1000 para 1;

ii) A Administração pode permitir, em alternativa, arranjos e proporções de descarga diferentes desde que com estas se obtenha uma protecção equivalente.

b) As condutas de descarga de espuma, entradas de ar para o gerador de espuma e o número de unidades produtoras de espuma devem ser tais que, segundo o parecer da Administração, assegurem uma produção e distribuição de espuma eficazes.

c) As condutas de distribuição de espuma devem estar dispostas de modo que um incêndio declarado nos locais protegidos não possa afectar o equipamento produtor de espuma.

d) O gerador de espuma, as suas fontes de energia, o líquido espumífero e os meios de comando da instalação devem ser facilmente acessíveis e de accionamento simples e estarem agrupados no menor número possível de pontos e em locais não susceptíveis de ficarem isolados por um incêndio que se produza nos locais protegidos.

Regra 11

Instalações fixas de extinção de incêndios por água pulverizada sob pressão nos locais de máquinas

a) Qualquer instalação fixa de água pulverizada sob pressão para extinção de incêndios em locais de máquinas deve ser dotada de pulverizadores de tipo aprovado.

b) O número e a disposição dos pulverizadores devem satisfazer as prescrições da Administração e ser tais que garantam a eficaz distribuição de água a uma razão média de, pelo menos, 5 l por metro quadrado (0,1 galão por pé quadrado) por minuto nos locais protegidos. Quando for considerado necessário utilizar maiores regimes de aplicação, estes devem ser satisfatórios segundo o critério da Administração. Esses pulverizadores devem ser instalados por cima dos porões, sobre os tectos dos tanques e noutras zonas sobre as quais se possa espalhar o combustível líquido e sobre os pontos dos locais das máquinas onde haja grave risco de incêndio.

c) A instalação deve ser dividida em secções, cujas válvulas de distribuição devem poder ser manobradas de locais facilmente acessíveis, fora dos locais protegidos, e que não sejam susceptíveis de ficar facilmente isolados quando se produz um incêndio.

d) A instalação deve ser mantida em carga, à pressão necessária, e a bomba que fornece água ao sistema deve arrancar automaticamente quando há uma baixa de pressão na instalação.

e) A bomba deve permitir alimentar, à pressão necessária, simultaneamente todas as secções de qualquer dos locais a proteger. A instalação não deve ficar fora de serviço por efeito de um incêndio no local ou locais protegidos.

f) A bomba pode ser accionada por um motor independente de combustão interna; no entanto, se o seu funcionamento depender da energia fornecida pelo gerador de emergência instalado em cumprimento do disposto nas regras 25 ou 26 do capítulo II-1 da presente Convenção, o referido gerador deve arrancar automaticamente por falta de energia principal de modo que a bomba prescrita pelo parágrafo *e*) da presente regra seja imediatamente alimentada. Quando a bomba for accionada por um motor independente de combustão interna, deve estar situada de modo que o fornecimento de ar ao motor não seja afectado quando se produzir um incêndio nos locais protegidos.

g) Devem ser tomadas precauções para evitar que os pulverizadores sejam obstruídos por impurezas da água ou por corrosão dos encanamentos, pulverizadores, válvulas e bombas.

Regra 12

Instalações automáticas de água pulverizada sob pressão, alarme e detecção de incêndios

a) — *i*) Toda a instalação automática de água pulverizada, alarme e detecção de incêndios que seja exigida, deve estar pronta para entrar em acção em qualquer momento sem que a tripulação tenha necessidade de o pôr em funcionamento. A instalação deve ser do tipo encanamentos em carga, embora pequenas secções não protegidas possam ser do tipo de encanamento seco se a Administração considerar necessária esta precaução. Qualquer parte da instalação que possa ficar sujeita, durante o serviço, a temperaturas de congelação, deve ser convenientemente protegida. A instalação deve ser mantida à pressão necessária e devem ser tomadas medidas que assegurem o fornecimento contínuo de água tal como é exigido na presente regra;

ii) Cada secção de pulverizadores deve dispor de meios que dêem automaticamente um alarme visual e sonoro num ou mais pontos sempre que qualquer pulverizador entre em acção. Estes indicadores devem assinalar a existência e a localização de qualquer incêndio que se declare em qualquer dos locais protegidos pela instalação, e devem estar agrupados na ponte de navegação ou num posto principal de segurança contra incêndios, onde deve estar o pessoal e o equipamento que assegurem que qualquer alarme emitido será imediatamente recebido por um membro da tripulação responsável. Os circuitos de alarme devem ser construídos de modo a indicarem qualquer avaria que possa ocorrer na instalação.

b) — *i*) Os pulverizadores devem estar agrupados em secções separadas, com um máximo de 200 pulverizadores por secção. Nenhuma secção deve servir mais do que dois pavimentos nem deve estar situada em mais do que uma zona vertical principal.

No entanto, a Administração poderá permitir que a mesma secção de pulverizadores sirva mais do que dois pavimentos e esteja situada em mais do que uma zona vertical principal, desde que considere que a protecção contra incêndios do navio não é reduzida;

ii) Cada secção deve ser susceptível de ser isolada através de uma única válvula de fecho. Esta válvula deve ser facilmente acessível e a sua localização deve estar clara e permanentemente indicada. Devem ser tomadas medidas para que estas válvulas não possam ser accionadas por uma pessoa não autorizada;

iii) Na válvula de fecho de cada secção e no posto central deve ser instalado um manómetro que indique a pressão da instalação;

iv) Os pulverizadores devem ser resistentes à corrosão provocada pelo ambiente marítimo. Nos locais habitados e de serviço os pulverizadores devem entrar em funcionamento quando se alcançar uma temperatura entre 68°C (155°F) e 79°C (175°F), mas em locais tais como estufas onde são de esperar temperaturas ambientes altas, a temperatura de funcionamento dos pulverizadores pode ser aumentada até 30°C (54°F) acima da máxima temperatura prevista para a parte superior do local considerado;

v) Junto de cada indicador deve existir uma lista ou plano que mostre os locais protegidos e a localização da zona em relação a cada secção. Devem existir instruções adequadas para provas e operações de manutenção.

c) Os pulverizadores devem ser colocados na parte superior e espaçados segundo uma disposição apropriada para manter um regime médio de aplicação de, pelo menos, 5 l por metro quadrado (0,1 galão por pé quadrado) por minuto sobre a área nominal coberta pelos pulverizadores. Em alternativa, a Administração pode permitir que sejam usados pulverizadores com débito diferente desde que não os considere menos eficazes.

d) — *i*) Deve ser instalado um depósito de água que tenha um volume mínimo igual ao dobro da quantidade de água especificada na presente alínea. O depósito deve conter permanentemente uma quantidade de água doce equivalente à que debita num minuto a bomba especificada na alínea *ii*) do parágrafo *e*) da presente regra, e a instalação deve ser tal que o depósito mantenha uma pressão de ar suficiente para assegurar que, quando tenha sido descarregada a água doce do depósito, a pressão dentro dele não seja inferior à pressão de trabalho dos pulverizadores mais a pressão correspondente à coluna de água medida desde o fundo do depósito até ao ponto mais elevado da instalação. Devem existir meios adequados para manter a pressão e a quantidade de água doce no interior do depósito. Deve ser instalado um vidro de nível que indique o nível correcto da água no interior do tanque;

ii) Devem existir meios para impedir a entrada de água salgada no depósito.

e) — *i*) Deve ser instalada uma bomba mecânica independente, destinada exclusivamente a manter automaticamente a descarga continua de água dos pulverizadores. Esta bomba deve começar a funcionar automaticamente, por abaixamento da pressão do sistema, antes que a quantidade de água doce do depósito sobre pressão se tenha esgotado completamente;

ii) A bomba e a rede de encanamentos devem ser capazes de manter a pressão necessária ao nível do pulverizador mais alto, de modo que se assegure um fornecimento contínuo de água em quantidade suficiente para cobrir uma área mínima de 280 m² (3000 pés quadrados) ao regime de aplicação especificado no parágrafo *c*) da presente regra;

iii) A bomba deverá ter do lado da descarga uma válvula de prova com um tubo curto aberto. A área efectiva da secção da válvula e do tubo deve permitir a descarga do caudal da bomba prescrito, sem que haja um abaixamento da pressão do sistema especificada no parágrafo *d*), alínea *i*), da presente regra;

iv) A tomada de água do mar da bomba deve estar situada, se possível, no mesmo compartimento da bomba e disposta de modo que, com o navio a nado, não seja necessário em nenhum caso cortar o fornecimento de água do mar à bomba a não ser para fins de inspecção e reparação da mesma.

f) A bomba e o depósito devem estar situados num lugar suficientemente afastado de qualquer local de máquinas da categoria A e fora de qualquer local protegido pelo sistema de pulverizadores.

g) Não deve haver menos de duas fontes de energia para alimentar a bomba de água do mar e o sistema automático de alarme e detecção de incêndios. Se a bomba for accionada electricamente, as fontes de energia devem ser um gerador principal e uma fonte de energia de emergência. A bomba deve ser alimentada a partir do quadro eléctrico principal e do quadro eléctrico de emergência por circuitos independentes reservados unicamente para este fim. Os circuitos não devem atravessar cozinhas, locais de máquinas nem outros espaços fechados que apresentem grave risco de incêndio, excepto quando seja absolutamente necessário para fazerem o percurso até aos quadros eléctricos de distribuição, e devem ser ligados a um comutador inversor automático localizado perto da bomba. Este comutador deve permitir a alimentação de energia a partir do quadro principal enquanto esta energia estiver disponível e deve estar concebido de modo que por falta desta alimentação mude automaticamente para a alimentação a partir do quadro de emergência. Os interruptores, quer do quadro principal quer do quadro de emergência, devem estar claramente assinalados por placas indicadoras e normalmente devem ser mantidos fechados. Não é permitida a instalação de qualquer outro interruptor nestes circuitos. Uma das fontes de energia para o sistema de alarme e detecção de incêndios deve ser a fonte de energia eléctrica de emergência. Se uma das fontes de energia para accionar a bomba for um motor de combustão interna, este, além de cumprir o especificado no parágrafo *f*) da presente regra, deve estar situado de modo que um incêndio produzido num local protegido não dificulte o fornecimento de ar ao motor.

h) A instalação, na parte respeitante aos pulverizadores, deve estar ligada ao colector principal de incêndios do navio através de uma válvula de retenção com haste roscada, que impeça o retorno da água da instalação para o colector.

i) — *i*) Deve existir uma válvula de prova para experimentar o alarme automático de cada secção de pulverizadores, descarregando uma quantidade de água equivalente à de um pulverizador em funcionamento. A válvula de prova de cada secção deve estar próxima da válvula de fecho da mesma secção;

ii) Devem existir meios para experimentar o funcionamento automático da bomba por abaixamento da pressão na instalação;

iii) Na posição correspondente a um dos indicadores referidos na alínea *ii*) do parágrafo *a*) da presente regra devem existir interruptores para experimentar o alarme e os indicadores de cada secção de pulverizadores.

j) Por cada secção da instalação devem existir pulverizadores sobresselentes em número que a Administração considere suficiente.

Regra 13

Instalações automáticas de alarme e detecção de incêndios

Prescrições aplicáveis a navios de passageiros que transportem mais de 36 passageiros

a) — *i*) Qualquer instalação automática de alarme e detecção de incêndios prescrita deve ser capaz de actuar imediatamente, sem que seja necessária a intervenção da tripulação;

ii) Cada secção de detectores deve estar equipada com os meios necessários para emitir automaticamente um sinal de alarme visual e sonoro em um ou mais indicadores, sempre que um detector entra em funcionamento. Estes indicadores devem assinalar a existência de qualquer incêndio declarado em qualquer dos locais protegidos pela instalação e devem estar centralizados na ponte de navegação ou num posto principal de segurança contra incêndios, onde deve estar o pessoal e o equipamento que assegurem que qualquer alarme emitido será imediatamente recebido por um membro da tripulação. Os circuitos de alarme devem ser construídos de modo a indicarem qualquer avaria que possa ocorrer na instalação.

b) Os detectores devem estar agrupados em secções distintas, cada uma das quais não deve proteger mais de 50 locais e não deve dispor de mais do que 100 detectores. Nenhuma das secções de detectores deve proteger locais situados em ambos os bordos, bombordo e estibordo, nem em mais do que um pavimento, nem tão-pouco deve estar instalada em mais do que uma zona vertical principal. No entanto, a Administração poderá autorizar que a mesma secção proteja ambos os bordos e mais do que um pavimento, desde que considere que a protecção do navio contra incêndios não é diminuída.

c) A instalação deve entrar em funcionamento por uma anormal temperatura do ar, concentração anormal de fumos ou outros factores que indiquem um início de incêndio em qualquer dos locais protegidos. Os sistemas sensíveis a variações de temperatura do ar não devem actuar a menos de 57°C (135°F) e devem começar a actuar a uma temperatura não superior a 74°C (165°F) quando os aumentos de temperatura até esses níveis não excedam 1°C (1,8°F) por minuto. Em estufas e compartimentos análogos, em que as temperaturas ambientes são normalmente elevadas, a Administração poderá autorizar que a temperatura admissível para actuação da instalação seja aumentada em 30°C (54°F) acima da temperatura máxima prevista para a parte superior desses locais. As instalações que funcionam por variação de concentração de fumos devem entrar em funcionamento quando a intensidade de um feixe luminoso emitido diminua na proporção que seja determinada pela Administração. A Administração pode aceitar como válidos outros métodos de funcionamento igualmente eficazes. A instalação de detecção deve ser utilizada única e exclusivamente para detecção de incêndios.

d) Os detectores podem estar dispostos de modo que accionem o alarme mediante a abertura ou o fechamento dos contactos ou por outros métodos apropriados. Devem ser montados em posições elevadas e devidamente protegidos contra choques e possíveis deteriorações. Devem ser de um tipo adequado para funcionarem em atmosfera marítima. Devem ser montados em locais espaçosos, distantes de vigas ou de outros elementos que possam dificultar a chegada dos gases quentes, ou fumos, ao elemento sensível do detector. Os detectores que actuem por fechamento de contactos devem ser do tipo estanque e o circuito deve ter um monitor capaz de sinalizar anomalias.

e) Deve ser montado pelo menos um detector em cada um dos espaços que se considere necessário proteger, e pelo menos um por cada 37 m² (400 pés quadrados) de superfície do pavimento. Em espaços de grandes dimensões os detectores devem ser dispostos regularmente, de maneira que nenhum deles diste entre si mais de 9 m (30 pés) ou mais de 4,5 m (15 pés) de uma antepara.

f) O equipamento eléctrico utilizado para fazer funcionar a instalação de alarme e detecção de incêndios deve ser alimentado, pelo menos, por duas fontes de energia, uma das quais deve ser a fonte de energia eléctrica de emergência. A alimentação de energia deve ser feita por circuitos independentes, destinados exclusivamente a este fim. Estes circuitos devem ser ligados a um comutador inversor situado no posto de comando da instalação de detecção. Os circuitos não devem atravessar cozinhas, locais de máquinas, nem outros locais fechados que apresentem grave risco de incêndio, excepto quando for necessário dotar esses locais com detectores de incêndio ou para fazerem o percurso até ao quadro eléctrico de distribuição.

g) — *i*) Junto a cada indicador deve existir uma lista ou plano que mostre os espaços protegidos e a localização da zona em relação a cada secção. Devem existir instruções adequadas para provas e operações de manutenção;

ii) Devem ser tomadas providências para verificar o correcto funcionamento dos detectores e dos indicadores, instalando meios que permitam aplicar ar quente ou fumo junto dos detectores.

h) Por cada secção de detectores devem existir detectores sobresselentes em número que a Administração considere suficiente.

Prescrições aplicáveis a todos os outros tipos de navios

i) Qualquer dispositivo regulamentar para a detecção de incêndios deve poder indicar automaticamente a existência ou indício de incêndio e a sua localização. Os indicadores devem estar centralizados na ponte ou em postos de segurança em directa comunicação com a ponte. A Administração pode permitir que os indicadores sejam distribuídos por diversos postos.

j) Nos navios de passageiros, o equipamento eléctrico usado no sistema de detecção de incêndios deve ser alimentado por duas fontes de energia independentes, uma das quais é obrigatoriamente a fonte de energia de emergência.

k) A rede de alarme deve comandar sinais de aviso, tanto luminosos como sonoros, colocados nos postos centrais mencionados no parágrafo *i*) da presente regra. Os dispositivos de detecção de incêndio nos porões de carga podem não ter avisadores sonoros.

Regra 14

Equipamento de bombeiro

O equipamento de bombeiro compreende:

a) Um equipamento individual constituído por:

i) Fato protector em material que proteja a pele das radiações térmicas emitidas pelo fogo e das queimaduras. A face exterior deve ser impermeável;

ii) Botas e luvas de borracha ou outro material não condutor de electricidade;

iii) Um capacete rígido que constitua uma protecção eficaz contra impactes;

iv) Uma lanterna eléctrica de segurança (portátil) de tipo aprovado para um período mínimo de funcionamento de três horas;

v) Um machado de um tipo que a Administração considere satisfatório.

b) Um aparelho respiratório de tipo aprovado, que pode ser:

i) Um capacete ou uma máscara antifumo equipados com uma bomba de ar e uma mangueira de comprimento suficiente para alcançar um ponto qualquer dos porões ou das casas das máquinas a partir de um ponto situado num pavimento descoberto e suficientemente distanciado da escotilha ou porta. Se, para satisfazer às prescrições desta alínea, for necessário que a mangueira de ar tenha comprimento superior a 36 m (120 pés), deve haver um aparelho respiratório autónomo, em substituição ou adição, conforme a Administração determine; ou

ii) Um aparelho respiratório autónomo que deve poder funcionar durante um período de tempo a fixar pela Administração.

Cada aparelho respiratório deve ser completado com uma linha de segurança antifogo de resistência e comprimento suficientes, ligada por um gato de mola às correias do aparelho respiratório ou a um cinto separado, com o objectivo de impedir que o aparelho se solte quando se puxar a linha de segurança.

Regra 15

Possibilidade de utilização rápida das instalações de extinção de incêndios

Em todos os navios novos e existentes as instalações de extinção de incêndios devem ser mantidas em bom estado de funcionamento e prontas a ser imediatamente utilizadas durante toda a viagem.

Regra 16

Equivalências

Sempre que no presente capítulo se especifique para qualquer navio novo ou existente um determinado tipo de dispositivo, aparelho, agente extintor ou instalação, pode ser autorizado o uso de outro tipo de dispositivo, aparelho, etc., desde que a Administração verifique que a sua eficácia não é inferior.

PARTE B

Medidas de segurança contra incêndios em navios de passageiros que transportem mais de 36 passageiros

Regra 17

Estrutura

O casco, superstruturas, anteparas estruturais, pavimentos e casotas devem ser construídos de aço ou outro material equivalente. Para efeitos da aplicação da definição da expressão «de aço ou outro material equivalente» dada no parágrafo *g*) da regra 3 do presente capítulo, a «exposição ao fogo» deve estar de acordo com as normas de resistência e isolamento consignadas nas tabelas da regra 20 do presente capítulo. Por exemplo, quando se permitir que a resistência ao fogo das divisórias, tais como pavimentos, anteparas longitudinais e laterais do casario forem iguais às divisórias da classe B-O como atrás referido, a «exposição ao fogo» deve ser de meia hora.

Se alguma parte da estrutura for construída de liga de alumínio aplicam-se as prescrições seguintes:

a) O isolamento dos componentes de liga de alumínio das divisórias da classe A ou B, excepto as estruturas que em opinião da Administração não suportem carga, deve ser tal que a temperatura da alma do elemento estrutural não suba mais do que 200°C (360°F) acima da temperatura ambiente, durante o tempo de exposição ao fogo da prova-tipo;

b) Deve ser prestada particular atenção ao isolamento dos componentes estruturais de ligas de alumínio, integrados em colunas, pés-de-carneiro e outros elementos de suporte, necessários em zonas de estiva e suspensão de baleeiras e salva-vidas, e nos locais de embarque, assim como ao isolamento das divisórias das classes A e B como garantia de que:

i) Nos elementos que fazem parte das estruturas de suporte das zonas das baleeiras e embarcações salva-vidas e divisórias da classe A, o limite para a elevação de temperatura indicado no parágrafo *a*) da presente regra deve ser observado ao fim de uma hora; e

ii) Nos elementos necessários para dar suporte às divisórias da classe B, o limite para a elevação de temperatura indicado no parágrafo *a*) da presente regra deve ser observado ao fim de meia hora;

c) Os tectos e anteparas do rufo dos locais de máquinas de categoria A devem ser construídos em aço e devidamente isolados, e as aberturas, se as houver, devem estar dispostas e protegidas de modo a evitarem a propagação de incêndios.

Regra 18

Zonas verticais principais e zonas horizontais

a) O casco, as superstruturas e as casotas devem ser divididas em zonas verticais principais por divisórias da classe A. Os saltos e recessos devem ser reduzidos ao mínimo, mas quando forem necessários, devem ser constituídos por divisórias da classe A. O valor de isolamento destas divisórias é indicado nas tabelas da regra 20 do presente capítulo.

b) Tanto quanto possível, as anteparas que limitam as zonas verticais principais situadas acima do pavimento das anteparas devem ficar alinhadas com as anteparas estanques de compartimentagem, situadas imediatamente abaixo do pavimento das anteparas.

c) Estas antéparas devem estender-se de pavimento a pavimento, até ao casco ou outras partes consideradas como limite.

d) Quando uma zona vertical principal está subdividida em zonas horizontais por divisórias horizontais da classe A para formar uma barreira entre zonas do navio equipadas com pulverizadores e zonas que não os têm, as divisórias devem estender-se entre as anteparas de zonas verticais principais adjacentes, até ao casco ou anteparas exteriores e devem ser isoladas de acordo com os valores de isolamento e de resistência ao fogo dados pela tabela 3 da regra 20 do presente capítulo.

e) Em navios projectados para fins especiais, como transporte de automóveis ou vagões de caminho de ferro, onde a instalação de anteparas em zonas verticais principais seja incompatível com a utilização do navio para o fim a que se destina, devem ser previstos meios equivalentes para dominar e limitar um incêndio, com prévia aprovação expressa da Administração.

No entanto, se um navio tiver espaços de categoria especial, todos eles devem estar de acordo com as disposições aplicáveis da regra 30 do presente capítulo, e na medida em que tais prescrições estiverem em contradição com outras disposições da presente parte do presente capítulo prevalecem as disposições da regra 30.

Regra 19

Anteparas situadas no interior de zonas verticais principais

a) Todas as anteparas que não sejam necessariamente da classe A devem ser pelo menos da classe B ou C, tal como se estipula nas tabelas da regra 20 do presente capítulo. Todas estas divisórias podem ser revestidas com materiais combustíveis de acordo com o disposto na regra 27 do presente capítulo.

b) Todas as anteparas dos corredores que não tenham de ser necessariamente divisórias da classe A serão da classe B e devem estender-se de pavimento a pavimento, excepto:

i) Se forem instalados forros e ou revestimentos continuos da classe B em ambos os lados da antepara, a parte da antepara que fica escondida pelo forro ou pelo revestimento contínuo deve ser de um material cuja composição e espessura sejam aceitáveis para a construção de divisórias da classe B desde que, segundo o critério da Administração, seja razoável e possível satisfazer as normas de resistência ao fogo exigidas para as divisórias da classe B;

ii) Se um navio estiver protegido por uma instalação fixa de água pulverizada sob pressão de acordo com as disposições da regra 12 do presente capítulo, as anteparas de corredores construídas com materiais da classe B podem terminar no forro de corredores desde que este forro seja de um material de composição e espessura admissível para a construção de divisórias da classe B; não obstante o disposto na regra 20 do presente capítulo, tais anteparas e forros devem satisfazer às normas de resistência exigidas para a classe B, na medida em que, no parecer da Administração, seja razoável e possível. Todas as portas e caixilhos situados nestas anteparas devem ser de material incombustível e a sua construção e montagem deve ser feita de modo que oponha uma resistência ao fogo que a Administração julgue suficiente.

c) Todas as anteparas que tenham necessariamente de ser divisórias da classe B, excepto as anteparas de corredores, devem estender-se de pavimento a pavimento e até ao casco ou outras partes consideradas como limites, a menos que se instalem forros e ou revestimentos contínuos da classe B em ambos os lados da antepara; nesse caso a antepara pode terminar no forro ou no revestimento contínuo.

Regra 20

Resistência ao fogo de anteparas e pavimentos

a) Todas as anteparas e pavimentos, além de cumprirem com as disposições específicas mencionadas noutras regras do presente capítulo, devem ter como resistência mínima ao fogo a indicada nas tabelas 1 a 4 da presente regra. Nos casos em que, devido a qualquer particularidade estrutural do navio, seja difícil determinar, aplicando as tabelas, os valores mínimos de resistência de algumas divisórias, estes valores devem ser determinados de um modo que satisfaça a Administração.

b) Na aplicação das tabelas devem observar-se as seguintes prescrições:

i) A tabela 1 aplica-se às anteparas limites de zonas verticais principais ou de zonas horizontais.

A tabela 2 aplica-se a anteparas que não limitam zonas verticais principais nem zonas horizontais.

A tabela 3 aplica-se a pavimentos que formam saltos em zonas verticais principais ou que limitam zonas horizontais.

A tabela 4 aplica-se a pavimentos que não formam saltos em zonas verticais principais nem limitam zonas horizontais;

ii) Com o objectivo de determinar as normas adequadas de resistência ao fogo que se aplicam a anteparas entre locais adjacentes, tais locais devem ser classificados segundo o seu risco de incêndio nas categorias enumeradas de (1) a (14), que a seguir se indicam. Se, pelo seu conteúdo e pelo serviço a que se destinam, houver dois critérios de classificação de um determinado local, para efeitos de aplicação da presente regra, deve considerar-se tal local na categoria para a qual as normas sejam mais rigorosas quanto a anteparas limite. A intenção é considerar que o título de cada categoria seja mais representativo do que restrito. O número, representado entre parêntesis, que precede cada categoria é o número da coluna ou da linha aplicável nas tabelas:

(1) *Postos de segurança:*

Locais onde estão situadas a fonte de energia e iluminação de emergência;

Casa do leme e casa de navegação;

Locais que contêm o equipamento de radiocomunicações do navio;

Postos de comando do equipamento de extinção e detecção de incêndios;
Casa de comando das máquinas propulsoras quando localizada fora do local de máquinas;
Locais onde estão centralizados os dispositivos de alarme de incêndios;
Espaços onde estão centralizados os postos e equipamentos do sistema de intercomunicação de emergência;

(2) *Escadas:*

Escadas interiores, ascensores e escadas de accionamento mecânico (não totalmente instaladas no interior dos locais de máquinas) para passageiros e tripulação e os troncos correspondentes;
A este respeito, uma escada que seja fechada unicamente a um dos níveis deve considerar-se como fazendo parte do local, do qual não é separada por uma porta contra fogo;

(3) *Corredores:*

Corredores para o serviço de passageiros e tripulação;

(4) *Postos de embarque e postos de manobra das baleeiras e embarcações salva-vidas:*

Locais exteriores e locais de passagem cobertos que sirvam de postos de embarque e postos de manobra das baleeiras e embarcações salva-vidas;

(5) *Locais exteriores:*

Locais exteriores e locais de passagem cobertos separados dos postos de embarque e postos de manobra das baleeiras e embarcações salva-vidas;
Locais descobertos (são espaços situados fora das superstruturas e casotas);

(6) *Locais habitados com reduzido risco de incêndio:*

Camarotes que contenham móveis e adereços cujo risco de incêndio seja reduzido;
Locais de reunião que contenham móveis e adereços cujo risco de incêndio seja reduzido;
Locais de reunião que contenham móveis e adereços cujo risco de incêndio seja reduzido e que ocupem uma superfície de pavimento inferior a 50 m² (540 pés quadrados);
Escritórios e enfermarias que contenham mobiliário e adereços cujo risco de incêndio seja reduzido;

(7) *Locais habitados com moderado risco de incêndio:*

Como os citados em (6), mas contendo mobiliário e adereços cujo risco de incêndio não seja reduzido;
Locais de reunião que contenham mobiliário e adereços cujo risco de incêndio seja reduzido e que ocupem uma superfície de pavimento igual ou superior a 50 m² (540 pés quadrados);
Armários fechados e pequenos paióis situados em locais habitados;
Lojas;
Salas de projecções cinematográficas e paióis de armazenamento de filmes;
Cozinhas dietéticas (sem chama descoberta);
Paióis de elementos de limpeza (em que não sejam armazenados líquidos inflamáveis);
Laboratórios (em que não sejam armazenados líquidos inflamáveis);
Farmácias;
Pequenas estufas [com uma superfície igual ou inferior a 4 m² (43 pés quadrados)];
Cofres;

(8) *Locais habitados com grande risco de incêndio:*

Locais de reunião que contenham móveis e adereços cujo risco de incêndio não é reduzido e que ocupem uma superfície de pavimento igual ou superior a 50 m² (540 pés quadrados);
Barbearias e salões de beleza;

(9) *Locais para fins sanitários e similares:*

Instalações higiénicas comuns, duches, banhos e retretes, etc.;
Pequenas lavandarias;
Piscinas cobertas;
Salas de operações;
Escritórios fechados em locais de alojamentos;
As instalações sanitárias privadas serão consideradas como fazendo parte do local em que estão situadas;

(10) *Tanques, espaços perdidos e locais de maquinaria auxiliar com pequeno ou nulo risco de incêndio:*

Tanques estruturais de água;
Espaços perdidos e coferdames;
Locais de maquinaria auxiliar nos quais não existam equipamentos com lubrificação sob pressão e onde é proibido o armazenamento de materiais combustíveis, tais como: compartimentos de ventilação e climatização; locais dos guinchos; compartimento da máquina do leme; compartimento do equipamento estabilizador; compartimento do motor eléctrico de propulsão; compartimentos de quadros eléctricos de distribuição por secções e equipamento exclusivamente eléctrico em que não haja transformadores eléctricos em banho de óleo (de mais de 10 kVA); túneis de veios e túneis de encanamentos, casas das bombas e de máquinas de refrigeração (que não trabalhem com líquidos inflamáveis nem os utilizem);
Troncos fechados servindo os espaços que se acabam de mencionar;
Outros troncos, tais como os troncos para encanamentos e cabos;

(11) *Locais de máquinas auxiliares, locais de carga, locais de categoria especial, tanques de hidrocarbonetos transportados como carga ou para consumo*

do próprio navio e outros locais similares com moderado risco de incêndio:

Tanques para carga de hidrocarbonetos;
Porões de carga, troncos de acesso e escotilhas;
Câmaras frigoríficas;
Tanques de combustível (quando instalados em locais separados que não contenham máquinas);
Túneis de veios e túneis de encanamentos em que seja possível armazenar materiais combustíveis;
Locais de máquinas auxiliares como os indicados na categoria (10), em que existam equipamentos com sistemas de lubrificação sob pressão ou em que se permita armazenar materiais combustíveis;
Locais de embarque de combustível;
Compartimentos onde estejam localizados transformadores eléctricos em banho de óleo (de mais de 10 kVA);
Locais onde estejam instalados geradores auxiliares accionados por turbinas ou máquinas alternativas de vapor e pequenos motores de combustão interna com potência máxima de 112 kW que accionem geradores de emergência, bombas da instalação de água pulverizada sob pressão, bombas de incêndio, bombas de esgoto, etc.;
Locais de categoria especial (somente se aplicam as tabelas 1 e 3);
Troncos fechados que servem os locais que se acabam de enumerar;

(12) *Locais de máquinas e cozinhas principais:*

Locais de máquinas propulsoras principais (excepto os locais dos motores eléctricos de propulsão) e casas de caldeiras;
Locais de máquinas auxiliares não incluídos nas categorias (10) e (11) que contenham motores de combustão interna ou dispositivos de queima, aquecimento ou bombagem de combustível;
Cozinhas principais e anexos;
Troncos e rufos dos locais que se acabam de enumerar;

(13) *Paióis, oficinas, despensas, etc.:*

Despensas principais separadas das cozinhas;
Lavandaria principal;
Estufas grandes [com uma superfície de pavimento superior a 4 m^2 (43 pés quadrados)];
Paióis diversos;
Paióis de correio e bagagens;
Paióis do lixo;
Oficinas (fora dos locais de máquinas e cozinhas, etc.);

(14) *Outros locais onde se armazenem líquidos inflamáveis:*

Paiol de luzes;
Paiol das tintas;
Paiol que contenha líquidos inflamáveis (incluídos corantes, medicamentos, etc.);
Laboratórios (nos quais sejam armazenados líquidos inflamáveis);

iii) Quando se indique um valor único para a resistência ao fogo de uma antepara situada entre dois espaços, este valor será aplicado em todos os casos;

iv) Para determinar o grau de resistência ao fogo aplicável a uma antepara situada entre dois espaços que ficam dentro de uma zona vertical principal ou horizontal não protegida por uma instalação automática de água pulverizada sob pressão, de acordo com as prescrições da regra 12 do presente capítulo ou entre zonas desse tipo se nenhuma delas for protegida por tal sistema, deve aplicar-se o maior dos valores dados nas tabelas;

v) Para determinar o grau de resistência ao fogo aplicável a uma antepara situada entre dois espaços que ficam dentro de uma zona vertical principal ou horizontal protegida por uma instalação automática de água pulverizada sob pressão, de acordo com as prescrições da regra 12 do presente capítulo, ou entre zonas desse tipo, e se ambas estão protegidas por tal instalação, aplicar-se-á o menor dos valores dados nas tabelas. Quando no interior de locais habitados e de serviço exista uma zona protegida por uma instalação de água pulverizada sob pressão, e esta se encontre ao lado de outra que não é protegida do mesmo modo, à divisória que compartimenta estas duas zonas deve aplicar-se o maior dos valores dado nas tabelas;

vi) Quando existirem locais adjacentes da mesma categoria numérica e nas tabelas figure o expoente 1, não há necessidade de colocar anteparas ou pavimentos entre tais espaços se a Administração não os considerar necessários. Por exemplo, na categoria (12) não há necessidade de colocar uma antepara entre a cozinha e seus anexos, de modo que as anteparas e pavimentos dos anexos mantenham a resistência das anteparas limites da cozinha. No entanto, entre uma cozinha e um local de máquinas deve ser colocada uma antepara, embora ambos os espaços figurem na categoria (12);

vii) Quando nas tabelas figure o expoente 2, pode-se tomar o valor menor de isolamento, mas só quando pelo menos um dos espaços contíguos é protegido por uma instalação automática de água pulverizada sob pressão, de acordo com as disposições da regra 12 do presente capítulo;

viii) Não obstante as disposições da regra 19 do presente capítulo, não há prescrições especiais para material ou resistência das anteparas limite quando nas tabelas somente aparece um traço;

ix) Quanto a locais da categoria (5), a Administração determinará se se aplicam a extremos de casotas e superstruturas os valores de isolamento da tabela 1 ou 2 e a pavimentos expostos, se se aplicam os valores da tabela 3 ou 4. As prescrições relativas à categoria (5) que figuram nas tabelas 1 a 4 não obrigam em nenhum caso a fechar os locais que no parecer da Administração não necessitem ser fechados.

c) Os forros ou revestimentos contínuos da classe B juntamente com os correspondentes pavimentos e anteparas podem ser aceites como contributo no todo ou em parte, para o isolamento e resistência exigidas para uma divisória.

d) Na aprovação de particularidades estruturais para a protecção contra incêndios, a Administração deve ter em conta o risco de transmissão de calor nas intersecções e nos pontos extremos das barreiras térmicas prescritas.

TABELA 1

Anteparas limite de zonas verticais principais ou de zonas horizontais

Locais		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Postos de segurança.	(1)	A-60	A-30	A-30	A-0	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Escadas.	(2)		A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-30	A-60	A-15 A-0	A-60
Corredores.	(3)			A-0	A-0	A-0	A-0	A-30 A-0	A-30 A-0	A-0	A-0	A-30	A-60	A-15 A-0	A-60
Postos de embarque e postos de manobra de baleeiras e embarcações salva-vidas.	(4)				-	-	A-0	A-0	A-0	A-0	A-0	A-0	A-60	A-0	A-60
Locais exteriores.	(5)					-	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Locais habitados com reduzido risco de incêndio.	(6)						A-15 A-0	A-30 A-0	A-30 A-0	A-0	A-0	A-15 A-0	A-30	A-15 A-0	A-30
Locais habitados com moderado risco de incêndio.	(7)							A-30 A-0	A-60 A-15	A-0	A-0	A-30 A-0	A-60	A-30 A-0	A-60
Locais habitados com grande risco de incêndio.	(8)								A-60 A-15	A-0	A-0	A-60 A-15	A-60	A-30 A-0	A-60
Locais para fins sanitários e similares.	(9)									A-0	A-0	A-0	A-0	A-0	A-0
Tanques, espaços perdidos e locais de maquinaria auxiliar com reduzido ou nulo risco de incêndio.	(10)										A-0	A-0	A-0	A-0	A-0
Locais de maquinaria auxiliar, locais de carga, locais de categoria especial, tanques de hidrocarbonetos transportados como carga ou para consumo do próprio navio e noutros locais similares com moderado risco de incêndio.	(11)											A-0	A-60	A-0	A-60
Locais de máquinas e cozinhas principais.	(12)												A-60	A-30[2] A-15	A-60
Paióis, oficinas, despensas, etc.	(13)													A-0	A-30
Outros locais onde se armazenem líquidos inflamáveis.	(14)														A-60

TABELA 2

Anteparas que não limitem zonas verticais principais nem zonas horizontais

Locais		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Postos de segurança.	(1)	B-0[1]	A-0	A-0	A-0	A-0 B-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Escadas.	(2)		A-0[1]	A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-15	A-30	A-15 A-0	A-30
Corredores.	(3)			C	A-0	A-0 B-0	B-0	B-15 B-0	B-15 B-0	B-0	A-0	A-15	A-30	A-0	A-30 A-0
Postos de embarque e postos de manobra de baleeiras e embarcações salva-vidas.	(4)				-	-	A-0	A-0	A-0	A-0	A-0	A-0	A-15	A-0	A-15 A-0
Locais exteriores.	(5)					-	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0 B-0	A-0 B-0
Locais habitados com reduzido risco de incêndio.	(6)						B-0 C	B-15 C	B-15 C	B-0 C	A-0	A-15 A-0	A-30	A-0	A-30 A-0
Locais habitados com moderado risco de incêndio.	(7)							B-15 C	B-15 C	B-0 C	A-0	A-15 A-0	A-60	A-15 A-0	A-60 A-15
Locais habitados com grande risco de incêndio.	(8)								B-15 C	B-0 C	A-0	A-30 A-0	A-60	A-15 A-0	A-60 A-15
Locais para fins sanitários e similares.	(9)									C	A-0	A-0	A-0	A-0	A-0
Tanques, espaços perdidos e locais de maquinaria auxiliar com reduzido ou nulo risco de incêndio.	(10)										A-0[1]	A-0	A-0	A-0	A-0
Locais de maquinaria auxiliar, locais de carga, locais de categoria especial, tanques de hidrocarbonetos transportados como carga ou para consumo do próprio navio e outros locais similares com moderado risco de incêndio.	(11)											A-0[1]	A-0	A-0	A-30[2] A-15
Locais de máquinas e cozinhas principais.	(12)												A-0	A-0	A-60
Paóis, oficinas, despensas, etc.	(13)													A-0[1]	A-0
Outros locais onde se armazenem líquidos inflamáveis.	(14)														A-30[2] A-15

TABELA 3

Pavimentos que formem saltos em zonas verticais principais ou que limitem zonas horizontais

Locais inferiores ↓ / Locais superiores →		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Postos de segurança.	(1)	A-60	A-60	A-30	A-0	A-0	A-15	A-30	A-60	A-0	A-0	A-30	A-60	A-15	A-60
Escadas.	(2)	A-15	A-0	A-0	A-0	A-0	A-0	A-15 A-0	A-15 A-0	A-0	A-0	A-0	A-60	A-0	A-60
Corredores.	(3)	A-30	A-0	A-0	A-0	A-0	A-0	A-15 A-0	A-15 A-0	A-0	A-0	A-0	A-60	A-0	A-60
Postos de embarque e postos de manobra de baleeiras e embarcações salva-vidas.	(4)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Locais exteriores.	(5)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Locais habitados com reduzido risco de incêndio.	(6)	A-60	A-30 A-0	A-15 A-0	A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-15 A-0	A-15	A-0	A-15
Locais habitados com moderado risco de incêndio.	(7)	A-60	A-60 A-15	A-30 A-0	A-15 A-0	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-30 A-0	A-30	A-0	A-30
Locais habitados com grande risco de incêndio.	(8)	A-60	A-60 A-15	A-60 A-15	A-60 A-15	A-0	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-30 A-0	A-60	A-15 A-0	A-60
Locais para fins sanitários e similares.	(9)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Tanques, espaços perdidos e locais de maquinaria auxiliar com reduzido ou nulo risco de incêndio.	(10)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Locais de maquinaria auxiliar, locais de carga, locais de categoria especial, tanques de hidrocarbonetos transportados como carga ou para consumo do próprio navio e outros locais similares com moderado risco de incêndio.	(11)	A-60	A-60	A-60	A-60	A-0	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-0	A-30	A-30[2] A-0	A-30
Locais de máquinas e cozinhas principais.	(12)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Paióis, oficinas, despensas, etc.	(13)	A-60	A-60 A-15	A-30 A-0	A-15	A-0	A-15 A-0	A-30 A-0	A-60 A-15	A-0	A-0	A-0	A-30	A-0	A-30
Outros locais onde se armazenem líquidos inflamáveis.	(14)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60

TABELA 4

Pavimentos que não formem saltos em zonas verticais principais nem limitem zonas horizontais

Locais inferiores —— Locais superiores ——►		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Postos de segurança.	(1)	A-30 A-0	A-30 A-0	A-15 A-0	A-0	A-0 B-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-0	A-60	A-0	A-60 A-15
Escadas.	(2)	A-0	A-0	A-0	A-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0	A-0	A-30	A-0	A-30 A-0
Corredores.	(3)	A-15 A-0	A-0	A-0[1] B-0[1]	A-0	A-0 B-0	A-0 B-0	A-15 B-0	A-15 B-0	A-0 B-0	A-0	A-0	A-30	A-0	A-30 A-0
Postos de embarque e postos de manobra de baleeiras e embarcações salva-vidas.	(4)	A-0	A-0	A-0	A-0	-	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0
Locais exteriores.	(5)	A-0	A-0	A-0 B-0	A-0	-	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0 B-0	A-0
Locais habitados com reduzido risco de incêndio.	(6)	A-60	A-15 A-0	A-0	A-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-15 A-0	A-0	A-15 A-0
Locais habitados com moderado risco de incêndio.	(7)	A-60	A-30 A-0	A-15 A-0	A-15 A-0	A-0 B-0	A-0 B-0	A-15 B-0	A-30 B-0	A-0 B-0	A-0	A-15 A-0	A-30 A-0	A-0	A-30 A-0
Locais habitados com grande risco de incêndio.	(8)	A-60	A-60 A-15	A-60 A-0	A-30 A-0	A-0 B-0	A-15 B-0	A-30 B-0	A-60 B-0	A-0 B-0	A-0	A-30 A-0	A-30 A-0	A-0	A-30 A-0
Locais para fins sanitários e similares.	(9)	A-0	A-0	A-0 B-0	A-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0 B-0	A-0	A-0	A-0	A-0	A-0
Tanques, espaços perdidos e locais de auxiliar com reduzido ou nulo risco de incêndio.	(10)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0[1]	A-0	A-0	A-0	A-0
Locais de maquinaria auxiliar, locais de carga, locais de categoria especial, tanques de hidrocarbonetos transportados como carga ou para consumo do próprio navio e outros locais similares com moderado risco de incêndio.	(11)	A-60	A-60 A-15	A-60 A-15	A-30 A-0	A-0	A-0	A-15 A-0	A-30 A-0	A-0	A-0	A-0[1]	A-0	A-0	A-30[2] A-15
Locais de máquinas e cozinhas principais.	(12)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-60	A-0	A-0	A-30	A-30[1]	A-0	A-60
Paióis, oficinas, despensas, etc.	(13)	A-60	A-30 A-0	A-15 A-0	A-15 A-0	A-0 B-0	A-15 A-0	A-30 A-0	A-30 A-0	A-0 B-0	A-0	A-0	A-0	A-0	A-15[2] A-0
Outros locais onde se armazenem liquidos inflamáveis.	(14)	A-60	A-60 A-30	A-60 A-30	A-60	A-0 ɔ	A-30 A-0	A-60 A-15	A-60 A-15	A-0	A-0	A-30[2] A-0	A-30[2] A-0	A-0	A-30[2] A-0

Regra 21

Meios de fuga

a) Em todos os locais destinados a passageiros ou à tripulação e nos locais em que a tripulação trabalhe normalmente, com excepção dos locais de máquinas, deve haver escadas (inclinadas ou verticais) dispostas de maneira que constituam meios rápidos de abandono de cada um desses locais até ao pavimento dos postos de embarque em baleeiras ou embarcações salva-vidas. Em especial devem ser observadas as seguintes disposições:

i) Abaixo do pavimento das anteparas, cada compartimento estanque, ou zona ou grupo de locais limitado de modo idêntico, deve ter duas saídas, uma das quais, pelo menos, não obrigue a passar por uma porta estanque. Excepcionalmente, a Administração pode dispensar uma destas saídas, tendo em conta a natureza e a localização das zonas ou locais em causa, assim como o número de pessoas que normalmente aí podem ser alojadas ou encontrar-se em serviço;

ii) Acima do pavimento das anteparas, cada zona vertical principal, ou zona ou grupo de locais limitado de modo idêntico, deve ter duas saídas, uma das quais, pelo menos, deve dar acesso a uma escada que constitua uma saída vertical;

iii) Pelo menos um dos meios de fuga prescritos nas alíneas *i*) e *ii*) do parágrafo *a*) da presente regra deve ser constituído por uma escada de fácil acesso e provida de caixa, que constitua, tanto quanto possível, abrigo contínuo contra o fogo, desde o nível onde começa até ao pavimento dos postos de embarque nas baleeiras ou embarcações salva-vidas, ou até ao nível mais alto a que a escada chegue, desde que este seja o superior. Porém, quando a Administração conceda a dispensa admitida na alínea *i*) do parágrafo *a*) da presente regra, o meio de fuga único deve ser seguro segundo o seu critério. A largura, o número e a continuidade de escadas devem obedecer a critérios que satisfaçam a Administração;

iv) A protecção dos acessos aos postos de embarque em baleeiras e embarcações salva-vidas deve ser feita segundo critério que satisfaça a Administração;

v) Os elevadores não são considerados como um dos meios de fuga prescritos;

vi) As escadas que servem unicamente um local e uma plataforma deste local não são consideradas como um dos meios de fuga prescritos;

vii) Se a estação radiotelegráfica não tiver saída directa para um pavimento descoberto, são exigidos dois meios de fuga da referida estação;

viii) Não são permitidos corredores sem saída que tenham mais de 13 m (43 pés) de comprimento.

b) — *i*) Nos locais de categoria especial, o número e a disposição dos meios de fuga, tanto abaixo como acima do pavimento de anteparas, devem responder a critérios que satisfaçam a Administração e, em geral, a segurança de acesso ao pavimento dos postos de embarque deve ser, pelo menos, equivalente ao previsto nas alíneas *i*), *ii*), *iii*), *iv*) e *v*) do parágrafo *a*) da presente regra;

ii) Um dos meios de fuga dos locais de máquinas onde normalmente trabalhe a tripulação deve evitar a passagem por qualquer dos locais de categoria especial.

c) Cada local de máquinas deve ter dois meios de fuga. Devem ser especialmente observadas as seguintes disposições:

i) Se o local estiver situado abaixo do pavimento de anteparas, os dois meios de fuga devem consistir em:

1) Dois conjuntos de escadas de aço, separadas entre si tanto quanto possível, que conduzam a portas situadas na parte superior do referido local, e igualmente separadas entre si, e a partir das quais haja acesso aos pavimentos dos postos de embarque nas baleeiras e embarcações salva-vidas. Uma destas escadas deve proteger de modo contínuo contra o fogo desde a parte inferior do local até um lugar seguro fora do mesmo; ou

2) Uma escada de aço que conduza a uma porta situada na parte superior do local a partir da qual haja acesso ao pavimento dos postos de abandono, e uma porta de aço, manobrável de ambos os lados e que ofereça segurança na saída para o pavimento dos postos de abandono;

ii) Se o local estiver situado acima do pavimento das anteparas, os dois meios de fuga devem estar separados entre si tanto quanto possível e as respectivas portas de saída devem estar localizadas de modo que dêem acesso aos pavimentos de embarque nas baleeiras e embarcações salva-vidas. Quando tais meios de fuga obriguem à utilização de escadas, estas devem ser de aço.

No entanto, nos navios de menos de 1000 t de arqueação bruta, a Administração pode aceitar que exista apenas um meio de fuga, tendo em consideração a largura e disposição da parte superior do local; nos navios de 1000 t ou mais de arqueação bruta, a Administração pode aceitar que exista apenas um meio de fuga de qualquer dos locais aqui considerados, com a condição de que exista uma porta ou uma escada de aço que ofereça segurança na saída, até ao pavimento dos postos de abandono, considerando a natureza e a localização do local e a possibilidade de que normalmente haja pessoas em serviço nesse local.

Regra 22

Protecção de escadas e ascensores em locais habitados e de serviço

a) Todas as escadas devem ter armação de aço, excepto nos casos em que a Administração aprove a utilização de outro material equivalente, e devem estar instaladas no interior de caixas construídas com divisórias da classe A com meios eficazes para fechar todas as aberturas, salvo as seguintes excepções:

i) Uma escada que sirva unicamente dois pavimentos pode não estar fechada numa caixa, se a resistência ao fogo do pavimento atravessado pela escada for mantida por anteparas ou portas adequadas ao nível de qualquer dos dois pavimentos. Quando uma escada for fechada somente a um nível, a caixa que a encerra deve ser protegida de acordo com o estabelecido nas tabelas para os pavimentos da regra 20 do presente capítulo;

ii) Podem ser instaladas escadas, sem estarem encerradas em caixas, nos locais de reunião, desde que estejam inteiramente no interior de tais locais.

b) As caixas de escada devem ter comunicação directa com os corredores e ter área suficiente para

impedir o congestionamento, tendo em vista o número provável de pessoas que podem ter de as utilizar em caso de emergência. Na medida do possível, estas não devem dar acesso directo a camarotes, paióis de serviço nem a outros locais fechados que contenham materiais combustíveis e a outros locais onde se possa declarar facilmente um incêndio.

c) As caixas de elevadores devem estar instaladas de modo que impeçam a passagem de fumo e chamas de um ponto para outro e providas de dispositivos de fechamento que permitam controlar a tiragem e passagem de fumo.

Regra 23

Aberturas nas divisórias da classe A

a) Quando as divisórias da classe A forem perfuradas para dar passagem a cabos eléctricos, encanamentos, caixas, condutas, etc., ou a longarinas, vaus ou outros elementos estruturais, devem ser tomadas as disposições necessárias para que a resistência ao fogo destas divisórias não seja diminuída, salvo o disposto no parágrafo *g*) da presente regra.

b) Quando uma conduta de ventilação tenha que atravessar forçosamente uma antepara de uma zona vertical principal deve ser instalada junto a essa antepara uma válvula de borboleta de fechamento automático contra incêndios e de funcionamento seguro. Esta válvula deve poder ser fechada manualmente de ambos os lados da antepara. Os postos de manobra destas válvulas devem ser facilmente acessíveis e devem estar marcados com tinta vermelha reflectora. A conduta situada entre a antepara e a válvula deve ser de aço ou de outro material equivalente e, se necessário, deve ser isolada de modo a que cumpra o disposto no parágrafo *a*) da presente regra. A válvula de borboleta deve ter, pelo menos, de um dos lados da antepara, um indicador bem visível que assinale que esta está aberta.

c) Com excepção das escotilhas situadas entre locais de carga, locais de categoria especial, paióis e locais para bagagens, e entre esses locais e os pavimentos descobertos, todas as aberturas devem ser providas de meios fixos para as fechar, que devem ser, pelo menos, tão resistentes ao fogo como as divisórias em que estejam instalados.

d) Todas as portas e os seus caixilhos localizados em anteparas da classe A, bem como os dispositivos necessários para assegurar que elas se mantenham fechadas, devem oferecer uma resistência ao fogo e à passagem de fumo e chamas equivalente, na medida do possível, à das anteparas em que estão situadas. Tais portas e caixilhos devem ser de aço ou de outro material equivalente. As portas estanques não necessitam de isolamento.

e) Deve ser possível a uma única pessoa abrir ou fechar qualquer destas portas de ambos os lados da antepara.

f) As portas contra incêndios existentes nas anteparas de zonas verticais principais, e nas caixas de escada, excluindo as portas estanques de accionamento mecânico e as que normalmente permaneçam fechadas, devem ser de fechamento automático capaz de vencer uma inclinação de 3,5°. Se for necessário, a velocidade de fechamento das portas deve ser controlada para evitar perigos desnecessários para o pessoal. Estas portas, excepto as que normalmente permaneçam fechadas, devem poder ser accionadas simultaneamente ou por grupos a partir de um posto de segurança e individualmente a partir de uma posição junto da porta. O mecanismo de accionamento deve ser concebido de modo que a porta se feche automaticamente em caso de avaria do sistema de comando; no entanto, são aceites para estes fins portas estanques de accionamento mecânico de um tipc aprovado. Não são permitidos ganchos de retençãc das portas que não possam ser accionados a partir do posto de segurança. As portas oscilantes de duas folhas que sejam permitidas devem ter um dispositivo de ferrolho ou trinco que actue automaticamente, accionado pelo sistema de accionamento das portas.

g) Quando qualquer local estiver protegido por um sistema automático de água pulverizada sob pressão de acordo com o disposto na regra 12 do presente capítulo, ou tenha forro contínuo da classe B, as aberturas dos pavimentos que não formem saltos em zonas verticais principais nem limitem zonas horizontais devem poder ser fechadas com um grau de estanquidade aceitável e tais pavimentos devem satisfazer ao grau de resistência ao fogo da classe A, na medida em que a Administração o considere razoável e possível.

h) As prescrições de resistência ao fogo para a classe A aplicáveis aos elementos limitadores que dão para o exterior do navio não se aplicam a painéis de vidro, janelas e vigias nem a portas exteriores de superstruturas e casotas.

Regra 24

Aberturas nas divisórias da classe B

a) Quando as divisórias da classe B forem perfuradas para dar passagem a cabos eléctricos, encanamentos, caixas, condutas, etc., destinados à instalação de bocas de ventilação, aparelhos de iluminação e dispositivos análogos, devem ser tomadas as medidas necessárias para que não seja diminuída a resistência ao fogo destas divisórias.

b) Todas as portas e os seus caixilhos localizados em anteparas da classe B, bem como os seus dispositivos de fixação, devem constituir um meio de fechamento cuja resistência ao fogo deve ser, na medida do possível, equivalente à das anteparas, excepto quando forem autorizadas aberturas de ventilação na parte inferior das portas. Quando houver uma ou várias aberturas deste tipo numa porta ou sob ela, a sua área total não pode exceder 0,05 m^2 (78 polegadas quadradas). Se a abertura for feita na porta, deve ter uma grelha de material incombustível. As portas devem ser de material incombustível.

c) As prescrições de resistência ao fogo para a classe B aplicáveis aos elementos limitadores que dão para o exterior do navio não se aplicam a painéis de vidro, janelas e vigias nem as portas exteriores de superstruturas e casotas.

d) Quando houver uma instalação automática de água pulverizada sob pressão que cumpra as prescrições da regra 12 do presente capítulo:

i) As aberturas dos pavimentos que não formem saltos em zonas verticais principais nem limitem zo-

nas horizontais devem ser fechadas com um grau de estanquidade aceitável e tais pavimentos devem satisfazer as normas de resistência ao fogo da classe B, na medida em que a Administração o considere razoável e possível; e

ii) As aberturas feitas em anteparas de corredores, construídos com materiais da classe B, devem ser protegidas de acordo com o disposto na regra 19 do presente capítulo.

Regra 25

Sistemas de ventilação

a) Em geral, os ventiladores devem ser dispostos de modo que as condutas que ventilam os diversos locais fiquem no interior da mesma zona vertical principal.

b) Quando os sistemas de ventilação atravessem pavimentos, além das precauções relativas à resistência ao fogo do pavimento exigidas pela regra 23 do presente capítulo, devem ser tomadas outras que reduzam a possibilidade de o fumo e os gases quentes passarem de um para outro local através das condutas. As condutas verticais, além de satisfazerem as prescrições de isolamento que figuram na presente regra, devem, se necessário, ser isoladas de acordo com o prescrito nas tabelas da regra 20 do presente capítulo.

c) As aberturas principais de aspiração e descarga de todos os sistemas de ventilação devem ser fechadas do exterior do local que servem.

d) Excepto nos locais de carga, as condutas de ventilação devem ser construídas com os seguintes materiais:

i) As condutas cuja secção tenha uma área não inferior a 0,075 m² (116 polegadas quadradas) e todas as condutas verticais que se utilizem para ventilar mais do que um local entre pavimentos devem ser de aço ou de outro material equivalente;

ii) As condutas cuja secção tenha uma área inferior a 0,075 m² (116 polegadas quadradas) devem ser construídas com materiais incombustíveis. Quando estas condutas atravessem divisórias de classe A ou B devem ser tomadas as medidas necessárias para assegurar a resistência ao fogo da divisória;

iii) As condutas com um pequeno comprimento, que em geral não excedam 2 m (79 polegadas) e 0,02 m² (31 polegadas quadradas) de secção, podem não ser incombustíveis sempre e quando satisfaçam as seguintes condições:

1) Que a conduta seja construída com um material cujo risco de incêndio seja reduzido segundo o critério da Administração;

2) Que a conduta seja utilizada somente nas partes extremas do sistema de ventilação;

3) Que a conduta não esteja localizada a menos de 0,6 m (24 polegadas), medida ao longo do seu comprimento, de uma perfuração feita numa divisória da classe A ou B incluindo forros contínuos da classe B.

e) Quando as caixas de escadas forem ventiladas, a conduta ou condutas que sairem da casa dos ventiladores devem ser independentes de outras condutas do sistema de ventilação e não devem ser utilizadas para qualquer outro local.

f) Todos os ventiladores mecânicos, com excepção dos que servem os locais de máquinas e os locais de carga e dos dispositivos adicionais de ventilação que possam ser prescritos pela aplicação do parágrafo *h*) da presente regra, devem ser equipados com comandos agrupados de modo que se possam parar todos os ventiladores de qualquer um de dois pontos tão afastados entre si quanto praticamente possível. Os comandos dos ventiladores mecânicos dos locais das máquinas devem também estar agrupados de modo que se possam accionar de dois pontos distintos, um dos quais deve estar situado no exterior desses locais. Os ventiladores da instalação de ventilação dos locais de carga devem poder ser parados de um ponto situado no exterior de tais locais.

g) Quando as condutas de extracção dos fogões de cozinha atravessem locais habitados ou locais que contenham materiais combustíveis, estas devem ser construídas com divisórias da classe A. Cada conduta de extracção deve ser equipada com:

i) Um filtro de gorduras facilmente desmontável para limpeza;

ii) Um regulador de tiragem situado na parte inferior da conduta;

iii) Dispositivos, accionados da cozinha, que permitam desligar o extractor;

iv) Meios fixos para extinção de incêndios dentro da conduta.

h) Devem ser tomadas as medidas praticamente possíveis para garantir, nos postos de segurança situados fora dos locais de máquinas, a permanência de ventilação e de visibilidade, assim como a ausência de fumo, de modo que, em caso de incêndio, as máquinas e aparelhos aí existentes possam ser vigiados e continuar a funcionar normalmente. Devem ser instalados dois meios inteiramente separados para o fornecimento de ar a esses locais; as duas aberturas de entrada de ar que lhe correspondem devem estar dispostas de modo a reduzir ao mínimo o risco da introdução simultânea de fumo pelas duas aberturas. A Administração pode aceitar que estas exigências não sejam aplicadas a postos de segurança localizados num pavimento descoberto e abrindo para ele ou nos casos em que existam dispositivos locais para fechamento igualmente eficazes.

i) As condutas de ventilação dos locais de máquinas de categoria A não devem passar normalmente através de locais habitados, locais de serviço e postos de segurança; no entanto, a Administração poderá dispensar o cumprimento desta prescrição se:

i) As condutas forem de aço e o seu isolamento estiver de acordo com a norma A-60; ou se

ii) As condutas forem construídas de aço e equipadas com uma válvula de borboleta automática contra incêndios, localizada perto da antepara limite atravessada, e isoladas segundo a norma A-60 desde o espaço de máquinas até um ponto situado além da válvula de borboleta, que dista desta, pelo menos, 5 m (16 pés).

j) As condutas de ventilação de locais habitados, locais de serviço ou postos de segurança não devem passar normalmente através de locais de máquinas da categoria A; no entanto, a Administração poderá dispensar o cumprimento destas prescrições se as condutas forem de aço e se tiverem instaladas válvulas automáticas de borboleta contra incêndios próximas das aberturas das anteparas limite.

Regra 26

Janelas e vigias

a) Todas as janelas e vigias de anteparas situadas no interior de locais habitados, de serviço e de postos de segurança que não sejam aquelas às quais são aplicáveis as prescrições do parágrafo *h*) da regra 23 e o parágrafo *c*) da regra 24 do presente capítulo devem ser construídas de modo a satisfazer as prescrições de resistência ao fogo aplicadas ao tipo da antepara em que estão instaladas.

b) Não obstante o prescrito nas tabelas da regra 20 do presente capítulo, devem ser observadas as seguintes prescrições:

i) Todas as janelas e as vigias das anteparas que separam do exterior os locais habitados, de serviço e postos de segurança, devem ter caixilhos de aço ou de outro material adequado. Os vidros devem ser mantidos no seu lugar por guarnições ou peças angulares metálicas;

ii) Deve ser dada especial atenção à resistência ao fogo das janelas que dêem para zonas abertas ou fechadas de embarque em baleeiras e embarcações salva-vidas e as janelas situadas por baixo de tais zonas e em posições tais que, em caso de incêndio, se essa resistência falhasse, impediria o arriar das baleeiras e embarcações salva-vidas, assim como o embarque.

Regra 27

Uso restrito de materiais combustíveis

a) Excepto nos locais de carga e nos locais destinados a correio, bagagens e câmaras frigoríficas dos locais de serviço, todos os revestimentos, soalhos, forros e isolamentos devem ser de materiais incombustíveis. As anteparas e os pavimentos parciais utilizados para subdividir um local por razões utilitárias ou artísticas devem ser também de material incombustível.

b) Os revestimentos anticondensação e os produtos adesivos utilizados em conjunto com o material isolante, bem como o isolamento dos acessórios de encanamentos dos sistemas de frio, não necessitam de ser incombustíveis; no entanto, devem ser reduzidos ao mínimo indispensável e as suas superfícies expostas devem ter qualidades de resistência à propagação da chama que satisfaça os critérios da Administração.

c) As anteparas, revestimentos e tectos de todos os locais habitados e de serviço podem ser cobertos de chapa combustível, desde que a sua espessura não exceda 2 mm ($^1/_{12}$ de polegada) no interior de tais locais, excepto em corredores, caixas de escadas e postos de segurança, em que a espessura da chapa não deve exceder 1,5 mm ($^1/_{17}$ de polegada).

d) O volume total dos forros, molduras, decorações e revestimentos constituídos por material combustível, em qualquer local habitado ou de serviço, não deve exceder um volume equivalente ao revestimento de 2,5 mm ($^1/_{10}$ de polegada) de espessura que cubra a superfície total das paredes e do tecto. Em navios equipados com um sistema automático de água pulverizada que cumpra as prescrições da regra 12 do presente capítulo, o volume citado pode incluir certa qualidade de material combustível usado para montar divisórias da classe C.

e) Todas as superfícies expostas dos corredores e caixas de escadas e as superfícies de espaços escondidos ou inacessíveis que existam em locais habitados, de serviço e postos de segurança, devem ter características de fraco poder de propagação da chama (1).

f) Deve ser reduzido ao mínimo o mobiliário em passagens e caixas de escadas.

g) Pinturas, vernizes e outros produtos de acabamento utilizados em superfícies interiores expostas devem ser de um tipo tal que no parecer da Administração não apresentem excessivo risco de incêndio nem produzam demasiado fumo ou outras substâncias tóxicas.

h) Os revestimentos primários de pavimentos, se existirem, aplicados em interiores de locais habitados, de serviço e postos de segurança devem ser de um material aprovado que não se inflame facilmente nem origine riscos de intoxicação ou de explosão a temperaturas elevadas (2).

i) Os recipientes para papel usado devem ser construídos de materiais incombustíveis e com paredes laterais e fundo sólidos.

Regra 28

Pormenores diversos

Prescrições aplicáveis a todas as partes do navio

a) Os encanamentos que atravessem divisórias da classe A ou B devem ser de material aprovado pela Administração, tendo em conta a temperatura que essas divisórias devem poder suportar. Os encanamentos de óleo ou de combustível líquido devem ser de material aprovado pela Administração, tendo em conta o risco de incêndio. Os materiais cujas características sejam facilmente afectadas pelo calor não devem ser utilizados na construção de embornais que descarreguem fora de borda, descargas sanitárias e outras descargas próximas da linha de água, onde a cedência de material, em caso de incêndio, poderia originar risco de alagamento.

Prescrições aplicáveis aos locais habitados e de serviço, postos de segurança, corredores e escadas

b) — *i*) As câmaras-de-ar e os espaços vazios que se encontram por detrás de tectos, forros e revestimentos devem ser convenientemente compartimentados por divisórias que cortem a tiragem e dispostos de modo que a distância entre eles não seja superior a 14 m (46 pés);

ii) No sentido vertical, tais espaços, incluindo os que ficam detrás dos revestimentos de escadas, troncos, etc., devem ser fechados ao nível de cada pavimento.

c) A construção dos tectos e dos sistemas de divisórias deve ser tal que seja possível às rondas de incêndio, sem diminuição da eficácia da protecção

---

(1) Veja as «Directrizes sobre a evolução dos riscos de incêndio típicos dos materiais», aprovadas pela Organização mediante a Resolução A.166 (ES.IV).

(2) Veja as «Instruções provisórias melhoradas sobre o procedimento de prova para revestimentos primários de pavimentos», aprovadas pela Organização mediante a Resolução A.214 (VII).

contra incêndios, detectar fumos provenientes de espaços escondidos ou inacessíveis, a não ser quando a Administração entenda que não há risco de incêndio originado nesses espaços.

Regra 29

Instalação automática de água pulverizada sob pressão, alarme e detecção de incêndios ou instalação automática de alarme e detecção de incêndios

Nos navios aos quais se aplica a presente parte deve ser instalado na totalidade de cada uma das zonas separadas, tanto verticais como horizontais, em todos os locais habitados e de serviço e, se a Administração o considerar necessário, nos postos de segurança, com excepção dos locais que não ofereçam um perigo considerável de incêndio (tais como espaços perdidos, espaços sanitários, etc.):

i) Um sistema automático de água pulverizada sob pressão, alarme e detecção de incêndios, de um tipo aprovado, que cumpra as disposições da regra 12 do presente capítulo, instalado e disposto de modo que proteja tais espaços; ou

ii) Um sistema automático de alarme e detecção de incêndios, de um tipo aprovado, que cumpra as prescrições da regra 13 do presente capítulo, instalado e disposto de modo que assinale a presença de incêndio em tais espaços.

Regra 30

Protecção dos locais de categoria especial

Disposições aplicáveis aos locais de categoria especial, estejam estes situados acima ou abaixo do convés

a) *Generalidades:*

i) O princípio fundamental em que se baseiam as disposições da presente regra é o seguinte: como não é possível aplicar o conceito de zonas verticais principais aos locais de categoria especial, há que conseguir para estes locais uma protecção equivalente, baseada no conceito de zona horizontal e na exigência de uma eficiente instalação fixa de extinção de incêndios. De acordo com este conceito, para efeitos de aplicação da presente regra, uma zona horizontal pode incluir locais de categoria especial em mais de um pavimento, sempre que a altura total da zona não seja superior a 10 m (33 pés);

ii) Todos os requisitos mencionados nas regras 23 e 25 do presente capítulo, para manter a integridade à prova de fogo das zonas verticais, devem igualmente ser aplicados a pavimentos e anteparas que separem entre si as zonas horizontais e estas do resto do navio.

b) *Protecção estrutural:*

i) As anteparas limite dos locais de categoria especial devem ter um isolamento como o prescrito para os locais da categoria (11) da tabela 1 da regra 20 do presente capítulo e os pavimentos que constituam limites horizontais como o prescrito para os espaços de categoria (11) da tabela 3 da referida regra.

ii) Na ponte de comando devem existir indicadores que assinalem o fechamento de qualquer porta contra incêndios que dê entrada ou saída a locais de categoria especial.

c) *Instalação fixa de extinção de incêndios* (1):

Cada local de categoria especial deve ser dotado de uma instalação fixa de água pulverizada sob pressão, accionada manualmente e de um tipo aprovado que proteja todas as partes de qualquer pavimento e plataforma de veículos, se existirem em tais pavimentos, embora a Administração possa permitir o uso de outra instalação fixa de extinção de incêndios, desde que essa instalação já tenha sido ensaiada e dado provas em situações de simulação de incêndio de petróleo derramado num local de categoria especial, e desde que esta instalação não seja menos eficaz para dominar os incêndios que possam deflagrar em tais locais.

d) *Serviço de rondas e detecção de incêndios:*

i) Nos locais de categoria especial deve haver um sistema eficiente de rondas. Em qualquer de tais locais em que o serviço de rondas contra incêndios não seja constante durante o período de duração da viagem, deve existir uma instalação automática de detecção de incêndios de tipo aprovado;

ii) Em todos os locais de categoria especial deve ser instalado um número necessário de dispositivos manuais de alarme contra incêndios, e um deles deve estar localizado perto de cada saída de tais espaços.

e) *Equipamento de extinção de incêndios:*

Em cada local de categoria especial devem ser instaladas:

i) Várias bocas de incêndio com mangueiras e agulhetas de duplo efeito (jacto-pulverização) de tipo aprovado e dispostas de modo que, pelo menos, dois jactos de água não provenientes da mesma boça, e cada um deles alimentado unicamente por uma quartelada de mangueira, possam alcançar qualquer ponto de tal local;

ii) Pelo menos três extensores de nevoeiro;

iii) Uma unidade portátil lança-espuma que cumpra as disposições da alínea *d*) da regra 7 do presente capítulo, devendo o navio dispor de, pelo menos, duas destas unidades com possibilidade de serem usadas nestes locais;

iv) Um número de extintores portáteis, de tipo aprovado, que a Administração considere suficiente.

f) *Sistema de ventilação:*

i) Nos locais de categoria especial deve ser instalado um sistema mecânico de ventilação suficiente para dar, pelo menos, dez renovações de ar por hora. Deve ser completamente independente dos outros sistemas de ventilação e deve funcionar sempre que haja veículos em tais locais. A Administração pode exigir um maior número de renovações horárias de

---

(1) Veja a «Recomendação sobre instalações fixas de extinção de incêndios para locais de categoria especial», aprovada pela Organização mediante a Resolução A.123 (V).

ar durante as operações de carga e descarga de veículos;

ii) A ventilação deve ser tal que evite a estratificação e a formação de bolsas de ar;

iii) Devem ser instalados meios que indiquem na ponte de comando qualquer perda ou redução da capacidade de ventilação prescrita.

Disposições complementares aplicáveis somente aos locais de categoria especial situados por cima do pavimento das anteparas

g) Embornais:

A fim de evitar graves perdas de estabilidade originadas pela acumulação de uma grande quantidade de água no pavimento ou pavimentos provocada pelo funcionamento da instalação fixa de água pulverizada sob pressão, devem ser instalados embornais que assegurem uma rápida descarga desta água directamente para o exterior.

h) Precauções contra a ignição de vapores inflamáveis:

i) Todo o equipamento que possa constituir uma fonte de ignição de vapores inflamáveis, especialmente o equipamento e cabos eléctricos, deve ser instalado a uma altura mínima de 450 mm (18 polegadas) acima do piso do pavimento, a não ser que a Administração considere que a sua instalação a uma altura inferior é necessária para a manobra segura do navio. Tais equipamentos e cabos devem ser de um tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina. O equipamento eléctrico instalado a mais de 450 mm (18 polegadas) acima do pavimento deve ser de tipo fechado e protegido de forma tal que dele não possam saltar faíscas. A referência a uma altura de 450 mm (18 polegadas) acima do pavimento diz respeito aos pavimentos que transportem veículos e no qual se possam acumular gases explosivos;

ii) Se o equipamento e os cabos eléctricos estiverem instalados numa conduta de extracção de ar, devem ser de tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina e a saída da conduta de extracção deve estar situada num local em que não haja outras fontes de ignição.

Disposições complementares aplicáveis unicamente aos locais de categoria especial situados abaixo do pavimento das anteparas

i) Esgoto e drenagem:

A fim de evitar graves perdas de estabilidade, originadas pela acumulação de uma grande quantidade de água no pavimento ou por cima dos tanques, provocada pelo funcionamento da instalação fixa de água pulverizada sob pressão, a Administração pode exigir que se instalem meios de esgoto e drenagem além dos prescritos na regra 18 do capítulo II-1 da presente Convenção.

j) Precauções contra a ignição de vapores inflamáveis:

i) Quando forem instalados equipamentos e cabos eléctricos, estes devem ser de tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina. Não são permitidos outros equipamentos que possam originar a ignição de gases inflamáveis;

ii) Se o equipamento e os cabos eléctricos estiverem instalados numa conduta de extracção de ar, devem ser de tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina, e a saída da conduta de extracção deve estar situada num local em que não haja outras fontes de ignição.

Regra 31

Protecção de locais de carga, distintos dos locais de categoria especial, destinados ao transporte de veículos automóveis que levem nos seus depósitos combustível para a sua própria propulsão.

Em qualquer local de carga (distinto dos locais de categoria especial) que transporte veículos automóveis que levem nos seus depósitos combustível para a sua própria propulsão, devem ser cumpridas as seguintes disposições:

a) Detecção de incêndios:

Deve ser instalado um sistema aprovado de alarme e detecção de incêndios.

b) Dispositivos de extinção de incêndios:

i) Deve ser instalado um sistema fixo de extinção de incêndios por gás que cumpra as disposições da regra 8 do presente capítulo, excepto quando o sistema instalado for de dióxido de carbono; neste caso, a quantidade de gás disponível deve corresponder a um volume mínimo de gás livre igual a 45 % do volume bruto do maior destes locais de carga susceptível de ser isolado. A instalação deve garantir uma rápida e eficaz entrada de gás no referido local. Pode ser instalado qualquer outro sistema fixo de extinção de incêndios por gás ou por espuma de alta expansão, desde que se obtenha uma protecção equivalente;

ii) Deve ser instalado, para uso em tais espaços, um número de extintores portáteis, de tipo aprovado que a Administração considere suficiente.

c) Sistema de ventilação:

i) Em qualquer destes locais de carga deve ser instalado um sistema mecânico de ventilação eficaz, suficiente para dar pelo menos dez renovações de ar por hora. Deve ser completamente independente dos demais sistemas de ventilação e deve funcionar sempre que haja veículos nesses locais;

ii) A ventilação deve ser tal que evite a estratificação e a formação de bolsas de ar;

iii) Devem ser instalados meios que indiquem na ponte de comando qualquer perda ou redução da capacidade de ventilação prescrita.

d) Precauções contra a ignição de vapores inflamáveis:

i) Quando forem instalados equipamentos e cabos eléctricos, estes devem ser de tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina. Não são permitidos outros equipamentos que possam originar a ignição de gases inflamáveis;

ii) Se o equipamento e os cabos eléctricos estiverem instalados numa conduta de extracção de ar,

devem ser do tipo aprovado para usar em atmosferas explosivas de mistura de ar e gasolina, e a saída da conduta de extracção deve estar situada num local em que não haja outras fontes de ignição.

Regra 32

Manutenção de um serviço de rondas, etc., e prescrições aplicáveis ao equipamento de extinção de incêndio

a) Serviço de rondas e instalações de detecção de incêndios, alarmes e altifalantes:

i) Deve ser organizado um eficiente serviço de rondas que permita a rápida descoberta de qualquer início de incêndio. Cada um dos componentes do serviço de rondas deve ser treinado de modo que conheça bem as instalações do navio e a localização e modo de utilização de qualquer equipamento que tenha necessidade de usar;

ii) Em todos os locais habitados e de serviço devem ser instalados sinais de alarme, de comando manual, os quais permitam ao pessoal da ronda dar o alarme imediato à ponte de comando ou a um posto principal de segurança contra incêndios;

iii) Deve ser instalado um sistema aprovado de alarme ou de detecção de incêndios que sinalize automaticamente em um ou vários pontos ou postos de segurança a presença ou indícios de incêndio e a sua localização em qualquer local de carga que no parecer da Administração seja inacessível ao serviço de rondas, excepto quando se demonstre perante a Administração que o navio efectua viagens de tão curta duração que não seria razoável exigir a aplicação desta prescrição;

iv) Sempre que um navio se encontre a navegar ou parado num porto (excepto quando se encontrar fora de serviço) deve dispor de tripulação e equipamento de modo que haja sempre um elemento responsável da tripulação que possa receber imediatamente qualquer alarme de incêndio;

v) O navio deve estar equipado com um dispositivo especial de alarme, destinado a chamar a tripulação e accionado da ponte de comando ou de um posto de segurança contra incêndios. Este dispositivo pode fazer parte do sistema geral de alarme do navio, mas deve ser possível accioná-lo independentemente do alarme;

vi) Todos os locais habitados de serviço e postos de segurança devem dispor de um sistema de altifalantes ou de outro meio efectivo de comunicação.

b) Bombas de incêndio e sistema de encanamentos:

Todos os navios devem ser dotados de bombas de incêndio, sistema de encanamentos, bocas e mangueiras de incêndio, de acordo com o estipulado na regra 5 do presente capítulo, e com as prescrições seguintes:

i) Em qualquer navio de arqueação bruta igual ou superior a 4000 t deve haver, pelo menos, três bombas de incêndio independentes e qualquer navio de arqueação bruta inferior a 4000 t deve ter, pelo menos, duas destas bombas;

ii) Em qualquer navio de arqueação bruta igual ou superior a 1000 t as tomadas de água do mar, as bombas de incêndio e as fontes de energia que accionam tais bombas devem estar dispostas de modo que um incêndio produzido em qualquer dos compartimentos não possa inutilizar todas as bombas de incêndio;

iii) Em qualquer navio de arqueação bruta igual ou superior a 1000 t as bombas de incêndio, o colector e as bocas de incêndio devem estar dispostos de modo que, tal como é estipulado no parágrafo *c)* da regra 5 do presente capítulo, possam lançar imediatamente, pelo menos, um jacto de água eficaz a partir de qualquer das bocas de incêndio localizadas nos compartimentos interiores. Devem ser tomadas medidas que garantam um fornecimento de água contínuo quando arranca automaticamente qualquer das bombas de incêndios prescritas;

iv) Em qualquer navio de arqueação bruta inferior a 1000 t as instalações devem satisfazer o critério da Administração.

c) Bocas de incêndio, mangueiras e agulhetas:

i) Todos os navios devem dispor de mangueiras em número e diâmetro suficiente de modo a satisfazer a Administração. Deve haver, pelo menos, uma mangueira para cada uma das bocas de incêndio prescritas no parágrafo *d)* da regra 5 do presente capítulo, e estas mangueiras não devem ser utilizadas senão para extinção de incêndios ou para exercícios de incêndio e vistorias às instalações;

ii) Nos locais habitados, de serviço e de máquinas, o número e a localização das bocas de incêndio devem ser tais que as prescrições do parágrafo *d)* da regra 5 do presente capítulo possam ser satisfeitas quando estão fechadas todas as portas estanques e todas as portas das anteparas das zonas verticais principais;

iii) Os meios instalados a bordo devem permitir que pelo menos dois jactos de água possam alcançar qualquer ponto de qualquer local de carga quando estes se encontrem vazios;

iv) Todas as bocas de incêndio prescritas para os locais de máquinas devem ser equipadas com mangueiras que tenham, além das agulhetas prescritas no parágrafo *g)* da regra 5 do presente capítulo, agulhetas adequadas para pulverização de água sobre o combustível líquido, ou agulhetas de duplo efeito (jacto-pulverização). Adicionalmente, em cada um dos locais de máquinas de categoria A devem existir pelo menos dois extensores (1);

v) No mínimo, devem existir agulhetas de pulverização de água ou de duplo efeito (jacto-pulverização) para um quarto do número total de mangueiras de incêndio exigidas em zonas do navio que não sejam locais de máquinas;

vi) Por cada par de aparelhos respiratórios deve existir um extensor de água, que deve ser guardado junto destes aparelhos;

vii) Quando qualquer local de máquinas da categoria A tiver acesso a partir de um túnel de veios adjacentes, situado a nível mais baixo, devem existir duas bocas de incêndio equipadas com mangueiras e

---

(1) Um extensor pode ser formado por um tubo metálico em forma de L cuja parte mais longa tenha um comprimento de cerca de 2 m (6 pés) e que possa ser ligado a uma mangueira de incêndio e cujo terminal mais curto tenha um comprimento de 250 mm (10 polegadas) aproximadamente e seja equipado com uma cabeça nebulizadora fixa, ou preparado para lhe ser adaptada uma cabeça pulverizadora.

agulhetas de duplo efeito, localizadas fora do local de máquinas mas perto da sua entrada. Quando tais acessos não sejam feitos através do túnel, mas sim através de outro local ou locais, num deles devem existir duas bocas de incêndio com mangueiras e agulhetas de duplo efeito localizadas perto da entrada para o local de máquinas da categoria A. Não é necessário aplicar esta prescrição quando o túnel de veios ou os locais adjacentes não sejam meios de fuga.

d) União internacional de ligação à terra:

i) Todos os navios de arqueação bruta igual ou superior a 1000 t devem ter, pelo menos, uma união internacional de ligação à terra que cumpra o estipulado no parágrafo *h)* da regra 5 do presente capítulo;

ii) A instalação deve permitir utilizar esta união de ambos os bordos do navio.

e) Extintores portáteis para locais habitados e de serviço e postos de segurança:

Qualquer navio deve ter nos locais habitados, de serviço e nos postos de segurança, os extintores portáteis, de tipo aprovado, que a Administração julgue adequados e suficientes.

f) Instalações fixas de extinção de incêndio nos locais de carga:

i) Os locais de carga dos navios com uma arqueação bruta igual ou superior a 1000 t devem ser protegidos por uma instalação fixa de extinção de incêndios por gás, de acordo com as prescrições da regra 8 do presente capítulo, ou por uma instalação fixa de extinção de incêndios, por espuma de alta expansão, que garanta uma protecção equivalente;

ii) Quando, segundo o critério da Administração, for demonstrado que um navio efectua viagens de tão curta duração que não seria razoável exigir a aplicação das prescrições da alínea *i)* do presente parágrafo, e nos navios de arqueação bruta inferior a 1000 t, os dispositivos de extinção de incêndios instalados nos locais de carga devem ser tais que satisfaçam a Administração.

g) Dispositivos de extinção de incêndio nas casas das caldeiras, etc.:

Os locais que contenham caldeiras ou instalações de combustível líquido devem ser protegidos com os dispositivos a seguir indicados:

i) Deve haver uma das seguintes instalações fixas de extinção de incêndios:

1) Uma instalação de água pulverizada sob pressão, que cumpra o estipulado na regra 11 do presente capítulo;

2) Uma instalação de gás que cumpra o estipulado na regra 8 do presente capítulo;

3) Uma instalação de espuma que cumpra o estipulado na regra 9 do presente capítulo;

4) Uma instalação de espuma de alta expansão que cumpra o estipulado na regra 10 do presente capítulo.

Em qualquer caso, se a casa das máquinas não for completamente separada da casa das caldeiras, ou se houver possibilidade de o combustível líquido correr da casa das caldeiras para a casa das máquinas, o conjunto das duas casas deve ser considerado como único compartimento;

ii) Em cada casa de caldeiras deve haver, pelo menos, uma unidade portátil lança-espuma que cumpra o estipulado no parágrafo *d)* da regra 7 do presente capítulo;

iii) Em cada frente de fogo da casa das caldeiras, assim como em todos os locais onde exista uma parte da instalação de combustível líquido, deve haver, pelo menos, dois extintores portáteis de tipo aprovado, de espuma ou de um produto equivalente. Em cada casa de caldeiras deve haver, pelo menos, um extintor de espuma, de tipo aprovado, com a capacidade mínima de 136 l (30 galões) ou equivalente. Estes extintores devem ser dotados de mangueiras enroladas em tambores, com comprimento suficiente para alcançar qualquer parte da casa de caldeiras;

iv) Em cada frente de fogo deve haver um recipiente contendo areia, serradura impregnada de soda, ou outro material seco aprovado e em quantidade julgada suficiente pela Administração. Este recipiente pode ser substituído por um extintor portátil, de tipo aprovado.

h) Dispositivos de extinção de incêndio nos locais que contenham motores de combustão interna:

Os locais que contenham motores de combustão interna, utilizados para a propulsão principal ou para outros fins, sempre que no conjunto tenham uma potência total não inferior a 373 kW, devem ser providos dos seguintes dispositivos:

i) Uma das instalações de extinção de incêndios prescrita na alínea *i)* do parágrafo *g)* da presente regra;

ii) Uma unidade portátil lança-espuma que cumpra o estipulado no parágrafo *d)* da regra 7 do presente capítulo;

iii) Em cada um destes locais deve haver extintores de espuma de um tipo aprovado, com uma capacidade mínima de 45 l (10 galões) ou modelo equivalente, em número suficiente para que a espuma ou o produto equivalente possam alcançar qualquer parte dos sistemas de combustível ou óleo de lubrificação sobre pressão, engrenagens e outras partes que apresentem risco de incêndio. Adicionalmente, deve haver um número suficiente de extintores portáteis, de espuma ou de outro tipo equivalente, localizados de modo que não seja necessário andar mais de 10 m (33 pés) a partir de qualquer ponto desse local para alcançar um extintor, devendo, no entanto, haver, pelo menos, dois destes extintores em cada um destes locais.

i) Dispositivos de extinção de incêndio nos locais que contenham turbinas de vapor ou máquinas a vapor de carter *fechado:*

Os espaços que contenham turbinas a vapor ou máquinas a vapor de *carter* fechado, utilizadas para a propulsão principal ou para outros fins, com uma potência total não inferior a 373 kW, devem ser providos de:

i) Extintores de espuma, com uma capacidade mínima de 45 l (10 galões) ou modelos equivalentes, em número suficiente para que a espuma ou o pro-

duto equivalente possa alcançar qualquer parte do sistema de lubrificação sobre pressão, ou as protecções dos componentes das turbinas com lubrificação sobre pressão, máquinas ou respectivas engrenagens, e outras partes que apresentem risco de incêndio; no entanto, estes extintores não são exigidos se os referidos locais tiverem uma protecção, pelo menos, equivalente à indicada na presente alínea, mediante a instalação de um sistema fixo de extinção de incêndios, de acordo com o disposto na alínea *i*) do parágrafo *g*) da presente regra;

ii) Um número suficiente de extintores portáteis de espuma, ou equivalentes, situados de modo que não seja necessário andar mais de 10 m (33 pés) a partir de qualquer ponto desse local para alcançar um extintor, devendo haver, pelo menos, dois desses extintores em cada um destes locais; no entanto não serão exigidos mais extintores do que os previstos com a aplicação do disposto na alínea *iii*) do parágrafo *h*) da presente regra.

j) Dispositivos de extinção de incêndio noutros locais de máquinas:

Quando, na opinião da Administração, houver risco de incêndio em algum local de máquinas, para os quais os parágrafos *g*), *h*) e *i*) da presente regra não exijam disposições concretas no respeitante a dispositivos de extinção, nesse local ou perto dele deve existir um número de extintores portáteis, de tipo aprovado, ou de outros meios de extinção que a Administração julgue conveniente.

k) Instalações fixas de extinção de incêndio não prescritas na presente parte:

Quando for montada uma instalação fixa de extinção de incêndios não prescrita nesta parte do presente capítulo, esta instalação deve satisfazer o critério da Administração.

l) Prescrições especiais para os locais de máquinas:

i) Todos os locais de máquinas de categoria A que tenham acesso de um nível inferior, através de um túnel de veios adjacente, devem ter, além da porta estanque que possa existir, uma porta leve de aço à prova de fogo, situada fora desse local e manobrável de ambos os lados;

ii) Em todos os locais de máquinas para os quais tenha sido aprovada a instalação de sistemas e equipamentos automáticos de *contrôle,* em vez da vigilância pessoal contínua, e quando a Administração entenda que há precauções especiais a tomar, deve ser instalado um sistema automático de detecção e alarme de incêndios.

m) Equipamento de bombeiro e equipamento individual:

i) O número mínimo de equipamentos de bombeiro que cumpram o estipulado na regra 14 do presente capítulo e os jogos de equipamentos individuais suplementares, cada um deles constituído pelos objectos especificados nas alíneas *i*), *ii*) e *iii*) do parágrafo *a*) da referida regra, que devem existir a bordo são os seguintes:

1) Dois equipamentos de bombeiro; e ainda

2) Por cada 80 m (262 pés) ou fracção, do comprimento total de todos os locais para passageiros e de serviço, devem existir dois equipamentos de bombeiro e dois jogos de equipamentos individuais, cada um destes constituído pelos objectos especificados nas alíneas *i*), *ii*) e *iii*) do parágrafo *a*) da regra 14 do presente capítulo, os quais devem estar localizados no pavimento em que se situem tais locais, ou, se estiverem situados em mais de um pavimento, no pavimento que tiver maior comprimento total;

ii) Por cada equipamento de bombeiro que inclua um aparelho respiratório autónomo, de acordo com o estipulado no parágrafo *b*) da regra 14 do presente capítulo, devem existir cargas sobresselentes, na quantidade que a Administração considere necessário;

iii) Os equipamentos de bombeiro e os jogos de equipamento individual devem ser guardados em locais bastante afastados entre si e prontos para utilização imediata. Em qualquer destes locais devem existir, pelo menos, dois equipamentos de bombeiro e um jogo de equipamento individual.

Regra 33

Medidas relativas ao combustível líquido, óleo lubrificante e outros óleos inflamáveis

a) Medidas relativas ao combustível líquido:

Nos navios em que se utilize combustível líquido, as medidas correspondentes a armazenagem, distribuição e consumo devem ser tais que garantam a segurança do navio e das pessoas embarcadas e devem cumprir, no mínimo, as seguintes disposições:

i) Não se deve utilizar como combustível um óleo que tenha um ponto de inflamação inferior a 60°C (140°F) (prova em cadinho fechado), cuja verificação deve ser feita com um aparelho de medida, de tipo aprovado, excepto no combustível dos geradores de emergência, em que o ponto de inflamação não deve ser inferior a 43°C (110°F).

No entanto, a Administração pode permitir a utilização geral de combustíveis líquidos com o ponto de inflamação não inferior a 43°C (110°F), sempre que se tomem as devidas precauções e se impeça que a temperatura do local onde se armazene ou utilize o combustível ultrapasse uma temperatura 10°C (18°F) inferior à do ponto de inflamação do combustível;

ii) Na medida do possível, nenhuma parte do sistema de combustível líquido, em que exista óleo quente sob uma pressão superior a 1,80 kg por centímetro quadrado (25 libras por polegada quadrada), deve estar oculta, de modo que não se possa observar rapidamente qualquer defeito ou fuga. Os locais de máquinas devem estar convenientemente iluminados nas zonas onde estiverem instaladas partes do sistema de combustível;

iii) A ventilação dos locais de máquinas deve ser suficiente para evitar em todas as condições normais a acumulação de vapores de combustível;

iv) — 1) Na medida do possível, os tanques de combustível devem fazer parte da estrutura do navio e devem estar situados fora dos locais de máquinas de categoria A. Quando os tanques de combustível, com excepção dos do duplo fundo, tenham de estar forçosamente junto aos espaços de máquinas de ca-

tegoria A, devem ter, de preferência, uma antepara limite comum com os do duplo fundo, e a área das anteparas limite comum a tanques e locais de máquinas deve ser a menor possível. Em geral, deve evitar-se o uso de tanques de combustível amovíveis, mas quando houver necessidade de os utilizar, estes não devem estar situados nos locais de máquinas da categoria A;

2) Não devem ser instalados tanques de combustível onde eventuais fugas ou derrames possam constituir perigo ao caírem sobre superfícies quentes. Devem ser tomadas as necessárias precauções para evitar que o combustível submetido a pressão se possa escapar de uma bomba, filtro ou aquecedor e entre em contacto com superfícies quentes;

v) Todos os encanamentos de combustível líquido que por avaria possam deixar derramar combustível de tanques de reserva, decantação ou de serviço diário, situados acima do duplo fundo, devem ser providos, junto ao tanque, de válvulas ou torneiras que possam ser manobradas do exterior do local em que se encontram, no caso de se declarar um incêndio no local onde existem tais tanques. No caso especial de *deep tanks* situados num túnel de veios ou de encanamentos ou espaço similar devem ser instaladas válvulas nos tanques, mas a manobra, em caso de incêndio, deve poder ser feita por meio de uma válvula adicional, montada no encanamento ou encanamentos, fora do túnel ou espaço similar;

vi) Devem existir meios seguros e eficientes para determinar a quantidade de combustível existente nos tanques. É permitida a utilização de tubos de sonda, dotados de meios de fechamento adequados, desde que o seu extremo superior termine num local seguro. São permitidos outros meios para determinar a quantidade de combustível que os tanques contenham, desde que não tenham de penetrar por baixo da parte superior do tanque e que, em caso de deficiência ou de enchimento excessivo dos tanques, não haja derrame de combustível;

vii) Devem ser tomadas precauções para evitar pressões excessivas em qualquer tanque ou em qualquer parte do sistema de combustível, incluindo os encanamentos de enchimento. Todas as válvulas de segurança e encanamento de respiração devem descarregar numa zona que no parecer da Administração seja segura;

viii) Os encanamentos de combustível devem ser de aço ou de outro material aprovado, sendo permitido o uso limitado de tubos flexíveis sempre que a Administração considere que são necessários. Estes tubos flexíveis e seus acessórios devem ser suficientemente robustos e feitos com materiais aprovados, resistentes ao fogo, devendo a sua instalação satisfazer a Administração.

b) *Medidas relativas ao óleo lubrificante:*

As medidas correspondentes ao armazenamento, distribuição e utilização do óleo usado nos sistemas de lubrificação sob pressão devem ser tais que garantam a segurança do navio e das pessoas embarcadas; nos locais de máquinas de categoria A e, sempre que possível, em qualquer local de máquinas, estas medidas devem satisfazer, pelo menos, o disposto nas alíneas *ii*), *iv*), 2), *v*), *vi*) e *vii*) do parágrafo *a*) da presente regra.

c) *Medidas relativas a outros óleos inflamáveis:*

As medidas correspondentes ao armazenamento, distribuição e utilização de outros óleos inflamáveis utilizados sob pressão em sistemas de transmissão de força, *contrôle* e excitação e de aquecimento devem ser tais que garantam a segurança do navio e das pessoas embarcadas. Nos locais em que existam possíveis causas de ignição, tais medidas devem estar de acordo com o disposto nas alíneas *iv*), 2), e *vi*) do parágrafo *a*) e com o disposto na alínea *viii*) do mesmo parágrafo da presente regra, no que diz respeito à construção e resistência.

Regra 34

Disposições especiais para locais de máquinas

a) As disposições da presente regra aplicam-se a locais de máquinas da categoria A e, quando a Administração o considere conveniente, a outros locais de máquinas.

b) — *i*) O número de albóios, portas, ventiladores, aberturas praticadas em chaminés, para dar saída ao ar de ventilação, e outras aberturas dos locais de máquinas deve ser o mínimo necessário para a ventilação e o funcionamento seguro e adequado do navio;

ii) As tampas dos albóios, quando existam, devem ser de aço. Devem ser tomadas as medidas necessárias para permitir, em caso de incêndio, a saída de fumo do local a ser protegido;

iii) As portas, excluindo as portas estanques de accionamento mecânico, devem estar dispostas de modo que, em caso de incêndio no local, se possam fechar eficazmente mediante dispositivos de fechamento accionados mecanicamente, ou então devem ser instaladas portas de fechamento automático capazes de vencer uma inclinação de 3,5°, equipadas com um gancho de retenção à prova de avarias e com um dispositivo de accionamento comandado à distância.

c) Não devem ser instaladas janelas no rufo dos locais de máquinas.

d) Devem existir meios de comando para:

i) Abrir e fechar os albóios, fechar as aberturas das chaminés que normalmente dão saída ao ar de ventilação e fechar os registos dos ventiladores;

ii) Permitir a saída de fumos;

iii) Fechar as portas accionadas por motor ou fazer actuar o mecanismo de fechamento das portas que não sejam portas estanques accionadas por motor;

iv) Parar os ventiladores; e

v) Parar os ventiladores de tiragem forçada e tiragem induzida, as bombas de trasfega de combustível líquido e outras similares.

e) Os comandos exigidos para os ventiladores devem obedecer ao especificado no parágrafo *f*) da regra 25 do presente capítulo. Os comandos de qualquer instalação fixa de extinção de incêndios e os comandos exigidos nas alíneas *i*), *ii*), *iii*) e *v*) do parágrafo *d*) da presente regra e a alínea *v*) do parágrafo *a*) da regra 33 do presente capítulo devem estar situados num posto de segurança ou agrupados no menor número possível de postos que a Administração admita como satisfatório. Tal posto ou

postos devem estar localizados de modo que não possam ficar isolados em caso de incêndio declarado no local que servem e devem ter acesso seguro a partir de um pavimento descoberto.

PARTE C

Medidas de segurança contra incêndios em navios de passageiros que não transportem mais de 36 passageiros

Regra 35

Estrutura

a) O casco, superstruturas, anteparas estruturais, pavimentos e casotas devem ser construídos de aço ou de outro material equivalente.

b) Quando se apliquem as medidas de prevenção de incêndios estipuladas no parágrafo *b*) da regra 40 do presente capítulo, as superstruturas podem ser construídas, por exemplo, em liga de alumínio sempre que:

i) Para a elevação de temperatura das almas metálicas das divisórias da classe A, e quando submetidas à prova-tipo de fogo, se tomarem em consideração as propriedades mecânicas do material;

ii) No parecer da Administração, a quantidade de materiais combustíveis utilizados na parte em questão do navio sejam reduzidas na devida proporção; os forros (isto é, os revestimentos dos tectos) devem ser de material não combustível;

iii) Sejam tomadas as precauções adequadas para assegurar que em caso de incêndio as medidas relativas a estiva, ao arriar e ao embarque nas baleeiras e embarcações salva-vidas sejam tão eficazes como se a superstrutura fosse de aço;

iv) Os tectos e as paredes dos rufos das casas de caldeiras e de máquinas devem ser de aço, convenientemente isoladas, e as aberturas, se as houver, devem estar dispostas e protegidas de modo a evitar a propagação do fogo.

Regra 36

Zonas verticais principais

a) O casco, as superstruturas e as casotas devem ser divididos em zonas verticais principais. Os saltos e recessos devem ser reduzidos ao mínimo, mas quando forem necessários devem ser constituídos por divisórias da classe A.

b) Tanto quanto possível, as anteparas que limitam as zonas verticais principais situadas acima do pavimento das anteparas devem ficar alinhadas com as anteparas estanques de compartimentagem situadas imediatamente abaixo do pavimento das anteparas.

c) Estas anteparas devem estender-se de pavimento a pavimento, até ao casco ou outras partes consideradas como limite.

d) Em navios projectados para fins especiais, como transporte de automóveis ou vagões de caminho de ferro, onde a instalação de tais anteparas seja incompatível com a utilização do navio para o fim a que se destina, devem ser previstos meios equivalentes para dominar e limitar um incêndio, especialmente aprovados pela Administração.

Regra 37

Aberturas nas divisórias da classe A

a) Quando as divisórias da classe A forem perfuradas para dar passagem a cabos eléctricos, encanamentos, troncos, condutas, etc., ou a longarinas, vaus ou outros elementos estruturais, devem ser tomadas as disposições necessárias para que a resistência ao fogo destas divisórias não seja diminuída.

b) Quando uma conduta tiver que atravessar forçosamente uma antepara de uma zona vertical principal, deve ser instalada junto a essa antepara uma válvula de borboleta de fechamento automático, contra incêndios e de funcionamento seguro. Esta válvula deve poder ser fechada manualmente de ambos os lados da antepara. Os postos de manobra destas válvulas devem ser facilmente acessíveis e devem estar marcados com tinta vermelha reflectora. A conduta situada entre a antepara e a válvula deve ser de aço ou de outro material equivalente e, se necessário, deve ser isolada de modo que cumpra o disposto no parágrafo *a*) da presente regra. A válvula de borboleta deve ter, pelo menos de um lado da antepara, um indicador bem visível que assinale que esta está aberta.

c) Com excepção das escotilhas situadas entre os locais de carga, paióis de serviço e de bagagens, e entre esses locais e os pavimentos descobertos, todas as aberturas devem ser providas de meios fixos para as fechar, que devem ser, pelo menos, tão resistentes ao fogo como as divisórias em que estejam instaladas.

d) Todas as portas e os seus caixilhos localizados em anteparas da classe A, bem como os dispositivos necessários para assegurar que elas se mantenham fechadas, devem oferecer uma resistência ao fogo e à passagem de fumo e chamas equivalente, na medida do possível, à das anteparas em que estão situadas. As portas estanques não necessitam de isolamento.

e) Deve ser possível a uma única pessoa abrir ou fechar qualquer destas portas de ambos os lados da antepara.

f) As portas contra incêndios existentes nas anteparas das zonas verticais principais e nas caixas de escada, excluindo as portas estanques de accionamento mecânico e as que normalmente permaneçam fechadas, devem ser de fechamento automático capaz de vencer uma inclinação de 3,5°. Estas portas, excepto as que normalmente permaneçam fechadas, devem poder ser accionadas simultaneamente ou por grupos a partir de um posto de segurança e individualmente a partir de uma posição junto à porta. O mecanismo de accionamento deve ser concebido de modo que a porta se feche automaticamente em caso de avaria do sistema de comando. No entanto, são aceites para este fim portas estanques de accionamento mecânico de um tipo aprovado. Não são permitidos ganchos de retenção que não possam ser accionados a partir de um posto de segurança. As portas oscilantes de duas folhas que sejam permiti-

das devem ter um dispositivo de ferrolho ou trinco que actue automaticamente comandado pelo sistema de accionamento de portas.

Regra 38

Resistência ao fogo de divisórias da classe A

Quando em virtude da presente parte se exijam divisórias da classe A, a Administração, ao decidir o grau de isolamento que deve ser aplicado, deve guiar-se pelas disposições da parte B do presente capítulo, mas pode aceitar um grau de isolamento inferior ao estipulado nesta parte.

Regra 39

Separação entre locais habitados e os locais de máquinas, carga e de serviço

As anteparas limite e os pavimentos que separam os locais habitados dos locais de máquinas, carga e de serviço devem ser construídas com divisórias da classe A e estas anteparas e pavimentos devem ter um grau de isolamento que a Administração considere satisfatório, tendo em conta a natureza dos locais adjacentes.

Regra 40

Protecção dos locais habitados e de serviço

Os locais habitados e de serviço devem estar protegidos de acordo com o estipulado no parágrafo *a*) ou *b*) da presente regra.

a) — *i*) Todas as anteparas que limitam os locais habitados, salvo as que obrigatoriamente sejam da classe A, devem ser construídas com divisórias da classe B de material incombustível. No entanto, podem ser revestidas de materiais combustíveis, de acordo com o estipulado na alínea *iii*) do presente parágrafo;

ii) Todas as anteparas de corredores devem estender-se de pavimento a pavimento. Podem ser autorizadas aberturas de ventilação nas portas de anteparas da classe B, localizadas, de preferência, na parte inferior da porta. Todas as restantes anteparas, de contorno, devem ser dispostas verticalmente de pavimento a pavimento, e transversalmente até ao casco ou outras partes constitutivas de limite, salvo se se instalarem forros interiores ou tectos incombustíveis que assegurem a resistência ao fogo; neste caso as anteparas podem terminar nos forros interiores, ou nos tectos;

iii) Excepto nos locais de carga e nos destinados ao transporte de correio e bagagens e nas câmaras frigoríficas dos locais de serviço, todos os revestimentos, soalhos, tectos e isolamentos devem ser de material incombustível. O volume total dos revestimentos combustíveis, molduras, decorações e madeiras não deverá exceder, em nenhum local habitado ou público, um volume equivalente a uma chapa de madeira de 2,54 mm ($^1/_{10}$ de polegada) de espessura que cobrisse a superfície total das paredes e dos tectos. Todas as superfícies descobertas de corredores ou caixas de escada e as de espaços ocultos ou inacessíveis devem ter características de fraco poder de propagação da chama (1).

b) — *i*) Todas as anteparas dos corredores que existam no interior dos locais habitados devem ser de aço ou construídas com painéis da classe B;

ii) Deve ser instalado um sistema de detecção de incêndios de um tipo aprovado, localizado de modo que sinalize a existência de um incêndio em qualquer dos locais fechados afectos ao uso ou serviço dos passageiros ou da tripulação (salvo nos espaços em que não exista um perigo apreciável de incêndio) e indique automaticamente em um ou vários pontos ou postos de segurança donde os oficiais ou membros da tripulação possam observar, com a máxima rapidez, a existência ou indícios de incêndio, assim como a sua localização.

Regra 41

Revestimento de pavimentos (2)

Os revestimentos primários dos pavimentos aplicados no interior de locais habitados, postos de segurança, escadas e corredores devem ser de materiais aprovados que não se inflamem facilmente.

Regra 42

Protecção de escadas e ascensores em locais habitados e de serviço

a) As escadas e os meios de fuga previstos para locais habitados e de serviço devem ser de aço ou de outro material apropriado.

b) As caixas dos ascensores e monta-cargas, os troncos verticais para iluminação e ventilação dos locais destinados a passageiros, etc., devem ser construídos com divisórias da classe A. As portas devem ser de aço ou de outro material equivalente, e quando estiverem fechadas devem garantir uma resistência ao fogo pelo menos tão eficaz como os troncos em que se encontram instaladas.

Regra 43

Protecção de postos de segurança e paióis

a) Os postos de segurança devem estar separados de outras partes do navio por anteparas e pavimentos da classe A.

b) As anteparas limite dos paióis para bagagens, correio, mantimentos, tintas, luzes, cozinhas e espaços similares devem ser da classe A. Os espaços que contenham materiais ou produtos muito inflamáveis devem estar situados de modo que o perigo para os passageiros e tripulação seja reduzido ao mínimo em caso de incêndio.

Regra 44

Janelas e vigias

a) Todas as janelas e as vigias de anteparas que separam do exterior os locais habitados devem ser construídas com caixilhos de aço ou de material

(1) Veja as «Directrizes sobre a evolução dos riscos de incêndio típicos dos materiais», aprovadas pela Organização mediante a Resolução A.166 (ES.IV).

(2) Veja as «Instruções provisórias melhoradas sobre procedimentos de prova de revestimentos primários de pavimentos», aprovadas pela Organização mediante a Resolução A.214 (VII).

equivalente. Os vidros devem ser mantidos no seu lugar por molduras metálicas.

b) Todas as janelas e vigias das anteparas situadas no interior de locais habitados devem ser construídas de modo a satisfazer as prescrições de resistência ao fogo aplicadas ao tipo da antepara em que estão instaladas.

Regra 45

Sistema de ventilação

A ventilação mecânica dos locais de máquinas deve poder ser parada de uma posição facilmente acessível fora dos referidos locais.

Regra 46

Pormenores de construção

a) Não podem ser empregadas tintas, vernizes e outros produtos análogos preparados à base de nitrocelulose ou de outras subtâncias altamente inflamáveis.

b) Os encanamentos que atravessem divisórias das classes A ou B devem ser de material aprovado pela Administração, tendo em conta a temperatura que essas divisórias devem poder suportar. Os encanamentos de óleo ou líquidos combustíveis devem ser de um material aprovado pela Administração, tendo em conta o risco de incêndio. Os materiais cujas caracteristicas sejam facilmente afectadas pelo calor não devem ser utilizados na construção de embornais que descarreguem fora da borda descargas sanitárias e outras descargas próximas da linha de flutuação onde a cedência do material em caso de incêndio poderia originar risco de alagamento.

c) Devem ser observadas as seguintes prescrições nos locais que contenham máquinas principais de propulsão, caldeiras de combustível líquido ou motores auxiliares de combustão interna com uma potência total igual ou superior a 746 kW:

i) Os albóios devem poder ser fechados do exterior dos locais;

ii) Os albóios com painéis de vidro devem ter tampas exteriores de aço ou de material equivalente fixadas de modo permanente;

iii) Qualquer janela eventualmente autorizada pela Administração, no rufo desses locais, deve ser de tipo fixo e ter tampa exterior de aço ou outro material equivalente fixada de modo permanente; e

iv) Nas janelas e vigias a que se referem as alíneas *i*), *ii*) e *iii*) do presente parágrafo deve ser usado vidro reforçado com tela metálica.

Regra 47

Instalações de detecção e equipamento de extinção de incêndios

a) *Serviço de rondas e detecção de incêndios:*

i) Deve ser organizado um eficiente serviço de rondas em todos os navios que permita detectar rapidamente qualquer início de incêndio. Em todos os alojamentos destinados a passageiros e à tripulação devem ser instalados dispositivos de alarme de incêndio de accionamento manual que permitam à ronda de serviço avisar imediatamente a ponte de comando ou um posto de segurança;

ii) Deve ser instalado um sistema aprovado de alarme ou de detecção de incêndios que sinalize automaticamente em um ou vários pontos ou postos de segurança a presença ou indícios de incêndio e a sua localização em qualquer parte do navio que, no parecer da Administração, seja inacessível ao serviço de rondas, excepto quando se demonstre perante a Administração que o navio efectua viagens de tão curta duração que seria pouco razoável exigir a aplicação desta prescrição;

iii) Qualquer navio, novo ou existente, que se encontre no mar ou em porto (excepto quando fora de serviço) deve ter permanentemente a bordo pessoal e equipamento que garanta que qualquer sinal de alarme de incêndio será imediatamente recebido por um membro responsável da tripulação.

b) *Bombas de incêndio e sistemas de encanamentos:*

Todos os navios devem ser dotados de bombas de incêndio, sistema de encanamentos, bocas e mangueiras de incêndio de acordo com o estipulado na regra 5 do presente capítulo, e com as prescrições seguintes:

i) Em qualquer navio de arqueação bruta igual ou superior a 4000 t deve haver, pelo menos, três bombas de incêndio independentes e qualquer navio de arqueação bruta inferior a 4000 t deve ter, pelo menos, duas destas bombas;

ii) Em qualquer navio de arqueação bruta igual ou superior a 1000 t as tomadas de água do mar, as bombas de incêndio e as fontes de energia que accionam tais bombas devem estar dispostas de modo que um incêndio produzido em qualquer dos compartimentos não possa inutilizar as bombas de incêndio;

iii) Em qualquer navio de arqueação bruta inferior a 1000 t as instalações devem satisfazer o critério da Administração.

c) *Bocas de incêndio, mangueiras e agulhetas:*

i) Todos os navios devem dispor de mangueiras de incêndio, em número que no parecer da Administração seja suficiente. Deve haver, pelo menos, uma mangueira para cada uma das bocas de incêndio prescritas no parágrafo *d*) da regra 5 do presente capítulo, e estas mangueiras não devem ser utilizadas senão para extinção de incêndios ou para exercícios de incêndio e vistorias às instalações;

ii) Nos locais habitados, de serviço e de máquinas, o número e localização das bocas de incêndio devem ser tais que as prescrições do parágrafo *d*) da regra 5 do presente capítulo possam ser satisfeitas quando estão fechadas todas as portas estanques e todas as portas das anteparas das zonas principais verticais;

iii) Os meios instalados a bordo devem permitir que, pelo menos, dois jactos de água possam alcançar qualquer ponto de qualquer dos locais de carga, quando estes se encontrem vazios;

iv) Todas as bocas de incêndio situadas nos locais de máquinas de navios equipados com caldeiras de combustível líquido ou motores de combustão interna devem ser equipadas com mangueiras que te-

nham agulhetas do tipo prescrito no parágrafo *g*) da regra 5 do presente capítulo.

d) *União internacional de ligação à terra:*

i) Todos os navios de arqueação bruta igual ou superior a 1000 t devem ter, pelo menos, uma união internacional de ligação à terra que cumpra o estipulado na parágrafo *h*) da regra 5 do presente capítulo;

ii) A instalação deve permitir utilizar esta união em ambos os bordos do navio.

e) *Extintores portáteis para locais habitados e de serviço:*

Qualquer navio deve ter nos locais habitados e de serviço os extintores portáteis, de tipo aprovado, que a Administração julgue adequados e suficientes.

f) *Instalações fixas de extinção de incêndio nos locais de carga:*

i) Os locais de carga dos navios com uma arqueação bruta igual ou superior a 1000 t devem ser protegidos por uma instalação fixa de extinção de incêndios por gás de acordo com as prescrições da regra 8 do presente capítulo;

ii) Quando, segundo o critério da Administração, for demonstrado que um navio efectua viagens de tão curta duração que não seria razoável exigir a aplicação das prescrições da alínea *i*) do presente parágrafo, e nos navios de arqueação bruta inferior a 1000 t, os dispositivos de extinção de incêndios nos locais de carga devem ser tais que satisfaçam a Administração.

g) *Dispositivos de extinção de incêndio nas casas das caldeiras, etc.:*

Os locais onde estão instaladas as caldeiras principais ou auxiliares de combustível líquido, e os que contenham instalações de combustível líquido ou tanques de decantação, devem ser protegidos com os dispositivos a seguir indicados:

i) Deve haver uma das seguintes instalações fixas de extinção de incêndios:

1) Uma instalação de água pulverizada sob pressão que cumpra o estipulado na regra 11 do presente capítulo;

2) Uma instalação de gás que cumpra o estipulado na regra 8 do presente capítulo;

3) Uma instalação de espuma que cumpra o estipulado na regra 9 do presente capítulo. (A Administração poderá exigir dispositivos fixos ou móveis de extinção por água pulverizada sob pressão ou de espuma para combater um incêndio que se declare acima das chapas do pavimento.)

Em qualquer caso, se a casa das máquinas não for completamente separada da casa das caldeiras, ou se houver possibilidade de o combustível líquido correr da casa das caldeiras para a casa das máquinas, o conjunto das duas casas deve ser considerado como um único compartimento;

ii) Em cada frente de fogo da casa das caldeiras, assim como em todos os locais onde exista uma parte da instalação de combustível líquido, deve haver, pelo menos, dois extintores portáteis, de tipo aprovado, de espuma ou de outro agente considerado eficiente para extinguir incêndios em combustível líquido. Deve haver também, em cada casa das caldeiras, pelo menos, um extintor de espuma, de tipo aprovado, de capacidade não inferior a 136 l (30 galões) ou equivalente. Estes extintores devem ser dotados de mangueiras enroladas em tambores apropriados que permitam alcançar todos os pontos da casa das caldeiras e dos locais onde exista uma parte da instalação de óleo combustível;

iii) Em cada frente de fogo deve haver um recipiente contendo areia, serradura de madeira impregnada com soda ou qualquer outro material seco, aprovado e em quantidade julgada suficiente pela Administração. Este recipiente pode ser substituído por um extintor portátil, de tipo aprovado.

h) *Dispositivos de extinção de incêndios nos locais que contenham motores de combustão interna:*

Quando se utilizem motores de combustão interna, como aparelho de propulsão principal, ou para fins auxiliares, com uma potência total não inferior a 746 kW, os navios devem ser providos dos seguintes dispositivos:

i) Uma das instalações fixas prescritas na alínea *i*) do parágrafo *g*) da presente regra;

ii) Deve haver em cada local de máquinas um extintor de espuma, de tipo aprovado e de capacidade não inferior a 45 l (10 galões) ou equivalente, e mais um extintor portátil de espuma, de tipo aprovado, por cada 746 kW de potência instalada ou fracção, sem que o número total destes extintores portáteis possa ser inferior a dois, não necessitando ser superior a seis.

i) *Dispositivos de extinção de incêndio nos locais que contenham turbinas de vapor e que não necessitem de instalações fixas:*

A Administração prestará atenção especial aos dispositivos de extinção de incêndios que devem existir nos locais que contenham turbinas de vapor e que estejam separados das casas das caldeiras por anteparas estanques.

j) *Equipamentos de bombeiro e equipamento individual:*

i) O número mínimo de equipamentos de bombeiro que cumpram o estipulado na regra 14 do presente capítulo e os jogos de equipamentos individuais, cada um deles constituído pelos objectos especificados nas alíneas *i*), *ii*) e *iii*) do parágrafo *a*) da referida regra, que devem existir a bordo são os seguintes:

1) Dois equipamentos de bombeiro; e ainda

2) Por cada 80 m (262 pés), ou fracção, do comprimento total de todos os locais para passageiros e de serviço devem existir dois equipamentos de bombeiro e dois jogos de equipamentos individuais, cada um destes constituído pelos objectos especificados nas alíneas *i*), *ii*) e *iii*) do parágrafo *a*) da regra 14 do presente capítulo, os quais devem estar localizados no pavimento em que se situem tais locais, ou, se estiverem situados em mais de um pavimento, no pavimento que tiver maior comprimento total;

ii) Por cada equipamento de bombeiro que inclua um aparelho respiratório autónomo, de acordo com

o estipulado no parágrafo *b*) da regra 14 do presente capítulo, devem existir cargas sobresselentes na quantidade que a Administração considere necessário;

iii) Os equipamentos de bombeiro e os jogos de equipamento individual devem ser guardados em locais bastante afastados entre si e prontos para utilização imediata. Em qualquer destes locais devem existir, pelo menos, dois equipamentos de bombeiro e um jogo de equipamento individual.

Regra 48

Meios de fuga

a) Em todos os locais destinados a passageiros ou à tripulação e nos locais em que a tripulação trabalhe normalmente, com excepção dos locais de máquinas, deve haver escadas (inclinadas ou verticais) dispostas de maneira que constituam meios rápidos de abandono de cada um desses locais até ao pavimento dos postos de embarque em baleeiras e embarcações salva-vidas. Em especial, devem ser observadas as disposições seguintes:

i) Abaixo do pavimento das anteparas, cada compartimento estanque, ou zona ou grupo de locais limitado de modo idêntico, deve ter duas saídas, uma das quais, pelo menos, não obrigue a passar por uma porta estanque. Excepcionalmente, a Administração pode dispensar uma destas saídas tendo em conta a natureza e a localização das zonas ou locais em causa, assim como o número de pessoas que normalmente aí podem ser alojadas ou encontrar-se em serviço;

ii) Acima do pavimento das anteparas, cada zona vertical principal, ou zona ou grupo de locais limitado de modo idêntico, deve ter duas saídas, uma das quais, pelo menos, deve dar acesso a uma escada que constitua uma saída vertical;

iii) Pelo menos um dos meios de fuga deve ser constituído por uma escada de fácil acesso e provida de caixa, que constitua, tanto quanto possível, abrigo contínuo contra o fogo, desde o nível onde começa até ao pavimento dos postos de embarque nas baleeiras ou embarcações salva-vidas. A largura, a continuidade e o número de escadas devem ser fixados a contento da Administração.

b) Nos locais de máquinas devem existir dois meios de fuga, um dos quais pode ser uma porta estanque, correspondente a cada casa de máquinas, túnel de veios ou casa de caldeiras. Nos locais das máquinas onde não existirem portas estanques os dois meios de fuga devem ser formados por dois conjuntos de escadas de aço, separadas entre si tanto quanto possível, as quais devem conduzir a portas abertas no rufo, igualmente afastadas entre si e a partir das quais haja acesso ao pavimento dos postos de abandono do navio. A Administração poderá dispensar o cumprimento desta prescrição nos navios de arqueação bruta inferior a 2000 t, tendo em consideração a largura e a disposição do rufo.

Regra 49

Utilização de combustível líquido para motores de combustão interna

Não podem ser utilizados motores de combustão interna em qualquer instalação fixa de bordo que consuma combustível com um ponto de inflamação igual ou inferior a 43°C (110°F) (prova em cadinho fechado) determinado em aparelho aprovado.

Regra 50

Disposições especiais para locais de máquinas

a) Deve haver meios para parar os ventiladores que servem os locais de máquinas e de carga e para fechar todas as portas, condutas de ventilação, espaços anelares em volta das chaminés e outras aberturas desses locais. Estes meios devem poder ser manobrados do exterior desses locais em caso de incêndio.

b) Os motores que accionam os ventiladores de tiragem forçada e induzida, as bombas de trasfega de óleo combustível, as bombas de instalações de combustível líquido e outras bombas similares de combustível líquido devem ter comandos a distância, situados fora dos locais em que se encontrem, de modo que possam ser paradas no caso de se declarar um incêndio no local onde estão instaladas.

c) Todos os encanamentos de aspiração de combustível líquido de um tanque de reserva, de decantação, ou serviço diário, situados acima do duplo fundo, devem ser providos de torneiras ou válvulas que possam ser fechadas do exterior do local em que se encontram no caso de se declarar um incêndio no local onde esses tanques estão situados. No caso especial de *deep tanks* situados num túnel de veios, ou de encanamentos, devem ser instaladas válvulas nos tanques, mas a manobra em caso de incêndio pode ser feita por intermédio de uma válvula adicional, montada no encanamento ou encanamentos fora do túnel ou túneis.

PARTE D

Medidas de segurança contra incêndios em navios de carga [1]

Regra 51

Prescrições gerais para navios de carga de arqueação bruta igual ou superior a 4000 t que não sejam navios-tanques abrangidos pela parte E do presente capítulo.

a) O casco, superstruturas, anteparas estruturais, pavimentos e casotas devem ser de aço, excepto quando a Administração, em casos especiais, aprove a utilização de outros materiais apropriados, tendo em conta o risco de incêndio.

b) Em locais habitados as anteparas dos corredores devem ser de aço ou estar construídas com painéis da classe B.

c) Os revestimentos dos pavimentos, nos locais habitados, situados sobre os pavimentos que constituem o tecto dos locais de máquinas e de carga devem ser de um tipo que não arda facilmente [2].

---

[1] Veja a «Recomendação sobre medidas de segurança para casas de máquinas de navios de carga periodicamente não assistidas, entendendo-se que tais medidas complementam as que são normalmente necessárias para uma casa de máquinas assistida», aprovada pela Organização mediante a Resolução A.211 (VII).

[2] Veja as «Instruções provisórias melhoradas sobre procedimentos de prova de revestimentos primários de pavimentos», aprovadas pela Organização mediante a Resolução A.214 (VII).

d) As escadas interiores situadas debaixo de um pavimento descoberto devem ser de aço ou de outro material apropriado. As caixas dos elevadores da tripulação, situadas em locais habitados, devem ser de aço ou de outro material equivalente.

e) As anteparas de cozinhas, paióis de tintas e de luzes, e paióis do contramestre, adjacentes aos locais habitados e ao compartimento do gerador de emergência, se existirem, devem ser de aço ou de material equivalente.

f) Não devem ser empregados em locais habitados e de máquinas tintas, vernizes e outras substâncias análogas, preparadas à base de nitrocelulose ou de outros produtos altamente inflamáveis.

g) Os encanamentos de óleo ou de combustível líquido devem ser de um material aprovado pela Administração, tendo em conta o perigo de incêndio. Não devem ser utilizados materiais facilmente afectados pelo calor nos embornais exteriores, nas descargas dos sanitários e noutros encanamentos de descarga próximos da linha de flutuação, onde a cedência desses materiais em caso de incêndio possa provocar o perigo de alagamento.

h) A ventilação mecânica dos locais de máquinas deve poder ser interrompida de um ponto facilmente acessível, situado fora desses locais.

Regra 52

Instalações e equipamento de extinção de incêndios

a) *Aplicação:*

Quando se trate de navios de carga cuja arqueação bruta seja inferior aos limites mínimos fixados na presente regra, as medidas relativas aos diversos pontos em que nela se faça referência devem obedecer a critérios que satisfaçam a Administração.

b) *Bombas de incêndio e sistema de encanamentos:*

Todos os navios devem ser dotados de bombas de incêndio sistema de encanamentos, bocas e mangueiras de incêndio, de acordo com o estipulado na regra 5 do presente capítulo e com as prescrições seguintes:

i) Os navios de arqueação bruta igual ou superior a 1000 t devem ser dotados de duas bombas de accionamento independente;

ii) Nos navios de arqueação bruta igual ou superior a 1000 t, se um incêndio produzido num compartimento qualquer puder inutilizar todas as bombas, deve haver um outro meio de fornecer água para extinção de incêndios. Nos navios de arqueação bruta igual ou superior a 2000 t, este outro meio deve ser constituído por uma bomba de emergência fixa, independente, capaz de fornecer dois jactos de água em condições que satisfaçam a Administração.

c) *Bocas de incêndio, mangueiras e agulhetas:*

i) Nos navios de arqueação bruta igual ou superior a 1000 t deve haver um número de mangueiras de incêndio (cada uma delas com as suas uniões e agulhetas) proporcional ao comprimento do navio, à razão de uma por cada 30 m de comprimento, mais uma de reserva, sem que o total de mangueiras possa ser inferior a cinco. Não estão compreendidas neste número as mangueiras prescritas para as casas das máquinas e das caldeiras. A Administração pode exigir o aumento do número de mangueiras de modo que haja sempre uma quantidade suficiente de mangueiras disponíveis e acessíveis, tendo em conta o tipo de navio e a natureza do serviço em que é utilizado;

ii) Nos locais habitados, de serviço e de máquinas, o número e a localização das bocas de incêndio deve satisfazer as prescrições do parágrafo *d*) da regra 5 do presente capítulo;

iii) Os meios instalados a bordo devem permitir que, pelo menos, dois jactos de água possam alcançar qualquer ponto de qualquer dos locais de carga quando estes se encontrem vazios;

iv) Todas as bocas de incêndio situadas nos locais de máquinas de navios equipados com caldeiras de combustível líquido ou com motores de combustão interna devem ser equipadas com mangueiras que tenham agulhetas do tipo prescrito no parágrafo *g*) da regra 5 do presente capítulo.

d) *União internacional de ligação à terra:*

i) Todos os navios de arqueação bruta igual ou superior a 1000 t devem ter, pelo menos, uma união internacional de ligação à terra que cumpra o estipulado no parágrafo *h*) da regra 5 do presente capítulo;

ii) A instalação deve permitir utilizar esta união de ambos os bordos do navio.

e) *Extintores portáteis para locais habitados e de serviço:*

Qualquer navio deve ter nos locais habitados e de serviço os extintores portáteis, de tipo aprovado, que a Administração julgue adequados e suficientes, mas nunca menos de cinco nos navios de arqueação bruta igual ou superior a 1000 t.

f) *Instalações fixas de extinção de incêndio nos locais de carga:*

i) Os locais de carga dos navios cuja arqueação bruta seja igual ou superior a 2000 t devem ser protegidos por uma instalação fixa de extinção de incêndio que cumpra o estipulado na regra 8 do presente capítulo;

ii) A Administração pode dispensar a aplicação das prescrições da alínea *i*) do presente parágrafo aos porões de carga de qualquer navio (com excepção dos tanques de um navio-tanque) desde que:

1) Estes sejam providos de tampas de escotilha de aço e houver meios eficazes para fechar todos os ventiladores e outras aberturas dos porões; ou

2) Se trate de um navio construído e destinado exclusivamente para transporte de cargas, como minério, carvão ou grão; ou

3) Seja demonstrado, a contento da Administração, que o navio é utilizado em viagens de tão curta duração que não seria razoável aplicar-se esta prescrição;

iii) Além das prescrições da presente regra, qualquer navio de carga, quando transporte explosivos de tal natureza ou em tal quantidade que não seja permitido transportá-los em navios de passageiros, em conformidade com o disposto na regra 7 do

capitulo VII da presente Convenção, devem ser cumpridas as seguintes prescrições:

1) Não deve ser utilizado vapor nos compartimentos que contenham explosivos. Para aplicação desta alínea, o termo «compartimento» significa o conjunto de todos os locais compreendidos entre duas anteparas permanentes e contíguas e compreende o porão e todos os locais de carga que lhe fiquem por cima;

2) Além disso, em cada compartimento que contenha explosivos e nos compartimentos adjacentes de carga deve ser instalado um dispositivo de detecção de fumo ou de incêndios.

g) Dispositivos de extinção de incêndios nas casas das caldeiras, etc.:

Em qualquer navio de arqueação bruta igual ou superior a 1000 t, os locais onde estão instaladas caldeiras principais ou auxiliares de combustível líquido e os que contenham instalações de combustível líquido ou tanques de decantação devem ser protegidos com os dispositivos a seguir indicados:

i) Deve haver uma das seguintes instalações fixas de extinção de incêndios:

1) Uma instalação de água pulverizada sob pressão que cumpra o estipulado na regra 11 do presente capítulo;

2) Uma instalação de gás que cumpra o estipulado na regra 8 do presente capítulo;

3) Uma instalação de espuma que cumpra o estipulado na regra 9 do presente capítulo. (A Administração poderá exigir dispositivos fixos ou móveis de extinção por água pulverizada sob pressão ou de espuma para combater um incêndio que se declare acima das chapas do pavimento.)

Em qualquer caso, se a casa das máquinas não for completamente separada da casa das caldeiras, ou se houver possibilidade de o combustível líquido correr da casa das caldeiras para a casa das máquinas, o conjunto das duas casas deve ser considerado como um único compartimento;

ii) Em cada frente de fogo da casa das caldeiras, assim como em todos os locais onde exista uma parte da instalação de combustível líquido, deve haver, pelo menos, dois extintores portáteis, de tipo aprovado, de espuma ou de outro agente considerado eficiente para extinguir incêndios em combustível líquido. Além disso, deve haver, pelo menos, um extintor com as mesmas características, com a capacidade de 9 l (2 galões) por queimador; no entanto, a capacidade total do extintor ou dos extintores adicionais pode não exceder 45 l (10 galões) por cada casa de caldeiras;

iii) Em cada frente de fogo deve haver um recipiente contendo areia, serradura de madeira impregnada com soda ou qualquer outro material seco aprovado, em quantidade julgada suficiente pela Administração. Este recipiente pode ser substituído por um extintor portátil, de tipo aprovado.

h) Dispositivos de extinção de incêndio nos locais que contenham motores de combustão interna:

Quando se utilizem motores de combustão interna como aparelho de propulsão principal, ou para fins auxiliares, com uma potência total não inferior a 746 kW, os navios de arqueação bruta igual ou superior a 1000 t devem ser providos dos seguintes dispositivos:

i) Uma das instalações fixas prescritas na alínea *i*) do parágrafo *g*) da presente regra;

ii) Deve haver em cada local de máquinas um extintor de espuma, de tipo aprovado, de capacidade não inferior a 45 l (10 galões) ou equivalente, e mais um extintor portátil de espuma, de tipo aprovado, por cada 746 kW de potência instalada ou fracção, sem que o número total destes extintores portáteis possa ser inferior a dois nem necessitando ser superior a seis.

i) Dispositivos de extinção de incêndio nos locais que contenham turbinas de vapor e que não necessitem de instalações fixas:

A Administração prestará atenção especial aos dispositivos de extinção de incêndio que devem existir nos locais que contenham turbinas de vapor e que estejam separadas das casas das caldeiras por anteparas estanques.

j) Equipamento de bombeiro e equipamento individual:

i) Qualquer navio, quer seja novo ou existente, deve ter a bordo, pelo menos, dois equipamentos de bombeiro que cumpram o estipulado na regra 14 do presente capítulo. Além disso, as Administrações podem exigir que em navios grandes tenham a bordo jogos adicionais de equipamentos individuais e que os navios-tanques e os navios especiais, tais como navios-fábrica, tenham equipamentos de bombeiro adicionais;

ii) Por cada equipamento de bombeiro que inclua um aparelho respiratório autónomo como o estipulado no parágrafo *b*) da regra 14 do presente capítulo devem existir cargas sobresselentes, na quantidade que a Administração considere necessário;

iii) Os equipamentos de bombeiro e os jogos de equipamento individual devem ser guardados em locais facilmente acessíveis, prontos para utilização imediata, e se for mais do que um equipamento ou jogo devem ser guardados em locais bastante afastados entre si.

Regra 53

Meios de fuga

a) Em todos os locais destinados a passageiros ou à tripulação, e nos locais em que a tripulação trabalhe normalmente, com excepção dos locais de máquinas, deve haver escadas (inclinadas ou verticais) dispostas de maneira que constituam meios rápidos de abandono de cada um desses locais até ao pavimento dos postos de embarque em baleeiras e embarcações salva-vidas.

b) Nos locais de máquinas devem existir dois meios de fuga, um dos quais pode ser uma porta estanque, correspondente a cada casa de máquinas, túnel de veios ou casa de caldeiras. Nos locais de máquinas onde não existirem portas estanques os dois meios de fuga devem ser formados por dois conjuntos de escadas de aço, separadas entre si tanto quanto possível, as quais devem conduzir a portas abertas no rufo, igualmente afastadas entre si

e a partir das quais haja acesso ao pavimento dos postos de abandono do navio. A Administração poderá dispensar o cumprimento desta prescrição nos navios de arqueação bruta inferior a 2000 t, tendo em consideração a largura e a disposição do rufo.

Regra 54

Disposições especiais para locais de máquinas

a) Deve haver meios para parar os ventiladores que servem os locais de máquinas e de carga e para fechar todas as portas, condutas de ventilação, espaços anelares em volta das chaminés e outras aberturas desses locais. Estes meios devem poder ser manobrados do exterior desses locais, em caso de incêndio.

b) Os motores que accionam os ventiladores de tiragem forçada e induzida, as bombas de trasfega de óleo combustível, as bombas de instalações de combustível líquido e outras bombas similares de combustível líquido devem ter comandos à distância situados fora dos locais em que se encontram, de modo que possam ser parados no caso de se declarar um incêndio no local onde estão instalados.

c) Todos os encanamentos de aspiração de combustível líquido de um tanque de reserva, de decantação ou de serviço diário, situados acima do duplo fundo, devem ser providos de machos ou válvulas que possam ser fechados do exterior do local em que se encontram no caso de se declarar um incêndio no local onde esses tanques estão situados. No caso especial de *deep tanks* situados num túnel de veios ou de encanamentos, devem ser instaladas válvulas nos tanques, mas a manobra em caso de incêndio pode ser feita por intermédio de uma válvula adicional montada no encanamento ou encanamentos fora do túnel ou túneis.

PARTE E

Medidas de segurança contra incêndios em navios-tanques

Regra 55

Aplicação

a) A presente parte aplica-se a todos os navios-tanques novos que transportem petróleo bruto ou produtos derivados do petróleo cujo ponto de inflamação não exceda 60°C (140°F) (prova em cadinho fechado) determinado num aparelho de medida de ponto de inflamação de tipo aprovado, e cuja pressão de vapor Reid seja inferior à pressão atmosférica, e outros produtos líquidos que apresentem um risco análogo de incêndio.

b) Além disso, todos os navios a que se aplique a presente parte devem estar de acordo com o prescrito nas regras 52, 53 e 54 do presente capítulo, se bem que o parágrafo *f*) da regra 52 não seja forçosamente aplicado a navios-tanques que estejam de acordo com o disposto na regra 60 do presente capítulo.

c) No caso de se pretender transportar outros produtos diferentes dos citados no parágrafo *a*) da presente regra, que introduzam riscos de incêndio adicionais, a Administração tomará as medidas complementares de segurança que julgue convenientes.

d) Os navios de carga combinados só devem transportar produtos sólidos quando todos os tanques de carga se encontrem limpos de hidrocarbonetos e desgasificados ou quando, em cada caso, forem tomadas medidas que no parecer da Administração sejam satisfatórias.

Regra 56

Localização e separação de espaços

a) Os locais de máquinas da categoria A devem estar situados a ré dos tanques de carga e de decantação e isolados dos mesmos por um coferdame, uma casa das bombas de carga, ou um tanque de combustível; devem também estar situados a ré da casa das bombas de carga e dos coferdames citados, mas não necessariamente a ré dos tanques de combustível. Contudo, a parte inferior da casa das bombas pode estender-se a esses locais para alojar as bombas, na condição de que a altura de recesso assim formado não exceda um terço do pontal de traçado acima da quilha. Excepcionalmente, a Administração pode autorizar que o recesso tenha uma altura superior à indicada, mas inferior a metade do pontal de traçado acima da quilha, nos navios de porte bruto inferior a 25 000 t e desde que seja demonstrado que por razões de acesso e de arranjo da instalação é impossível o cumprimento desta prescrição.

b) Os locais habitados, os pontos principais de *contrôle* da carga, os postos de segurança e os locais de serviço devem estar situados a ré de todos os tanques de carga, tanques de decantação, casa das bombas de carga e coferdames que separam os tanques de carga ou decantação dos locais de máquinas da categoria A. Qualquer antepara comum que separe uma casa das bombas de carga, incluindo a entrada de tal casa, dos locias habitados e de serviço ou postos de segurança deve ser da classe A-60. Quando se considere necessário, pode ser permitido que os locais habitados, os postos de segurança, os locais de máquinas que não sejam da categoria A e os locais de serviço estejam a vante de todos os tanques de carga, de decantação, casa das bombas de carga e coferdames, na condição de, segundo o critério da Administração, as normas de segurança serem equivalentes e os meios previstos para a extinção de incêndios serem adequados.

c) Quando houver necessidade de instalar um posto de navegação por cima da zona em que estão situados os tanques de carga, tal posto deve ser utilizado exclusivamente para fins de navegação e deve estar separado do pavimento dos tanques de carga por um espaço aberto de, pelo menos, 2 m de altura. A protecção contra incêndios de tal posto de navegação deve cumprir o estipulado nos parágrafos *a*) e *b*) da regra 57, referentes a postos de segurança, assim como outras disposições da presente parte que sejam aplicáveis.

d) Os locais habitados e de serviço devem estar protegidos contra qualquer derrame que se possa produzir no convés. Esta protecção pode ser conseguida instalando-se uma braçola contínua e permanente de suficiente altura que se estenda de bordo a bordo. Deve ser prestada atenção especial às instalações de carga que possam existir à popa do navio.

e) As anteparas exteriores das superstruturas e casotas que contenham locais habitados e de serviço, incluindo qualquer pavimento suspenso que dê suporte a tais locais, devem ter isolamento da classe A-60 na totalidade das partes que estejam de frente para os tanques de carga e, além disso, por espaço de 3 m a ré do limite frontal. Nas partes laterais de tais superstruturas e casotas, o isolamento deve ter a altura que a Administração julgar necessária.

f) As anteparas que limitam as superstruturas e casotas em que se contenham locais habitados e de serviço e que estejam de frente para os tanques de carga devem cumprir as seguintes prescrições:

i) Não são permitidas portas em tais anteparas, excepto as portas dos locais que não dêem acesso a locais habitados e de carga, tais como postos de *contrôle* de carga, paióis e despensas, e desde que autorizadas pela Administração. Quando tais portas existirem, as anteparas do local devem ter um isolamento da classe A-60. Nestas anteparas podem ser instaladas chapas aparafusadas para facilitar a saída de maquinaria;

ii) As vigias instaladas em tais anteparas devem ser do tipo fixo (não devem poder abrir-se). As janelas da casa do leme podem não ser fixas (podem abrir-se);

iii) As vigias do primeiro piso sobre o pavimento principal devem ter tampas interiores de aço ou de outro material equivalente.

As prescrições do presente parágrafo, quando aplicáveis, com excepção dos acessos aos espaços da casa de navegação, são também aplicadas às anteparas das superstruturas e casotas, por um comprimento de 5 m, medidos no sentido longitudinal, a partir dos extremos mais à proa de tais estruturas.

Regra 57

Construção

a) — *i*) O casco, superstruturas, anteparas estruturais, pavimentos e casotas devem ser construídos de aço ou de outro material equivalente;

ii) As anteparas que separam as casas das bombas de carga, incluindo os seus troncos, dos locais de máquinas da categoria A devem ser da classe A e não devem ter nenhuma perfuração que as torne inferiores às da classe A-O ou equivalentes em todos os sentidos, com excepção das perfurações feitas para os bucins dos veios das bombas de carga e outras similares;

iii) As anteparas e pavimentos que separam os locais de máquinas da categoria A e a casa das bombas de carga, incluindo os troncos que passam respectivamente nestes espaços, dos locais habitados e de serviço devem ser da classe A-60. Tais anteparas e pavimentos, assim como todas as anteparas dos locais de máquinas da categoria A e das casas das bombas de carga, não devem ser perfuradas para instalar janelas ou vigias;

iv) As prescrições das alíneas *ii*) e *iii*) do presente parágrafo não impedem a instalação de clarabóias de iluminação permanente, de tipo aprovado, que sejam estanques ao gás, destinadas a iluminar a casa das bombas, na condição de que tenham a devida resistência e mantenham a integridade e estanquidade ao gás das anteparas da classe A. Também não excluem o uso de janelas num posto de comando totalmente situado no interior de um local de máquinas;

v) Os postos de segurança devem estar separados dos espaços fechados adjacentes por anteparas e pavimentos da classe A. O isolamento das anteparas limite destes postos de segurança deve ser o que a Administração julgar satisfatório, tendo em conta o risco de incêndio existente nos espaços adjacentes;

vi) As portas dos rufos dos locais de máquinas da categoria A devem ser de fechamento automático e devem cumprir o estipulado na alínea *vii*) do parágrafo *b*) da presente regra;

vii) A superfície do isolamento das anteparas dos locais de máquinas da categoria A não deve ser atacada pelo petróleo ou seus vapores;

viii) Os revestimentos primários de pavimento, se existirem, devem ser de materiais aprovados que não se inflamem facilmente (1);

ix) As escadas interiores devem ser de aço ou de outro material apropriado;

x) As anteparas de cozinhas, paióis de tintas, paióis de luzes e paiol do contramestre, adjacentes aos locais habitados, devem ser de aço ou de outro material equivalente;

xi) As tintas e os vernizes ou outros produtos de acabamento utilizados em superfícies interiores descobertas devem ser de um tipo tal que na opinião da Administração não apresentem excessivo risco de incêndio nem produzam demasiado fumo ou outras substâncias tóxicas;

xii) Os encanamentos de óleo ou líquidos combustíveis devem ser de um material aprovado pela Administração, tendo em conta o risco de incêndio. Os materiais cujas características sejam facilmente afectadas pelo calor não devem ser utilizados na construção de embornais que descarreguem fora da borda descargas sanitárias e outras descargas próximas da linha de flutuação, onde a cedência do material em caso de incêndio poderia originar risco de alagamento;

xiii) A ventilação mecânica dos locais de máquinas deve poder ser parada de um ponto facilmente acessível, situado fora desses locais;

xiv) Os albóios dos locais de máquinas de categoria A e das casas das bombas de carga devem estar de acordo com o estipulado na alínea *iii*) do parágrafo *a*) da presente regra no respeitante a janelas e vigias e devem estar dispostos de modo que possam ser facilmente fechados do exterior dos locais que servem.

b) Dentro dos locais habitados e de serviço e postos de segurança devem ser observadas as prescrições seguintes:

i) As anteparas de corredores, incluindo as portas, devem ser da classe A ou B e devem estender-se

(1) Veja as «Instruções provisórias melhoradas sobre procedimentos de prova de revestimentos primários de pavimentos», aprovadas pela Organização mediante a Resolução A.214 (VII).

de pavimento a pavimento. Quando de ambos os lados da antepara se instalarem forros e ou revestimentos contínuos da classe B, a antepara poderá terminar no forro ou no revestimento contínuo. As portas dos camarotes e dos locais públicos situados em tais anteparas podem ter uma grelha de ventilação localizada na parte inferior da porta;

ii) As câmaras de ar que se encontrem por detrás de forros, painéis ou revestimentos devem ser convenientemente divididas por separadores que evitem a formação de correntes de ar. A distância entre estes separadores deve ser inferior a 14 m;

iii) Os forros, revestimentos, anteparas e isolamentos, com excepção dos isolamentos das câmaras frigoríficas, devem ser de material incombustível. Os materiais anticondensação e os produtos adesivos utilizados com o material isolante, bem como o isolamento das condutas dos sistemas de frio, não necessitam ser incombustíveis, mas devem ser aplicados na menor quantidade possível, e as suas superfícies descobertas devem oferecer uma resistência à propagação da chama que satisfaça a Administração;

iv) A estrutura, incluindo os perfis e as peças de ligação das anteparas, os revestimentos, forros e os separadores que evitem as correntes de ar devem ser de material não combustível;

v) Todas as superfícies expostas de corredores e caixas de escada e as superfícies existentes em espaços ocultos ou inacessíveis devem ter características de fraco poder de propagação da chama (1);

vi) As anteparas, revestimentos e forros podem ser cobertos por chapas combustíveis, desde que a espessura da chapa não exceda 2 mm em nenhum local, e nos corredores, caixas de escada e postos de segurança esta espessura não deve exceder 1,5 mm;

vii) As caixas de escada que atravessem apenas um pavimento devem estar protegidas, pelo menos a um nível, por divisórias da classe A ou B e portas de fechamento automático, a fim de evitar a rápida propagação de fogo, de um pavimento para outro. As caixas dos ascensores da tripulação devem ser constituídas por divisórias da classe A. As caixas de escada e de ascensores que atravessem mais de um pavimento devem estar rodeadas de divisórias da classe A e protegidas por portas de aço de fechamento automático em todos os níveis. As portas de fechamento automático não devem ter ganchos de retenção; no entanto, podem ser utilizados sistemas de trinquetes com comando à distância e à prova de avarias.

c) Em geral, as condutas de ventilação dos locais de máquinas de acategoria A não devem atravessar locais habitados ou de serviço nem postos de segurança. No entanto, a Administração poderá atenuar o rigor desta prescrição sempre que:

i) As condutas de ventilação sejam de aço e tenham isolamento da classe A-60; ou

ii) As condutas sejam de aço e tenham uma válvula de borboleta de fechamento automático, localizada perto da antepara limite que atravessam, e tenham também um isolamento da classe A-60 desde o local de máquinas de categoria A até, pelo menos, a um ponto situado a 5 m depois da válvula de borboleta.

d) As condutas de ventilação dos locais habitados e de serviço ou dos postos de segurança não devem, em geral, atravessar locais de máquinas de categoria A; no entanto, a Administração pode atenuar o rigor desta prescrição sempre que as condutas de ventilação sejam de aço e tenham uma válvula de borboleta de fechamento automático localizada perto das anteparas atravessadas.

(1) Veja as «Directrizes sobre a evolução dos riscos de incêndio típicos dos materiais», aprovadas pela Organização mediante a Resolução A.166 (ES.IV).

Regra 58

Ventilação

a) A disposição e a localização das aberturas no pavimento dos tanques de carga, através das quais se possam produzir fugas de gases, devem ser tais que reduzam ao mínimo a possibilidade de esses gases entrarem para locais fechados onde existam fontes de ignição ou de se acumularem perto das máquinas e equipamentos do convés que possam constituir um risco de incêndio. Em todo o caso, a altura do orifício de descarga, situado acima do convés, e a velocidade de descarga do gás devem ser calculadas em função da distância existente entre tal orifício e qualquer abertura de casotas ou possível fonte de ignição.

b) A disposição das tomadas e saídas do ar de ventilação e outras aberturas existentes nas anteparas que limitam as casotas e superstruturas devem complementar o estipulado no parágrafo *a*) da presente regra. Tais aberturas de ventilação, especialmente as corrrespondentes a locais de máquinas, devem estar situadas tanto quanto possível à popa. A este respeito devem ser tomadas as devidas precauções quando o navio for concebido para efectuar a carga ou descarga à popa. Tudo o que constituir uma possível fonte de ignição, tal como o equipamento eléctrico, deve ser disposto de modo que não crie riscos de explosão.

c) As casas das bombas de carga devem ter ventilação mecânica e as condutas de extracção devem fazer a descarga num ponto seguro do pavimento descoberto. A ventilação destas casas deve ser suficiente, de modo a reduzir ao mínimo a passibilidade de acumulação de vapores inflamáveis. O número de renovações de ar deve ser pelo menos vinte por hora, tomando como base o volume bruto da casa. As condutas de ventilação devem ser dispostas de modo que toda a casa seja eficazmente ventilada. A ventilação deve ser do tipo extracção à casa.

Regra 59

Meios de fuga

Em adição ao prescrito no parágrafo *a*) da regra 53 deste capítulo, a Administração terá em consideração que o pessoal deve dispor de acesso, a partir de cada camarote, até aos meios de fuga de emergência.

Regra 60

Protecção dos tanques de carga

a) Em navios-tanques com um porte bruto igual ou superior a 100 000 t e em navios de carga combinados com um porte bruto igual ou superior a 50 000 t, a fim de proteger a zona do pavimento onde se encontram os tanques de carga e os próprios tanques, deve existir uma instalação fixa de espuma montada no convés e uma instalação fixa de gás inerte que cumpra o estipulado nas regras 61 e 62 da presente parte. No entanto, em substituição de tais instalações, a Administração, depois de examinar o arranjo e o equipamento do navio, pode aceitar outras combinações de instalações fixas, se estas oferecerem uma protecção equivalente, em conformidade com o disposto na regra 5 do capítulo I da presente Convenção.

b) Para que possa ser considerada como equivalente, a instalação proposta, em substituição da de espuma instalada no convés, deve:

i) Ser capaz de extinguir o incêndio em substâncias derramadas e de impedir a ignição do combustível derramado que não esteja a arder; e

ii) Ser capaz de combater incêndios em tanques com roturas.

c) Para que possa ser considerada como equivalente, a instalação proposta, em substituição da instalação fixa de gás inerte, deve:

i) Ser capaz de impedir acumulações perigosas de misturas explosivas nos tanques de carga intactos, durante o serviço normal, ao longo de toda a viagem em lastro e enquanto se efectuem todas as operações necessárias no interior dos tanques; e

ii) Ter sido concebida de modo que o risco de ignição proveniente da formação de electricidade estática na própria instalção seja reduzido ao minimo.

d) Em navios-tanques de porte bruto inferior a 100 000 t e navios de carga combinados de porte bruto inferior a 50 000 t, a Administração poderá, no que se refere à aplicação dos requisitos do parágrafo *f*) da regra 52 deste capítulo, aceitar uma instalação de espuma descarregando para o interior ou exterior dos tanques. Os pormenores desta instalação devem satisfazer a Administração.

Regra 61

Instalação fixa de espuma no convés

A instalação fixa de espuma montada no convés e referida no parágrafo *a*) da regra 60 do presente capítulo deve ter a seguinte concepção:

a) Os dispositivos destinados a descarregar espuma devem poder lançá-la sobre toda a zona dos tanques de carga e no interior de qualquer deles, quando a zona do convés que lhes corresponda tenha sofrido avaria;

b) A instalação deve ter um modo de utilização simples e rápido. O posto de comando principal desta instalação deve estar numa posição convenientemente situada fora da zona dos tanques de carga, adjacente aos locais habitados, e deve ser fácil de o alcançar e utilizar quando se declare um incêndio nas zonas protegidas;

c) O regime de produção de espuma não deve ser inferior à maior das seguintes taxas:

i) 0,6 l por minuto, por metro quadrado de superfície do pavimento de carga, entendendo-se por superfície do pavimento de carga a largura máxima do navio, multiplicada pelo comprimento total dos espaços destinados a tanques de carga; ou

ii) 6 l por minuto, por metro quadrado da secção horizontal do tanque que tenha a maior área de secção horizontal.

Deve estar assegurado o fornecimento de líquido espumífero em quantidade suficiente para garantir, pelo menos, durante vinte minutos a produção de espuma, utilizando a maior das taxas estipuladas nas alíneas *i*) ou *ii*) do presente parágrafo. A relação de expansão da espuma (relação entre o volume de espuma gerada e o volume da mistura de água e líquido espumífero) não deve ser, em geral, superior a 12 para 1. Quando as instalações produzam essencialmente espuma de baixa expansão, mas segundo uma relação de expansão ligeiramente superior a 12 para 1, a quantidade disponível de líquido espumífero deve calcular-se como para as instalações cuja relação de expansão seja de 12 para 1. Se se aplicar uma relação média de expansão de espuma (entre 50 para 1 a 150 para 1), o regime de produção de espuma e as capacidades dos monitores instalados devem ser tais que satisfaçam a Administração;

d) Para fornecer espuma, a instalação fixa deve dispor de monitores fixos e aplicadores móveis. Cada um dos monitores fixos deve poder descarregar pelo menos 50 % da taxa exigida;

e) — *i*) O número e a localização dos monitores fixos devem cumprir o disposto no parágrafo *a*) da presente regra. A capacidade de qualquer monitor fixo expressa em litros de espuma por minuto deve ser pelo menos igual a três vezes a área do convés em metros quadrados protegida por esse monitor, encontrando-se tal área a vante desse monitor;

ii) A distância desde o monitor fixo até ao extremo mais afastado da zona protegida, a vante do monitor, não deve ser superior a 75 % do alcance do mesmo, com o tempo calmo;

f) Deve ser instalado um monitor fixo e uma união de mangueira para um aplicador lança-espuma portátil de ambos os bordos da antepara de vante dos tombadilhos ou dos locais habitados virados para o convés de carga. Os aplicadores lança-espuma portáteis devem estar dispostos de modo que dêem flexibilidade durante a operação na extinção de incêndios e cubram as zonas que os monitores fixos não possam alcançar;

g) Devem instalar-se válvulas nos colectores de espuma e no colector de incêndios imediatamente a seguir à posição de cada monitor para que se possa isolar qualquer secção avariada desses colectores;

h) O funcionamento, no regime prescrito, da instalação de espuma montada no convés deve permitir a utilização simultânea do número mínimo de jactos de água prescritos, à pressão prescrita, alimentados a partir do colector de incêndios.

Regra 62

Instalação de gás inerte

A instalação de gás inerte, a que se faz referência no parágrafo *a*) da regra 60 do presente capítulo,

deve poder fornecer aos tanques de carga, em qualquer momento, o gás ou uma mistura gasosa com tão pouco oxigénio que a atmosfera interior do tanque fique inerte, isto é, incapaz de propagar as chamas. Tal sistema deve satisfazer as seguintes prescrições:

a) Não deve ser necessário entrar ar no interior de nenhum dos tanques durante as operações normais, excepto quando se preparar o tanque para a entrada de pessoal;

b) Deve ser possível encher os tanques vazios com gás inerte, de modo a reduzir os hidrocarbonetos existentes no tanque depois da descarga;

c) Deve ser possível efectuar a lavagem dos tanques numa atmosfera inerte;

d) Durante a operação de descarga a instalação deve permitir dispor de um volume de gás especificado no parágrafo *f*) da presente regra. Deve haver gás em quantidade suficiente, em qualquer momento, de modo a cumprir o estipulado no parágrafo *g*) da presente regra;

e) Devem existir meios adequados para encher os tanques com ar fresco e com gás inerte;

f) A instalação deve ser capaz de fornecer gás inerte à razão de pelo menos 125 % da máxima capacidade nominal das bombas de carga;

g) Sob condições normais de funcionamento, deve ser possível manter uma pressão positiva no interior dos tanques quando se estiverem a encher ou estiverem cheios de gás inerte;

h) Os orifícios de saída das purgas de gás devem estar situados em posições convenientes e ao ar livre e devem cumprir as mesmas prescrições gerais que os orifícios de ventilação de tanques indicadas no parágrafo *a*) da regra 58 do presente capítulo;

i) Deve existir um depurador de gás que o arrefeça eficazmente e que elimine sólidos e produtos da combustão do enxofre;

j) Devem existir pelo menos dois ventiladores que, em conjunto, possam fornecer, no mínimo, a quantidade de gás estipulada no parágrafo *f*) da presente regra;

k) O volume de oxigénio existente no gás inerte a fornecer não deve exceder normalmente 5 % do volume total;

l) Devem existir meios que impeçam o retorno de gases ou vapores dos hidrocarbonetos dos tanques para os locais de máquinas e condutas de fumos e evitem a formação de vácuo ou pressões excessivas. Além disso, deve ser instalado um eficiente sistema para fechar a água no depurador de gases ou no convés. Os ramais dos encanamentos de gás inerte devem ter válvulas de retenção ou meios equivalentes de comando em cada tanque. A instalação deve estar projectada de modo que reduza ao mínimo o risco de ignição devido à formação de electricidade estática;

m) Devem ser instalados instrumentos que indiquem e registem de modo contínuo e permanente, durante o fornecimento de gás inerte, a pressão e o teor em oxigénio do gás dentro do colector de fornecimento de gás, do lado da descarga do ventilador. Tais instrumentos, quando fixos, devem ser localizados na casa de *contrôle* da carga, se existir, e sempre em local de acesso fácil para o oficial responsável pelas operações de carga. Devem existir a bordo instrumentos portáteis para medir o oxigénio e os gases ou vapores de hidrocarbonetos, assim como os dispositivos necessários montados nos tanques para verificar a natureza do seu conteúdo;

n) Devem existir meios que indiquem a temperatura e a pressão no colector de gás inerte;

o) Devem existir dispositivos de alarme para indicar:

i) Teor excessivo de oxigénio no colector de gás inerte;

ii) Pressão insuficiente do gás no colector de gás inerte;

iii) Pressão insuficiente na alimentação do retentor de água no convés, se existir;

iv) Temperatura excessiva do gás no colector de gás inerte; e

v) Pressão insuficiente de água à entrada do depurador de gases.

Além disso, devem existir meios para parar automaticamente a instalação, que devem actuar quando se alcancem os limites predeterminados indicados nas alíneas *iii*), *iv*) e *v*) do presente parágrafo;

p) O comandante de qualquer navio equipado com um sistema de gás inerte deve ter um manual de instruções que dê informações sobre os aspectos operacionais de segurança e riscos para a saúde, característico da instalação.

Regra 63

Casas das bombas de carga

Cada uma das casas das bombas de carga deve ser equipada com a sua própria instalação fixa de extinção de incêndios, accionada de um ponto de acesso fácil situado fora desta casa. A instalação deve lançar água pulverizada sob pressão ou qualquer outro agente extintor próprio que satisfaça os critérios da Administração.

Regra 64

Agulhetas de mangueira

Todas as agulhetas para mangueira devem ser de um tipo aprovado, de duplo efeito (jacto e pulverização) e com dispositivo de fecho.

PARTE F

Medidas especiais de segurança contra incêndios em navios de passageiros existentes

[Para efeitos de aplicação desta parte do presente capítulo, qualquer referência a regras . . . (1948) deve entender-se por regras do capítulo II da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1948, e qualquer referência a regras . . . (1960) refere-se, salvo indicação em contrário, às regras do capítulo II da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960.]

Regra 65

Aplicação

Os navios de passageiros que transportem mais de 36 passageiros devem cumprir, pelo menos, as seguintes disposições:

a) Qualquer navio cuja quilha tenha sido assente antes de 19 de Novembro de 1952 deve cumprir as

disposições das regras 66 a 85, inclusive, da presente parte;

b) Qualquer navio cuja quilha tenha sido assente em 19 de Novembro de 1952 ou depois dessa data, mas antes de 26 de Maio de 1965, deve cumprir as disposições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1948, relativas às medidas de segurança contra incêndios, aplicáveis em face dessa Convenção aos navios novos, e devem cumprir também as disposições dos parágrafos *b*) e *c*) da regra 68, a regra 75, o parágrafo *b*) da regra 77, a regra 78, o parágrafo *b*) da regra 80, os parágrafos *b*) a *g*) da regra 81 e as regras 84 e 85 da presente parte;

c) Qualquer navio cuja quilha tenha sido assente em 26 de Maio de 1965 ou depois dessa data, mas antes da entrada em vigor da presente Convenção, deve cumprir, a menos que cumpra as partes A e B do presente capítulo, as disposições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, relativas a medidas de segurança contra incêndios, aplicáveis em face da referida Convenção a navios novos, e devem cumprir também as disposições dos parágrafos *b*) e *c*) da regra 68, o parágrafo *b*) da regra 80, os parágrafos *b*), *c*) e *d*) da regra 81 e a regra 85 da presente parte.

Regra 66

Estrutura

Os componentes estruturais devem ser de aço ou de outro material apropriado, de acordo com a regra 27 (1948), com excepção das casotas isoladas, onde não existam locais habitados, e dos pavimentos expostos ao tempo, que podem ser de madeira, desde que sob o aspecto estrutural sejam tomadas medidas de prevenção contra incêndios que satisfaçam a Administração.

Regra 67

Zonas verticais principais

O navio deve ser dividido em zonas verticais principais por divisórias da classe A, de acordo com a regra 28 (1948). Estas divisórias devem ter, na medida do possível, um grau de isolamento adequado, tendo em conta a natureza dos espaços adjacentes, tal como é estipulado na alínea *iv*) do parágrafo *c*) da regra 26 (1948).

Regra 68

Aberturas nas anteparas de zonas verticais principais

a) O navio deve cumprir, no essencial, o disposto na regra 29 (1948).

b) As portas contra incêndios devem ser de aço ou de outro material equivalente, com ou sem isolamento incombustível.

c) Os troncos e condutas de ventilação cuja secção tenha uma área de 0,02 m² (31 polegadas quadradas) ou superior e atravessem divisórias de zonas principais devem reger-se pelas seguintes prescrições adicionais:

i) Os troncos e condutas cuja área de secção esteja compreendida entre 0,02 m² (31 polegadas quadradas) e 0,075 m² (116 polegadas quadradas), inclusive, devem ter válvulas de borboleta de fechamento automático contra incêndios e à prova de avarias, ou terem um isolamento de pelo menos 457 mm (18 polegadas) de cada lado da divisória, de modo a cumprir as prescrições aplicáveis às anteparas.

ii) Os troncos e condutas cuja área de secção seja superior a 0,075 m² (116 polegadas quadradas) devem ter válvulas de borboleta de fechamento automático contra incêndios e à prova de avarias.

Regra 69

Separação entre os locais habitados e os locais de máquinas, de carga e de serviço

O navio deve cumprir o disposto na regra 31 (1948).

Regra 70

Aplicação relativa aos métodos I, II e III

Todos os locais habitados e de serviço devem cumprir as disposições estipuladas num dos parágrafos *a*), *b*), *c*) ou *d*) da presente regra:

a) Para que um navio possa ser considerado como aceitável, de acordo com o método I, deve ser provido de uma rede de anteparas incombustíveis da classe B que cumpram no essencial o disposto no parágrafo *a*) da regra 30 (1948), em conjunto com a utilização máxima de materiais não combustíveis de acordo com o parágrafo *a*) da regra 39 (1948);

b) Para que um navio possa ser considerado como aceitável, de acordo com o método II:

i) Deve ser provido de uma instalação automática de água pulverizada sob pressão e de alarme de incêndio, que no essencial cumpra o disposto nas regras 42 e 48 (1948); e

ii) O uso de materiais combustíveis de qualquer espécie deve ser reduzido tanto quanto seja razoável e possível;

c) Para que um navio possa ser considerado como aceitável, de acordo com o método III, deve ter instalada, de pavimento a pavimento, uma rede de anteparas retardadoras de fogo que cumpra no essencial o disposto no parágrafo *b*) da regra 30 (1948) e, além disso, estar equipado com uma instalação automática de detecção de incêndios que no essencial cumpra o disposto na regra 43 (1948). Deve ser limitado o uso de materiais combustíveis e altamente inflamáveis, como está prescrito nos parágrafos *b*) da regra 39, e *g*) da regra 40 (1948). Será concedida dispensa aos requisitos dos parágrafos *b*) da regra 39 e *g*) da regra 40 (1948) se existirem rondas de incêndios e estas forem efectuadas em intervalos de tempo que não excedam os vinte minutos;

d) Para que um navio possa ser considerado como aceitável, de acordo com o método III:

i) Deve ser provido de divisórias adicionais da classe A, dentro dos locais habitados, de modo que o comprimento médio das zonas verticais principais possa ser reduzido em tais locais a uns 20 m (65,5 pés); e

ii) Deve ser provido de uma instalação automática de detecção de incêndios que cumpra, no essencial, o disposto na regra 43 (1948), e

iii) Todas as superfícies expostas e os revestimentos de anteparas de corredores e camarotes, situados em locais habitados, devem ter um pequeno poder de propagação da chama; e

iv) O uso de materiais combustíveis deve ser limitado, como está prescrito no parágrafo *b*) da regra 39 (1948). Poderá ser concedida dispensa dos requisitos do parágrafo *b*) da regra 30 (1948) se existirem rondas de incêndios e estas forem efectuadas em intervalos de tempo que não excedam os vinte minutos; e

v) Deve ter instaladas, de pavimento a pavimento, divisórias adicionais e incombustíveis da classe B que formem uma rede de anteparas retardadoras de fogo dentro das quais a área de qualquer compartimento, excepto locais públicos, não deve exceder em geral 300 m² (3200 pés quadrados).

Regra 71

Protecção de escadas verticais

As escadas devem cumprir o disposto na regra 33 (1948); no entanto, em casos de dificuldade excepcional, a Administração poderá permitir o uso de divisórias e portas incombustíveis da classe B, em vez de divisórias e portas da classe A, para caixas de escada. Além disso, a Administração pode permitir excepcionalmente que se conserve uma escada de madeira sempre que esta estiver protegida por uma instalação fixa de água pulverizada sob pressão e se conserve fechada numa caixa de modo adequado.

Regra 72

Protecção dos ascensores e monta-cargas, troncos verticais de iluminação e ventilação, etc.

O navio deve cumprir o disposto na regra 34 (1948).

Regra 73

Protecção dos postos de segurança

O navio deve cumprir o disposto na regra 35 (1948), excepto quando a disposição ou a construção dos postos de segurança sejam tais que impeçam o pleno cumprimento: por exemplo, se a casa do leme for de madeira, a Administração pode permitir o uso de divisórias incombustíveis amovíveis da classe B com o objectivo de proteger as imediações de tais postos de segurança. Em tais casos, se os espaços situados imediatamente por baixo dos postos de segurança constituírem um grande risco de incêndio, o pavimento que separa tais locais deve ser totalmente isolado, como se fosse uma divisória da classe A.

Regra 74

Protecção de paióis, etc.

O navio deve cumprir o disposto na regra 36 (1948).

Regra 75

Janelas e vigias

Os albóios dos locais de máquinas e de caldeiras devem poder ser fechados do exterior de tais locais.

Regra 76

Sistema de ventilação

a) Toda a ventilação mecânica, excepto a dos locais de carga e de máquinas, deve ter comandos a distância, localizados fora dos locais de máquinas e numa posição facilmente acessível, de modo que para parar todos os ventiladores, que não sejam os dos locais de máquinas e de carga, não seja necessário ir a mais de três postos de comando. Para a ventilação dos locais de máquinas deve existir um comando que possa ser accionado fora dos locais de máquinas.

b) As condutas de extracção dos fogões das cozinhas que atravessem locais habitados devem ter um isolamento eficaz.

Regra 77

Pormenores diversos

a) Os navios devem cumprir o disposto nos parágrafos *a*), *b*) e *f*) da regra 40 (1948), mas o cumprimento indicado na alínea *i*) do parágrafo *c*) da regra 40 (1948) pode passar a ser 20 m (65,5 pés) em vez de 13,73 m (45 pés).

b) As bombas de combustível líquido devem ser equipadas com comandos a distância, situados fora dos locais em que se encontram, de modo que possam ser paradas no caso de se declarar um incêndio em tais locais.

Regra 78

Películas cinematográficas

Não se devem utilizar películas com suporte de nitrocelulose nas instalações cinematográficas de bordo.

Regra 79

Planos

Devem existir planos de acordo com a regra 44 (1948).

Regra 80

Bombas, colectores, bocas e mangueiras de incêndio

a) Deve ser cumprido o disposto na regra 45 (1948).

b) A água de alimentação do colector de incêndio deve estar sempre, na medida do possível, disponível para uso imediato, quer mantendo-a sob pressão ou dispondo de um comando à distância das bombas de incêndio facilmente acessível e de accionamento simples.

Regra 81

Prescrições para a detecção e extinção de incêndios

Generalidades

a) Devem ser cumpridas as disposições dos parágrafos *a*) a *o*), inclusive, da regra 50 (1948), completadas com as prescrições expostas na presente regra.

Serviço de rondas. detecção e comunicações

b) Qualquer membro do serviço de rondas exigido pela presente parte deve ser treinado de modo a familiarizar-se com o arranjo do navio e com a localização e o modo de utilização de qualquer equipamento que possa ter necessidade de usar.

c) Qualquer navio deve ter um dispositivo especial de alarme para a chamada da tripulação, que pode fazer parte do sistema de alarme geral.

d) Deve existir um sistema de altifalantes ou de outros meios de comunicação eficazes instalado em todos os locais habitados, públicos e de serviço.

Locais de máquinas e de caldeiras

e) O número, o tipo e a distribuição dos extintores devem cumprir o disposto nas alíneas *ii*) e *iii*) do parágrafo *g*) e na alínea *ii*) do parágrafo *h*) da regra 64 (1960).

União internacional de ligação à terra

f) Deve ser dado cumprimento ao disposto no parágrafo *d*) da regra 64 (1960).

Equipamento de bombeiro

g) Deve ser dado cumprimento ao disposto no parágrafo *j*) da regra 64 (1960).

Regra 82

Possibilidade de utilização rápida das instalações de extinção de incêndios

Deve ser dado cumprimento ao disposto na regra 66 (1960).

Regra 83

Meios de fuga

Deve ser dado cumprimento ao disposto na regra 54 (1948).

Regra 84

Fonte de energia eléctrica de emergência

Deve ser dado cumprimento ao disposto nos parágrafos *a*), *b*) e *c*) da regra 22 (1948), embora a localização da fonte de energia eléctrica de emergência deva estar de acordo com as prescrições do parágrafo *a*) da regra 25 (1960).

Regra 85

Chamadas e exercícios periódicos

Nos exercícios de combate a incêndios, a que se faz referência na regra 26 do capítulo III da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, será exigido que cada membro da tripulação conheça bem a disposição e as instalações do navio, assim como os seus próprios deveres e o modo de utilização de qualquer equipamento que possa ter necessidade de usar. O comandante deve exigir que a tripulação se familiarize com as suas obrigações e deve instruí-la nesse sentido.

CAPÍTULO III

Meios de salvação, etc.

Regra 1

Aplicação

a) Este capítulo, salvo indicação em contrário, aplica-se como segue aos navios novos que fazem viagens internacionais:

Parte A — Navios de passageiros e navios de carga;
Parte B — Navios de passageiros;
Parte C — Navios de carga.

b) No caso de navios existentes que façam viagens internacionais, cujas quilhas foram assentes ou que a construção se encontre em estado equivalente à data ou depois da data de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, devem observar-se as disposições do capítulo III daquela Convenção, aplicáveis aos navios novos, tais como são definidas naquela Convenção.

c) No caso de navios existentes que façam viagens internacionais, cujas quilhas foram assentes ou que a construção se encontre em estado equivalente antes da data de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, e que não satisfaçam ainda as prescrições do capítulo III daquela Convenção relativas aos navios novos, a Administração determinará quais as diposições, para cada navio, que devem ser tomadas com o fim de assegurar, tanto quanto seja prático e razoável e o mais cedo possível, que as exigências do capítulo III daquela Convenção sejam substancialmente respeitadas. Contudo, o disposto na segunda parte da alínea *i*) do parágrafo *b*) da regra 27 do presente capítulo pode ser aplicado a navios existentes, visados no presente parágrafo, desde que:

i) Sejam respeitadas as disposições das regras 4, 8, 14, 18 e 19 e dos parágrafos *a*) e *b*) da regra 27 do presente capítulo;

ii) As jangadas transportadas de acordo com as disposições do parágrafo *b*) da regra 27 respeitem as exigências da regra 15 ou da regra 16 e ainda da regra 17 do presente capítulo; e

iii) O número total de pessoas a bordo não seja aumentado como consequência da utilização de jan-

gadas pneumáticas, a não ser que o navio esteja plenamente de acordo com os requisitos de:

1) Parte B do capítulo II-1;

2) As alíneas *iii*) e *iv*) do parágrafo *a*) da regra 21 ou da alínea *iii*) do parágrafo *a*) da regra 48 do capítulo II-2, na medida em que sejam aplicáveis; e

3) Os parágrafos *a*), *b*), *e*) e *f*) da regra 29 do presente capítulo.

PARTE A

Disposições gerais

(A parte A aplica-se tanto a navios de passageiros como a navios de carga)

Regra 2

Definições

Para fins de aplicação do presente capítulo:

a) «Viagem internacional curta» designa uma viagem internacional em que o navio não se afasta mais de 200 milhas de um porto ou local onde os passageiros e tripulantes possam ser colocados em segurança e no decurso da qual a distância entre o último porto de escala no país onde a viagem começa e o porto final de destino não ultrapassa 600 milhas.

b) «Jangada pneumática» designa uma jangada que satisfaz às disposições da regra 15 ou da regra 16 do presente capítulo.

c) «Dispositivo de lançamento aprovado» designa um dispositivo aprovado pela Administração e susceptível de colocar na água, a partir do posto de embarque, uma jangada pneumática com a lotação completa que é autorizada a transportar e com o respectivo equipamento.

d) «Tripulante encartado para embarcação salva-vidas» designa qualquer tripulante que possua um certificado de aptidão emitido de acordo com as disposições da regra 32 do presente capítulo.

e) «Balsa» (ou engenho flutuante) designa equipamento flutuante (que não seja embarcação salva-vidas, jangada pneumática, bóia ou colete de salvação) destinado a suportar um número determinado de pessoas mergulhadas na água e de construção tal que mantenha a sua forma e características.

Regra 3

Isenções

a) A Administração, no caso de considerar que a natureza abrigada e as condições da viagem são tais que tornam desnecessária ou não razoável a aplicação de todos os requisitos do presente capítulo, pode, na medida correspondente, deles isentar determinados navios ou classe de navios que, no decurso da sua viagem, se não afastem mais de 20 milhas da terra mais próxima.

b) No caso de navios de passageiros empregados no transporte de grande número de passageiros em tráfegos especiais, como seja o transporte de peregrinos, a Administração pode isentar tais navios, quando pertencentes ao seu país, das exigências do presente capítulo, desde que entenda que tais exigências não são praticáveis e que satisfaçam integralmente as disposições seguintes:

i) Regulamento anexo ao Acordo sobre os Navios de Passageiros Que Efectuem Transportes Especiais, 1971; e

ii) Regulamento anexo ao Protocolo sobre os Locais Habitados a Bordo de Navios de Passageiros Que Efectuem Transportes Especiais, 1973, quando este entrar em vigor.

Regra 4

Condições que devem ser satisfeitas para que as embarcações salva-vidas, as jangadas pneumáticas e as balsas sejam prontamente utilizáveis

a) O princípio geral que regula a instalação das embarcações salva-vidas, jangadas pneumáticas e balsas num navio a que se aplique o presente capítulo é que elas devem ser prontamente utilizáveis em caso de emergência.

b) Para serem prontamente utilizáveis, as embarcações salva-vidas, as jangadas pneumáticas e as balsas devem satisfazer às seguintes condições:

i) Deve ser possível lançá-las à água com segurança e rapidez mesmo em condições desfavoráveis de caimento e com o navio adornado de 15°;

ii) Deve ser possível embarcar nas embarcações salva-vidas e nas jangadas pneumáticas rapidamente e em boa ordem;

iii) A montagem a bordo de cada embarcação salva-vidas, jangada pneumática ou balsa deve ser feita de modo que não estorve a manobra das outras embarcações, jangadas pneumáticas e balsas.

c) Todos os meios de salvação devem ser mantidos em boas condições de utilização e prontos a ser imediatamente utilizados antes que o navio deixe o porto e durante toda a viagem.

Regra 5

Construção das embarcações salva-vidas

a) Todas as embarcações salva-vidas devem ser de boa construção e de formas e proporções tais que lhes garantam ampla estabilidade no mar e suficiente bordo livre quando carregadas com toda a sua lotação de pessoas e equipamento completo. Todas as embarcações salva-vidas devem poder conservar estabilidade positiva quando com água aberta e com lotação e equipamento completos.

b) — *i*) Todas as embarcações salva-vidas devem ser de borda rígida e ter caixas de ar só no interior. A Administração pode aprovar embarcações salva-vidas com cobertura rígida, desde que esta possa ser facilmente aberta tanto do interior como do exterior e não impeça o embarque ou desembarque rápido, o lançamento à água e a manobra da embarcação;

ii) As embarcações salva-vidas a motor podem ser dotadas de um dispositivo, aprovado pela Administração, que proteja a região da proa do embarque de água;

iii) As embarcações salva-vidas não devem ser de comprimento inferior a 7,30 m (24 pés), excepto naqueles navios em que, por motivo das suas dimen-

sões ou por outras razões, a Administração considere o transporte de tais embarcações salva-vidas como não razoável ou impraticável. Em navio algum serão as embarcações salva-vidas de comprimento inferior a 4,90 m (16 pés).

c) Não são autorizadas embarcações salva-vidas cujo peso, com lotação e equipamento completos, exceda 20 300 kg (20 t inglesas) ou cuja lotação, calculada de acordo com as disposições da regra 7 do presente capítulo, ultrapasse 150 pessoas.

d) Toda a embarcação salva-vidas autorizada a transportar mais de 60 pessoas, mas não mais de 100, deve ser uma embarcação a motor e estar de acordo com as disposições da regra 9 do presente capítulo ou ser uma embarcação provida de meios aprovados de propulsão mecânica que obedeçam às disposições da regra 10 do presente capítulo. Toda a embarcação salva-vidas autorizada a transportar mais de 100 pessoas deve ser uma embarcação a motor e satisfazer às prescrições da regra 9 do presente capítulo.

e) Toda a embarcação salva-vidas deve ser de robustez suficiente para permitir ser arriada para a água com segurança quando com plena carga de pessoas e equipamento. Toda a embarcação salva-vidas deve ser de robustez suficiente para garantir que não haverá deformação permanente depois de uma prova de carga completa aumentada de 25%.

f) Toda a embarcação salva-vidas deve ter um tosado médio igual a, pelo menos, 4% do seu comprimento. O tosado deve ser de forma próxima da parabólica.

g) Numa embarcação salva-vidas autorizada a transportar 100 ou mais pessoas, o volume das caixas de ar deve ser aumentado de forma considerada satisfatória pela Administração.

h) Toda a embarcação salva-vidas deve possuir flutuabilidade própria suficiente ou ser equipada com caixas de ar estanques ou com outros flutuadores, constituídos por materiais resistentes à corrosão e de flutuabilidade equivalente à das caixas de ar, que não sejam afectados pelos hidrocarbonetos e que permitam manter à superfície a embarcação e o seu equipamento quando com água aberta. Deve existir ainda um suplemento de caixas de ar de outros flutuadores, constituídos por materiais resistentes à corrosão, de uma flutuabilidade equivalente à das caixas de ar que não sejam atacados pelos hidrocarbonetos e com um volume igual a, pelo menos, um décimo da capacidade cúbica da embarcação. A Administração pode igualmente autorizar caixas de ar estanques cheias de um material flutuante resistente à corrosão e que não seja afectado pelos hidrocarbonetos.

i) Os bancos e as bancadas devem ser instalados o mais baixo possível na embarcação.

j) Todas as embarcações salva-vidas, com excepção das construídas de madeira, devem ter um coeficiente de finura não inferior a 0,64, medido em conformidade com as disposições da regra 6 do presente capítulo. Uma embarcação poderá ter um coeficiente de finura inferior a 0,64, desde que a Administração considere como suficiente a altura metacêntrica e o seu bordo livre quando a embarcação estiver carregada com plena carga de pessoas e equipamento.

Regra 6

Capacidade cúbica das embarcações salva-vidas

a) A capacidade cúbica de uma embarcação salva-vidas deve ser calculada por meio da regra de Simpson (Stirling) ou por qualquer outro método que dê o mesmo grau de precisão. A capacidade de uma embarcação com popa de painel deve ser calculada como se fosse uma baleeira.

b) A título de exemplo, a capacidade cúbica de uma embarcação salva-vidas, calculada pela regra de Simpson, em metros cúbicos (ou pés cúbicos), pode ser considerada como dada pela fórmula seguinte:

$$\text{Capacidade} = \frac{L}{12}\ (4A + 2B + 4C)$$

onde L é o comprimento da embarcação salva-vidas em metros (ou pés), medido desde a face interna do tabuado ou das chapas do costado, junto à roda, até ao ponto correspondente do cadaste; no caso de embarcação com popa de painel, o comprimento será medido até à face interna do painel.

A, B e C designam, respectivamente, as áreas das secções transversais a um quarto de comprimento a vante, a meio comprimento e a um quarto de comprimento a ré, que correspondem aos três pontos que se obtêm dividindo L em quatro partes iguais (as áreas correspondentes às duas extremidades da embarcação são consideradas de valor desprezível).

As áreas A, B e C devem ser consideradas como sendo dadas em metros quadrados (ou pés quadrados) pela aplicação sucessiva da fórmula seguinte a cada uma das três secções transversais:

$$\text{Área} = \frac{h}{12}\ (a + 4b + 2c + 4d + e)$$

onde h é o pontal, medido em metros (ou pés), desde a face interna do rebordão junto à quilha até à face superior do alcatrate ou, em certos casos, até um nível mais baixo, como está determinado mais adiante; a, b, c, d e e designam as bocaduras da embarcação salva-vidas, medidas em metros (ou pés) ao nível dos pontos mais alto e mais baixo do pontal, e de três pontos obtidos dividindo h em quatro partes iguais (a e e são as bocaduras nas extremidades do pontal e c a bocadura a meio pontal).

c) Se o tosado do alcatrate, medido em dois pontos situados a um quarto do comprimento a partir dos extremos, excede 1% do comprimento da embarcação salva-vidas, o pontal empregado para o cálculo das áreas das secções A ou C deve ser tomado como igual ao pontal a meio, acrescido de 1% do comprimento da embarcação salva-vidas.

d) Se o pontal a meio da embarcação salva-vidas excede 45% da boca, o pontal a empregar no cálculo da área da secção transversal a meio B deve ser tomado igual a 45% da boca e o pontal para o cálculo das áreas das secções a um quarto do comprimento A e C é obtido acrescentando a 45% da boca 1% do comprimento da embarcação salva-vidas, não devendo, contudo, em caso algum, os valores do pontal assim obtidos ser superiores aos pontais reais naqueles pontos.

e) Se o pontal da embarcação salva-vidas é superior a 1,22 m (4 pés), o número de pessoas dado pela aplicação da presente regra deve ser reduzido na proporção da relação de 1,22 m (4 pés) para o

pontal real até que a embarcação salva-vidas seja submetida, com resultados satisfatórios, a uma prova, flutuando com aquele número de pessoas a bordo, todas elas envergando os coletes de salvação.

f) A Administração deve impor, por meio de fórmula apropriada, um limite para o número de pessoas que pode ser transportado em embarcações salva-vidas com os extremos muito finos ou naquelas cujas formas forem muito cheias.

g) A Administração pode fixar para uma embarcação salva-vidas de tabuado trincado uma capacidade igual ao produto do comprimento pela boca e pelo pontal, multiplicado por 0,6, desde que seja evidente que o emprego desta fórmula não dá capacidade maior do que aquela obtida pelo emprego do método anteriormente indicado. As dimensões, neste caso, devem ser medidas do seguinte modo:

Comprimento — Desde a interseção da face exterior do tabuado do casco com a roda até ao ponto correspondente no cadaste, ou, no caso de embarcações de painel, até à face externa deste;

Boca — Entre as faces exteriores do tabuado do casco, no ponto em que a boca da embarcação é maior;

Pontal — A meio comprimento da embarcação, desde a face interna do tabuado junto à quilha até ao nível do topo superior do alcatrate, não devendo, contudo, em caso algum, o pontal empregado para o cálculo da capacidade cúbica ser superior a 45% da boca.

O armador tem sempre o direito de exigir que a capacidade cúbica das embarcações salva-vidas seja obtida por método exacto.

h) A capacidade cúbica de uma embarcação salva-vidas a motor ou de uma embarcação salva-vidas com outro dispositivo mecânico de propulsão obtém-se deduzindo da capacidade total da embarcação o volume do espaço ocupado pelo motor e respectivos acessórios ou pela caixa de engrenagens do outro dispositivo mecânico de propulsão e, quando for o caso, pela instalação radiotelegráfica e pelo projector e respectivos acessórios.

Regra 7

Lotação das embarcações salva-vidas

O número de pessoas que uma embarcação salva-vidas é autorizada a transportar é igual ao maior número inteiro obtido dividindo a capacidade da embarcação em metros cúbicos por:

0,283 (ou por 10, se a sua capacidade for medida em pés cúbicos) — no caso de embarcações salva-vidas com um comprimento de 7,3 m (24 pés) ou mais;

0,396 (ou por 14, se a sua capacidade for medida em pés cúbicos) — no caso de embarcações salva-vidas com um comprimento de 4,90 m (16 pés);

Um número compreendido entre 0,396 e 0,283 (ou por um número compreendido entre 14 e 10, se a sua capacidade for medida em pés cúbicos), que se obterá por interpolação — no caso de embarcações salva-vidas com um comprimento superior a 4,9 m (16 pés), mas inferior a 7,3 m (24 pés);

com a condição de esse número não exceder o número de adultos envergando coletes de salvação para que exista lugar sentado sem que, de qualquer forma, estorvem a manobra de remos ou o funcionamento de qualquer outro sistema de propulsão.

Regra 8

Número de embarcações salva-vidas a motor que deve existir a bordo dos navios

a) Cada navio de passageiros deve possuir, por bordo, pelo menos uma embarcação salva-vidas a motor satisfazendo às disposições da regra 9 do presente capítulo.

No entanto, quando o número total dos passageiros que o navio é autorizado a transportar, adicionado do número de tripulantes, não ultrapassa 30 pessoas, bastará uma única embarcação a motor.

b) Cada navio de carga de 1600 t de arqueação bruta ou mais, com excepção dos navios-tanques, dos navios utilizados como navios-fábricas na pesca da baleia, dos navios empregados na transformação e conserva dos produtos da pesca e dos navios de transporte de pessoal empregado nestas indústrias, deve possuir, pelo menos, uma embarcação salva-vidas a motor satisfazendo às disposições da regra 9 do presente capítulo.

c) Cada navio-tanque de 1600 t ou mais de arqueação bruta, cada navio empregado como navio-fábrica na pesca da baleia, cada navio empregado na transformação e na conservação dos produtos da pesca e cada navio de transporte de pessoal empregado nestas indústrias deve ter a cada bordo, pelo menos, uma embarcação salva-vidas a motor satisfazendo às disposições da regra 9 do presente capítulo.

Regra 9

Especificação das embarcações salva-vidas a motor

a) Uma embarcação salva-vidas a motor deve obedecer às seguintes condições:

i) Deve ser equipada com um motor de combustão interna e mantida permanentemente pronta para uso; deve poder ser posta em funcionamento rapidamente em quaisquer que sejam as circunstâncias; deve transportar combustível suficiente para vinte e quatro horas de marcha contínua, à velocidade indicada na alínea *iii*) do presente parágrafo;

ii) O motor e respectivos acessórios devem ser convenientemente protegidos para assegurar o funcionamento em condições de tempo desfavoráveis e a cobertura do motor deve ser resistente ao fogo. Deve existir dispositivo que permita a marcha a ré;

iii) A velocidade em marcha a vante em água calma, com lotação e equipamento completos, deve ser:

1) Pelo menos 6 nós no caso das embarcações salva-vidas a motor exigidas pela regra 8 do presente capítulo, para os navios de passageiros e navios-tanques, os navios utilizados como navios-fábricas

na pesca da baleia, os navios empregados na transformação e conserva dos produtos da pesca, os navios de transporte do pessoal empregado nestas indústrias;

2) Pelo menos 4 nós, no caso de todas as outras embarcações salva-vidas a motor.

b) O volume das caixas-de-ar de uma embarcação salva-vidas a motor deve ser aumentado, em relação ao prescrito na regra 5 do presente capítulo, do excesso, quando existir, entre o volume correspondente às caixas-de-ar necessárias para manter à superfície o motor e os seus acessórios e, quando for o caso, o projector, a instalação radiotelegráfica e respectivos acessórios e o volume, calculado à razão de 0,0283 m^3 (1 pé cúbico) por pessoa, correspondente ao número de pessoas suplementares que a embarcação poderia receber se o motor, os seus acessórios e, quando for o caso, o projector, a instalação radiotelegráfica e seus acessórios forem suprimidos.

Regra 10

Especificação das embarcações salva-vidas de propulsão mecânica que não sejam embarcações salva-vidas a motor

Uma embarcação salva-vidas de propulsão mecânica que não seja uma embarcação salva-vidas a motor deve satisfazer as seguintes condições:

a) O aparelho de propulsão deve ser de tipo aprovado e deve ter potência suficiente para permitir à embarcação salva-vidas afastar-se prontamente do navio quando for colocada na água e ainda manter o rumo em condições de tempo desfavoráveis. Se o aparelho de propulsão for accionado manualmente, este deve ser tal que possa ser manobrado por pessoas que não tenham experiência do seu uso e deve poder igualmente ser manobrado quando a embarcação salva-vidas estiver cheia de água;

b) Deve prever-se um dispositivo que permita ao homem do leme da embarcação salva-vidas fazer marcha a ré em qualquer momento com o sistema propulsor em funcionamento;

c) O volume dos flutuadores internos (caixas-de-ar) das embarcações salva-vidas de propulsão mecânica que não sejam embarcações salva-vidas a motor será aumentado de maneira a compensar o peso do aparelho de propulsão.

Regra 11

Equipamento das embarcações salva-vidas

a) O equipamento normal de cada embarcação salva-vidas, será o seguinte:

i) Um número suficiente de remos de voga, dois remos sobresselentes e um remo de esparrela; um jogo e meio de toletes ou forquetas, ligados à embarcação por fiel de corrente ou de fio; um croque;

ii) Dois bujões para cada bueira (não serão exigidos bujões quando as bueiras sejam providas de válvulas automáticas apropriadas), ligados à embarcação por fiel de corrente ou de fio; um vertedouro e dois baldes, de material aprovado;

iii) Um leme, ligado à embarcação por fiel, e uma cana de leme;

iv) Duas machadinhas, uma em cada extremidade da embarcação salva-vidas;

v) Um farol com petróleo suficiente para doze horas; duas caixas de fósforos apropriados, contidos num recipiente estanque;

vi) Um mastro ou mastros, com estais de cabo de aço galvanizado e com velas (de cor alaranjada);

vii) Uma agulha de marear eficiente montada numa bitácula luminosa ou provida de meios convenientes de iluminação;

viii) Uma linha de salvação, com seios, em torno da face externa da embarcação salva-vidas;

ix) Uma âncora flutuante, de tamanho aprovado;

x) Duas boças de comprimento suficiente; uma delas deve ser ligada à extremidade de vante da embarcação por meio de estropo e cavirão, de modo que possa ser solta, e a outra deve estar solidamente ligada à roda de proa e pronta para uso;

xi) Um recipiente contendo 4,5 l (1 galão inglês) de óleo vegetal, de peixe ou animal; o recipiente deve ser tal que permita espalhar facilmente o óleo sobre a água e que possa ser ligado à âncora flutuante;

xii) Uma ração alimentar, fixada pela Administração, para cada pessoa que a embarcação seja autorizada a transportar. Estas rações devem ser conservadas em recipientes estanques ao ar, os quais, por sua vez, serão introduzidos noutros estanques à água;

xiii) Recipientes estanques à água contendo 3 l (6 *pints*) de água doce por cada pessoa que a embarcação esteja autorizada a transportar ou recipientes estanques à água contendo 2 l (4 *pints*) de água doce por cada pessoa, assim como um aparelho de dessalinização capaz de fornecer 1 l (2 *pints*) de água potável por pessoa; um copo graduado de material inoxidável; um argau inoxidável fixado por fiel;

xiv) Quatro sinais com pára-quedas, de um tipo aprovado, capazes de produzir uma luz vermelha brilhante numa alta altitude; seis fachos de mão, de tipo aprovado, produzindo uma luz vermelha brilhante;

xv) Dois sinais fumígenos flutuantes, de tipo aprovado (para uso durante o dia), capazes de produzir uma quantidade apreciável de fumo de cor alaranjada;

xvi) Dispositivos de tipo aprovado que permitam às pessoas agarrar-se à embarcação no caso de ela se virar, sob a forma de robaletes ou de quilhas laterais, juntamente com linhas passando sob a quilha e ligadas aos alcatrates de um e de outro bordo, ou outros dispositivos aprovados;

xvii) Uma caixa estanque de primeiros socorros, de tipo aprovado;

xviii) Uma lanterna eléctrica estanque que possa ser utilizada para emissão de sinais morse com um jogo de pilhas de reserva e uma lâmpada de reserva, num recipiente estanque à água;

xix) Um espelho de sinalização, de tipo aprovado, para ser utilizado durante o dia;

xx) Uma navalha com abre-latas, ligada à embarcação por fiel;

xxi) Duas retenidas ligeiras flutuantes;

xxii) Uma bomba de esgoto, manual, de tipo aprovado;

xxiii) Uma caixa conveniente para arrecadação de pequeno material de equipamento;

xxiv) Um apito ou um sinal acústico equivalente;

xxv) Um jogo de apetrechos de pesca;

xxvi) Uma cobertura, de modelo aprovado e de uma cor muito visível, que proteja os passageiros contra a intempérie;

xxvii) Um exemplar do quadro de sinais de salvamento mencionado na regra 16 do capítulo V.

b) No caso de navios que efectuem viagens de duração tal que, na opinião da Administração interessada, sejam considerados supérfluos os artigos mencionados nas alíneas *vi*), *xii*), *xix*), *xx*) e *xxv*) do parágrafo *a*) da presente regra, a Administração pode dispensar tais navios do transporte daqueles artigos.

c) Apesar das determinações do parágrafo *a*) da presente regra, as embarcações salva-vidas com motor ou com outros meios aprovados de propulsão mecânica não são obrigadas a ter mastro ou velas ou mais de metade do equipamento de remos, mas devem ter dois croques.

d) Todas as embarcações salva-vidas devem possuir dispositivos convenientes que permitam a uma pessoa que se encontre na água subir para a embarcação salva-vidas.

e) Toda a embarcação salva-vidas a motor deve ter a bordo um extintor portátil de incêndio, de modelo aprovado, que possa projectar espuma ou qualquer outro produto capaz de extinguir um incêndio provocado pela inflamação de combustível.

Regra 12

Manutenção em boa ordem do material de equipamento das embarcações salva-vidas

Todo o material de equipamento das embarcações salva-vidas que não seja contido em caixas, com excepção do croque, que deve estar sempre pronto para aguentar a embarcação, deve estar convenientemente peado dentro dela. As peias devem estar dispostas de modo que assegurem a manutenção nos seus lugares das diferentes peças do equipamento e não interfiram com os gatos da embarcação ou o acesso fácil às mesmas. Todo o material de equipamento deve ser de dimensões e de peso tão reduzidos quanto possível e deve ser embalado de maneira apropriada e sob uma forma compacta.

Regra 13

Equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas

a) Todos os navios, à excepção dos que possuam a cada bordo uma embarcação salva-vidas a motor equipada com uma instalação radiotelegráfica que satisfaça às prescrições da regra 14 do presente capítulo e da regra 13 do capítulo IV, devem ser munidos de um equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, de tipo aprovado e que satisfaça as prescrições da regra 14 do capítulo IV. Todo este equipamento deve ser conservado na casa de navegação ou em qualquer outro local conveniente e pronto a ser transportado em qualquer das embarcações salva-vidas em caso de emergência. Contudo, nos navios-tanques de 3000 t ou mais de arqueação bruta, sobre os quais as embarcações salva-vidas são fixadas a meio e à popa, este equipamento deve ser conservado em lugar conveniente, na proximidade das embarcações salva-vidas mais afastadas do emissor principal do navio.

b) No caso de navios efectuando viagens de duração tal que, na opinião da Administração, seja desnecessário o emprego do equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, pode este ser dispensado pela Administração.

Regra 14

Instalação radiotelegráfica e projectores das embarcações salva-vidas com motor

a) — *i*) Quando o número total de pessoas a bordo de um navio de passageiros que efectue viagens internacionais que não sejam viagens internacionais curtas, de um navio empregado como navio-fábrica na pesca da baleia, de um navio-fábrica para a transformação ou conservação dos produtos da pesca ou de um navio afecto ao transporte do pessoal empregado nestas indústrias, é superior a 199 mas inferior a 1500, pelo menos uma das embarcações salva-vidas a motor prescritas na regra 8 do presente capítulo deverá ter uma instalação radiotelegráfica que satisfaça as prescrições da presente regra e da regra 13 do capítulo IV;

ii) Quando o número total de pessoas a bordo deste navio é igual ou superior a 1500, esta instalação radiotelegráfica deverá ser montada a bordo de cada embarcação salva-vidas com motor de que este navio deve ser provido segundo as prescrições da regra 8 do presente capítulo.

b) O equipamento radiotelegráfico deve ser instalado numa cabina suficientemente grande para conter, ao mesmo tempo, o aparelho e o operador.

c) Devem tomar-se as necessárias medidas para que o funcionamento do emissor e do receptor não seja prejudicado pelo funcionamento do motor, quer a bateria esteja à carga, quer não.

d) A bateria da instalação radiotelegráfica não deve ser utilizada para alimentar qualquer dispositivo de arranque do motor ou sistema de ignição.

e) O motor da embarcação salva-vidas deve ser equipado com um dínamo para a carga da bateria da instalação radiotelegráfica e para outros fins.

f) Deve haver um projector em cada embarcação salva-vidas com motor que, nos termos do parágrafo *a*) da regra 8 do presente capítulo, deve existir nos navios de passageiros e, nos termos do parágrafo *c*) da referida regra, nos navios-fábricas utilizados na pesca da baleia ou na transformação ou conservação dos produtos da pesca e nos navios destinados a transportar o pessoal empregado nestas indústrias.

g) O projector deve possuir uma lâmpada de, pelo menos, 80 W, um reflector eficaz e uma fonte de energia que permita iluminar eficazmente um objecto de cor clara de um tamanho de cerca de 18 m (60 pés) a uma distância de 180 m (200 jardas) durante um período total de seis horas e poder funcionar durante, pelo menos, três horas consecutivas.

Regra 15

Prescrições relativas às jangadas salva-vidas de tipo pneumático

a) Toda a jangada salva-vidas de tipo pneumático deve ser construída de forma tal que, totalmente insuflada e flutuando com a cobertura levantada, seja estável no mar alto.

b) A jangada salva-vidas de tipo pneumático deverá ser construída de tal forma que, lançada à água de uma altura de 18 m (60 pés), não sofram avarias tanto a jangada como o seu equipamento. Se a jangada salva-vidas estiver colocada a uma altura superior a 18 m (60 pés), deve ser de um tipo tal que satisfaça num teste de lançamento à água pelo menos da altura a que fica colocada a bordo.

c) A jangada salva-vidas de tipo pneumático deverá ser provida de uma cobertura que se coloque automaticamente em posição quando a jangada é insuflada. Esta cobertura deve proteger os ocupantes contra a intempérie e deve ter um dispositivo que permita a recolha da água da chuva. A cobertura deve ser provida de duas lâmpadas alimentadas por uma célula activada pela água do mar, sendo uma delas montada no interior e a outra no exterior, na parte mais elevada. A cobertura da jangada deve ser de uma cor muito visível.

d) A jangada salva-vidas de tipo pneumático deve ter uma boça e uma linha de salvação, com seios, fixadas exteriormente. Deve também ter uma linha de salvação fixada interiormente.

e) A jangada salva-vidas de tipo pneumático, depois de cheia, deve poder ser facilmente voltada por uma só pessoa, se, por acaso, cair invertida na água.

f) A jangada salva-vidas de tipo pneumático deve ser provida, junto de cada abertura, de meios eficientes que permitam às pessoas na água subir para bordo.

g) A jangada salva-vidas de tipo pneumático deve ser mantida numa mala ou outro invólucro, construídos de forma a resistirem às severas condições de utilização a que podem estar sujeitos no mar. O conjunto formado pela jangada e respectiva mala ou invólucro deve ter flutuabilidade positiva.

h) A flutuabilidade da jangada salva-vidas de tipo pneumático deve ser tal que garanta uma margem razoável de flutuabilidade se a jangada for danificada ou se se encher apenas parcialmente. Para tanto, deverá a parte insuflável da jangada ser dividida num certo número de compartimentos, metade dos quais seja suficiente para sustentar fora da água o número de pessoas que a jangada é autorizada a transportar, ou deverá adoptar-se qualquer outro processo eficaz.

i) O peso total da jangada salva-vidas de tipo pneumático, com a respectiva mala ou outro recipiente e equipamento, não deve ultrapassar 180 kg (400 libras inglesas).

j) O número de pessoas que uma jangada salva-vidas de tipo pneumático é autorizada a transportar é igual ao menor dos dois números seguintes:

i) O maior número inteiro obtido dividindo por 96 o volume medido em decímetros cúbicos (ou por 3,4 o volume medido em pés cúbicos) das câmaras-de-ar principais, depois de insufladas. Para este efeito, não se incluirá o volume dos arcos, nem o do banco ou bancos, quando existam;

ii) O maior número inteiro obtido dividindo por 3,720 a área medida em centímetros quadrados (ou por 4 a superfície medida em pés quadrados) do pavimento da jangada, uma vez insuflada. Para efeito deste cálculo, poderá a referida área compreender a do banco ou bancos, quando existam.

k) O pavimento da jangada salva-vidas de tipo pneumático deve ser impermeável à água e suficientemente isolado do frio.

l) A jangada salva-vidas de tipo pneumático deve ser insuflada por meio de um gás que não seja nocivo para os ocupantes e a insuflagem deve fazer-se automaticamente, puxando por um cabo ou por outro dispositivo igualmente simples e ficaz. Devem tomar-se providências com vista a permitir a utilização de foles ou de bombas de enchimento previstos pela regra 17 do presente capítulo para manter a pressão.

m) A jangada salva-vidas de tipo pneumático deve ser de material e de construção aprovados e deve ser contruída de maneira a poder resistir à intempérie durante trinta dias, flutuando, qualquer que seja o estado do mar.

n) Não deve ser aprovada jangada salva-vidas de tipo pneumático cuja capacidade, calculada de acordo com as disposições do parágrafo *j*) da presente regra, seja inferior a seis pessoas. O número máximo de pessoas, calculado de acordo com as disposições do refeido parágrafo, que uma jangada poderá transportar fica ao critério da Administração, mas não deve, em qualquer caso, exceder vinte e cinco.

o) A jangada salva-vidas de tipo pneumático deve poder funcionar numa gama de temperaturas compreendida entre —30°C e +66°C (—22°F e +150°F).

p) — *i*) A jangada salva-vidas de tipo pneumático deve ser colocada a bordo de maneira que se possa utilizar facilmente em caso de sinistro. A colocação deverá permitir livrar-se, flutuando, do seu dispositivo de fixação, insuflando-se e libertando-se do navio em caso de naufrágio;

ii) Os aparelhos de amarração das jangadas salva-vidas devem possuir um dispositivo automático de libertação do tipo hidrostático ou de outro tipo equivalente aprovado pela Administração;

iii) As jangadas salva-vidas de tipo pneumático prescritas no parágrafo *c*) da regra 35 do presente capítulo podem estar solidamente amarradas.

q) A jangada salva-vidas de tipo pneumático deve ser munida de dispositivos que permitam um reboque fácil.

Regra 16

Prescrições relativas às jangadas salva-vidas de tipo rígido

a) As jangadas salva-vidas de tipo rígido devem ser construídas de tal forma que possam ser atiradas à água do respectivo local em que estiverem colocadas sem que sofram avarias. O mesmo deve acontecer em relação ao seu equipamento.

b) O pavimento da jangada salva-vidas de tipo rígido deve ser localizado na parte desta que permitir maior protecção para os respectivos ocupantes. A

área do pavimento deve ser de, pelo menos, 0,372 m² (4 pés quadrados) por cada pessoa que a jangada é autorizada a transportar. O pavimento deve ser de natureza tal que impeça, na medida do possível, a penetração de água, devendo as pessoas transportadas sê-lo efectivamente fora da água.

c) A jangada salva-vidas do tipo rígido deve ter uma cobertura ou um dispositivo semelhante de cor muito visível e capaz de proteger os ocupantes contra a intempérie, quer a jangada flutue de um lado, quer do outro.

d) O equipamento da jangada salva-vidas de tipo rígido deve ser estivado de tal maneira que seja facilmente acessivel, quer a jangada flutue de um lado, quer do outro.

e) O peso total de uma jangada salva-vidas de tipo rígido com o respectivo equipamento, transportada em navio de passageiros, não poderá exceder 180 kg (400 libras inglesas). O peso das jangadas transportadas em navios de carga pode exceder 180 kg (400 libras inglesas) se for possível lançá-las por um e outro bordo ou se existir dispositivo mecânico que permita colocá-las na água.

f) A jangada salva-vidas de tipo rígido deve ser sempre eficiente e estável, quer flutue de um lado, quer do outro.

g) A jangada salva-vidas de tipo rígido deverá ter, pelo menos, 96 dm³ (3,4 pés cúbicos) de caixas-de-ar, ou dispositivos de flutuabilidade, equivalente, por cada pessoa que a jangada é autorizada a transportar, devendo as referidas caixas-de-ar (ou dispositivo equivalente) ser localizadas tão perto quanto possível da periferia da jangada.

h) A jangada salva-vidas de tipo rígido deve ter uma boça a ela ligada solidamente e uma linha de salvação, com seios, fixada exteriormente, na periferia. Deverá haver também uma linha de salvação a toda a volta da jangada, no seu interior.

i) Deverá haver junto de cada abertura da jangada salva-vidas de tipo rígido dispositivo eficiente que permita às pessoas na água subirem para ela.

j) A jangada salva-vidas de tipo rígido deve ser construida por forma a não ser atacada pelos hidrocarbonetos.

k) Deve ser ligada à jangada salva-vidas de tipo rígido, por meio de fiel. uma luz flutuante do tipo de bateria eléctrica.

l) A jangada salva-vidas de tipo rígido deve ter dispositivos que permitam um fácil reboque.

m) As jangadas devem ser colocadas de forma a flutuarem livremente no caso de afundamento do navio.

Regra 17

Equipamento das jangadas salva-vidas dos tipos pneumático e rígido

a) O equipamento normal de cada jangada compreenderá:

i) Uma bóia de salvação ligada a, pelo menos, 30 m (100 pés) de retenida flutuante;

ii) Nas jangadas autorizadas a transportar um número de pessoas igual ou inferior a doze: uma navalha e um vertedouro. Para jangadas autorizadas a transportar um número de pessoas igual ou superior a treze: duas navalhas e dois vertedouros;

iii) Duas esponjas;

iv) Duas âncoras flutuantes, uma das quais ligada permanentemente à jangada e uma sobresselente;

v) Dois remos;

vi) Um jogo de ferramentas que permita reparar perfurações nos compartimentos que asseguram a flutuabilidade;

vii) Uma bomba de ar de enchimento ou um fole, a menos que a jangada obedeça às disposições da regra 16 do presente capítulo;

viii) Três abre-latas;

ix) Uma ambulância para primeiros socorros, de tipo aprovado, numa caixa estanque;

x) Um copo graduado e inoxidável;

xi) Uma lanterna eléctrica estanque susceptível de ser utilizada para sinais morse e, numa caixa estanque, um jogo de pilhas e uma lâmpada sobresselentes;

xii) Um espelho de sinalização e um apito;

xiii) Dois sinais de socorro, com pára-quedas, de tipo aprovado, capazes de fornecer uma luz vermelha brilhante a grande altura;

xiv) Seis fachos de mão, de tipo aprovado, de luz vermelha brilhante;

xv) Um jogo de apetrechos de pesca;

xvi) Uma ração alimentar, fixada pela Administração, por cada pessoa que a jangada seja autorizada a transportar;

xvii) Recipientes estanques contendo 1,5 l (3 *pints*) de água doce por cada pessoa que a jangada seja autorizada a transportar, podendo substituir-se 0,5 l (1 *pint*), por pessoa, por um aparelho de dessalinização capaz de produzir a mesma quantidade de água doce;

xviii) Seis pastilhas contra o enjoo por cada pessoa que a jangada seja autorizada a transportar;

xix) Instruções relativas à sobrevivência a bordo das jangadas;

xx) Um exemplar do quadro ilustrado dos sinais de salvação referidos na regra 16 do capítulo V.

b) No caso de navios de passageiros efectuando viagens internacionais curtas de uma duração tal que, na opinião da Administração, todos os artigos especificados no parágrafo *a*) da presente regra sejam considerados supérfluos, a Administração pode autorizar que uma ou várias jangadas salva-vidas de tipo pneumático, constituindo, pelo menos, um sexto do número de jangadas transportadas nos referidos navios, sejam providas do equipamento especificado nas alíneas *i*) a *vii*), inclusive, *xi*) e *xix*) do parágrafo *a*) da presente regra e de metade do equipamento especificado nas alíneas *xiii*) e *xiv*) do mesmo parágrafo; as restantes jangadas embarcadas devem ser providas do equipamento especificado nas alíneas *i*) a *vii*), inclusive, e *xix*) do parágrafo referido.

Regra 18

Treino no uso de jangadas

Na medida do possível e do razoável, a Administração deve tomar as providências necessárias para assegurar que nos navios dotados de jangadas salva-vidas a tripulação seja treinada sobre a sua colocação na água e utilização.

Regra 19

Acesso às embarcações e às jangadas salva-vidas

a) Devem ser previstos dispositivos convenientes para permitir o acesso às embarcações; estes dispositivos compreenderão:

i) Uma escada, para cada par de turcos, permitindo o acesso às embarcações quando elas estejam na água; contudo, nos navios de passageiros, nos navios-fábricas utilizados na pesca da baleia, nos navios-fábricas destinados à transformação e conservação dos produtos da pesca e nos navios utilizados para o transporte das pessoas empregadas nestas indústrias, a Administração pode autorizar a substituição destas escadas por dispositivos aprovados, com a condição de que não haja menos de uma escada a cada bordo do navio;

ii) Meios que permitam a iluminação das embarcações, dos respectivos dispositivos de colocação na água e, depois, na própria água, desde que se inicia a preparação até se completar o processo de colocação na água;

iii) Dispositivos de alarme que permitam avisar os passageiros e a tripulação de que o navio deve ser abandonado; e

iv) Dispositivos que evitem a descarga de água para as embarcações.

b) Devem igualmente ser previstos dispositivos convenientes para permitir o acesso às jangadas; estes dispositivos compreenderão:

i) Um número suficiente de escadas que facilitem o acesso às jangadas quando elas se encontrem na água; contudo, nos navios de passageiros, nos navios-fábricas da pesca da baleia, nos navios-fábricas para a transformação e conservação dos produtos da pesca e nos navios utilizados no transporte de pessoas empregadas nestas indústrias, a Administração pode autorizar a substituição das escadas, no todo ou em parte, por dispositivos aprovados;

ii) Nos casos em que sejam previstos dispositivos de colocação na água das jangadas, deverão prever-se meios apropriados de iluminação daqueles dispositivos, das jangadas correspondentes e da própria zona da água aonde são lançadas, desde que se inicia a preparação até se completar o processo de colocação na água;

iii) Meios de iluminação do local onde se encontram as jangadas que não possuam meios aprovados de colocação na água;

iv) Dispositivos de alarme que permitam avisar os passageiros e a tripulação de que o navio deve ser abandonado; e

v) Dispositivos que evitem a descarga de água para as jangadas nas disposições fixadas para o lançamento, incluindo as que correspondem aos dispositivos aprovados de colocação na água.

Regra 20

Inscrições nas embarcações, jangadas e balsas

a) As dimensões da embarcação salva-vidas, assim como o número de pessoas que ela é autorizada a transportar, devem ser inscritos na embarcação em caracteres indeléveis e de leitura fácil. O nome do navio a que pertence a embarcação salva-vidas e o respectivo porto de registo devem ser pintados, a vante, a um e outro bordo.

b) Nas balsas deverá ser inscrito, da mesma forma, o número de pessoas que podem transportar.

c) O número de pessoas será inscrito, da mesma forma, nas jangadas salva-vidas de tipo pneumático e na respectiva mala ou outro invólucro. Cada jangada salva-vidas de tipo pneumático deve ter igualmente marcado um número de série e o nome do construtor, de maneira a ser possível determinar qual o proprietário da jangada.

d) Deverá inscrever-se em cada jangada salva-vidas de tipo rígido o nome do navio a que ela pertence e respectivo porto de registo, assim como o número de pessoas que ela é autorizada a transportar.

e) Nunca deve inscrever-se numa embarcação, jangada ou balsa um número de pessoas maior do que aquele que é obtido pela aplicação das regras do presente capítulo.

Regra 21

Características das bóias de salvação

a) Uma bóia de salvação deve obedecer às seguintes condições:

i) Ser de cortiça maciça ou de qualquer outro material equivalente;

ii) Poder flutuar, em água doce, durante 24 horas com um peso de ferro de, pelo menos, 14,5 kg (32 libras inglesas);

iii) Não ser atacada pelos hidrocarbonetos;

iv) Ser de cor muito visível;

v) Ter marcado, em letras maiúsculas, o nome do navio a que pertence e o respectivo porto de registo.

b) É proibido o uso de bóias de salvação cheias de junco, de aparas de cortiça, de cortiça granulada ou de qualquer outro material granulado solto ou cuja flutuabilidade dependa de câmaras que tenham de ser insufladas.

c) As bóias de salvação de material plástico ou de qualquer outro composto sintético devem poder manter as suas propriedades de flutuabilidade e de durabilidade quando em contacto com a água do mar e com os hidrocarbonetos, ou sujeitas às variações de temperatura e de clima que se possam encontrar em viagens no alto mar.

d) As bóias devem ser dotadas de seios solidamente fixados. Deve haver, a cada bordo, pelo menos uma bóia com retenida (linha de salvação), com um comprimento mínimo de 27,50 m (15 braças).

e) Nos navios de passageiros, o número de bóias com fachos de auto-inflamação não deve ser inferior a metade do número total de bóias salva-vidas e não deve, em qualquer caso, ser inferior a seis; nos navios de carga este número não deve ser inferior a metade do número total de bóias.

f) Os fachos de auto-inflamação previstos no parágrafo *e*) da presente regra não devem extinguir-se sob a acção da água. Devem poder funcionar durante, pelo menos, quarenta e cinco minutos e a sua intensidade luminosa não deve ser inferior a 2 candelas em todas as direcções do hemisfério superior. Os fachos devem ser colocados na vizinhança das respectivas bóias, com os dispositivos de fixação necessários. Os fachos de auto-inflamação utilizados

nos navios-tanques devem ser de tipo de pilha eléctrica, aprovado (1).

g) Todas as bóias de salvação devem ser colocadas a bordo de maneira a estarem ao alcance imediato das pessoas embarcadas e pelo menos duas delas providas de fachos de auto-inflamação, de acordo com as disposições do parágrafo *e*) da presente regra, e devem ter também sinais fumígenos eficazes, de funcionamento automático, capazes de emitir um fumo de cor muito visível durante, pelo menos, quinze minutos. As bóias de salvação devem poder ser largadas rapidamente da ponte.

h) Deve haver sempre a possibilidade de largar as bóias de salvação instantaneamente, não devendo por isso haver qualquer dispositivo de fixação permanente.

Regra 22

Coletes de salvação

a) Os navios devem ter, por cada pessoa a bordo, um colete de salvação, de tipo aprovado, e, além deste, um número suficiente de coletes especiais para criança, a menos que os coletes referidos sejam de tipo ajustável ao tamanho das crianças. Os coletes de salvação devem ter, em lugar visível, a indicação de que estão aprovados pela Administração.

b) Além destes coletes de salvação, indicados no parágrafo *a*) da presente regra, os navios de passageiros devem ter coletes de salvação para 5 % do número total de pessoas a bordo. Estes coletes devem ser arrumados no convés, em locais bem visíveis.

c) Para ser aprovado, um colete de salvação deverá satisfazer às seguintes condições:

i) Ser de material e fabrico apropriado;

ii) Ser construído de maneira a eliminar, tanto quanto possível, todo o risco de colocação incorrecta, excepto se for possível usá-lo indiferentemente de um lado ou do outro;

iii) Deve ser capaz de sustentar a cabeça de maneira que se uma pessoa se encontrar sem sentidos ou exausta a sua cabeça seja mantida fora da água e o seu corpo inclinado para trás em relação à sua posição vertical;

iv) Ser capaz de forçar o corpo a voltar-se, ao entrar na água, de maneira que este flutue numa posição segura, com o corpo inclinado para trás em relação à sua posição vertical;

v) Não ser atacado pelos hidrocarbonetos;

vi) Ser de cor bem visível;

vii) Ser provido de um apito de tipo aprovado, firmemente ligado por um fiel;

viii) Ser construído de maneira que a flutuabilidade necessária prevista não diminua mais de 5 %, depois de submerso durante vinte e quatro horas em água doce.

d) Pode ser autorizada a utilização de colete de salvação, cuja flutuabilidade dependa de insuflação prévia pelas tripulações dos navios, exceptuados os navios de passageiros e os navios-tanques, com a condição de:

i) Possuir duas câmaras de ar distintas;

ii) Poder ser insuflado indistintamente por processos mecânicos ou soprando; e

iii) Satisfazer as prescrições do parágrafo *c*) da presente regra, mesmo que só funcione com uma câmara de ar cheia.

e) Os coletes de salvação devem ser instalados a bordo de maneira que sejam facilmente acessíveis e a sua posição assinalada com clareza.

Regra 23

Aparelhos lança-cabos

a) Os navios devem ter um aparelho lança-cabos, de tipo aprovado.

b) Este aparelho deve poder lançar com uma precisão suficiente um cabo a uma distância de, pelo menos, 230 m (250 jardas); deve ter um mínimo de quatro foguetões e quatro cabos.

Regra 24

Sinais de perigo

Todo o navio deve ser provido, de maneira a satisfazer a Administração, de meios que lhe permitam fazer sinais de perigo eficazes de dia e de noite, compreendendo, pelo menos, doze sinais de pára-quedas capazes de produzir uma luz vermelha brilhante a uma grande altitude.

Regra 25

Rol de chamada e procedimento em caso de emergência

a) A cada membro da tripulação devem ser atribuídas funções especiais a desempenhar em caso de emergência.

b) O rol de chamada deve fixar as funções especiais e indicar, em particular, qual o local onde se deverá dirigir cada tripulante, assim como as funções que tem a desempenhar.

c) O rol de chamada de cada navio de passageiros deve ser feito sob uma norma aprovada pela Administração.

d) O rol de chamada deve ser feito antes da partida do navio. Devem ser afixadas cópias do rol de chamada em diversos locais do navio e, em particular, nos alojamentos da tripulação.

---

(1) Os sinais luminosos terão aproximadamente a intensidade luminosa abaixo indicada, para umas dadas condições atmosféricas:

Coeficiente de transmissão atmosférico	Visibilidade meteorológica (milhas marítimas)	Alcance luminoso do sinal (milhas marítimas)
0,3	2,4	0,96
0,4	3,3	1,05
0,5	4,3	1,15
0,6	5,8	1,24
0,7	8,4	1,34
0,8	13,4	1,45
0,9	28,9	1,57

e) O rol de chamada deve indicar os deveres de cada membro da tripulação relativamente:

i) À manobra de fechar as portas estanques, válvulas, dispositivos de vedar os embornais, ejectores de cinza e portas contra incêndio;

ii) Ao equipamento das embarcações salva-vidas (incluindo o equipamento de radiocomunicações portátil para embarcações salva-vidas) e dos outros meios de salvação em geral;

iii) À colocação das embarcações na água;

iv) À preparação geral de outros meios de salvação;

v) À chamada de passageiros; e

vi) À extinção de incêndios, tendo em conta o plano de combate a incêndios do navio.

f) O rol de chamada deve fixar, para os membros do pessoal de câmaras, os deveres que lhe competem relativamente aos passageiros em caso de emergência.

Estes deveres incluem:

i) Aviso aos passageiros;

ii) Verificar se estão vestidos e se envergam os coletes de salvação de modo conveniente;

iii) Agrupar os passageiros nos postos de abandono;

iv) Manter a ordem nos corredores e escadas e, de um modo geral, regular os movimentos dos passageiros; e

v) Verificar que seja colocada nas embarcações uma dotação de cobertores.

g) De entre as atribuições indicadas no rol de chamada relativamente à extinção de incêndios, conforme o parágrafo *e*), alínea *vi*), da presente regra, devem constar:

i) Composição das equipas de combate a incêndios;

ii) Distribuição dos deveres especiais de actuação em relação ao equipamento e instalações de combate a incêndios.

h) O rol de chamada deve especificar quais os sinais para chamar toda a tripulação aos postos de abandono do navio e de incêndio e indicar as respectivas características. Os referidos sinais devem ser feitos por meio de apito ou sirene e, excepto em navios de passageiros que efectuam viagens internacionais curtas e navios de carga com menos de 45,7 m (150 pés) de comprimento, poderão ser complementados por outros sinais accionados electricamente. Todos os sinais devem ser comandados da ponte.

Regra 26

Chamadas e exercícios

a) — *i*) Nos navios de passageiros as chamadas da tripulação para os exercícios de embarcações salva-vidas e de ataque a incêndios devem efectuar-se uma vez por semana, quando seja possível. Estas chamadas efectuar-se-ão antes de o navio deixar o último porto de partida para uma viagem internacional que não seja uma viagem internacional curta;

ii) Nos navios de carga deve haver chamadas da tripulação para exercícios de embarcações salva-vidas e de ataque a incêndio com intervalos que não ultrapassem um mês, com a condição de ser feita uma chamada da tripulação para os exercícios de embarcações salva-vidas e de ataque a incêndio nas vinte e quatro horas que se seguem à partida de um porto, se 25 % dos membros da tripulação forem substituídos nesse porto;

iii) Nos navios de carga deve fazer-se a verificação do equipamento das embarcações salva-vidas por ocasião das chamadas mensais e dos exercícios de embarcações, a fim de assegurar que está completo;

iv) As datas em que são feitas as chamadas devem ser registadas no diário de bordo, de tipo a fixar pela Administração; e se, durante determinada semana (para os navios de passageiros) ou mês (para os navios de carga), não houver chamada ou somente uma chamada parcial, tal facto deve ser mencionado no diário, com indicação das circunstâncias e natureza da chamada feita. As conclusões das inspecções relativas ao equipamento das embarcações que se encontrem a bordo dos navios de carga devem ser registadas no diário, no qual também deve ser mencionado o número de vezes que as embarcações salva-vidas são disparadas e arriadas, de acordo com o parágrafo *c*) da presente regra.

b) Nos navios de passageiros, com excepção dos navios que efectuam viagens internacionais curtas, a chamada dos passageiros deve ser feita nas vinte e quatro horas que se seguem à partida do navio do porto.

c) Pelo menos uma vez em cada quatro meses, diversos grupos de embarcações salva-vidas devem ser, sucessivamente, suspensos à borda e, se a operação for possível e razoável, arriados. Os exercícios e inspecções devem ser regulados de modo a dar à tripulação a compreensão perfeita e a prática suficiente dos deveres que tem a cumprir.

d) O sinal de alarme para a chamada dos passageiros aos postos de reunião compõe-se de uma série de sete ou mais silvos curtos, seguidos de um silvo longo, emitidos quer pelo apito, quer pela sirene. Nos navios de passageiros, com excepção dos navios que efectuam viagens internacionais curtas, este sinal deve ser completado por outros sinais produzidos electricamente em todo o navio e comandados da ponte de navegação. O significado de todos os sinais que interessam aos passageiros, com instruções precisas sobre o que deverão fazer em caso de emergência, deve ser claramente indicado, em línguas apropriadas, nos avisos afixados nos camarotes e outros lugares bem visíveis, nos locais destinados a uso dos passageiros.

PARTE B

Aplicável somente a navios de passageiros

Regra 27

Embarcações salva-vidas, jangadas e balsas

a) Os navios de passageiros devem transportar duas embarcações ligadas a turcos, uma a cada bordo, para serviço em caso de emergência. Estas embarcações devem ser de tipo aprovado e o seu comprimento não deve exceder 8,5 m (28 pés). Podem ser contadas para os fins dos parágrafos *b*) e *c*) da presente regra, desde que satisfaçam completa-

mente às prescrições do presente capítulo para embarcações salva-vidas, e para os fins da regra 8, desde que satisfaçam também às exigências da regra 9 e, onde aplicável, às da regra 14 do presente capítulo. Estas embarcações devem estar prontas para uso imediato quando o navio está no mar. Nos navios em que as exigências do parágrafo *h*) da regra 29 são satisfeitas por meio de dispositivos aplicados aos bordos das embarcações salva-vidas, não são necessários esses dispositivos nas duas embarcações a que se referem as prescrições da presente regra.

b) Os navios de passageiros que efectuam viagens internacionais, que não são viagens internacionais curtas, devem transportar:

i) Embarcações salva-vidas a cada bordo, com capacidade total para receber metade do número das pessoas a bordo. A Administração poderá, porém, permitir a substituição de algumas embarcações salva-vidas por jangadas, de modo a realizar a mesma capacidade total, mas o número de embarcações salva-vidas a cada bordo do navio deve ser sempre suficiente para receber, pelo menos, 37,5 % de todas as pessoas a bordo;

ii) Jangadas com uma capacidade total suficiente para receber 25 % do número total de pessoas a bordo, assim como balsas para 3 % desse número. Os navios com factor de subdivisão igual ou inferior a 0,33 são autorizados a transportar, em vez de jangadas para 25 % das pessoas a bordo, mais as balsas para 3 % das pessoas a bordo, apenas balsas para 25 % do número total de pessoas a bordo.

c) — *i*) Os navios de passageiros que efectuem viagens internacionais curtas devem ter um número de pares de turcos calculado em função do seu comprimento, conforme especifica a coluna A da tabela da regra 28 do presente capítulo. A cada par de turcos deve estar ligada uma embarcação salva-vidas; estas embarcações devem ter a capacidade mínima prescrita na coluna C da tabela ou a capacidade necessária para receber todas as pessoas a bordo, se este número for menor. Quando a Administração verificar que não é possível ou não é razoável montar a bordo de um navio empregado em viagens internacionais curtas o número de pares de turcos indicado na coluna A da tabela da regra 28, pode a Administração autorizar, em circunstâncias excepcionais, um número menor de pares de turcos, com a reserva de que este número não poderá nunca ser inferior ao indicado na coluna B da tabela e a capacidade total das embarcações salva-vidas deve ser, pelo menos, igual à capacidade mínima exigida pela coluna C ou à capacidade necessária para receber todas pessoas a bordo, se esta capacidade for menor;

ii) Se as embarcações salva-vidas assim determinadas não chegarem para receber todas as pessoas a bordo, o navio deve ser provido de mais embarcações ligadas a turcos ou de jangadas, de maneira que a capacidade total das embarcações e das jangadas seja suficiente para receber todas as pessoas a bordo;

iii) Apesar do que dispõe a alínea *ii*) do presente parágrafo, o número de pessoas transportadas em qualquer navio que efectue viagens internacionais curtas não deve exceder a capacidade total das embarcações salva-vidas existentes a bordo, de harmonia com as disposições das alíneas *i*) e *ii*) do presente parágrafo, a não ser nos casos em que a Administração julgue que tal é necessário para atender ao volume de tráfego e, nesse caso, somente se o navio satisfaz às prescrições do parágrafo *d*) da regra 1 do capítulo II-1;

iv) Quando, em conformidade com as prescrições da alínea *iii*) do presente parágrafo, a Administração autorizar o transporte de um número de passageiros superior à capacidade das embarcações salva-vidas e verificar ser impraticável colocar a bordo do navio as jangadas a que se refere a alínea *ii*) do presente parágrafo, poderá autorizar uma redução do número de embarcações salva-vidas, desde que:

1) O número de embarcações salva-vidas, no caso de navios de comprimento igual ou superior a 58 m (190 pés), não seja nunca inferior a quatro, duas a cada bordo, e no caso de navios de comprimento inferior a 58 m (190 pés), não seja inferior a dois, uma a cada bordo; e que

2) O número de embarcações salva-vidas e de jangadas seja sempre suficiente para receber a totalidade das pessoas que o navio está autorizado a transportar;

v) Todos os navios de passageiros que efectuem viagens internacionais curtas devem transportar, além das embarcações e jangadas exigidas pelas disposições do presente parágrafo, um número de jangadas suficiente para receber 10 % do número total de pessoas que podem ser recebidas nas embarcações salva-vidas com que o navio está equipado;

vi) Todos os navios de passageiros que efectuem viagens internacionais curtas devem ser também providos de balsas para 5 %, pelo menos, do número total de pessoas que o navio está autorizado a transportar;

vii) A Administração pode permitir a determinados navios ou categorias de navios que possuam certificados para viagens internacionais curtas a realização de viagens que excedam 600 milhas, mas não superiores a 1200 milhas, desde que esses navios satisfaçam às prescrições do parágrafo *d*) da regra 1 do capítulo II-1, que transportam embarcações salva-vidas capazes de receber, pelo menos, 75 % das pessoas a bordo e que satisfaçam às disposições do presente parágrafo.

Regra 28

Tabela relativa aos turcos e à capacidade das embarcações salva-vidas para navios que efectuam viagens internacionais curtas

A tabela que se segue fixa, em função do comprimento do navio:

A — O número mínimo de pares de turcos, a cada um dos quais deve estar ligada uma embarcação salva-vidas, conforme a regra 27 do presente capítulo, em navios que efectuam viagens internacionais curtas;

B — O número reduzido de pares de turcos que pode ser autorizado excepcionalmente em navios que efectuam viagens internacionais curtas, de harmonia com a regra 27 do presente capítulo; e

C — A capacidade mínima exigida para as embarcações salva-vidas em navios que efectuam viagens internacionais curtas.

Comprimento do navio				(A) — Número mínimo de pares de turcos	(B) — Número reduzido de pares de turcos autorizados excepcionalmente	(C) — Capacidade mínima das embarcações	
Metros		Pés					
	e inferior a		e inferior a			Metros cúbicos	Pés cúbicos
31	37	100	120	2	2	11	400
37	43	120	140	2	2	18	650
43	49	140	160	2	2	26	900
49	53	160	175	3	3	33	1,150
53	58	175	190	3	3	38	1,350
58	63	190	205	4	4	44	1,550
63	67	205	220	4	4	50	1,750
67	70	220	230	5	4	52	1,850
70	75	230	245	5	4	61	2,150
75	78	245	255	6	5	68	2,400
78	82	255	270	6	5	76	2,700
82	87	270	285	7	5	85	3,000
87	91	285	300	7	5	94	3,300
91	96	300	315	8	6	102	3,600
96	101	315	330	8	6	110	3,900
101	107	330	350	9	7	122	4,300
107	113	350	370	9	7	135	4,750
113	119	370	390	10	7	146	5,150
119	125	390	410	10	7	157	5,550
125	133	410	435	12	9	171	6,050
133	140	435	460	12	9	185	6,550
140	149	460	490	14	10	202	7,150
149	159	490	520	14	10	221	7,800
159	168	520	550	16	12	238	8,400

Nota sobre (C) — Quando o comprimento do navio é inferior a 31 m (100 pés) ou excede 168 m (550 pés), o número mínimo de pares de turcos e a capacidade cúbica das embarcações salva-vidas devem ser fixados pela Administração.

Regra 29

instalação e manobra das embarcações salva-vidas, das jangadas e das balsas

a) As embarcações salva-vidas e as jangadas devem ser instaladas a contento da Administração, de tal modo que:

i) Possam ser postas na água num tempo tão curto quanto possível e não superior a trinta minutos;

ii) Não impeçam de qualquer modo a manobra rápida das outras embarcações salva-vidas, das jangadas ou das balsas, ou a reunião das pessoas a bordo nos postos de abandono e o seu embarque;

iii) As embarcações salva-vidas e as jangadas que devem ser munidas de dispositivos aprovados para as pôr na água devem poder ser postas na água carregadas com todas as pessoas da sua lotação e o equipamento completo, mesmo em más condições de caimento e com inclinação transversal de 15° a qualquer dos bordos;

iv) As jangadas para que não são exigidos dispositivos aprovados para serem postas na água e as balsas devem poder ser lançadas na água, mesmo em más condições de caimento e com inclinação transversal de 15° a qualquer dos bordos.

b) Cada embarcação salva-vidas deve estar ligada a um par de turcos separado.

c) As embarcações salva-vidas não podem ser instaladas em mais de um pavimento, a não ser quando sejam tomadas medidas para evitar que a manobra das embarcações do pavimento inferior seja prejudicada pela das embarcações do pavimento superior.

d) As embarcações salva-vidas e as jangadas que devem ser providas de meios aprovados para serem postas na água não devem ser instaladas à proa do navio. As embarcações salva-vidas devem ser instaladas de modo a poderem ser postas na água com segurança, tendo em conta a necessidade de ficarem afastadas das hélices e dos delgados da popa.

e) Os turcos devem ser de tipo aprovado e devem ser instalados a contento da Administração. Devem ser dispostos em um ou mais pavimentos, de modo que as embarcações colocadas inferiormente possam ser arriadas com segurança, sem serem prejudicadas pela manobra dos outros turcos.

f) Os turcos devem ser:

i) Do tipo oscilante ou do tipo de gravidade para a manobra das embarcações salva-vidas cujo peso não exceda 2300 kg (2 1/4 toneladas inglesas), na condição de serem arriadas sem os passageiros;

ii) Do tipo de gravidade para a manobra das embarcações salva-vidas de peso superior a 2300 kg (2 1/4 toneladas inglesas), na condição de serem arriadas sem os passageiros.

g) Os turcos, talhas, cadernais e outras partes do aparelho devem ser de resistência suficiente para que as embarcações salva-vidas possam ser disparadas com o pessoal necessário para a sua manobra e depois arriadas com toda a segurança, com a carga completa de pessoas da sua lotação e o equipamento, com o navio adornado de 15° a um ou outro bordo e com caimento de 10°.

h) Devem ser instalados patins ou outros meios apropriados para facilitar o arriar das embarcações quando o navio esteja adornado de 15°.

i) Devem ser previstos meios para trazer as embarcações salva-vidas ao costado do navio e mantê-las nessa posição, de modo que as pessoas possam embarcar com segurança.

j) As embarcações salva-vidas, assim como as embarcações de emergência previstas na regra 27 do presente capítulo, devem ser servidas por talhas de cabo metálico e por guinchos de modelo aprovado, capazes, no caso das embarcações de emergência, de as içar rapidamente.

A Administração pode, a título excepcional, permitir a instalação de talhas de cabo de manila ou de outro material aprovado, com ou sem guincho de manobra (excepto para as embarcações de emergência, que deverão ser sempre servidas por guinchos que permitam recuperá-las rapidamente), quando se entenda que as talhas de cabo de manila ou de outro material aprovado são suficientes.

k) Deve haver dois cabos de pinhas, pelo menos, fixados às extremidades do turco; as talhas e os cabos de pinhas devem ser suficientemente compridos para alcançarem a água quando o navio esteja no calado mínimo em água do mar e adornado de 15°. Os cadernais inferiores devem ser munidos de um olhal ou elo comprido para engatar nos gatos de suspensão, salvo quando esteja instalado um dispositivo de desengate, de modelo aprovado.

l) Quando existe um dispositivo com motor para recuperar as embarcações salva-vidas, deve haver também um dispositivo eficiente de manobra manual. Quando as embarcações são recuperadas por meio de talhas accionadas por motor devem ser instalados dispositivos de segurança que parem automaticamente o motor quando os turcos tocam nos esbarros, de modo a evitar esforços excessivos sobre os cabos de arame das talhas e os turcos.

m) As embarcações salva-vidas ligadas a turcos devem ter as talhas previstas para o serviço e haverá dispositivos que permitam soltar rapidamente as embarcações das talhas, não sendo, porém, exigido que esta manobra seja simultânea para as duas talhas. Os pontos de ligação dos salva-vidas às talhas devem estar a uma altura tal, acima do alcatrate, que garanta a estabilidade da embarcação durante a manobra de arriar.

n) — *i*) Nos navios de passageiros empregados em viagens que não são viagens internacionais curtas e que estão providos de embarcações salva-vidas e de jangadas, de harmonia com as prescrições da alínea *i*) do parágrafo *b*) da regra 27 do presente capítulo, deve haver dispositivos aprovados para arriar o número de jangadas que, juntamente com as embarcações salva-vidas, é necessário, nos termos da alínea citada, para receber todas as pessoas a bordo. Estes dispositivos devem ser em número suficiente, no entender da Administração, para permitirem pôr na água, no tempo máximo de trinta minutos, com mar calmo, as jangadas carregadas com o número de pessoas que estão autorizadas a transportar. Estes dispositivos aprovados devem ser, tanto quanto possível, repartidos igualmente pelos dois bordos, não devendo nunca haver menos de um dispositivo a cada bordo. Não é necessário prever dispositivos desse género para as jangadas suplementares, consideradas na alínea *ii*) do parágrafo *b*) da regra 27 do presente capítulo, para 25 % de todas as pessoas a bordo, mas, se o navio dispuser dos dispositivos aprovados, as jangadas embarcadas em conformidade com o prescrito na alínea citada devem então ser de tipo que possa ser posto na água utilizando esses dispositivos;

ii) Nos navios de passageiros que efectuam viagens internacionais curtas, o número de dispositivos aprovados para pôr na água as jangadas será estabelecido pela Administração. O número de jangadas a servir por cada dispositivo não será superior ao que, no entender da Administração, pode ser posto na água, na condição de carga completa, com todas as pessoas da sua lotação, num período de tempo não superior a trinta minutos, com mar calmo.

Regra 30

Iluminação dos pavimentos, embarcações salva-vidas, jangadas, etc.

a) Deve haver iluminação, eléctrica ou equivalente, bastante para todas as exigências de segurança nos diversos pontos de um navio de passageiros e, em especial, nos pavimentos onde se encontram as embarcações salva-vidas. A fonte autónoma de energia eléctrica de emergência, exigida pela regra 25 do capítulo II-1, deve ser capaz de alimentar, quando necessário, esta iluminação, além da que é prescrita pela alínea *ii*) do parágrafo *a*) e alíneas *ii*) e *iii*) do parágrafo *b*) da regra 19 do presente capítulo.

b) A saída de cada zona principal de compartimentos, ocupada por passageiros ou tripulantes, deve ser iluminada permanentemente por uma lâmpada de emergência. A alimentação dessas lâmpadas de emergência deve poder ser feita pela fonte autónoma de energia eléctrica de emergência, a que se refere o parágrafo *a*) da presente regra, em caso de interrupção de funcionamento da fonte principal de energia.

Regra 31

Pessoal das embarcações salva-vidas e das jangadas

a) Cada embarcação salva-vidas estará a cargo de um oficial náutico ou de um tripulante encartado para embarcações salva-vidas e deve ser também nomeado um substituto. A pessoa encarregada da embarcação deve ter em seu poder uma lista da respectiva tripulação e certificar-se-á de que os homens sob as suas ordens estão ao corrente das funções que têm a desempenhar.

b) Para cada embarcação salva-vidas com motor deve ser nomeado um homem que saiba trabalhar com o motor.

c) Para cada embarcação salva-vidas provida de instalação radiotelegráfica e de projector deve nomear-se um homem capaz de fazer funcionar essa aparelhagem.

d) Para cada jangada existente a bordo deve ser nomeado um homem com prática da sua manobra e utilização. Contudo, nos navios de passageiros que efectuem viagens internacionais curtas pode ser dispensada esta exigência, se a Administração entender que tal não é possível.

Regra 32

Tripulantes encartados para embarcações salva-vidas

a) Nos navios de passageiros deve haver, para cada embarcação salva-vidas existente a bordo, em satisfação do estabelecido no presente capítulo, um

número de tripulantes encartados pelo menos igual ao que indica a tabela seguinte:

Número de pessoas para que o salva-vidas é lotado	Número mínimo de tripulantes encartados
Menos de 41 pessoas	2
De 41 a 61 pessoas	3
De 62 a 85 pessoas	4
Acima de 85 pessoas	5

b) A distribuição dos tripulantes encartados pelas embarcações salva-vidas é das atribuições do comandante.

c) O certificado e aptidão de tripulantes encartados para embarcações salva-vidas é passado com autorização da Administração. Para obter este certificado, o candidato deve provar que tem prática de todas as manobras para arriar as embarcações, assim como do uso dos remos e dos dispositivos de propulsão mecânica, que conhece bem a manobra das embarcações e dos outros meios de salvação e que é capaz de compreender e executar as ordens relativas a todas as categorias de meios de salvação.

Regra 33

Balsas

a) Nenhum tipo de balsa pode ser aprovado, se não satisfizer às condições seguintes:

i) Ter dimensões e resistência tais que possa ser lançado à água do local em que está estivado, sem avaria;

ii) Não ter peso superior a 180 kg (400 libras inglesas), a não ser que existam meios adequados, aprovados pela Administração, que permitam o seu lançamento à água sem que seja preciso levantá-la à mão;

iii) Ser de material e construção aprovados;

iv) Ser utilizável e estável, qualquer que seja o lado sobre que flutui;

v) As caixas-de-ar ou flutuadores equivalentes devem ser instalados tão próximo quanto possível dos lados da balsa e a sua flutuabilidade não deve depender da insuflação prévia;

vi) Deve ser munida de uma boça e ter uma linha de salvação, formando seios, solidamente fixada à parede exterior.

b) O número de pessoas que uma balsa pode sustentar é dado pelo menor dos dois números obtidos, dividindo:

i) O número de quilogramas de ferro que é capaz de suportar em água doce por 14,5 (ou o número de libras inglesas por 32); ou

ii) O perímetro da balsa em milímetros por 305.

Regra 34

Número de bóias de salvação

O número mínimo de bóias de salvação que deve ter um navio de passageiros é fixado pela tabela seguinte:

Comprimento do navio		Número mínimo de bóias
Em metros	Em pés	
Inferior a 61	Inferior a 200	8
61 e inferior a 122	200 e inferior a 400	12
122 e inferior a 183	400 e inferior a 600	18
183 e inferior a 244	600 e inferior a 800	24
244 e superior	800 e superior	30

PARTE C

Aplicável somente a navios de carga

Regra 35

Número e capacidade das embarcações salva-vidas e das jangadas

a) — *i*) Todos os navios de carga, com excepção dos navios empregados como navios-fábrica na pesca da baleia e na transformação ou preparação de conservas dos produtos da pesca e dos navios utilizados nos transportes de pessoas empregadas nessas indústrias, devem ter, a cada bordo, embarcações salva-vidas, cuja capacidade total seja suficiente para receber todas as pessoas a bordo, e, ainda, adicionalmente, devem transportar jangadas para metade do número total de pessoas a bordo.

No caso em que tais navios efectuem pequenas viagens internacionais entre países próximos, a Administração, desde que considere desnecessário o uso obrigatório de jangadas, pode isentar certos navios ou classes de navios de tal exigência;

ii) — 1) Com reserva às disposições da alínea *ii*), 2), do presente parágrafo, todo o navio-tanque de arqueação bruta igual ou superior a 3000 t deve ter a bordo, pelo menos, quatro embarcações salva-vidas, duas a ré e duas a meia nau. Contudo, nos navios-tanques sem superstruturas centrais, todas as embarcações devem ser colocadas a ré;

2) Nos navios-tanques de arqueação bruta igual ou superior a 3000 t, sem superstruturas centrais, a Administração pode permitir que sejam colocadas só duas embarcações salva-vidas, nas seguintes condições:

aa) Uma embarcação salva-vidas, a ré, a cada bordo;

bb) Cada uma destas embarcações não deve exceder o comprimento de 8,5 m (28 pés);

cc) Cada uma das embarcações deve ser colocada o mais a vante possível, e, pelo menos, de modo que a parte da ré da embarcação fique uma vez e meia o seu comprimento a vante do hélice; e

dd) Cada uma das embarcações deve ser colocada tão próximo do nível do mar quanto seja praticamente possível e seguro.

b) — *i*) Os navios empregados como navios-oficinas na pesca da baleia, os navios empregados

como navios-oficinas na transformação ou preparação de conservas dos produtos da pesca e os navios utilizados no transporte das pessoas empregadas em tais indústrias, devem ter:

1) A cada bordo, embarcações salva-vidas de capacidade suficiente para receber metade do número total de pessoas a bordo.

A Administração pode, contudo, autorizar a substituição de parte das embarcações salva-vidas por jangadas, para a mesma capacidade total, mas deve haver sempre, a cada bordo, embarcações salva-vidas com capacidade suficiente para 37,5% das pessoas a bordo;

2) Jangadas com capacidade total para receber metade das pessoas a bordo.

Contudo, se nos navios-oficinas empregados na transformação ou preparação de conservas dos produtos das pescas não for praticável transportar embarcações salva-vidas que satisfaçam inteiramente as prescrições do presente capítulo, a Administração pode permitir a sua substituição por outras embarcações, que devem ter lotação não inferior à exigida pela presente regra e que tenham flutuabilidade e equipamento, pelo menos, iguais aos que são estabelecidos no presente capítulo para embarcações salva-vidas;

ii) Qualquer navio empregado como navio-oficina na pesca da baleia, como navio-oficina na transformação e preparação de conservas dos produtos da pesca e, ainda, qualquer navio utilizado no transporte de pessoas empregadas nessas indústrias deve ter a bordo duas embarcações — uma a cada bordo — para casos de emergência. Essas embarcações devem ser do tipo aprovado e de comprimento não superior a 8,5 m (28 pés). Essas embarcações podem ser contadas para os fins do presente parágrafo, desde que satisfaçam inteiramente às exigências sobre embarcações salva-vidas do presente capítulo; podem também ser contadas para os fins da regra 8 desde que satisfaçam às condições da regra 9 e, eventualmente, às da regra 14 do presente capítulo. Devem estar prontas para uso imediato quando o navio está no mar. Nos navios em que as prescrições do parágrafo *g*) da regra 36 do presente capítulo são satisfeitas com a aplicação de dispositivos especiais aos bordos dos salva-vidas, tais dispositivos não são exigidos nas duas embarcações instaladas para satisfazer as condições da presente regra.

c) Todos os navios de carga, de comprimento igual ou superior a 150 m (492 pés), sem superstruturas centrais, devem ter a bordo, em adição ao previsto na alínea *i*) do parágrafo *a*) da presente regra, uma jangada pneumática com capacidade para seis pessoas, colocada o mais a vante possível, e que seja operacional.

Regra 36

Turcos e dispositivos para lançamento à água

a) Nos navios de carga, as embarcações salva-vidas e as jangadas devem ser instaladas a contento da Administração.

b) Cada embarcação salva-vidas deve ser ligada a um par de turcos separado.

c) As embarcações salva-vidas e as jangadas, para as quais devem ser previstos dispositivos aprovados para a sua colocação na água, devem, de preferência, estar colocadas o mais perto possível dos alojamentos e dos locais de serviço. A sua colocação deve ser tal que possam ser postas na água com segurança, de preferência fora dos delgados e convenientemente afastada da hélice. Se forem colocadas à vante, elas devem ficar à ré da antepara de colisão, num local abrigado e a contento da Administração, que deverá prestar particular atenção à resistência dos turcos.

d) Os turcos devem ser de tipo aprovado e instalados de modo conveniente, a contento da Administração.

e) Nos navios-tanques de arqueação bruta igual ou superior a 1600 t, nos navios empregados como navios-oficinas na pesca da baleia, nos navios-oficinas empregados na transformação e preparação de conservas de produtos da pesca e nos navios utilizados no transporte de pessoas empregadas nessas indústrias, os turcos devem ser do tipo de gravidade.

Nos outros navios, os turcos devem ser:

i) Do tipo oscilante ou do tipo de gravidade, para a manobra de embarcações salva-vidas, cujo peso não excede 2300 kg (2 1/4 toneladas inglesas) na condição de arriar, mas sem passageiros;

ii) Do tipo de gravidade para a manobra das embarcações salva-vidas de peso superior a 2300 kg (2 1/4 toneladas inglesas) na condição de arriar, mas sem passageiros.

f) Os turcos, talhas e outras partes do poleame devem ter resistência suficiente para que as embarcações salva-vidas possam ser disparadas com a tripulação e, depois, arriadas com segurança com a carga completa de passageiros e equipamento, com o navio adornado de 15° a qualquer dos bordos e com caimento de 10°.

g) Devem ser previstos patins ou outros meios apropriados para facilitar o arriar das embarcações quando o navio esteja adornado a 15°.

h) Deve haver meios para trazer as embarcações salva-vidas ao costado do navio e de as manter nessa posição, de modo que as pessoas possam embarcar com segurança.

i) As embarcações salva-vidas, incluindo as embarcações de emergência, prescritas na alínea *ii*) do parágrafo *b*) da regra 35 do presente capítulo, devem ser servidas por talhas de cabo metálico e guinchos de modelo aprovado, os quais, no caso das embarcações de emergência, serão capazes de as recuperar rapidamente. Excepcionalmente, a Administração pode permitir o emprego de talhas de cabo de manila ou de outro material aprovado, com ou sem guinchos (excepto para as embarcações de emergência, que devem sempre ser servidas por guinchos que garantam a sua rápida recuperação), quando julgue que as talhas de cabo de manila ou de outro material aprovado são suficientes.

j) Deve haver, pelo menos, dois cabos de pinhas ligados às extremidades dos turcos. Os cabos de pinhas e as talhas devem ter comprimento suficiente para atingirem a água quando o navio estiver no calado mínimo no mar e com inclinação de 15° a qualquer dos bordos. Os cadernais inferiores das ta-

lhas devem ter um olhal ou elo comprido, para ligação aos gatos de suspensão, salvo os cabos em que há um dispositivo de desengate, de modelo aprovado.

k) Quando há dispositivos com motor para recuperação das embarcações salva-vidas deve haver também um dispositivo manual eficaz. Quando as embarcações são recuperadas por talhas com accionamento mecânico devem existir dispositivos de segurança que desliguem o motor quando os turcos tocam os esbarros, a fim de evitar esforços excessivos sobre os cabos metálicos das talhas e sobre os turcos.

l) As embarcações salva-vidas ligadas a turcos devem ter as talhas prontas a ser utilizadas e deve haver meios para desengatar rapidamente as talhas das embarcações, mas não é exigida a manobra simultânea das duas talhas. Os pontos de ligação das embarcações salva-vidas às talhas devem estar a altura tal acima do alcatrate que garanta a estabilidade das embarcações durante a manobra de arriar.

m) Nos navios-oficinas da pesca da baleia, nos navios-oficinas empregados na transformação e preparação de conservas dos produtos da pesca e nos navios utilizados no transporte de pessoas empregadas nessas indústrias, providos de embarcações salva-vidas e de jangadas em conformidade com a alínea *i*), 2), do parágrafo *b*) da regra 35 do presente capítulo, não é necessário instalar dispositivos aprovados para pôr na água as jangadas; contudo, devem existir dispositivos desse género em número que satisfaça a Administração para as jangadas embarcadas, nos termos da alínea *i*), 1), do citado parágrafo, que permitam arriá-las à água, carregadas com todas as pessoas da sua lotação, em período não superior a trinta minutos, com mar calmo. Estes dispositivos devem ser, tanto quanto possível, distribuídos igualmente pelos dois bordos. Todas as jangadas embarcadas num navio munido de dispositivos aprovados para pôr as jangadas na água devem ser de tipo susceptível de serem arriadas por esse dispositivo.

Regra 37

Número de bóias de salvação

Deve haver a bordo, pelo menos, oito bóias de salvação que satisfaçam às condições da regra 21 do presente capítulo.

Regra 38

Iluminação de emergência

A iluminação prescrita na alínea *ii*) do parágrafo *a*) e nas alíneas *ii*) e *iii*) do parágrafo *b*) da regra 19 do presente capítulo deve poder ser fornecida, durante pelo menos três horas, pela fonte de energia de emergência, exigida pela regra 26 do capítulo II-1. Nos navios de arqueação bruta igual ou superior a 1600 t, a Administração deve tomar medidas para garantir a iluminação dos corredores, escadas e saídas, de maneira que todas as pessoas a bordo possam chegar facilmente aos locais de manobra e das embarcações salva-vidas e das jangadas.

CAPÍTULO IV

Radiotelegrafia e radiotelefonia

PARTE A

Aplicação e definições

Regra 1

Aplicação

a) Salvo indicação expressa em contrário, o presente capítulo aplica-se a todos os navios aos quais as presentes regras digam respeito.

b) O presente capítulo não se aplica aos navios abrangidos pelas disposições das presentes regras, enquanto navegarem nas águas dos Grandes Lagos da América do Norte e suas águas tributárias e comunicantes até ao limite leste, constituído pela saída inferior da comporta de Saint-Lambert, em Montreal, na província de Quebeque, Canadá (1).

c) Disposição alguma do presente capítulo pode impedir que um navio ou meio de salvação em perigo use de qualquer meio ao seu dispor para chamar a atenção, indicar a sua posição e ser socorrido.

Regra 2

Termos e definições

Para efeitos do presente capítulo, os termos que se seguem terão os significados abaixo indicados. Todos os outros termos utilizados no presente capítulo, e que são igualmente definidos no Regulamento das Radiocomunicações, têm o significado indicado nesse Regulamento.

a) «Regulamento das Radiocomunicações» designa o Regulamento das Radiocomunicações anexo, ou considerado como anexo, à mais recente Convenção Internacional das Telecomunicações, em vigor num dado momento.

b) «Auto-alarme radiotelegráfico» designa um receptor automático de alarme, que é activado pelo sinal de alarme radiotelegráfico e que tenha sido aprovado.

c) «Auto-alarme radiotelefónico» designa um receptor automático de alarme que é activado pelo sinal de alarme radiotelefónico e que tenha sido aprovado.

d) «Estação radiotelefónica», «Instalação radiotelefónica» e «Escuta radiotelefónica» referem-se, salvo indicação em contrário, à radiotelefonia em ondas hectométricas.

e) «Oficial radiotécnico» designa uma pessoa que possua, pelo menos, um certificado de operador radiotelegrafista de 1.ª classe ou de 2.ª classe, ou um certificado geral de operador de radiocomunicações do serviço móvel marítimo, de harmonia com as disposições do Regulamento das Radiocomunicações, que exerça as suas funções a bordo de um navio

---

(1) Estes navios estão sujeitos a requisitos especiais de radiocomunicações para fins de segurança, conforme o acordo estabelecido entre o Canadá e os Estados Unidos da América.

munido de uma estação radiotelegráfica, nos termos das disposições da regra 3 ou da regra 4 do presente capítulo.

f) «Operador radiotelefonista» designa uma pessoa titular de um certificado apropriado, de harmonia com as disposições do Regulamento das Radiocomunicações.

g) «Instalação existente» designa:

i) Uma instalação inteiramente montada a bordo antes da data da entrada em vigor da presente Convenção, qualquer que seja a data em que entre em vigor a aceitação dada pela Administração interessada; e

ii) Uma instalação parcialmente montada a bordo de um navio antes da data da entrada em vigor da presente Convenção e cujo restante consista, quer em componentes instalados em substituição de componentes idênticos, quer em componentes que satisfaçam as prescrições do presente capítulo.

h) «Instalação nova» designa toda a instalação que não seja uma instalação existente.

Regra 3

Estação radiotelegráfica

Todos os navios de passageiros, quaisquer que sejam as suas dimensões, e os navios de carga de 1600 t ou mais de arqueação bruta, a menos que sejam isentos pela regra 5 do presente capítulo, devem ter uma estação radiotelegráfica que obedeça às prescrições das regras 9 e 10 do presente capítulo.

Regra 4

Estação radiotelefónica

Todos os navios de carga, de arqueação bruta igual ou superior a 300 t, mas inferior a 1600 t, a menos que sejam providos de uma estação radiotelegráfica conforme as disposições das regras 9 e 10 do presente capítulo, se não estiverem disso isentos nos termos da regra 5 do presente capítulo, devem ter uma estação radiotelefónica, conforme as disposições das regras 15 e 16 do presente capítulo.

Regra 5

Isenção das regras 3 e 4

a) Os Governos Contratantes entendem ser altamente desejável não se afastarem da aplicação das regras 3 e 4 do presente capítulo; contudo, a Administração pode conceder, a título individual, a navios de passageiros e a navios de carga, isenções de carácter parcial e ou condicional, ou mesmo completa isenção das prescrições das regras 3 e 4 do presente capítulo.

b) As isenções autorizadas pelo parágrafo *a*) da presente regra só podem ser concedidas a navios que efectuem viagens em que a distância máxima que o navio se afasta da costa, a duração da viagem, a ausência dos riscos habituais da navegação e outras condições que afectem a segurança sejam tais que a aplicação integral da regra 3 ou da regra 4 do presente capítulo não seja razoável nem necessária. Ao decidir se devem ou não conceder isenções a título individual aos navios, as Administrações devem considerar as consequências que estas isenções podem ter, sobre a eficácia geral do serviço de socorro, para a segurança de todos os navios. Convém que as Administrações não percam de vista que é desejável prescrever a instalação de uma estação radiotelefónica de acordo com as regras 15 e 16 do presente capítulo, como condição de concessão a um navio das isenções das disposições da regra 3 do presente capítulo.

c) Cada Administração deve submeter à Organização, logo que possível, após o primeiro dia de Janeiro de cada ano, um relatório indicando todas as isenções concedidas em virtude dos parágrafos *a*) e *b*) da presente regra, no decurso do ano civil precedente, e dando os motivos destas isenções.

PARTE B

Escutas

Regra 6

Escuta radiotelegráfica

a) Todo o navio que, de acordo com as disposições da regra 3 ou da regra 4 do presente capítulo, é provido de uma estação radiotelegráfica deve ter a bordo, quando no mar, pelo menos um oficial radiotécnico e, se não estiver equipado com um auto-alarme radiotelegráfico, sob reserva das disposições do parágrafo *d*) da presente regra, deve assegurar um serviço de escuta permanente na frequência radiotelegráfica de socorro, por meio de um oficial radiotécnico que utilize auscultadores ou um altifalante.

b) Todo o navio de passageiros provido de uma estação radiotelegráfica em virtude da regra 3 do presente capítulo, se tem instalado um auto-alarme radiotelegráfico, sob reserva das disposições do parágrafo *d*) da presente regra, e enquanto estiver no mar, deve assegurar um serviço de escuta na frequência radiotelegráfica de socorro, por meio de um oficial radiotécnico que utilize auscultadores ou um altifalante, nas condições seguintes:

i) Se transporta ou está autorizado a transportar 250 passageiros ou menos, num total de, pelo menos, oito horas de escuta por dia;

ii) Se transporta ou está autorizado a transportar mais de 250 passageiros e efectua uma viagem de duração superior a dezasseis horas entre dois portos consecutivos, num total de, pelo menos, dezasseis horas de escuta por dia. Nestes casos o navio terá a bordo, pelo menos, dois oficiais radiotécnicos;

iii) Se transporta ou está autorizado a transportar mais de 250 passageiros e efectua uma viagem de duração inferior a dezasseis horas entre dois portos consecutivos, num total de, pelo menos, oito horas de escuta por dia.

c) — *i*) Todo o navio de carga que é provido de uma estação radiotelegráfica em virtude da regra 3 do presente capítulo, se possuir um auto-alarme radiotelegráfico, sob reserva das disposições do parágrafo *d*) da presente regra, e enquanto estiver no mar, assegurará um serviço de escuta na frequência

radiotelegráfica de socorro, por meio de um oficial radiotécnico que utilize auscultadores ou um altifalante, durante um total de, pelo menos, oito horas por dia;

ii) Todo o navio de carga de tonelagem de arqueação bruta igual ou superior a 300 t, mas inferior a 1600 t, provido de uma estação radiotelegráfica, nos termos da regra 4 do presente capítulo, se possui um auto-alarme radiotelegráfico, sob reserva das disposições do parágrafo *d*) da presente regra, e enquanto estiver no mar, deve assegurar um serviço de escuta na frequência radiotelegráfica de socorro, por meio de um oficial radiotécnico que utilize auscultadores ou um altifalante, durante os períodos determinados pela Administração. As Administrações devem, contudo, ter em conta o interesse de prescrever, sempre que praticamente seja possível, um total de, pelo menos, oito horas de escuta por dia.

d) — *i*) Durante o período em que pela presente regra é determinado que um oficial radiotécnico escute na frequência radiotelegráfica de socorro, aquele pode interromper a escuta durante o tempo em que está manipulando o tráfego noutras frequências ou realizando outros trabalhos essenciais ao serviço radioeléctrico, mas somente no caso em que seja impraticável escutar por meio de auscultadores de dupla escuta simultânea ou altifalante. A escuta será sempre mantida por um oficial radiotécnico que use auscultadores ou altifalante durante os períodos de silêncio especificados no Regulamento das Comunicações.

A expressão «trabalhos essenciais relativos ao serviço radioeléctrico» utilizada na presente regra inclui as reparações urgentes de:

1) Material de radiocomunicações utilizado para fins de segurança;

2) Material de radioajudas à navegação, sob ordem do comandante;

ii) Independentemente das disposições da alínea *i*) do presente parágrafo, o oficial radiotécnico a bordo de navio que não seja de passageiros, com vários oficiais radiotécnicos, pode, em casos excepcionais, isto é, quando escuta com auscultadores ou altifalantes é praticamente impossível, interromper a escuta, sob ordem do comandante, a fim de efectuar a manutenção nacessária, com o fim de evitar o iminente mau funcionamento de:

Material de radiocomunicações utilizado para fins de segurança;
Material de radioajudas à navegação;
Todo o outro material electrónico de navegação, incluindo a sua reparação;

desde que:

1) O oficial radiotécnico possua as qualificações julgadas necessárias pela Administração para o desempenho destes trabalhos;

2) O navio possua um receptor de chamada selectiva com os requisitos do Regulamento das Radiocomunicações;

3) A escuta seja sempre mantida por um oficial radiotécnico que use auscultadores ou altifalantes durante os períodos de silêncio especificados no Regulamento das Radiocomunicações.

e) Sempre que um navio equipado com auto-alarme radiotelegráfico esteja no mar, este aparelho deve ser posto em serviço sempre que não seja efectuada a escuta, conforme os parágrafos *b*), *c*) ou *d*) da presente regra e, quando praticável, durante as operações de radiogoniometria.

f) Os períodos de escuta previstos por esta regra, incluindo os que são determinados pela Administração, devem ser mantidos, de preferência, durante as horas prescritas para o serviço radiotelegráfico pelo Regulamento das Radiocomunicações.

Regra 7

Escuta radiotelefónica

a) Todo o navio que é equipado com uma estação de radiotelefonia, de acordo com a regra 4 do presente capítulo, para fins de segurança deve ter a bordo, pelo menos, um operador radiotelefonista (que pode ser o comandante, um oficial ou outro membro da tripulação que possua um certificado de radiotelefonista) e, enquanto estiver no mar, deve manter escuta permanente na frequência radiotelefónica de socorro, no local a bordo, onde o navio é habitualmente governado, através de um receptor de escuta da frequência radiotelefónica de socorro, utilizando um altifalante, um altifalante filtrado ou um auto-alarme radiotelefónico.

b) Todo o navio equipado com uma estação radiotelegráfica de acordo com a regra 3 ou a regra 4 do presente capítulo, enquanto estiver no mar, deve manter uma escuta permanente na frequência radiotelefónica de socorro, em local determinado pela Administração, por meio de receptor de escuta da frequência radiotelefónica de socorro, utilizando um altifalante, um altifalante filtrado ou um auto-alarme radiotelefónico.

Regra 8

Escuta radiotelefónica de VHF

Todo o navio provido de estação radiotelefónica de ondas métricas (VHF), de acordo com a regra 18 do capítulo V, deve manter escuta, na ponte, nos períodos e nos canais prescritos pelos Governos Contratantes referidos naquela regra.

PARTE C

Condições técnicas exigidas

Regra 9

Estações radiotelegráficas

a) A estação radiotelegráfica deve estar situada de modo que nenhuma interferência prejudicial, proveniente de um ruído exterior, de origem mecânica ou outra qualquer, impeça a recepção conveniente dos sinais radioeléctricos. A estação deve estar situada no navio, tão alto quanto seja praticável, a fim de assegurar o mais elevado grau possível de segurança.

b) A cabina de radiotelegrafia deve ser de dimensões suficientes e adequadamente ventilada para permitir o funcionamento eficaz das instalações radiote-

legráficas, principal e de reserva, e não deve ser utilizada para qualquer fim que possa interferir com a exploração da estação de radiotelegrafia.

c) O camarote de, pelo menos, um oficial radiotécnico deve estar situado tão perto quanto seja praticável da cabina de radiotelegrafia.

Em navios novos, este camarote não deve estar situado dentro da cabina de radiotelegrafia.

d) Deve existir entre a cabina de radiotelegrafia e a ponte de navegação e qualquer outro lugar, caso exista, donde se possa dirigir a navegação, uma eficiente ligação bilateral para chamar e falar, a qual deve ser independente da rede principal de comunicação do navio.

e) A instalação radiotelegráfica deve estar colocada de tal forma que esteja protegida dos efeitos prejudiciais da água ou de temperaturas extremas. Deve ser facilmente acessível, quer para uso imediato em caso de perigo, quer para fins de reparação.

f) Deve ser instalado um relógio de funcionamento seguro, com mostrador de diâmetro não inferior a 12,5 cm (5 polegadas) e munido de ponteiro central de segundos, tendo naquele marcados os períodos de silêncio prescritos para o serviço radiotelegráfico pelo Regulamento das Radiocomunicações. Deve ser solidamente fixado na cabina de radiotelegrafia, em posição tal que a totalidade do mostrador possa ser fácil e precisamente observada pelo oficial radiotécnico da sua posição de trabalho da radiotelegrafia e da posição de ensaio de auto-alarme radiotelegráfico.

g) Na cabina radiotelegráfica deve ser instalada uma iluminação de emergência de funcionamento garantido, constituída por uma lâmpada eléctrica permanentemente instalada por forma a fornecer iluminação satisfatória dos aparelhos de comando e de controle das instalações radiotelegráficas, principal e de reserva, do relógio prescrito pelo parágrafo *f*) da presente regra. Esta lâmpada, em novas instalações, se for alimentada pela fonte de energia de reserva, prescrita na alínea *iii*) do parágrafo *a*) da regra 10 do presente capítulo, será comandada por comutadores de quarto colocados perto da entrada principal da casa de radiotelegrafia e do sítio de trabalho dentro da mesma, a menos que a disposição da casa de radiotelegrafia não justifique isso. Estes comutadores devem ter lembretes para bem precisar o seu fim.

h) Deve existir e será conservada na cabina radiotelegráfica uma gambiarra alimentada pela fonte de energia de reserva prescrita pela alínea *iii*) do parágrafo *a*) da regra 10 do presente capítulo e munida de um cabo flexível de comprimento conveniente, ou uma lâmpada portátil autónoma.

i) A estação radiotelegráfica deve ser dotada com sobresselentes, ferramentas e aparelhos de prova necessários para manter em eficientes condições de funcionamento a instalação radiotelegráfica enquanto o navio estiver no mar. O equipamento de provas deve incluir um instrumento ou instrumentos para a medição de tensões em correntes alterna e contínua (volts) e resistências (ohms).

j) Se existir uma cabina de radiotelegrafia de emergência separada, os requisitos dos parágrafos *d*) *e*), *f*), *g*) e *h*) da presente regra devem ser-lhe aplicados.

Regra 10

Instalações radiotelegráficas

a) Salvo disposições em contrário na presente regra:

i) A estação radiotelegráfica deve incluir uma instalação principal e uma instalação de reserva, electricamente separadas e electricamente independentes uma da outra;

ii) A instalação principal deve incluir um emissor principal, um receptor principal, um receptor de escuta da frequência radiotelefónica de socorro e uma fonte de energia principal;

iii) A instalação de reserva deve incluir um emissor de reserva, um receptor de reserva e uma fonte de energia de reserva;

iv) Devem estar instaladas uma antena principal e uma antena de reserva, mas a Administração pode dispensar qualquer navio da instalação da antena de reserva se considerar que a montagem de uma tal antena não é possível nem razoável; neste caso deve existir a bordo uma antena sobresselente adequada, completamente preparada para instalação imediata. Além disso, deve existir a bordo, em todos os casos, fio de antena e isoladores em quantidade suficiente para permitir a instalação de uma antena conveniente. Se a antena principal estiver suspensa entre suportes sujeitos a vibrações, deve ser convenientemente protegida contra ruptura.

b) Nas instalações de navios de carga (com excepção das de navios de carga de tonelagem de arqueação bruta igual ou superior a 1600 t, instaladas em 19 de Novembro de 1952 ou depois desta data), se o emissor principal satisfaz a todos os requisitos exigidos para o emissor de reserva, este último não é obrigatório.

c) — *i*) O emissor principal e o emissor de reserva devem ter possibilidade de ser ligados rapidamente e sintonizados com a antena principal e a antena de reserva, se esta estiver instalada;

ii) O receptor principal e o receptor de reserva devem ter possibilidade de ser ligados rapidamente com qualquer antena com a qual eles devam ser utilizados.

d) Todos os componentes da instalação de reserva devem ser colocados no navio tão alto quanto praticável para garantir o máximo de segurança.

e) O emissor principal e o emissor de reserva devem ter possibilidade de emitir na frequência radiotelegráfica de socorro utilizando uma classe de emissão determinada no Regulamento das Radiocomunicações para esta frequência. Além disso, o emissor principal deve ter possibilidade de emitir em, pelo menos, duas frequências de trabalho nas bandas autorizadas dos 405 kHz aos 535 kHz, utilizando as classes de emissão determinadas pelo Regulamento das Radiocomunicações para estas frequências. O emissor de reserva pode ser um emissor de socorro, tal como é definido e limitado em uso pelo Regulamento das Radiocomunicações.

f) O emissor principal e o emissor de reserva devem ter uma profundidade de modulação não inferior a 70% e uma frequência de modulação compreendida entre 450 Hz e 1350 Hz se pelo Regulamento das Radiocomunicações for determinado terem emissão modulada.

g) O emissor principal e o emissor de reserva, quando ligados à antena principal, devem ter um alcance mínimo normal, como é especificado na tabela abaixo, isto é, eles devem poder emitir sinais claramente perceptíveis de navio para navio de dia e em condições e circunstâncias normais nas distâncias especificadas (1). (Sinais claramente perceptíveis devem normalmente ser recebidos se o valor eficaz da intensidade de campo no receptor for, pelo menos, de 50 μV/m.)

	Alcance mínimo normal em milhas marítimas	
	Emissor principal	Emissor de reserva
Todos os navios de passageiros e navios de carga de arqueação bruta igual ou superior a 1600 t	150	100
Navios de carga de arqueação bruta inferior a 1600 t	100	75

h) — *i*) O receptor principal e o receptor de reserva devem ter possibilidade de receber a frequência radiotelegráfica de socorro e as classes de emissão determinadas no Regulamento das Radiocomunicações, para esta frequência;

ii) Além disso, o receptor principal deve permitir receber as frequências e classes de emissão utilizadas para emissão dos sinais horários, das mensagens meteorológicas e de todas as outras comunicações relativas à segurança da navegação que a Administração possa considerar como necessárias;

iii) O receptor de escuta da frequência radiotelefónica de socorro deve ser pré-sintonizado para esta frequência. Deve possuir um filtro ou dispositivo que silencie o altifalante se estiver localizado na ponte, na ausência do sinal de alarme radiotelefónico. Este dispositivo terá possibilidade de ser facilmente ligado e desligado e deve poder ser usado quando, na opinião do comandante, as condições são de ordem tal que a manutenção da escuta com o altifalante aberto interfira com a segurança da navegação do navio;

iv) — 1) Se estiver instalado um emissor radiotelefónico, este deve ter um dispositivo de manipulação automática do sinal de alarme radiotelefónico, construído de modo a evitar que entre em funcionamento por negligência e satisfazendo os requisitos do parágrafo *e*) da regra 16 do presente capítulo. O dispositivo deve ter possibilidade de ser desligado em qualquer momento a fim de permitir a emissão imediata da mensagem de socorro;

2) Devem ser tomadas disposições de modo a permitir a verificação periódica do funcionamento apropriado do dispositivo de manipulação automática do sinal de alarme radiotelefónico, em frequências diferentes da frequência radiotelefónica de socorro, usando uma antena artificial apropriada.

i) O receptor principal deve ter sensibilidade suficiente para produzir sinais nos auscultadores ou em altifalante, mesmo quando o sinal na entrada do receptor não tenha tensão maior do que 50 μV. O receptor de reserva deve ter sensibilidade suficiente para produzir tais sinais mesmo quando o sinal na entrada no receptor não tenha tensão maior do que 100 μV.

j) Deve estar sempre disponível em qualquer momento, enquanto o navio estiver no mar, uma fonte de energia eléctrica suficiente para fazer funcionar a instalação principal com o alcance normal, exigido no parágrafo *g*) da presente regra, assim como para carregar todas as baterias de acumuladores que façam parte da estação radiotelegráfica. A tensão de alimentação da instalação principal, no caso de navios novos, deve ser mantida dentro de ±10% da tensão nominal. No caso de navios existentes, deve ser mantida tão próxima quanto possível da tensão nominal, e, se for praticável, dentro de ±10%.

k) A instalação de reserva deve ter uma fonte de energia independente da de propulsão do navio e da sua rede eléctrica.

l) — *i*) A fonte de energia de reserva deve ser constituída, de preferência, por baterias de acumuladores, as quais podem ser carregadas a partir da rede eléctrica do navio, e, em todas as circunstâncias, deve ser capaz de ser posta em serviço rapidamente e de fazer funcionar o emissor e o receptor de reserva continuamente num mínimo de seis horas, nas condições normais de serviço, e também satisfazer a todas as outras cargas suplementares, mencionadas nos parágrafos *m*) e *n*) da presente regra (1).

ii) A fonte de energia de reserva deve ter capacidade suficiente para fazer funcionar simultaneamente e, pelo menos, durante seis horas o emissor de reserva e a instalação de ondas métricas (VHF), se esta existir, a não ser que exista um comutador que só permita o funcionamento alternado destes dispo-

---

(1) Na falta da medida directa de intensidade de campo, os dados seguintes podem servir de guia para determinar aproximadamente o alcance normal.

Alcance normal em milhas marítimas	Metros-amperes (*a*)	Potência total na antena (watts) (*b*)
200	128	200
175	102	125
150	76	71
125	58	41
100	45	25
75	34	14

(*a*) Este número representa o produto da altura máxima da antena expressa em metros, acima da linha de carga máxima, pela corrente de antena expressa em amperes (valor eficaz). Os valores dados na segunda coluna da tabela correspondem a um valor médio da relação.

$$\frac{\text{Altura efectiva da antena}}{\text{Altura máxima da antena}} = 0{,}47$$

Esta relação varia com as condições locais da antena e pode variar entre 0,3 e 0,7 aproximadamente.

(*b*) Os valores dados na terceira coluna da tabela correspondem a um valor médio da relação

$$\frac{\text{Potência irradiada pela antena}}{\text{Potência total da antena}} = 0{,}08$$

Esta relação varia consideravelmente segundo os valores da altura efectiva e da resistência da antena.

(1) Com o fim de determinar a quantidade de electricidade que deve fornecer a fonte de energia de reserva recomenda-se, como guia, a seguinte fórmula:

$^1/_2$ do consumo de corrente do emissor, com a chave premida (sinal);
+ $^1/_2$ do consumo de corrente do emissor, com a chave aliviada (intervalo);
+ consumo da corrente do receptor e dos outros circuitos ligados à fonte de energia de reserva.

sitivos. O uso da fonte de energia de reserva para instalação de ondas métricas deve ser limitado às comunicações de socorro, de urgência e de segurança. Uma outra solução consiste na existência de uma fonte de energia de reserva, separada para a instalação de ondas métricas.

m) A fonte de energia de reserva deve ser utilizada para alimentar a instalação de reserva e o dispositivo de manipulação automática do sinal de alarme, especificado no parágrafo *r*) da presente regra, se este for de funcionamento eléctrico.

A fonte de energia de reserva pode também ser utilizada para alimentar:

i) O auto-alarme radiotelegráfico;

ii) A iluminação de emergência especificada no parágrafo *g*) da regra 9 do presente capítulo;

iii) O radiogoniómetro;

iv) A instalação de ondas métricas (VHF);

v) O dispositivo de manipulação automática do sinal de alarme radiotelefónico, se existir;

vi) Qualquer dispositivo prescrito pelo Regulamento das Radiocomunicações que permita a passagem da emissão para a recepção e vice-versa.

Sob reserva das disposições no parágrafo *n*) da presente regra, a fonte de energia de reserva não deve ser utilizada para outros fins que não sejam os especificados no presente parágrafo.

n) Não obstante as prescrições do parágrafo *m*) da presente regra, a Administração pode autorizar o uso, em navios de carga, da fonte de energia de reserva para alimentar um pequeno número de circuitos de emergência de fraca potência, inteiramente localizados na parte superior do navio, tais como a iluminação de emergência no pavimento das embarcações, com a condição de estes circuitos poderem ser facilmente desligados, se necessário, e desde que a fonte de energia tenha capacidade suficiente para satisfazer estas cargas suplementares.

o) A fonte de energia de reserva e o seu quadro de distribuição devem ser colocados no navio, tão alto quanto seja praticável e devem ser facilmente acessíveis ao oficial radiotécnico. O quadro de distribuição deve, quando seja possível, ser instalado numa cabina de radiotelegrafia; se não, deve ser munido de um dispositivo que o ilumine.

p) Quando o navio está no mar, as baterias de acumuladores, quer façam parte da instalação principal quer da instalação de reserva, devem ser diariamente levadas à sua plena carga normal.

q) Devem ser tomadas disposições que permitam eliminar, tanto quanto possível, as causas de radiointerferências provenientes de aparelhos eléctricos ou de quaisquer outros aparelhos existentes a bordo e suprimi-las. Se necessário, devem ser tomadas disposições para assegurar que as antenas ligadas a receptores de radiodifusão não causem interferências ao funcionamento eficiente e correcto da instalação radiotelegráfica. Será dada particular atenção a estes requisitos na construção de novos navios.

r) Em adição aos meios para transmitir manualmente o sinal de alarme radiotelegráfico deve existir um dispositivo de manipulação automática capaz de manipular o emissor principal e o emissor de reserva por forma a emitirem aquele sinal. O dispositivo poderá ser desligado em qualquer momento, por forma a permitir a manipulação manual imediata do emissor. Este dispositivo de manipulação pode ser alimentado pela fonte de energia de reserva, se for de funcionamento eléctrico.

s) No mar, o emissor de reserva, se não for utilizado para comunicações, deve ser experimentado diariamente usando uma antena artificial conveniente e pelo menos uma vez durante cada viagem utilizando a antena de reserva, se estiver instalada. A fonte de energia de reserva deve ser também experimentada diariamente.

t) Todos os equipamentos que constituem a instalação radiotelegráfica devem ser de funcionamento seguro e construídos por forma que sejam facilmente acessíveis para fins de manutenção.

u) Não obstante as prescrições da regra 4 do presente capítulo, a Administração pode, no caso de navios de carga de tonelagem de arqueação bruta inferior a 1600 t, admitir atenuações à regra 9 do presente capítulo e à presente regra, desde que, em nenhum caso, o padrão da estação radiotelegráfica possa ser inferior ao nível exigido pela regra 15 e regra 16 do presente capítulo para as estações radiotelefónicas, na medida em que estas regras sejam aplicáveis. Em particular, no caso de navios de carga de arqueação bruta igual ou superior a 300 t, mas inferior a 500 t, a Administração pode não exigir:

i) Um receptor de reserva;

ii) Uma fonte de energia de reserva nas instalações existentes;

iii) A protecção da antena principal contra a ruptura devida às vibrações;

iv) Serem os meios de comunicação entre a estação radiotelegráfica e a ponte de navegação independentes do sistema principal de comunicações do navio;

v) O alcance do emissor ser superior a 75 milhas marítimas.

Regra 11

Auto-alarmes radiotelegráficos

a) Qualquer auto-alarme radiotelegráfico instalado depois de 26 de Maio de 1965 deve obedecer aos seguintes requisitos mínimos:

i) Na ausência de interferência de qualquer natureza, deve ser capaz de ser posto em acção, sem regulação manual, por qualquer sinal de alarme radiotelegráfico, emitido na frequência radiotelegráfica de socorro por qualquer estação costeira, emissor de socorro de navio ou de embarcação salva-vidas, funcionando de acordo com o Regulamento das Radiocomunicações, desde que a intensidade do sinal de entrada no receptor seja superior a 100 μV e inferior a 1 V;

ii) Na ausência de interferência de qualquer natureza, deve ser accionado por três ou quatro traços consecutivos, quando a duração dos traços variar de 3,5 segundos a um valor tão próximo quanto possível de 6 segundos e a duração dos intervalos variar entre 1,5 segundos e o mais pequeno valor possível de preferência não superior a 10 milissegundos;

iii) Não deve ser accionado por atmosféricos ou por qualquer outro sinal que não seja o sinal de alarme radiotelegráfico, desde que os sinais recebidos não constituam de facto um sinal que esteja dentro dos limites de tolerância indicados na alínea *ii*);

iv) A selectividade do auto-alarme radiotelegráfico deve ser tal que produza uma sensibilidade pratica-

mente uniforme numa banda não inferior a 4 kHz e não superior a 8 kHz para cada lado da frequência radiotelegráfica de socorro e, fora desta banda, produza uma sensibilidade que decresça tão rapidamente quanto possível em conformidade com a melhor tecnologia;

v) Se for praticável, o auto-alarme radiotelegráfico, na presença de atmosféricos ou de interferências, deve regular-se automaticamente, de forma que, dentro de um espaço de tempo razoavelmente curto, se aproxime das condições em que mais facilmente possa distinguir o sinal de alarme radiotelegráfico;

vi) Quando accionado por um sinal de alarme radiotelegráfico, ou em caso de avaria no aparelho, o auto-alarme radiotelegráfico deve produzir um aviso contínuo audível na cabina de radiotelegrafia, no camarote do oficial radiotécnico e na ponte de navegação. Se for praticável, o aviso deve também fazer-se ouvir no caso de avaria em qualquer componente de todo o sistema receptor de alarme. Somente deve ser previsto um interruptor para fazer cessar o aviso, o qual deve estar situado na cabina de radiotelegrafia;

vii) Com o fim de se experimentar regularmente o auto-alarme radiotelegráfico, o aparelho deve incluir um gerador pré-sintonizado na frequência radiotelegráfica de socorro e um dispositivo de manipulação que permita produzir um sinal de alarme radiotelegráfico com a intensidade mínima indicada na alínea *i*) acima. Também devem ser previstos meios para a ligação de auscultadores para a escuta de sinais recebidos no auto-alarme radiotelegráfico;

viii) O auto-alarme radiotelegráfico deve ser capaz de suportar vibrações, humidade e variações de temperatura equivalentes às severas condições encontradas a bordo dos navios no mar, e deve continuar a funcionar sob tais condições.

b) Antes de aprovar um novo tipo de auto-alarme radiotelegráfico, a Administração interessada deve assegurar-se, por meio de ensaios práticos feitos nas condições de funcionamento equivalentes às que se encontram na prática, de que o equipamento obedece às prescrições do parágrafo *a*) da presente regra.

c) Em navios equipados com um auto-alarme radiotelegráfico, a eficiência deste deve ser verificada por um oficial radiotécnico, pelo menos uma vez cada vinte e quatro horas, enquanto o navio estiver no mar. Se não estiver em condições de funcionamento eficientes, o oficial radiotécnico deve comunicar o facto ao comandante ou ao oficial de quarto na ponte de navegação.

d) Um oficial radiotécnico deve verificar periodicamente o bom funcionamento do receptor do auto-alarme radiotelegráfico ligado à sua antena normal, escutando sinais no aparelho e comparando-os com sinais similares recebidos na frequência radiotelegráfica de socorro por meio da instalação principal.

e) Tanto quanto praticável, o auto-alarme radiotelegráfico, quando ligado a uma antena, não deve afectar a exactidão do radiogoniómetro.

Regra 12

Radiogoniómetros

a) — *i*) O radiogoniómetro exigido pela regra 12 do capítulo V deve ser eficiente e capaz de receber sinais com o mínimo de ruído do receptor e de permitir marcações radiogoniométricas a partir das quais o azimute verdadeiro e a direcção possam ser determinados;

ii) Deve ter possibilidade de receber sinais nas frequências radiotelegráficas, estabelecidas pelo Regulamento das Radiocomunicações para fins de socorro e de radiogoniometria e para radiofaróis marítimos;

iii) Na ausência de interferências, o radiogoniómetro deve ter uma sensibilidade suficiente para permitir que sejam tomadas marcações precisas mesmo para um sinal que tenha uma intensidade de campo tão baixa como 50 μV por metro;

iv) Tanto quanto praticável, o radiogoniómetro deve estar localizado por forma que a determinação correcta de azimutes seja interferida o menos possível por ruídos de origem mecânica ou de qualquer outra;

v) Tanto quanto praticável, o sistema de antenas do radiogoniómetro deve estar montado de tal forma que a determinação correcta de azimutes seja o menos embaraçada possível pela proximidade de outras antenas, mastros de carga, adriças metálicas ou outras grandes massas metálicas;

vi) Um sistema eficiente bilateral de chamada e de comunicação de voz deve ser estabelecido entre o radiogoniómetro e a ponte de navegação;

vii) Todos os radiogoniómetros devem ser calibrados de forma satisfatória para a Administração aquando da sua instalação. A calibração deve ser verificada por azimutes de verificação ou por uma nova calibração sempre que sejam efectuadas quaisquer mudanças na posição de quaisquer antenas ou de quaisquer estruturas no convés e superstruturas que possam afectar apreciavelmente a precisão do radiogoniómetro. Os elementos característicos da calibração devem ser verificados a intervalos de um ano ou tão próximos quanto possível de um ano. Deve existir um registo das calibrações e de quaisquer verificações feitas da sua precisão.

b) — *i*) O equipamento de radiolocalização na frequência radiotelefónica de socorro deve ter possibilidade de efectuar a determinação de marcações radiogoniométricas naquela frequência, sem ambiguidade de sentido, dentro de um ângulo de 30° para cada lado da proa;

ii) Ao ser instalado e experimentado o equipamento mencionado no presente parágrafo devem ser tomadas em devida consideração as recomendações pertinentes da Comissão Consultiva Internacional das Radiocomunicações (CCIR);

iii) Devem ser tomadas todas as medidas razoáveis para assegurar a possibilidade de radiolocalização prescritas no presente parágrafo. Nos casos em que, devido a dificuldades técnicas, não possa haver possibilidade de radiolocalização, a Administração pode isentar, um por um, os navios das disposições prescritas no presente parágrafo.

Regra 13

Instalação radiotelegráfica das embarcações salva-vidas com motor

a) A instalação radiotelegráfica requerida pela regra 14 do capítulo III inclui um emissor, um receptor e uma fonte de energia. Deve ser concebida de modo que possa ser utilizada, em caso de emergência, por uma pessoa inexperiente.

b) O emissor deve ser capaz de emitir na frequência radiotelegráfica de socorro utilizando uma classe de emissão determinada no Regulamento das Radiocomunicações para aquela frequência. O emissor deve também ser capaz de emitir na frequência e utilizando a classe de emissão estabelecida pelo Regulamento das Radiocomunicações, para uso, pelas embarcações salva-vidas, nas bandas de 4000 kHz a 27 500 kHz.

c) Se for prescrita emissão modulada pelo Regulamento das Radiocomunicações, o emissor deve ter uma profundidade de modulação não inferior a 70 % e uma frequência de modulação compreendida entre 450 Hz e 1350 Hz.

d) Além de uma chave para a manipulação manual, o emissor deve ser equipado com um dispositivo de manipulação automática para a emissão dos sinais de alarme e de socorro radiotelegráficos.

e) Na frequência radiotelegráfica de socorro o emissor deve ter um alcance mínimo normal [como é especificado no parágrafo *g*) da regra 10 do presente capítulo] de 25 milhas marítimas utilizando a antena fixa (1).

f) O receptor deve ser capaz de receber a frequência radiotelegráfica de socorro e as classes de emissão estabelecidas pelo Regulamento das Radiocomunicações para esta frequência.

g) A fonte de energia deve ser constituída por uma bateria de acumuladores com capacidade suficiente para alimentar continuamente o emissor durante quatro horas nas condições normais de serviço. Se a bateria for de um tipo que requeira carregamento, deve haver meios de carregá-la a partir da rede eléctrica de bordo. Além disso, devem existir os meios necessários para carregá-la depois de a embarcação ter sido arriada.

h) Quando a energia necessária para a instalação radiotelegráfica e para o projector requerido pela regra 14 do capítulo III for fornecida pela mesma bateria, esta terá capacidade suficiente para satisfazer a carga adicional ocasionada pelo projector.

i) Uma antena de tipo fixo deve existir a bordo juntamente com os meios necessários para a suportar à máxima altura praticável. Além disso, deve existir a bordo, se for praticável, uma antena suportada por um papagaio ou balão.

j) Quando o navio estiver no mar, um oficial radiotécnico deve experimentar semanalmente o emissor, utilizando uma antena artificial conveniente, e levar a bateria à plena carga se ela é de um tipo que exija recarga.

Regra 14

Equipamentos de radiocomunicações portáteis para embarcações e jangadas salva-vidas

a) O equipamento exigido pela regra 13 do capítulo III deve compreender um emissor, um receptor, uma antena e uma fonte de energia. Deve ser concebido de modo que possa ser utilizado, em caso de emergência, por uma pessoa inexperiente.

(1) Na ausência de medição da intensidade do campo, supõe-se que este alcance será obtido se o produto da altura da antena acima da linha de água pela corrente de antena (valor eficaz) é de 10 metros-ampere.

b) O equipamento deve ser facilmente transportável, estanque, capaz de flutuar na água do mar e deve poder ser lançado ao mar sem sofrer avaria. Os novos equipamentos devem ser leves e de dimensões reduzidas, tanto quanto for praticável, e devem, de preferência, poder ser utilizados tanto em embarcações como em jangadas salva-vidas.

c) O emissor deve ter possibilidade de emitir na frequência radiotelegráfica de socorro, utilizando uma classe de emissão determinada para esta frequência pelo Regulamento das Radiocomunicações. Deve ter igualmente possibilidade de emitir na frequência radiotelegráfica e numa classe de emissão determinada pelo Regulamento das Radiocomunicações para as estações dos meios de salvação, nas bandas dos 4000 kHz a 27 500 kHz. Contudo, a Administração pode autorizar que o emissor tenha possibilidade de emitir na frequência radiotelefónica de socorro, usando uma classe de emissão determinada pelo Regulamento das Radiocomunicações para esta frequência, em alternativa ou em adição à frequência radiotelegráfica determinada pelo Regulamento para os meios de salvação, nas bandas dos 4000 kHz a 27 500 kHz.

d) Se for prescrita a emissão modulada pelo Regulamento das Radiocomunicações, o emissor deve ter uma profundidade de modulação não inferior a 70 % e, no caso de emissão radiotelegráfica, deve ter uma frequência de modulação compreendida entre 450 Hz e 1350 Hz.

e) Além de uma chave para a manipulação manual, o emissor deve ser equipado com um dispositivo de manipulação automática para a emissão dos sinais radiotelegráficos de alarme e de socorro. Se o emissor for capaz de emitir na frequência radiotelefónica de socorro, será equipado com um dispositivo automático para emitir o sinal de alarme radiotelefónico que satisfaça às prescrições do parágrafo *e*) da regra 16 do presente capítulo.

f) O receptor deve ser capaz de receber a frequência radiotelegráfica de socorro e as classes de emissão estabelecidas pelo Regulamento das Radiocomunicações para esta frequência. Se o emissor for capaz de transmitir na frequência radiotelefónica de socorro, o receptor deve também ser capaz de receber esta frequência e a classe de emissão determinada pelo Regulamento das Radiocomunicações para esta mesma frequência.

g) A antena deve ser ou auto-suportada ou capaz de ser suportada pelo mastro da embarcação salva-vidas, à maior altura praticável. Além disso, é desejável que exista uma antena suportada por um papagaio ou balão, se for praticável.

h) O emissor deve fornecer à antena prescrita pelo parágrafo *a*) da presente regra uma potência (1) suficiente em radiofrequência e, de preferência, deve ser alimentado por um gerador accionado à mão. Se

(1) Pode considerar-se que os fins da presente regra são satisfeitos com as seguintes condições:

Pelo menos 10 W de potência de entrada no ânodo do andar final ou uma potência de saída em radiofrequência de, pelo menos, 2 W (emissão A-2) em 500 kHz, numa antena artificial constituída por uma resistência pura de 15 ohms em série com um condensador de 100×10^{-12} farads. A profundidade de modulação deve ser, pelo menos, de 70 %.

for alimentado por uma bateria, esta bateria deve satisfazer às especificações estabelecidas pela Administração para assegurar que ela é de um modelo durável e de uma capacidade adequada.

i) Quando um navio estiver no mar, um oficial radiotécnico ou um operador radiotelefonista, conforme o caso, deve experimentar semanalmente o emissor, utilizando uma antena artificial conveniente, e deve levar a bateria à plena carga se ela for de um tipo que exija recarga.

j) Para os fins da presente regra, «equipamento novo» significa um equipamento fornecido a um navio depois da data de entrada em vigor da presente Convenção.

Regra 15

Estações radiotelefónicas

a) A estação radiotelefónica deve estar situada na parte superior do navio, localizada de modo que esteja abrigada o mais possível de ruídos que possam prejudicar a correcta recepção de mensagens e sinais.

b) Deve existir um meio de comunicação eficiente entre a estação radiotelefónica e a ponte de navegação.

c) Um relógio de funcionamento seguro deve ser solidamente fixado numa posição tal que todo o mostrador possa ser facilmente observado da posição de operação do radiotelefone.

d) Deve existir uma conveniente iluminação de emergência, independente da rede de iluminação normal da instalação radiotelefónica, instalada permanentemente, de modo a poder fornecer iluminação adequada dos comandos da instalação radiotelefónica, do relógio requerido pelo parágrafo *c*) e do quadro de instruções prescrito pelo parágrafo *f*) da presente regra.

e) Quando a fonte de energia consistir numa bateria ou baterias, a estação radiotelefónica deve ser equipada com um meio que permita avaliar o estado de carga.

f) Um quadro de instruções que forneça um resumo claro do procedimento radiotelefónico de socorro deve ser instalado de maneira a ser completamente visível da posição de operação do radiotelefone.

Regra 16

Instalações radiotelefónicas

a) A instalação radiotelefónica é constituída pelo equipamento de emissão e recepção e fontes de energia apropriada (referidas nos parágrafos seguintes como «o emissor», «o receptor», «o receptor de escuta da frequência radiotelefónica de socorro» e «a fonte de energia», respectivamente).

b) O emissor deve ter possibilidade de emitir na frequência radiotelefónica de socorro e em, pelo menos, numa outra frequência nas bandas de 1605 kHz a 2850 kHz, utilizando as classes de emissão determinadas pelo Regulamento das Radiocomunicações para estas frequências. Em funcionamento normal, uma emissão de dupla banda lateral ou de banda lateral única com onda portadora completa (isto é, A3H) deve ter uma profundidade de modulação de, pelo menos, 70 % na amplitude máxima. Uma emissão em banda lateral única com a portadora reduzida ou suprimida (A3A, A3J) deve ter uma modulação de tal modo que os produtos de intermodulação não excedam os valores indicados no Regulamento das Radiocomunicações.

c) — *i*) No caso dos navios de carga de 500 t de arqueação bruta ou mais, mas inferior a 1600 t, o emissor deve ter um alcance normal mínimo de 150 milhas, isto é, deve ter possibilidade de emitir sinais claramente perceptíveis de navio para navio durante o dia e em condições normais para esta distância (1). (Devem ser normalmente recebidos sinais claramente perceptíveis se o valor eficaz da intensidade de campo produzida no receptor pela onda portadora não modulada for, pelo menos, de 25 μV por metro);

ii) No caso dos navios de carga de 300 t de arqueação bruta ou mais, mas inferior a 500 t:

1) Nas instalações existentes o emissor deve ter um alcance normal mínimo de 75 milhas;

2) Nas instalações novas o emissor deve fornecer uma potência à antena de, pelo menos, 15 W (onda portadora não modulada).

d) O emissor deve ser apetrechado com um dispositivo destinado a produzir automaticamente o sinal de alarme radiotelefónico e concebido de maneira a evitar que possa ser posto em funcionamento acidentalmente. Este dispositivo deve ter possibilidade de interromper o funcionamento em qualquer momento, de modo a permitir a emissão imediata de uma mensagem de socorro. Deve ter possibilidade de ser experimentado periodicamente o bom funcionamento do dispositivo em frequências diferentes da frequência radiotelefónica de socorro, usando uma antena artificial adequada.

e) O dispositivo exigido pelo parágrafo *d*) da presente regra deve satisfazer aos seguintes requisitos:

i) A tolerância de frequência de cada um dos sinais elementares deve ser igual a ±1,5 %;

ii) A tolerância de duração de cada um dos sinais elementares deve ser igual a ± 50 milissegundos;

iii) O intervalo entre dois sinais elementares sucessivos não deve exceder 50 milissegundos;

iv) A relação entre as amplitudes do sinal elementar mais forte e do mais fraco deve estar compreendida entre 1 e 1,2.

f) O receptor exigido pelo parágrafo *a*) da presente regra deve receber na frequência radiotelefónica de socorro e, pelo menos, numa outra frequência consignada para as estações radiotelefónicas do serviço móvel marítimo na faixa dos 1605 kHz a 2850 kHz, usando as classes de emissão estabelecidas pelo Regulamento das Radiocomunicações para estas frequências. Além disso, o receptor deve ter possibilidade de receber outras frequências nas classes de emissão estabelecidas pelo Regulamento das Radiocomunicações, tais como as usadas para a emissão radiotelefónica de comunicados meteorológicos e para outras comunicações relativas à segurança da navegação que possam ser consideradas necessárias pe-

(1) Na ausência de medições de intensidade de campo, pode admitir-se que este alcance será obtido com uma potência de 15 W na antena (onda portadora não modulada) com um rendimento de antena de 27 %.

la Administração. O receptor deve ter sensibilidade suficiente para produzir sinais num altifalante mesmo que a tensão à sua entrada seja só 50 μV.

g) O receptor de escuta na frequência radiotelefónica de socorro deve ser pré-sintonizado nesta frequência. Deve ter um filtro ou um dispositivo que permita o silenciamento do altifalante na ausência do sinal de alarme radiotelefónico. Este dispositivo deve ter possibilidade de ser facilmente ligado e desligado e pode ser usado quando, segundo a opinião do comandante, a situação é tal que a manutenção da escuta possa interferir com a segurança da navegação do navio.

h) Para permitir uma rápida mudança da emissão para a recepção, quando for utilizada a comutação manual, o comando do dispositivo de comutação, desde que seja praticável, deve ser localizado no microfone ou no microtelefone.

i) Enquanto o navio estiver no mar, deve haver em qualquer instante uma fonte de energia principal suficiente para fazer funcionar a instalação para o alcance normal requerido pelo parágrafo *c*) da presente regra. Se existirem baterias, elas devem ter, em qualquer circunstância, capacidade suficiente para fazer funcionar o emissor e o receptor num mínimo de seis horas consecutivas nas condições normais de exploração (1). Em instalações de navios de carga de tonelagem de arqueação bruta igual ou superior a 500 t, mas inferior a 1600 t, montadas em ou depois de 19 de Novembro de 1952, a fonte de energia de reserva deve ser situada na parte superior do navio, a menos que a fonte de energia principal esteja aí situada.

j) A fonte de energia de reserva, se existir, será usada somente para alimentar:

i) A instalação radiotelefónica;

ii) A iluminação de emergência requerida pelo parágrafo *d*) da regra 15 do presente capítulo;

iii) O dispositivo requerido pelo parágrafo *d*) da presente regra para a produção do sinal de alarme radiotelefónico;

iv) A instalação de ondas métricas (VHF).

k) Não obstante as disposições do parágrafo *j*) da presente regra, a Administração pode autorizar o uso da fonte de energia de reserva, se existir, para o radiogoniómetro, quando instalado, e para um número de circuitos de emergência de baixa potência que sejam totalmente confinados à parte superior do navio, tais como a iluminação de emergência no pavimento das embarcações, com a condição de que estas cargas adicionais possam ser rapidamente desligadas e de que a fonte de energia seja de capacidade suficiente para as satisfazer.

l) Enquanto o navio estiver no mar, as baterias existentes devem ser mantidas carregadas para satisfazer os requisitos do parágrafo *i*) da presente regra.

m) Deve existir uma antena convenientemente instalada, a qual, se for suspensa entre suportes sujeitos a vibração, deve ser protegida contra ruptura no caso de navios de arqueação bruta igual ou superior a 500 t, mas inferior a 1600 t. Além disso, deve haver uma antena sobresselente completamente preparada para substituição imediata ou, quando isto não for possível, deve existir cabo de antena e isoladores para permitir a sua instalação. Devem igualmente existir as ferramentas necessárias para essa montagem.

Regra 17

Estações radiotelefónicas de ondas métricas (VHF)

a) Quando um navio disponha de uma estação radiotelefónica de ondas métricas, de acordo com a regra 18 do capítulo V, a estação deve estar localizada na parte superior do navio e deve incluir uma instalação radiotelefónica de VHF satisfazendo os requisitos da presente regra, sendo formada por um emissor e um receptor, uma fonte de energia suficiente para fazê-la funcionar na sua potência normal e uma antena apropriada para radiação e recepção eficiente dos sinais nas frequências em que trabalha.

b) Tal instalação de ondas métricas deve satisfazer as condições indicadas no Regulamento das Radiocomunicações para os equipamentos usados no serviço móvel marítimo em ondas métricas e terá possibilidade de funcionar nos canais especificados pelo Regulamento atrás mencionado, nas condições prescritas pelo Governo Contratante indicado na regra 18 do capítulo V.

c) O Governo Contratante não pode exigir que a potência da onda portadora do emissor seja superior a 10 W. A antena, tanto quanto possível, será montada de maneira a estar desobstruída em todas as direcções (1).

d) O comando dos canais de VHF necessários para a segurança da navegação devem estar colocados em local imediatamente acessível na ponte, junto ao local onde o navio é geralmente dirigido. Quando necessário, deve haver possibilidade de existência de radiocomunicações nas asas da ponte.

Regra 18

Auto-alarmes radiotelefónicos

a) Os auto-alarmes radiotelefónicos devem obedecer aos requisitos mínimos seguintes:

i) As frequências dos máximos da curva de resposta dos circuitos sintonizados ou de outros dispositivos utilizados para a selecção de frequências terão uma tolerância de ± 1,5 % em cada caso e a resposta não será inferior a 50 % da resposta máxima para as frequências dentro dos 3 % da frequência de resposta máxima;

ii) Na ausência de ruído e de interferência, o dispositivo de recepção automática terá possibilidade de

---

(1) Com o fim de determinar a quantidade de electricidade que devem fornecer as baterias requeridas para ter uma reserva de capacidade de seis horas, é recomendada a seguinte fórmula como guia:

1/2 do consumo de corrente necessária para a emissão falada;
+ o consumo de corrente do receptor;
+ o consumo de corrente de todas as cargas adicionais para as quais as baterias podem fornecer energia em caso de socorro ou emergência.

(1) A título informativo, admite-se que cada navio tenha uma antena de ganho unitário, de polarização vertical, instalada a uma altura nominal de 9,15 m (30 pés) em relação à água, um emissor com uma potência de saída de 10 W e um receptor com uma sensibilidade de 2 μV na entrada para uma relação sinal/ruído de 20 dB.

ser accionado por um sinal de alarme com uma duração não inferior a 4 segundos, mas não ultrapassando os 6 segundos;

iii) O dispositivo de recepção automática deve responder ao sinal de alarme nas condições de interferências intermitentes, devidas a atmosféricos e a sinais de grande intensidade que não sejam o sinal de alarme, de preferência sem que seja necessário qualquer regulação manual durante qualquer período de escuta assegurada pelo equipamento;

iv) Não deve ser accionado por atmosféricos nem por sinais de grande intensidade que não sejam de alarme;

v) Deve ser eficiente para além da distância para a qual a emissão da voz é satisfatória;

vi) Deve suportar as condições de vibração, humidade, variações de temperatura e de tensão de alimentação correspondente às condições rigorosas experimentadas a bordo dos navios no mar, e deve continuar a funcionar em tais condições;

vii) Na medida do possível, deve assinalar as avarias que poderão impedir o seu funcionamento normal durante as horas de escuta.

b) Antes de aprovar um novo tipo de auto-alarme radiotelefónico, a Administração interessada deve assegurar-se, por meio de ensaios práticos feitos nas condições de funcionamento equivalentes às que se encontram na prática, de que o equipamento obedece às prescrições do parágrafo *a*) da presente regra.

PARTE D

Registos de radiocomunicações

Regra 19

Registos de radiocomunicações

a) O registo de radiocomunicações (diário do serviço radioeléctrico) prescrito pelo Regulamento das Radiocomunicações para um navio equipado com uma estação radiotelegráfica, de acordo com a regra 3 ou a regra 4 do presente capítulo, deve ser conservado na cabina de radiotelegrafia durante a viagem. Cada um dos oficiais radiotécnicos deve inscrever no registo o seu nome, as horas em que entra e sai de quarto e todos os factos relacionados com o serviço radioeléctrico que ocorram durante o seu quarto e pareçam ser de importância para a segurança da vida humana no mar. Além disso, serão registadas as seguintes indicações:

i) As inscrições prescritas pelo Regulamento das Radiocomunicações;

ii) Pormenores de conservação das baterias, incluindo um registo das cargas, na forma prescrita pela Administração;

iii) Um relatório diário mencionando que foram observadas as prescrições do parágrafo *p*) da regra 10 do presente capítulo;

iv) Pormenores das experiências do emissor de reserva e da fonte de energia de reserva efectuadas em conformidade com o parágrafo *s*) da regra 10 do presente capítulo;

v) Pormenores das experiências feitas, em conformidade com o parágrafo *c*) da regra 11 do presente capítulo, nos navios equipados com auto-alarme radiotelegráfico;

vi) Pormenores da conservação das baterias, incluindo um registo das cargas (se necessárias) prescritas pelo parágrafo *j*) da regra 13 do presente capítulo, e pormenores das experiências exigidas por aquele parágrafo em relação aos emissores instalados nas embarcações salva-vidas com motor;

vii) Pormenores da conservação das baterias, incluindo um registo das cargas (se necessárias) prescritas pelo parágrafo *i*) da regra 14 do presente capítulo, e pormenores das experiências exigidas por aquele parágrafo em relação aos equipamentos radiocomunicações portáteis para embarcações e jangadas salva-vidas;

viii) A hora em que a escuta foi interrompida, de acordo com o parágrafo *d*) da regra 6 do presente capítulo, assim como o motivo da interrupção e a hora em que foi retomada a escuta.

b) O registo das radiocomunicações (diário do serviço radioeléctrico) prescrito pelo Regulamento das Radiocomunicações para um navio equipado com uma estação radiotelefónica, de acordo com a regra 4 do presente capítulo, deve ser conservado no local onde o serviço de escuta é mantido. Todos os operadores qualificados e todos os comandantes, oficiais ou outros membros da tripulação que efectuem um quarto de escuta, de acordo com a regra 7 do presente capítulo, devem inscrever no registo, com o seu nome, os pormenores de todos os factos relacionados com o serviço radioeléctrico ocorridos durante o seu quarto e que pareçam ser de importância para a segurança da vida humana no mar. Além disso, devem figurar no registo:

i) Os pormenores prescritos pelo Regulamento das Radiocomunicações;

ii) A hora em que a escuta começa, quando o navio sai do porto, e aquela em que acaba, quando o navio chega ao porto;

iii) A hora em que a escuta for interrompida por qualquer razão, juntamente com o motivo da interrupção, e a hora em que a escuta recomeçou;

iv) Pormenores da conservação das baterias (se existirem), incluindo um registo das cargas prescritas pelo parágrafo *l*) da regra 16 do presente capítulo;

v) Pormenores da conservação das baterias, incluindo um registo das cargas (se aplicável) prescritas pelo parágrafo *i*) da regra 14 do presente capítulo, e pormenores das experiências exigidas por aquele parágrafo em relação aos equipamentos radiocomunicações portáteis para embarcações e jangadas salva-vidas.

c) Os registos de radiocomunicações devem estar disponíveis para serem inspeccionados pelos funcionários autorizados pela Administração para esse efeito.

CAPÍTULO V

Segurança da navegação

Regra 1

Aplicação

Este capítulo, salvo indicação em contrário, aplica-se a todos os navios e em todas as viagens, excepto aos navios de guerra e aos navios que nave-

guem exclusivamente nos Grandes Lagos da América do Norte e suas águas tributárias e comunicantes até ao limite leste constituído pela saída inferior da comporta de Saint-Lambert, em Montreal, na província de Quebeque (Canadá).

Regra 2

Mensagens de segurança

a) O comandante de qualquer navio que se encontre em presença de gelos, destroços perigosos ou qualquer outro perigo imediato para a navegação, ou de uma tempestade tropical, ou que encontre temperaturas do ar inferiores ao ponto de congelação associadas a ventos de força tempestuosa que causem graves acumulações de gelo sobre as superstruturas, ou que encontre ventos de força igual ou superior a 10 (escala Beaufort), acerca dos quais ainda não tenha sido recebido aviso de tempestade, é obrigado a comunicar esse facto, por todos os meios de que disponha, aos navios que se encontrem nas proximidades, assim como às autoridades competentes, por intermédio do primeiro ponto da costa com que possa comunicar. Não é imposta qualquer forma especial de transmissão da informação. Esta pode ser transmitida quer em linguagem clara (de preferência em inglês), quer por meio do Código Internacional de Sinais, e, eventualmente, pode ser transmitida a todos os navios que se encontrem nas proximidades e enviada ao primeiro ponto da costa com o qual possa entrar em comunicação, com o pedido de a transmitir à autoridade competente.

b) Cada um dos Governos Contratantes deve tomar as medidas que julgar necessárias para que todas as informações recebidas, relativas a um perigo previsto no parágrafo precedente, sejam rapidamente levadas ao conhecimento dos interessados e comunicadas aos outros Governos aos quais possa ser útil.

c) A transmissão das mensagens relativamente a esses perigos é gratuita para os navios interessados.

d) Todas as mensagens transmitidas via rádio, em virtude do prescrito no parágrafo *a*) da presente regra, serão precedidas do sinal de segurança, usando o procedimento prescrito pelo Regulamento de Radiocomunicações, tal como está definido na regra 2 do capítulo IV.

Regra 3

Informações exigidas nas mensagens de segurança

As seguintes informações devem ser fornecidas nas mensagens de segurança:

a) *Gelos, destroços e outros perigos imediatos para a navegação:*

i) Natureza dos gelos, dos destroços ou dos perigos observados;

ii) Posição dos gelos, dos destroços ou dos perigos aquando da última observação;

iii) A data e hora (tempo médio de Greenwich) da última observação.

b) *Tempestades tropicais* (furacões nas Antilhas, tufões nos mares da China, ciclones no oceano Índico e tempestades de natureza semelhante nas outras regiões):

i) Mensagem que assinale que se encontrou uma tempestade tropical. Esta obrigação deve ser encarada de uma maneira geral e esta informação deve ser transmitida todas as vezes que o comandante tenha motivo para julgar que uma tempestade tropical está em via de formação ou já existe na sua vizinhança;

ii) Data e hora (tempo médio de Greenwich) e posição do navio no momento em que a observação foi feita;

iii) A mensagem deve incluir o maior número de informações possível, de entre as seguintes:

Pressão atmosférica, de preferência correcta (indicando se ela está expressa em milibares, em polegadas ou em milímetros e se foi ou não corrigida);
Tendência barométrica (variação da pressão atmosférica nas últimas três horas);
Direcção verdadeira do vento;
Força do vento (escala Beaufort);
Estado do mar (chão, encrespado, forte, alteroso);
Ondulação (fraca, moderada, forte) e a direcção verdadeira donde vem. A indicação do período ou comprimento de onda (curta, média ou longa) é igualmente valiosa;
Rumo verdadeiro e velocidade do navio.

c) *Observações ulteriores:*

Quando um comandante tenha assinalado uma tempestade tropical ou qualquer outra tempestade perigosa, é conveniente, mas não obrigatório, efectuar observações ulteriores e transmiti-las de hora a hora, sendo possível, mas em qualquer caso com intervalos que não excedam três horas, enquanto o navio permaneça sob a influência da tempestade.

d) *Ventos de força igual ou superior a 10 (escala Beaufort) e acerca dos quais não tenha sido recebido qualquer aviso de tempestade:*

O presente parágrafo refere-se a tempestades diferentes das tempestades tropicais, tratadas no parágrafo *b*); quando uma tempestade desta espécie é encontrada, a mensagem enviada deve conter informações semelhantes às referidas no parágrafo *b*) da presente regra, excluindo as relativas ao estado do mar e ondulação.

e) *Temperaturas do ar inferiores ao ponto de congelação associadas a rajadas violentas que provoquem acumulação de gelo nas superstruturas:*

i) Data e hora (tempo médio de Greenwich);
ii) Temperatura do ar;
iii) Temperatura da água do mar (se for possível);
iv) Força e direcção do vento.

Exemplos

Gelo:

TTT Gelo. Grande icebergue avistado a 4605 N., 4410 W., às 08.00 T. M. G., 15 de Maio.

Destroços de navio:

TTT Destroços. Destroços de navio avistados quase submersos a 4006 N., 1243 W., às 16.30 T. M. G., 21 de Abril.

Perigos para a navegação:

TTT Navegação. Navio-farol *Alfa* não está no seu posto. 18.00 T. M. G., 3 de Janeiro.

Tempestade tropical:

TTT Tempestade. 00.30 T. M. G., 18 de Agosto. 2004 N., 11 354 E. Barómetro correcto 994 milibares, tendência para baixar 6 milibares. Vento N. W., força 9, grandes aguaceiros. Ondulação forte de leste. Rumo 067, 5 nós;

TTT Tempestade. Indícios de aproximação de um furacão. 13.00 T. M. G., 14 de Setembro. 2200 N., 7236 W. Barómetro correcto 29,64 polegadas, tendência para baixar 0,015 polegadas. Vento N. E., força 8, aguaceiros frequentes. Rumo 035, 9 nós.

TTT Tempestade. As condições indicam a formação de um forte ciclone. 02.00 T. M. G., 4 de Maio. 1620 N., 9203 E. Barómetro não correcto 753 mm, tendência para baixar 5 mm. Vento S. quarta a S. W., força 5. Rumo 300, 8 nós.

TTT Tempestade. Tufão a S. E., 03.00 T. M. G., 12 de Junho. 1812 N., 12 605 E. Descida rápida do barómetro. Vento aumentando do N.

TTT Tempestade. Vento de força 11, não foi recebido qualquer aviso de tempestade. 03.00 T. M. G., 4 de Maio, 4830 N., 3000 W. Barómetro correcto 983 milibares, tendência para baixar 4 milibares. Vento S. W., força 11 variável. Rumo 260, 6 nós.

Formação substancial de gelo:

TTT Formação substancial de gelo. 14.00 T. M. G., 2 de Março, 69 N., 10 W. Temperatura do ar 18. Temperatura da água do mar 29. Vento N. E., força 8.

Regra 4

Serviços meteorológicos

a) Os Governos Contratantes comprometem-se a fomentar a recolha de informações meteorológicas pelos navios no mar e a promover o exame, difusão e troca de informações e comunicar da forma mais eficaz com o fim de auxiliar a navegação. As Administrações devem também fomentar o emprego de instrumentos de alta precisão e facilitar a verificação desses instrumentos quando seja pedida.

b) Em particular, os Governos Contratantes comprometem-se a cooperar, tanto quanto possível, na aplicação das disposições meteorológicas seguintes:

i) Avisar os navios de temporais, tempestades e tempestades tropicais, tanto pela transmissão de mensagens via rádio, como pelo emprego de sinais apropriados em pontos da costa;

ii) Transmitir diariamente, via rádio, boletins meteorológicos para uso da navegação, contendo informações acerca das condições de tempo, mar e gelos, assim como previsões e, sendo possível, informações complementares suficientes para permitir traçar no mar cartas meteorológicas simples e fomentar, além disso, a transmissão por fac-símile das cartas meteorológicas adequadas;

iii) Preparar e editar todas as publicações que possam ser necessárias à execução eficiente do trabalho meteorológico no mar e assegurar, na medida do possível, a publicação e a distribuição das cartas meteorológicas diárias para informação dos navios que estejam para partir;

iv) Tomar medidas para que determinados navios sejam equipados com aparelhos aferidos (tais como um barómetro, um barógrafo, um psicrómetro e um aparelho que permita medir a temperatura da água do mar) destinados a serem empregados nesse serviço e efectuem observações meteorológicas às principais horas padrão para observações sinópticas de superfície (pelo menos quatro vezes por dia, quando as circunstâncias o permitam) e estimular outros navios a fazerem observações de maneira diferente, particularmente quando se encontrem em regiões onde a navegação seja pouco intensa. Estes navios devem transmitir as observações via rádio em benefício dos diversos serviços meteorológicos oficiais e devem repetir as suas informações para os navios que se encontrem na proximidade. Quando na vizinhança de uma tempestade tropical ou de uma pretensa tempestade tropical, os navios deverão ser estimulados a fazer e transmitir as suas observações, a intervalos mais curtos se possível, tendo em atenção que durante a tempestade os oficiais do navio podem estar ocupados com a navegação;

v) Tomar disposições que assegurem a recepção e transmissão pelas estações costeiras de rádio das mensagens meteorológicas provenientes ou destinadas a esses navios. Os navios que não possam comunicar directamente com as estações costeiras devem ser levados a transmitir as suas mensagens meteorológicas por intermédio de navios de serviço meteorológico no alto mar ou através de outros navios que estejam em contacto com a costa;

vi) Persuadir todos os comandantes a informarem os navios que estejam próximos, bem como as estações costeiras, sempre que encontrem vento de velocidade igual ou superior a 50 nós (força 10 da escala Beaufort);

vii) Esforçar-se por conseguir um procedimento uniforme em relação aos serviços meteorológicos internacionais, já especificados, e proceder, na medida do possível, em conformidade com as regras técnicas e recomendações feitas pela Organização Meteorológica Mundial, à qual os Governos Contratantes se poderão dirigir para estudo e conselho sobre qualquer assunto de ordem meteorológica que possa surgir na aplicação da presente Convenção.

c) As informações consideradas na presente regra devem ser fornecidas sob a forma prevista para a sua emissão e devem ser transmitidas segundo a ordem de prioridade prescrita no Regulamento das Radiocomunicações; no decurso das transmissões «para todas as estações», das informações meteorológicas, avisos e previsões, todas as estações de bordo devem

proceder de acordo com as disposições do Regulamento das Radiocomunicações.

d) As previsões, avisos, relatórios sinópticos e outros de carácter meteorológico para uso dos navios devem ser transmitidos e difundidos pelo serviço nacional que se encontre na posição mais favorável para servir as diferentes zonas e regiões, em conformidade com os acordos mútuos existentes entre os Governos Contratantes interessados.

Regra 5

Serviços de patrulha dos gelos

a) Os Governos Contratantes comprometem-se a manter um serviço de patrulha dos gelos e um serviço de estudo e observação das condições do regime do gelo no Atlântico Norte. Durante toda a estação dos gelos, os limites sueste, sul e sudoeste das regiões dos icebergues na vizinhança dos Grandes Bancos da Terra Nova devem ser vigiados, com o fim de fornecer informações sobre a extensão desta região perigosa aos navios que por aí passam, de estudar o regime de gelos, em geral, e de prestar assistência aos navios e tripulações que tiverem necessidade de auxílio dentro dos limites da zona da acção dos navios-patrulhas. Durante o resto do ano o estudo e a observação do regime dos gelos devem ser mantidos de acordo com as necessidades.

b) Os navios e aviões usados no serviço de patrulha dos gelos e no estudo e observação do seu regime podem ser designados para outras funções pelo Governo encarregado da execução desse serviço, desde que essas funções não interfiram com o seu objectivo principal e não aumentem o seu custo.

Regra 6

Patrulha dos gelos. Gestão e custeio

a) O Governo dos Estados Unidos da América aceita continuar a assumir a gestão do serviço de patrulha dos gelos e manter o estudo e observação do regime dos mesmos, assim como a difusão das informações recebidas. Os Governos Contratantes especialmente interessados nestes serviços comprometem-se a contribuir para o custeio das despesas de manutenção e funcionamento de tais serviços; a contribuição de cada um deles será calculada em função da tonelagem bruta total dos navios respectivos que naveguem nas regiões dos icebergues vigiadas pelo Serviço de Patrulha dos Gelos; em especial, cada Governo Contratante particularmente interessado compromete-se a contribuir anualmente para as despesas de manutenção e de funcionamento destes serviços com uma quantia que será fixada em proporção à tonelagem bruta total dos navios respectivos que naveguem durante a estação de gelos nas regiões dos icebergues vigiadas pelo Serviço de Patrulha dos Gelos em relação à tonelagem bruta dos navios de todos os Governos contribuintes que naveguem durante aquela estação nas mesmas regiões. Os Governos não Contratantes especialmente interessados neste serviço podem contribuir para as despesas de manutenção e de funcionamento destes serviços na mesma base. O Governo responsável pela execução do serviço de patrulha dos gelos deve fornecer anualmente a cada Governo contribuinte a indicação do custo total da manutenção e funcionamento do Serviço de Patrulha dos Gelos e da quota-parte correspondente a cada Governo contribuinte.

b) Cada um dos Governos contribuintes tem o direito de alterar ou de cessar a sua contribuição e outros Governos interessados podem comprometer-se a contribuir para as despesas. O Governo contribuinte que faça uso desta faculdade deve continuar, contudo, responsável pela sua contribuição em curso até ao dia 1 de Setembro que se seguir à data da comunicação da sua intenção de alterar ou cessar a sua contribuição. Para usar da faculdade acima esse Governo deverá comunicar a sua intenção ao Governo responsável pela execução dos serviços pelo menos seis meses antes do dito dia 1 de Setembro.

c) Se, em qualquer altura, o Governo dos Estados Unidos da América desejar cessar de gerir estes serviços, ou se qualquer dos Governos contribuintes exprimir o desejo de não continuar a assumir a responsabilidade pela sua contribuição pecuniária ou desejar alterar essa contribuição, ou se qualquer dos Governos Contratantes desejar comprometer-se a contribuir para aquela despesa, os Governos contribuintes deverão resolver o assunto de acordo com os seus interesses mútuos.

d) Os Governos contribuintes têm o direito de, por comum acordo, fazer, de tempos a tempos, as alterações às disposições da presente regra e da regra 5 deste capítulo que lhes pareçam necessárias.

e) Nos casos em que esta regra prevê a possibilidade de ser tomada qualquer medida por acordo entre os Governos contribuintes, as propostas de qualquer Governo Contratante para efectivar tal medida devem ser comunicadas ao Governo encarregado da execução do serviço, o qual se deve pôr em comunicação com os outros Governos contribuintes, com o fim de averiguar se eles aceitam essas propostas. Os resultados do inquérito assim feito devem ser comunicados aos outros Governos contribuintes e ao Governo autor das propostas. Em especial, os acordos relativos às contribuições para o custeio das despesas do serviço serão revistos pelos Governos contribuintes no decurso de consultas que serão feitas a intervalos não superiores a três anos. O Governo encarregado da execução do serviço deve tomar a iniciativa das medidas necessárias para tal fim.

Regra 7

Velocidade na proximidade de gelos

Quando forem assinalados gelos na rota ou próximo da rota a seguir, os comandantes de todos os navios são obrigados a navegar durante a noite com velocidade moderada ou a alterar o rumo de modo a passarem bem safos da zona perigosa.

Regra 8

Organização do tráfego

a) A prática de seguir, particularmente em zonas de convergência, rotas adoptadas com o objectivo de separar o tráfego, incluindo evitar a passagem

em zonas marcadas como áreas a ser evitadas pelos navios ou certas classes de navios, ou no propósito de evitar condições perigosas, tem contribuído para a segurança da navegação e é recomendada a sua utilização a todos os navios a que digam respeito.

b) A Organização é o único organismo internacional reconhecido para estabelecimento e adopção de medidas a nível internacional no respeitante a rotas e áreas a ser evitadas por navios ou certas classes de navios. Todas as informações importantes serão examinadas e divulgadas aos Governos Contratantes pela Organização.

c) A escolha das rotas e a iniciativa das medidas a tomar a este respeito, assim como a delimitação do que constitui zonas de convergência, são principalmente da responsabilidade dos Governos interessados. No desenvolvimento de esquemas de separação de tráfego que colidam com as águas internacionais, ou de outros quaisquer esquemas que possam ser aceites pela Organização, serão tomadas em devida consideração as importantes informações publicadas pela Organização.

d) Os Governos Contratantes devem usar as suas influências para assegurar a utilização apropriada das rotas adoptadas e devem fazer tudo o que estiver ao seu alcance para garantir adesão às medidas adoptadas pela Organização em relação à rota dos navios.

e) Os Governos Contratantes devem aconselhar também todos os navios que realizem viagens nas proximidades dos Grandes Bancos da Terra Nova a evitar, tanto quanto possível, os bancos de pesca da Terra Nova a norte do paralelo 43° N e a navegar fora das regiões, manifesta ou supostamente, perigosas pela presença de gelos.

Regra 9

Uso injustificado de sinais de perigo

O uso de um sinal internacional de perigo, excepto com o fim de indicar que um navio ou avião está em perigo, e o uso de qualquer sinal que se possa confundir com um sinal internacional de perigo, são proibidos a todos os navios ou aviões.

Regra 10

Mensagens de socorro. Obrigações e procedimentos a seguir

a) O comandante de um navio no mar que receba uma mensagem de qualquer origem que indique que um navio ou avião ou as suas embarcações ou jangadas se encontram em perigo é obrigado a dirigir-se, a toda a velocidade, em socorro das pessoas em perigo, informando-as, se for possível, do facto. Em caso de impossibilidade ou se, nas circunstâncias especiais em que se encontre, julgar nem razoável nem necessário ir em seu socorro, deve mencionar no diário de navegação a razão por que não foi em socorro das pessoas em perigo.

b) O comandante de um navio em perigo, depois de ter consultado, tanto quanto isso seja possível, os capitães dos navios que responderem ao seu pedido de socorro, tem o direito de requisitar um ou mais desses navios que considere os mais aptos para lhe prestar assistência, e é dever do comandante ou comandantes do navio ou navios requisitados submeter-se à requisição, continuando a dirigir-se a toda a velocidade em socorro das pessoas em perigo.

c) O comandante de um navio é desligado da obrigação imposta pelo parágrafo *a*) da presente regra quando tomar conhecimento de que um ou mais navios, que não o seu, foram requisitados e estão dando cumprimento à requisição.

d) O comandante de um navio é desligado da obrigação imposta pelo parágrafo *a*) da presente regra e, se o seu navio for requisitado, da obrigação imposta pelo parágrafo *b*) da presente regra se tiver sido informado pelas pessoas em perigo ou pelo comandante de outro navio que já tenha chegado junto dessas pessoas de que já não é necessária a sua assistência.

e) As disposições da presente regra não prejudicam as da Convenção Internacional para a Unificação de Certas Regras Relativas a Assistência e Salvação no Mar, assinada em Bruxelas em 23 de Setembro de 1910, especialmente no que diz respeito à obrigação de prestar a assistência imposta pelo artigo 11.° daquela Convenção.

Regra 11

Lâmpadas de sinais

Todos os navios de arqueação bruta superior a 150 t, quando efectuem viagens internacionais, devem ter a bordo uma lâmpada para sinais de dia, que seja eficiente e que não deve ser exclusivamente alimentada pela fonte principal de energia eléctrica do navio.

Regra 12

Auxiliares de navegação a bordo

a) Todos os navios de arqueação bruta igual ou superior a 1600 t devem ser providos com um radar de tipo aprovado pela Administração. Nas pontes desses navios devem existir meios que permitam fazer registo das indicações do radar *(plotting)*.

b) Todos os navios de arqueação bruta igual ou superior a 1600 t, quando efectuem viagens internacionais, devem ter um radiogoniómetro de acordo com o disposto na regra 12 do capítulo IV. A Administração, nas zonas em que entenda não ser razoável nem necessário impor a instalação a bordo de tal aparelho, pode dispensar desta prescrição todos os navios de arqueação bruta inferior a 5000 t, tendo, contudo, em atenção que o radiogoniómetro constitui um auxiliar precioso não só como instrumento de navegação mas também como meio de determinar a posição de navios, aeronaves ou embarcações salva-vidas.

c) Todos os navios de arqueação bruta igual ou superior a 1600 t, quando efectuem viagens internacionais, devem ter uma girobússula, além da agulha magnética. A Administração, se entender não ser razoável nem necessário impor a instalação a bordo de uma girobússula, pode dispensar desta prescrição todos os navios de arqueação bruta inferior a 5000 t.

d) Todos os navios novos, de arqueação bruta igual ou superior a 500 t, quando efectuem viagens internacionais, devem ter uma sonda acústica.

e) Embora devam ser tomadas as providências apropriadas para manter a aparelhagem em condições eficientes, o mau funcionamento do radar, da girobússola ou da sonda acústica não deve ser considerado como incapacidade para o navio sair para o mar nem motivo para retê-lo em portos onde as possibilidades de reparação não sejam rapidamente efectuadas.

f) Todos os navios novos, de arqueação bruta igual ou superior a 1600 t, quando efectuem viagens internacionais, devem ter um equipamento de radiolocalização na frequência radiotelefónica de socorro de acordo com as prescrições do parágrafo *b*) da regra 12 do capítulo IV.

Regra 13

Tripulação

Os Governos Contratantes comprometem-se, no que diz respeito a navios pertencentes à sua nacionalidade, a conservar ou, se for necessário, a adoptar todas as medidas que tenham por fim assegurar que, sob o ponto de vista de segurança no mar, todos os navios tenham a bordo uma tripulação suficiente em número e qualidade.

Regra 14

Ajudas à navegação

Os Governos Contratantes comprometem-se a assegurar o estabelecimento e manutenção de ajudas à navegação, incluindo radiofaróis e ajudas electrónicas, na medida em que, em seu entender, tais medidas sejam justificadas pela intensidade da navegação e pelo grau de risco. Comprometem-se também a assegurar que as informações relativas a estas ajudas sejam postas à disposição de todos os interessados.

Regra 15

Busca e salvamento

a) Cada Governo Contratante compromete-se a assegurar que são tomadas todas as disposições necessárias para a vigilância da costa e salvamento das pessoas em perigo ao largo da costa. Estas medidas devem incluir o estabelecimento, operação e manutenção de todas as instalações de segurança marítima julgadas praticamente realizáveis e necessárias, tendo em atenção a intensidade do tráfego marítimo e os perigos da navegação, e devem, tanto quanto possível, fornecer meios apropriados para localizar e salvar as pessoas em perigo.

b) Cada Governo Contratante compromete-se a fornecer informações relativas aos meios de salvamento de que dispõe e aos planos para modificação de tais meios, se os houver.

Regra 16

Sinais das estações de salvamento

São os seguintes os sinais que devem ser empregados pelas estações e unidades marítimas de salvamento nas suas comunicações com navios ou pessoas em perigo e pelos navios ou pessoas em perigo nas suas comunicações com as estações ou unidades marítimas de salvamento. Os sinais utilizados pelos aviões que efectuam operações de busca e salvamento para dirigir os navios são indicados no parágrafo *d*) a seguir. Deve estar sempre à disposição dos oficiais de quarto de qualquer navio a que se apliquem as regras do presente capítulo um quadro ilustrado que descreva os sinais a que se fez referência.

a) Resposta das estações ou unidades marítimas de salvamento aos sinais de perigo emitidos por um navio ou uma pessoa:

Sinal	Significado
De dia — Sinal de fumo alaranjado ou sinal combinado de luz e som (relâmpago), que consiste em três sinais simples lançados com intervalos de cerca de um minuto.	«Estamos a ver-vos; ser-vos-á prestado socorro logo que seja possível».
De noite — Foguete de estrelas brancas que consiste em três sinais simples lançados com intervalos de cerca de um minuto.	(A repetição destes sinais tem a mesma interpretação.)

Se for necessário os sinais de dia podem ser feitos de noite e vice-versa.

b) Sinais de desembarque destinados a orientar as embarcações que transportem tripulações ou pessoas em perigo:

Sinal	Significado
De dia — Movimento vertical de uma bandeira branca, ou dos braços, ou lançamento de um sinal de estrelas verdes, ou transmissão da letra «K» (— · —) do código, por meio de um aparelho de sinais luminosos ou sonoros.	«Este é o melhor local para desembarcar.»
De noite — Movimento vertical de uma luz, ou chama branca, ou lançamento de um sinal de estrelas verdes, ou transmissão da letra «K» (— · —) do código, por meio de um aparelho que emita sinais luminosos ou sonoros. Pode arranjar-se um alinhamento (indicação de direcção) colocando uma luz ou chama branca fixa a um nível inferior e na direcção do observador.	
De dia — Movimento horizontal de uma bandeira branca, ou braços abertos horizontalmente, ou lançamento de um sinal de estrelas vermelhas, ou transmissão da letra «S» (. . .) do código, por meio de um aparelho que emita sinais luminosos ou sonoros.	«É extremamente perigoso desembarcar aqui.»

Sinal	Significado
De noite — Movimento horizontal de uma luz ou chama branca, ou lançamento de um sinal de estrelas vermelhas, ou transmissão da letra «S» (. . .) do código, por meio de um aparelho que emita sinais luminosos ou sonoros.	«É extremamente perigoso desembarcar aqui.»
De dia — Movimento horizontal de uma bandeira branca, seguido da sua fixação no solo e do deslocamento de uma segunda bandeira branca na direcção a indicar; ou lançamento de um sinal de estrelas vermelhas verticalmente e de um sinal de estrelas brancas na direcção do melhor local de desembarque; ou transmissão da letra «S» (. . .) do código, seguida pela letra «R» (· — ·) do código, se for localizado um melhor local de desembarque, para as embarcações em perigo, mais para a direita na direcção de aproximação; ou transmissão da letra «L» (· — ··) do código, se um melhor local de desembarque, para as embarcações em perigo, for localizado mais para a esquerda na direcção de aproximação. *De noite* — Movimento horizontal de uma luz ou chama branca seguido pela sua colocação no solo e do deslocamento de outra luz ou chama branca na direcção a indicar; ou lançamento de um sinal de estrelas vermelhas verticalmente e de um sinal de estrelas brancas na direcção do melhor local de desembarque; ou transmissão da letra «S» (. . .) do código, seguida pela letra «R» (· — ·) do código, que significa que para o navio em perigo o melhor lugar para o desembarque fica situado mais à direita da direcção de aproximação; ou transmissão da letra «L» (· — ··) do código, que significa que para o navio em perigo o melhor lugar para o desembarque fica situado mais à esquerda na direcção de aproximação.	«O desembarque aqui é extremamente perigoso. Encontra-se um local melhor para desembarque na direcção indicada.»

c) Sinais a empregar em ligação com o uso dos meios de salvação instalados na costa:

Sinal	Significado
De dia — Movimento vertical de uma bandeira branca, ou dos braços, ou lançamento de um sinal de estrelas verdes. *De noite* — Movimento vertical de uma luz, ou chama branca, ou lançamento de um sinal de estrelas verdes.	Em geral: «Afirmativo.» De modo particular: «O cabo do foguetão está seguro.» «O cadernal de rabicho está amarrado.» «O cabo está amarrado.» «Há um homem na bóia-calção.» «Vira.»
De dia — Movimento horizontal de uma bandeira branca, ou braços estendidos horizontalmente, ou lançamento de um sinal de estrelas vermelhas. *De noite* — Movimento horizontal de uma luz, ou chama branca, ou lançamento de um sinal de estrelas vermelhas.	Em geral: «Negativo.» De modo particular: «Brandeai as espias.» «Parar de virar.»

d) Sinais usados pelas aeronaves que efectuam operações de busca e salvamento para orientar os navios em direcção a uma aeronave, um navio ou uma pessoa em perigo (veja nota no final desta regra):

i) As manobras seguintes, executadas por uma aeronave pela ordem por que se apresentam, significam que a aeronave está a dirigir uma embarcação para outra aeronave ou para um navio em perigo:

1) A aeronave descreve, pelo menos, um círculo em volta do navio;

2) A aeronave cruza a baixa altura a futura rota do navio a pequena distância da proa, acelerando e reduzindo os motores ou alterando o passo da hélice;

3) A aeronave toma o rumo que o navio deve seguir.

A repetição destas manobras tem a mesma interpretação;

ii) As manobras que se seguem, efectuadas por uma aeronave, significam que a ajuda é já desnecessária da parte do navio a que foi pedida:

A aeronave cruza a esteira do navio a baixa altitude, perto da popa, acelerando e reduzindo os motores ou variando o passo da hélice.

Nota. — A Organização notificará com antecipação qualquer modificação eventual introduzida nestes sinais.

Regra 17

Escadas de piloto e escadas de piloto mecânicas («pilot hoists»)

Os navios que efectuem viagens no decurso das quais seja provável que tenham de embarcar pilotos devem satisfazer aos seguintes requisitos:

a) *Escadas de piloto:*

i) A escada deve ser concebida de modo que os pilotos possam embarcar e desembarcar com

segurança e pode ser utilizada pelas autoridades e outras pessoas, quando um navio entra ou sai de um porto, e deve ser mantida limpa e em bom estado;

ii) A escada deve ser fixada numa posição tal que fique safa de qualquer possível descarga do navio, que cada degrau fique firmemente apoiado ao costado do navio, que fique claro e tão longe quanto possível dos delgados do navio e que o piloto tenha acesso ao navio de uma maneira cómoda e segura sem subir nem menos de 1,50 m (5 pés) nem mais de 9 m (30 pés). A escada utilizada será de um único lanço e deve poder atingir o nível do mar desde o local de acesso ao navio; devem ser tomadas as medidas necessárias para que a escada satisfaça em todas as condições de carga e caimento do navio e para uma inclinação desfavorável de 15°. Sempre que a distância do nível do mar ao ponto de acesso ao navio for superior a 9 m (30 pés), o acesso da escada de piloto ao navio será efectuado por meio de uma escada de portaló ou qualquer outro meio igualmente seguro e cómodo;

iii) Os degraus da escada de piloto devem ser:

1) De madeira rija ou outro material com propriedades equivalentes, feitos de uma só peça sem nós, tendo uma superfície não escorregadia; os quatro primeiros degraus inferiores devem ser feitos de borracha de suficiente resistência e dureza ou outro qualquer material de características equivalentes;

2) De comprimento não inferior a 480 mm (19 polegadas), 115 mm (4,5 polegadas) de largura e 25 mm (1 polegada) de espessura, excluindo qualquer dispositivo antiescorregante;

3) Igualmente separados uns dos outros nem menos que 300 mm (12 polegadas) nem mais que 380 mm (15 polegadas) e devem ser fixados de tal forma que se mantenham em posição horizontal;

iv) Nenhuma escada de piloto deve ter mais que dois degraus substituídos e fixados por um processo diferente do usado na construção original da escada e de qualquer modo os degraus assim fixados devem ser substituídos, tão cedo quanto possível, pelo processo de fixação usado na construção original da escada. Quando algum degrau substituído esteja fixo nos cabos laterais da escada por meio de ranhuras nos lados do degrau, tais ranhuras devem ser feitas nos lados mais compridos do degrau;

v) Os cabos laterais da escada consistirão de dois cabos de manila simples com pelo menos 60 mm (2¼ polegadas) de bitola (circunferência) cada um. Cada cabo será inteiro sem emendas até ao degrau superior. Devem estar à mão, prontos a serem utilizados em caso de necessidade, dois cabos de portaló solidamente amarrados ao navio e pelo menos com 65 mm (2½ polegadas) de bitola (circunferência) e uma retenida;

vi) Travessas de madeira rija, ou outro material de propriedades equivalentes, feitas numa só peça e com um comprimento não inferior a 1,80 m (5 pés e 10 polegadas), devem ser colocadas a intervalos tais que impeçam a escada de se torcer. A travessa mais baixa ficará no quinto degrau a contar da parte mais baixa da escada e o intervalo entre travessas não excederá nove degraus;

vii) Devem ser tomados em consideração todos os meios necessários para garantir com segurança e comodidade a passagem de acesso ou saída do navio, entre o topo superior da escada de piloto ou escada de portaló, ou outro sistema existente, e o navio. Quando tal passagem se efectue através de uma porta aberta na balaustrada ou na borda falsa, serão colocados corrimãos adequados. Se o acesso se faz por meio de uma escada de costado, tal escada será seguramente amarrada ao corrimão da borda falsa ou ao pavimento e dois corrimãos serão colocados no local de acesso ou de saída do navio, separados de uma distância compreendida entre 0,70 m (2 pés e 3 polegadas) e 0,80 m (2 pés e 7 polegadas). Cada corrimão será amarrado rigidamente à estrutura do navio pela sua parte inferior ou por um ponto próximo dela e também por um ponto superior e deve ter um diâmetro de, pelo menos, 40 mm (1½ polegada), elevando-se acima da borda falsa pelo menos 1,20 m (3 pés e 11 polegadas);

viii) De noite deve estar pronta a ser utilizada uma luz que ilumine suficientemente não só a escada fora da borda mas também a posição onde o piloto entra no navio. Deve haver à mão, pronta para ser utilizada, uma bóia equipada com luz de auto-inflamação. Também deve haver à mão uma retenida, pronta para ser utilizada se for necessário;

ix) Devem ser tomadas providências para que as escadas de piloto possam ser utilizadas por ambos os bordos do navio;

x) A instalação da escada assim como o embarque e desembarque do piloto devem ser assistidos por um oficial responsável do navio;

xi) Quando em qualquer navio cujas características de construção, tais como defensas salientes, tornem impossível satisfazer completamente a execução de qualquer destas regras, devem ser tomadas disposições especiais de acordo com a Administração de modo que o embarque e desembarque das pessoas se faça com segurança.

b) Escadas de piloto mecânicas (pilot hoists):

i) Se existir uma escada de piloto mecânica, tanto a escada como o seu mecanismo auxiliar devem ser de um tipo aprovado pela Administração. Deve ser projectada e construída de modo que assegure ao piloto o embarque e desembarque, bem como a passagem da escada ao pavimento e vice-versa, com segurança;

ii) Deve ser colocada no convés junto da escada mecânica e pronta para utilização imediata uma escada de piloto de acordo com o previsto no parágrafo *a*) da presente regra.

Regra 18

Estações radiotelefónicas de ondas métricas (VHF)

Quando um Governo Contratante prescreva para os navios que naveguem numa zona submetida à sua soberania que estejam providos com uma estação radiotelefónica de VHF, destinada a ser utilizada em combinação com o sistema que foi estabelecido para aumentar a segurança da navegação, a dita estação deve cumprir as disposições da regra 17 do capítulo IV e deve ser utilizada de acordo com o disposto na regra 8 do capítulo IV.

Regra 19

Utilização do piloto automático

a) Em zonas de grande densidade de tráfego, em condições de visibilidade reduzida e em todas as outras condições de navegação perigosas em que se utilize o piloto automático, deverá ser possível restabelecer prontamente o *contrôle* manual do governo do navio.

b) Nas circunstâncias anteriores, deve ser possível para o oficial de serviço dispor nessa ocasião dos serviços de um timoneiro competente, que em qualquer momento deve estar preparado para tomar a seu cargo o governo do navio.

c) A mudança do governo automático para o manual ou vice-versa será efectuada por um oficial ou debaixo da vigilância deste.

Regra 20

Publicações náuticas

Todos os navios devem possuir cartas, roteiros, listas de faróis, avisos aos navegantes, tabelas de marés e qualquer outra publicação náutica necessária e devidamente actualizada, para a viagem projectada.

Regra 21

Código Internacional de Sinais

Todos os navios de acordo com a presente Convenção que sejam obrigados a possuir uma instalação radiotelegráfica ou radiotelefónica devem possuir o Código Internacional de Sinais. Esta publicação será também levada por qualquer outro navio, se na opinião da Administração for considerada necessária.

CAPÍTULO VI

Transporte de grão

PARTE A

Condições gerais

Regra 1

Aplicação

Salvo indicação em contrário, o presente capítulo, que inclui as partes A, B e C, aplica-se ao transporte de grão em todos os navios sujeitos às regras da presente Convenção.

Regra 2

Definições

a) O termo «grão» compreende o trigo, o milho, a aveia, o centeio, a cevada, o arroz, as leguminosas, sementes e preparados cujo comportamento seja semelhante ao do grão no seu estado natural.

b) O termo «compartimento cheio» diz respeito a qualquer compartimento no qual, depois do carregamento e estiva, tal como estabelecido na regra 3, o grão a granel fique a um nível o mais elevado possível.

c) O termo «compartimento parcialmente cheio» refere-se a qualquer compartimento em que o grão a granel não se encontra carregado da maneira prescrita no parágrafo *b*) da presente regra.

d) O termo «ângulo de alagamento» ($\emptyset_f$) significa o ângulo de inclinação no qual imergem as aberturas do casco, superstruturas ou casotas do convés que não sejam estanques. Na aplicação desta definição não é necessário ter em conta as pequenas aberturas, através das quais não possa haver alagamento progressivo.

Regra 3

Estiva do grão

Quando se carrega grão num navio devem tomar-se todas as precauções necessárias e razoáveis para impedir o escorregamento da carga e para nivelar todas as superfícies livres do grão.

a) Em qualquer «compartimento cheio» o grão a granel deve ser estivado de modo a encher tanto quanto possível todos os espaços entre os vaus, as amuradas e as extremidades.

b) Após o carregamento, todas as superfícies livres do grão em «compartimentos parcialmente cheios» devem ser bem niveladas.

c) A Administração que emite o documento de autorização pode, segundo a regra 9 do presente capítulo, conceder dispensa da estiva nos casos em que a geometria dos espaços vazios abaixo dos pavimentos que resultem da queda livre do grão num compartimento que podem ser equipados com canais alimentadores, pavimentos perfurados ou outros meios semelhantes seja tida em consideração à sua satisfação no cálculo das alturas dos vazios.

Regra 4

Condições de estabilidade intacta

a) Os cálculos exigidos pela presente regra devem ser baseados na informação de estabilidade, de acordo com a regra 19 do capítulo II-1 ou com as exigências da Administração que emite o documento de autorização, de acordo com a regra 10 do presente capítulo.

b) As características de estabilidade intacta de qualquer navio transportando grão a granel devem mostrar satisfazer, durante toda a viagem, pelo menos os seguintes critérios, depois de ter em conta, conforme exigido na parte B, os momentos de inclinação devidos ao escorregamento do grão:

i) O ângulo de inclinação devido ao escorregamento do grão não deve exceder os 12°, excepto se a Administração, na sua autorização e de acordo com a regra 10 do presente capítulo, exigir um ângulo menor de inclinação, caso considere que a experiência mostra que é necessário (1);

(1) Por exemplo, o ângulo de inclinação admissível pode ser limitado ao ângulo de inclinação em que a água submerge a borda do convés, em mar chão.

ii) No diagrama de estabilidade estática, a área líquida ou residual entre a curva dos braços de inclinação e a curva dos braços de estabilidade até ao ângulo de inclinação que corresponde à diferença máxima entre as ordenadas das duas curvas, ou a 40°, ou ao «ângulo de alagamento» ($\emptyset_f$), o que for menor, deve, em todas as condições de carga, não ser menor do que 0,075 m radianos; e

iii) A altura metacêntrica inicial, depois da correcção devida aos efeitos das superfícies livres dos líquidos nos tanques, não deve ser menor do que 0,30 m.

c) Antes do carregamento do grão a granel o comandante deve, se for exigido pelo Governo Contratante do país do porto de carregamento, demonstrar a possibilidade de o navio, em todas as fases de qualquer viagem, satisfazer os critérios de estabilidade requeridos pelo parágrafo *b*) da presente regra, usando as informações aprovadas e emitidas segundo as regras 10 e 11 do presente capítulo.

d) Depois do carregamento, o comandante deve assegurar-se de que o navio fica sem inclinação transversal antes de partir para o mar.

Regra 5

Divisórias longitudinais e cavidades («saucers»)

a) Tanto nos «compartimentos completamente cheios» como nos «compartimentos parcialmente cheios» devem ser construídas divisórias longitudinais (meios-fios), tanto para reduzir o efeito desfavorável da inclinação provocada pelo escorregamento do grão como para limitar a altura da carga necessária para segurar a superfície. Estas divisórias devem ser estanques ao grão e construídas de acordo com as disposições da secção I da parte C do presente capítulo.

b) Num «compartimento completamente cheio», todas as divisórias construídas com o objectivo de reduzir os efeitos desfavoráveis do escorregamento do grão devem:

i) Nos compartimentos das cobertas, ir de pavimento a pavimento;

ii) Nos porões, prolongar-se para baixo, desde a face inferior do pavimento ou da tampa da escotilha, como descrito na secção II da parte B do presente capítulo.

Excepto no caso da semente do linho e outras sementes com propriedades análogas, toda a divisória longitudinal situada por baixo de uma escotilha poderá ser substituída por uma cavidade *(saucer)* formada como descrito na secção I da parte C do presente capítulo.

c) Num «compartimento parcialmente cheio» todas as divisórias (meio-fios) instaladas devem elevar-se acima da superfície da carga do grão a granel em pelo menos um oitavo da largura máxima do compartimento e penetrar de igual valor para baixo da superfície do grão. Quando forem usadas para limitar a altura da carga e destinadas a segurar a superfície do grão, a altura da divisória central deve elevar-se pelo menos a 0,60 m do nível da superfície do grão.

d) Além disso, os efeitos desfavoráveis da inclinação devida ao escorregamento do grão podem ser reduzidos, estivando junto ao costado e nas partes extremas do compartimento grão ensacado ou outro tipo de carga fixa adequadamente.

Regra 6

Fixação

a) Salvo se, de acordo com o disposto nas regras, se tenham em conta os efeitos desfavoráveis da inclinação devida ao escorregamento do grão, a superfície do grão a granel em qualquer «compartimento parcialmente cheio» deve ser nivelada e coberta com grão em sacos solidamente estivados com uma altura de, pelo menos, $^1/_{16}$ da largura máxima da superfície livre do grão a granel, ou 1,20 m se esta dimensão for maior. Em lugar do grão ensacado pode ser utilizada outra carga adequada que exerça, pelo menos, a mesma pressão.

b) O grão em sacos, ou outras mercadorias apropriadas, deve ser fixo pelo processo descrito na secção II da parte C do presente capítulo. Alternativamente, a superfície livre do grão a granel também pode ser suportada com correias ou amarras como descrito nessa secção.

Regra 7

Alimentadores e troncos

Se forem instalados alimentadores ou troncos, devem ter-se em conta os seus efeitos no cálculo dos momentos inclinantes, como indica a secção III da parte B do presente capítulo. A resistência das anteparas limites de tais alimentadores deve estar conforme com o disposto na secção I da parte C do presente capítulo.

Regra 8

Carregamento em comum

Os porões e as cobertas acima destes podem ser carregados como um único compartimento, sempre que no cálculo dos momentos inclinantes transversais se tenha em conta a passagem do grão para os espaços inferiores.

Regra 9

Aplicação das partes B e C

A Administração, ou um Governo Contratante agindo em nome da Administração, pode autorizar que não sejam observadas as disposições das partes B e C do presente capítulo, nos casos em que se considere justificado, tendo em conta as disposições relativas à carga ou à distribuição dos elementos estruturais, e à condição de que sejam satisfeitos os critérios de estabilidade do parágrafo *b*) da regra 4 do presente capítulo. Quando é concedida alguma autorização prevista na presente regra, os pormenores correspondentes devem estar incluídos no documento de autorização ou nos dados da carga de grão a granel.

Regra 10

Autorização

a) A todo o navio carregado de acordo com as regras do presente capítulo ser-lhe-á concedido um documento de autorização pela Administração ou por uma organização por ela reconhecida ou por um Governo Contratante em nome da Administração. Este documento deve ser aceite como prova de que o navio satisfaz as prescrições das presentes regras.

b) Este documento deve acompanhar e referir um caderno de estabilidade para carga de grão e preparado de modo que o comandante possa cumprir as disposições do parágrafo *c*) da regra 4 do presente capítulo. Este caderno deve satisfazer as disposições da regra 11 do presente capítulo.

c) No citado documento, os dados de estabilidade relativos à carga em grão e os planos correspondentes devem ser redigidos no idioma ou idiomas oficiais do país que o emitiu. Se o idioma utilizado não é o inglês nem o francês, no texto deve figurar uma tradução num destes idiomas.

d) Uma cópia deste documento, dos elementos de estabilidade relativos à carga de grão e os planos correspondentes devem estar a bordo para que o comandante os exiba, caso seja solicitado, para inspecção por parte do Governo Contratante do país do porto de carga.

e) Não se deve proceder à carga do grão em nenhum navio que não possua este documento de autorização até que o comandante prove de modo satisfatório, a contento da Administração ou em nome da mesma, do Governo Contratante do território aonde se encontre o porto de carga, que nas condições de carga propostas o navio cumpre com as prescrições das presentes regras.

Regra 11

Informações sobre o carregamento de grão

Esta informação deve ser suficiente para permitir ao comandante determinar em qualquer condição normal de carga os momentos inclinantes devido ao escorregamento do grão, calculados de acordo com a parte *B* do presente capítulo. Nela deve figurar o seguinte:

a) Informação aprovada pela Administração ou pelo Governo Contratante em nome da Administração:

i) Curvas ou tabelas dos momentos inclinantes do grão em cada compartimento cheio ou parcialmente cheio, ou combinação deles, incluindo os efeitos de equipamentos provisórios;

ii) Tabelas dos momentos inclinantes máximos admissíveis ou outra informação que baste ao comandante para demonstrar que cumpre com o prescrito no parágrafo *c*) da regra 4 do presente capítulo;

iii) Detalhes dos escantilhões de quaisquer equipamentos provisórios utilizados e, quando seja preciso, as medidas que se julguem necessárias para cumprir com o prescrito na secção 1 (*E*) da parte *C* do presente capítulo;

iv) Condições típicas de carga à saída do porto e à chegada e, quando seja necessário, condições intermédias de serviço mais desfavoráveis;

v) Um exemplo de cálculo que sirva de modelo ao comandante;

vi) Instruções de carregamento, em forma de observações, que resumam as prescrições do presente capítulo;

b) Informação destinada a ser aceite pela Administração ou pelo Governo Contratante em nome da Administração:

i) Características do navio;

ii) Deslocamento leve e a distância na vertical desde a intersecção da linha base do traçado com a secção mestra até ao centro de gravidade (KG);

iii) Tabela de correcções para superfícies livres;

iv) Capacidades e centros de gravidade.

Regra 12

Equivalências

Quando se aplica uma equivalência aceite pela Administração em conformidade com o disposto na regra 5 do capítulo I da presente Convenção, os pormenores correspondentes devem estar inclusos no documento de autorização ou nos dados relativos à carga de grão.

Regra 13

Isenção para determinadas viagens

A Administração, ou o Governo Contratante em nome da Administração, pode, quando entender que o carácter abrigado e as condições de viagem são tais que a aplicação de qualquer das disposições das regras 3 a 12 do presente capítulo não é razoável nem necessária, dispensar dessas disposições particulares certos navios ou classes de navios.

PARTE B

Cálculo dos momentos inclinantes supostos

Secção I — Descrição dos vazios supostos e método de cálculo da estabilidade intacta.
Secção II — Momento volumétrico inclinante suposto de um compartimento completamente cheio.
Secção III — Momento volumétrico inclinante suposto de alimentadores e troncos.
Secção IV — Momento volumétrico e inclinante suposto de compartimentos parcialmente cheios.
Secção V — Condições de carga alternativas para navios existentes.

SECÇÃO I

Descrição dos vazios supostos e método do cálculo da estabilidade intacta

A) **Generalidades**

a) Com o propósito de calcular o momento inclinante desfavorável devido ao escorregamento da superfície da carga em navios que transportem grão a granel, admitem-se as seguintes hipóteses:

i) Nos «compartimentos completamente cheios» que tenham sido estivados de acordo com o disposto na regra 3 do presente capítulo, por baixo de todas as superfícies limitadoras que tenham uma inclinação, em relação à horizontal de menos de 30°,

existem vazios paralelos à superfície limitadora, com uma altura média calculada de acordo com a fórmula:

$$Vd = Vd_1 + 0.75\ (d - 600)\ \text{mm};$$

onde

Vd = altura média do vazio em milímetros;
Vd_1 = altura normal do vazio tomada na tabela I, abaixo;
d = altura real do elemento estrutural em milímetros.

Em nenhum caso se deve tomar Vd inferior a 100 mm.

TABELA I

Distância desde os extremos ou lados da escotilha ao limite do compartimento (metros)	Altura normal do vazio Vd_1 (milimetros)
0,5	570
1,0	530
1,5	500
2,0	480
2,5	450
3,0	440
3,5	430
4,0	430
4,5	430
5,0	430
5,5	450
6,0	470
6,5	490
7,0	520
7,5	550
8,0	590

Notas relativas à tabela I:

Para distâncias superiores a 8 m a altura normal do vazio deve ser extrapolada linearmente com um incremento de 80 mm por cada metro de aumento em distância. Quando haja diferença de altura entre as sicordas da escotilha ou seus prolongamentos e os vaus da mesma, deve utilizar-se a maior altura, salvo se:

1) Quando as sicordas da escotilha ou seus prolongamentos são mais baixos que os vaus da mesma, os vazios de ambos os lados da escotilha podem calcular-se utilizando a menor destas alturas;
2) Quando os vaus são mais baixos que as sicordas da escotilha ou seus prolongamentos, os vazios de vante e ré da escotilha que estejam situados entre o prolongamento das sicordas devem calcular-se utilizando a menor das alturas;
3) Quando existe um pavimento a um nível superior fora do lugar onde se encontra situada a escotilha, a altura média do vazio medida desde o lado inferior do pavimento citado deve calcular-se utilizando a altura normal do vazio associada à altura do vau extremo da escotilha mais a altura do pavimento elevado.

ii) Nos «compartimentos completamente cheios» que não são estivados de acordo com a regra 3 do presente capítulo e cujas superfícies limitadoras têm uma inclinação, em relação à horizontal, de menos de 30°, a superfície da carga tem uma inclinação de 30° em relação à horizontal, depois de efectuada a carga;

iii) Nas escotilhas cheias, além de qualquer vazio não coberto existente na tampa das mesmas, existe um vazio de altura média de 150 mm, medida desde a parte mais baixa da dita tampa ou desde a parte mais alta da braçola à superfície do grão, tomando o menor dos valores.

b) O comportamento da superfície do grão que deve ser considerado nos «compartimentos parcialmente cheios» está descrito na secção IV da presente parte.

c) Com o fim de se demonstrar que são cumpridas as condições do critério de estabilidade do parágrafo *b*) da regra 4 do presente capítulo (veja figura 1), os cálculos de estabilidade do navio devem ser normalmente baseados no pressuposto de que o centro de gravidade da carga num «compartimento completamente cheio» coincide com o centro volumétrico do espaço total de carga. Nos casos em que a Administração autorize a ter em conta o efeito de vazios supostos por baixo da coberta na posição vertical do centro de gravidade da carga, nos «compartimentos completamente cheios», é necessário compensar o efeito desfavorável do assentamento da superfície do grão, aumentando o momento inclinante suposto devido ao escorregamento transversal do grão, do seguinte modo:

Momento inclinante total = 1,06 × momento inclinante transversal calculado.

Em todos os casos, o peso da carga de um «compartimento completamente cheio» deve ser igual ao volume do espaço total de carga dividido pelo factor estiva.

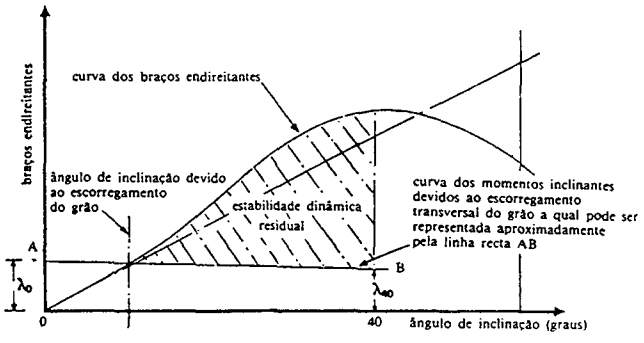


Figura 1

Notas relativas à figura 1:

1) Onde:

$$\lambda_0 = \frac{\text{Momento inclinante volumétrico suposto devido a escorregamento transversal}}{\text{Factor de estiva} \times \text{deslocamento}}$$

$\lambda 40 = 0.8 \times \lambda_0$

Factor de estiva = volume por unidade do peso da carga de grão.

Deslocamento = peso do navio, combustível, água potável, provisões, etc., e carga.

2) A curva de braços endireitantes deve ser obtida das carenas inclinadas tomadas em número suficiente para definir com precisão e entre as quais devem ser incluídas as correspondentes a 12° e a 40°.

d) Nos «compartimentos parcialmente cheios» o efeito desfavorável do escorregamento vertical de superfície do grão deve ser calculado tendo em conta o seguinte:

Momento inclinante total = 1,12 × momento inclinante transversal calculado.

e) Pode ser adoptado qualquer outro método de igual efeito para o cálculo das compensações requeridas nos precedentes parágrafos *c*) e *d*).

SECÇÃO II

Momento volumétrico inclinante suposto de um compartimento cheio

A) **Generalidades**

a) O movimento da superfície do grão é função da secção transversal da parte do compartimento considerado e o momento inclinante resultante deve ser multiplicado pelo comprimento para obter o momento total desta parte.

b) O momento inclinante transversal suposto, devido a escorregamento do grão, é uma consequência da forma e posições finais dos vazios, após o grão se ter movido do lado alto para o lado baixo.

c) Supõe-se que a superfície do grão resultante do escorregamento forma um ângulo de 15° com a horizontal.

d) No cálculo da área máxima vazia que pode ser formada contra um elemento da estrutura longitudinal não se tem em conta os efeitos de nenhuma das superfícies horizontais, como, por exemplo, abas ou faces de reforços.

e) As áreas totais dos vazios e finais são iguais.

f) Uma divisão longitudinal descontínua deve ser considerada efectiva em todo o seu comprimento.

B) **Hipóteses**

Nos parágrafos seguintes supõe-se que o momento inclinante total de um compartimento deve obter-se somando os resultados obtidos ao considerar em separado as seguintes partes:

a) *A vante e a ré das escotilhas:*

i) Se um compartimento tem duas ou mais escotilhas principais pelas quais pode ser carregado para determinar a altura do vazio situado por baixo da coberta correspondente à parte ou partes que estão compreendidas entre estas escotilhas, deve usar-se a distância para vante e para ré até ao ponto médio entre as escotilhas;

ii) Depois de suposto o escorregamento do grão, o arranjo final do vazio será o que mostra a figura 2.

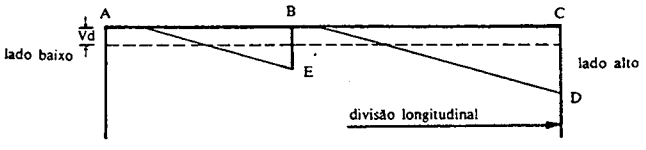


Figura 2

Notas relativas à figura 2:

(1) Se a área vazia máxima que se pode formar contra o reforço longitudinal em *B* é menor do que a área inicial do vazio abaixo de *AB*, isto é, $AB \times Vd$, supõe-se que o excesso de área transita para o vazio final no lado alto.

(2) Se a antepara longitudinal situada em *C* está instalada de acordo com a alínea *ii*) do parágrafo *b*) da regra 5 do presente capítulo, ela deve estender-se pelo menos 0,6 m abaixo de *D* ou *E*, consoante o caso que der origem a maior profundidade.

b) *Na zona da escotilha e ao nível desta:*

Depois de suposto o escorregamento do grão, o arranjo final dos vazios será o que mostram as figuras 3 ou 4.

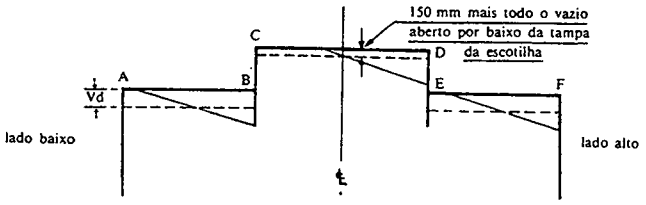


Figura 3

Notas relativas à figura 3:

(1) *AB* — Toda a área que excede a que se pode formar contra o reforço longitudinal em *B* é transferida para a área final vazia que haja na escotilha.

(2) *CD* — Toda a área que exceda a que se pode formar contra o reforço longitudinal em *E* é transferida para a área final vazia que haja no lado alto.

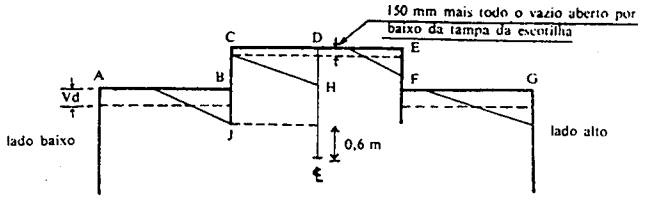


Figura 4

Notas relativas à figura 4:

(1) Se a divisória central longitudinal está instalada de acordo com o prescrito na alínea *ii*) do parágrafo *b*) da regra 5 do presente capítulo, deve estender-se pelo menos a 0,6 m abaixo de *H* ou *J*, consoante o caso que der origem a maior profundidade.

(2) O excesso de área vazia de *AB* é transferida para a metade do lado baixo da escotilha, no qual duas áreas vazias separadas se formam, ou seja, uma contra a divisória central e outra contra a braçola e reforço longitudinal do lado alto.

(3) Se se forma uma cavidade *(saucer)* de grão ensacado ou um fardo de grão dentro de uma escotilha, supõe-se, para calcular o momento inclinante transversal, que tal dispositivo é pelo menos equivalente a uma divisória central longitudinal.

C) **Compartimentos carregados em comum**

Nos parágrafos seguintes é descrito o comportamento dos vazios supostos quando os compartimentos se carregam em comum.

a) *Sem divisórias centrais eficazes:*

i) Abaixo da coberta superior o comportamento é igual ao de uma coberta única, descrito na secção II (B) da presente parte;

ii) Abaixo da segunda coberta a área de vazio a ser supostamente transferida do lado baixo, isto é, a área vazia inicial menos a área contra a sicorda da escotilha, deve ser feita do seguinte modo:

Uma metade para a escotilha da coberta superior e cada um dos dois quartos restantes para o lado mais alto, debaixo da coberta superior e da segunda coberta, respectivamente;

iii) Abaixo da terceira coberta e inferiores — as áreas de vazio a serem supostamente transferidas do lado baixo de cada uma destas cobertas devem ser feitas em quantidades iguais para todos os vazios debaixo das cobertas, do lado alto, e para o vazio na escotilha da coberta superior.

b) Com divisões centrais eficazes que se estendem até à escotilha da coberta superior:

i) Em todos os níveis das cobertas, de cada lado da divisória, as áreas de vazio disponíveis para serem supostamente transferidas da parte baixa devem ser consideradas transferidas para o vazio situado sob a metade do lado inferior da escotilha da coberta superior;

ii) Ao nível da coberta situada imediatamente abaixo da base da divisória, as áreas de vazio a serem supostamente transferidas do lado baixo devem ser feitas do seguinte modo:

Uma metade para o vazio situado na metade do lado de baixo da escotilha da coberta superior e o resto, em quantidades iguais, para os vazios situados debaixo das cobertas do lado alto;

iii) Ao nível das cobertas inferiores às descritas nas alíneas *i)* e *ii)* do presente parágrafo supõe-se que a área de vazio que se pode transferir desde o lado baixo de cada uma das cobertas é feita em quantidades iguais para os vazios situados em cada uma das metades da escotilha da coberta superior e para os vazios situados debaixo das cobertas no lado alto.

c) Com divisões centrais eficazes que não se estendem até à escotilha da coberta superior:

Dado que não se admitem transferências na horizontal de vazios ao mesmo nível da divisória na coberta, supõe-se que a zona de vazio que se pode transferir do lado baixo para este nível deve ser feita transferindo por cima da divisória para os vazios situados nos lados altos, de acordo com os princípios enumerados nos parágrafos *a)* e *b)* precedentes.

SECÇÃO III

Momento volumétrico inclinante suposto em alimentadores e troncos

A) **Alimentadores laterais convenientemente situados (veja figura 5)**

Pode admitir-se que por causa do movimento do navio os vazios situados por baixo da coberta fiquem consideravelmente cheios pelo grão que passa por um par de alimentadores longitudinais, sempre que:

a) Os alimentadores se estendam ao longo de todo o comprimento da coberta e as aberturas praticadas neles estejam convenientemente espaçadas;

b) O volume de cada alimentador seja igual ao volume do espaço vazio situado por baixo da coberta, pelo lado de fora da sicorda da escotilha e seu prolongamento.

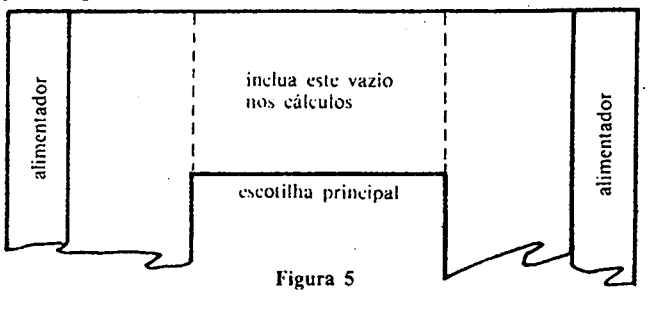


Figura 5

B) **Troncos situados sobre as escotilhas principais**

Depois do admitido escorregamento do grão, a disposição final dos vazios é a que mostra a figura 6.

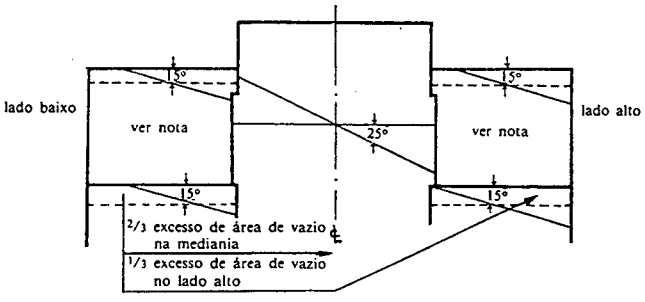


Figura 6

Nota relativa à figura 6:

Se os espaços laterais que estão na zona do tronco não puderem ser convenientemente estivados de acordo com o prescrito na regra 3 do presente capítulo, admite-se que se produz um escorregamento da superfície de 25°.

SECÇÃO IV

Momento volumétrico inclinante suposto em compartimentos parcialmente cheios

A) **Generalidades**

Quando a superfície livre do grão a granel não for segura de acordo com os requisitos da regra 6 do presente capítulo, admite-se que esta, depois do escorregamento, forma um ângulo de 25° com a horizontal.

B) **Divisórias longitudinais descontínuas**

Num compartimento em que as divisórias longitudinais não sejam contínuas entre os limites transversais, o comprimento em que estas divisórias forem capazes de evitar escorregamentos da superfície do grão em toda a largura deve ser considerado igual ao comprimento real da parte da divisória considerada menos dois sétimos da maior das distâncias transversais entre a divisória e a sua divisória adjacente ou o costado do navio.

Esta correcção não é aplicada a compartimentos inferiores, em nenhum caso de carga em comum, em que o compartimento superior seja um «compartimento completamente cheio» ou um «compartimento parcialmente cheio».

SECÇÃO V

Outras condições de carga para navios existentes

A) **Generalidades**

Um navio carregado de acordo com as subsecções *B)* ou *C)* expostas a seguir deve ser considerado como tendo características de estabilidade intacta equivalentes, pelo menos, às prescritas no parágrafo *b)* da regra 4 do presente capítulo. Os documentos de autorização necessários para permitir que se efec-

tuem tais cargas devem ser aceites em conformidade com o disposto no parágrafo *e*) da regra 10 do presente capítulo.

Para efeitos da presente parte o termo «navio existente» designa todo o navio cuja quilha tenha sido assente antes da data de entrada em vigor do presente capítulo.

B) **Estiva em navios especialmente apropriados**

a) O grão a granel pode ser transportado sem observância das prescrições da parte B do presente capítulo nos navios com duas ou mais divisórias longitudinais verticais ou inclinadas, estanques ao grão, convenientemente dispostas para limitar os efeitos do escorregamento do grão, sob reserva das condições seguintes:

i) Ter o maior número possível de porões e compartimentos cheios e estivados, de modo a não apresentarem vazios;

ii) O navio não adornar mais de 5° em qualquer período da viagem, seja qual for a estiva adoptada quando:

1) Nos porões ou compartimentos estivados de maneira a não apresentarem vazios se der um assentamento de superfície do grão em relação à superfície inicial que pressuponha uma redução de 2 % do volume e um escorrimento que origine um ângulo de 12° em relação à dita superfície, sob os elementos que delimitam os porões que tenham uma inclinação inferior a 30° com a horizontal;

2) Nos «porões ou compartimentos parcialmente cheios», a superfície livre do grão assentar e escorregar, como é referido na alínea *ii*), 1), do presente parágrafo, ou sob um ângulo maior, conforme for julgado necessário pela Administração ou um Governo Contratante agindo em nome da Administração, e as superfícies do grão, sobrepostas conforme a regra 5 do presente capítulo, se inclinarem de um ângulo de 8° em relação às superfícies niveladas iniciais. Para os fins da alínea *ii*) do presente parágrafo, os meios-fios, se existirem, são considerados como meios de limitação do escorregamento transversal da superfície do grão;

iii) O comandante tiver um plano de carregamento do grão com todas as condições de carga e respectivo caderno de cálculos de estabilidade, ambos aprovados pela Administração ou por um Governo Contratante agindo em nome de uma Administração, indicando as condições de estabilidade em que são baseados os cálculos indicados na alínea *ii*) do presente parágrafo.

b) A Administração, ou um Governo Contratante agindo em nome da Administração, prescreverá as precauções a tomar para impedir o escorregamento da carga em todas as outras condições de carregamento dos navios construídos de acordo com as disposições do parágrafo *a*) da subsecção *B*) da presente secção de modo a satisfazer as condições enunciadas nas alíneas *ii*) e *iii*) do mesmo parágrafo.

C) **Navios sem documentos de autorização**

A todo o navio que não tenha a bordo os documentos de autorização emitidos de acordo com o disposto nas regras 4 e 10 do presente capítulo pode ser permitida a carga de grão a granel se cumprir com o prescrito na subsecção *B*) da presente secção, ou também se:

a) Todos os «compartimentos cheios» estiverem dotados de divisórias centrais que se estendam por todo o seu comprimento e por baixo, a partir do lado inferior da coberta ou das tampas da escotilha, a uma distância abaixo da linha da coberta igual pelo menos a um oitavo da máxima boca do compartimento ou a 2,4 m, se esta segunda distância for maior, excepto se em lugar de divisória central forem aceites cavidades *(saucers)* construídas de acordo com o disposto na secção II da parte C, no interior e debaixo de uma escotilha;

b) Todas as escotilhas de acesso a «compartimentos cheios» devem ser fechadas e as tampas fixas no lugar;

c) Nos «compartimentos parcialmente cheios» todas as superfícies livres do grão devem ser niveladas e travadas de acordo com o disposto na secção II da parte C;

d) Durante toda a viagem a altura metacêntrica, depois de corrigida devido aos espelhos líquidos existentes nos tanques, deve ser 0,30 m ou a dada pela fórmula seguinte, se este segundo valor for maior:

$$GM_R = \frac{LBVd\ (0{,}25\ B - 0{,}645\ \sqrt{VdB})}{SF \times \triangle \times 0{,}0875}$$

onde:

L = comprimento total de todos os compartimentos cheios.
B = boca do navio na ossada.
SF = factor de estiva.
Vd = altura média do vazio calculada de acordo com a alínea *i*) do parágrafo *a*) da secção I, *A*), da presente parte;
$\triangle$ = deslocamento.

PARTE C

Dispositivos de travamento para carga de grão e sua fixação

SECÇÃO I

Resistência dos dispositivos de travamento para carga de grão a granel

A) Generalidades (com inclusão de cargas de trabalho).
B) Divisórias com cargas de ambos os lados.
C) Divisórias com carga só de um lado.
D) Cavidades *(saucers)*.
E) Cobertura da carga a granel.
F) Fixação das tampas das escotilhas em compartimentos cheios.

SECÇÃO II

Fixação de carga de grão a granel em compartimentos parcialmente cheios

A) Modalidades de fixação.
B) Modos de sobreposição de carga.
C) Grão ensacado.

SECÇÃO I

Resistência dos dispositivos de travamento para carga de grão a granel

A) **Generalidades**

a) *Madeira:*

Toda a madeira utilizada nos dispositivos destinados a travar o grão deve ser de boa qualidade e de um tipo ou classe das que se tenham demonstrado satisfatórias para esse fim. As dimensões reais da madeira devem coincidir com as especificadas na presente parte. Pode usar-se contraplacado semelhante ao utilizado para exteriores, unido com cola impermeável e colocado de modo que a direcção da fibra do lado exterior seja perpendicular aos montantes ou braçadeiras de suporte, sempre que a sua resistência seja equivalente à da madeira de um escantilhão apropriado.

b) *Cargas de trabalho:*

No dimensionamento das divisões com carga de um só lado, utilizando as tabelas dos parágrafos *a*) e *b*) da subsecção *C*) da presente secção, devem ser adoptadas as seguintes cargas de trabalho:

Divisórias de aço — 2000 kg por centímetro quadrado;
Divisórias de madeira — 160 kg por centímetro quadrado.

c) *Outros materiais:*

Podem ser adoptados outros materiais, distintos de madeira e de aço, para a construção das divisórias citadas, se se tiver tido em conta as suas propriedades mecânicas.

d) *Prumos:*

i) A menos que se prevejam meios necessários para impedir que as extremidades dos prumos saiam dos seus suportes, a profundidade do alojamento de cada extremo será pelo menos 75 mm. Se um prumo não estiver fixo no topo, a escora ou o estai mais alto deve ser colocado o mais perto possível deste extremo;

ii) Quando para a junção de tábuas amovíveis há que retirar uma parte da secção transversal de um prumo, os dispositivos previstos para o efeito devem ser tais que o nível de esforços resultante não seja excessivo;

iii) O momento flector máximo a que está submetido um prumo que suporta uma divisória com carga de um só lado é calculado normalmente supondo que os seus extremos estão simplesmente apoiados. Contudo, pode ser aceite uma redução no momento flector máximo resultante do grau de rigidez dos extremos do prumo, sempre que a Administração comprove que o grau de rigidez suposto é igual ao real.

e) *Elementos resistentes compostos:*

Quando um prumo, uma travessa ou qualquer outro elemento resistente for formado por duas secção distintas, cada uma delas instalada a um dos lados da antepara e ambas interligadas por passadores convenientemente espaçados, o módulo resistente efectivo da secção deve ser tomado como a soma dos dois módulos das ditas secções.

f) *Divisórias parciais:*

Quando as divisórias não chegam a ter toda a altura dos porões, tanto elas como os seus montantes devem ser espiados ou escorados, de modo que a sua eficácia seja a mesma do que se tivessem toda a altura.

B) **Divisórias com carga de ambos os lados**

a) *Meios-fios:*

i) Os meios-fios devem ter uma espessura mínima de 50 mm, mantidos de modo que sejam estanques ao grão e, se for necessário, suportados por montantes;

ii) O máximo vão entre apoios dos meios-fios deve ser o seguinte, em função da espessura:

Espessura	Máximo vão entre apoios
50 mm	2,50 m
60 mm	3,00 m
70 mm	3,50 m
80 mm	4,00 m

Para espessuras maiores que as indicadas, o máximo vão entre apoios varia em proporção directa com o aumento de espessura;

iii) Os extremos de todos os meios-fios devem estar firmemente alojados, com um suporte mínimo de 75 mm de comprimento.

b) *Outros materiais:*

As divisórias construídas usando outros materiais sem ser madeira devem ter uma resistência equivalente à indicada para os meios-fios no parágrafo *a*) da presente subsecção.

c) *Prumos:*

i) Os prumos de aço utilizados para suportar divisórias com carga em ambos os lados devem ter um módulo da secção dado por

$$W = a \times W_1$$

onde:

W = módulo da secção, em centímetros cúbicos;
a = vão na horizontal entre prumos, em metros.

O módulo da secção por metro de vão W_1 não deve ser menor do que o dado pela fórmula:

$$W_1 = 14{,}8\ (h_1 - 1{,}2)\ \text{cm}^3 \text{ por metro}$$

onde:
h_1 é o vão vertical em metros e deve ser tomado como a máxima distância entre quaisquer dois estais adjacentes ou entre um estai e qualquer dos extremos do prumo correspondente. Quando esta distância for menor do que 2,40 m, os módulos correspondentes devem ser calculados como se a distância real fosse de 2,40 m;

ii) Os módulos dos prumos de madeira devem ser determinados multiplicando o módulo correspondente ao montante de aço por 12,5. Se outros materiais forem usados, o módulo de cada um destes deve ser pelo menos igual ao do aço, aumentando em proporção à relação existente entre os esforços admissíveis para o aço e para o material empregado. Em cada caso haverá que ter em conta também a rigidez de cada um dos prumos, para garantir que a flexão não seja excessiva;

iii) A distância na horizontal entre prumos deve ser tal que o vão entre os apoios dos meios-fios não exceda o máximo especificado na alínea *ii*) do parágrafo *a*) da presente subsecção.

d) *Escoras:*

i) As escoras de madeira, quando utilizadas, devem ser de uma peça única e devem ser seguramente fixadas em cada extremo, apoiando-se na estrutura permanente do navio e não directamente nas chapas do costado;

ii) Sob reserva com o disposto nas alíneas *iii*) e *iv*) do presente parágrafo, as medidas mínimas das escoras de madeira devem ser:

Comprimento da escora (metros)	Secção rectangular (milímetros)	Diâmetro da secção circular (milímetros)
Não superior a 3 m	150 × 100	140
Superior a 3 m e não superior a 5 m	150 × 150	165
Superior a 5 m e não superior a 6 m	150 × 150	180
Superior a 6 m e não superior a 7 m	200 × 150	190
Superior a 7 m e não superior a 8 m	200 × 150	200
Superior a 8 m	200 × 150	215

As escoras com 7 m ou mais de comprimento devem ser seguramente escoradas a meio comprimento aproximadamente;

iii) Quando a distância na horizontal entre prumos difere significativamente de 4 m, os momentos de inércia das escoras podem ser alterados em proporção directa;

iv) Quando o ângulo formado pela escora com a horizontal exceder 10°, deve ser utilizada a escora com medidas imediatamente superiores às requeridas pela alínea *ii*) do presente parágrafo, tendo presente que o ângulo formado por qualquer escora com a horizontal não pode exceder 45°.

e) *Estais:*

Quando se utilizam estais para suportar divisórias com carga em ambos os lados, estes devem ser em cabo de aço, instalados horizontalmente ou na posição mais próxima desta e fixados firmemente pelos seus extremos. Para determinar a dimensão destes cabos supõe-se que a divisória e o prumo suportados pelo estai estão solicitados por uma carga uniforme de 500 kg/m². A carga de trabalho assim suposta no estai não deve exceder um terço da sua carga de rotura.

C) Divisórias com carga de um só lado

a) *Divisórias longitudinais:*

A carga em quilogramas por metro de comprimento da divisória é indicada seguidamente:

TABELA I (*a*)

B (*m*)

h (*m*)	2	3	4	5	6	7	8	10
1.5	850	900	1 010	1 225	1 500	1 770	2 060	2 645
2.0	1 390	1 505	1 710	1 985	2 295	2 605	2 930	3 590
2.5	1 985	2 160	2 430	2 740	3 090	3 435	3 800	4 535
3.0	2 615	2 845	3 150	3 500	3 885	4 270	4 670	5 480
3.5	3 245	3 525	3 870	4 255	4 680	5 100	5 540	6 425
4.0	3 890	4 210	4 590	5 015	5 475	5 935	6 410	7 370
4.5	4 535	4 890	5 310	5 770	6 270	6 765	7 280	8 315
5.0	5 185	5 570	6 030	6 530	7 065	7 600	8 150	9 260
6.0	6 475	6 935	7 470	8 045	8 655	9 265	9 890	11 150
7.0	7 765	8 300	8 910	9 560	10 245	10 930	11 630	13 040
8.0	9 055	9 665	10 350	11 075	11 835	12 595	13 370	14 930
9.0	10 345	11 030	11 790	12 590	13 425	14 260	15 110	16 820
10.0	11 635	12 395	13 230	14 105	15 015	15 925	16 850	18 710

h = altura do grão, em metros, a partir da base da divisória (*b*).
B = extensão transversal da carga do grão a granel, em metros

(*a*) Para converter estas cargas em unidades inglesas (t/pé) considera-se que 1 kg por metro de comprimento equivale a 0,0003 t por pé de comprimento.
(*b*) Quando a distância entre uma divisória e um alimentador ou uma escotilha for de 1 m ou menos, considera-se que a altura — *h* — é tomada até ao nível do grão dentro da escotilha ou do alimentador. Nos outros casos, a altura deve ser tomada até à coberta situada por cima, ao nível da divisória.

Para outros valores de *h* ou *B* a carga deve ser determinada por interpolação ou extrapolação linear, conforme necessário.

b) *Divisórias transversais:*

A carga em quilogramas por metro de comprimento da divisória é indicada seguidamente:

TABELA II (*a*)

L (*m*)

h (*m*)	2	3	4	5	6	7	8	10	12	14	16
1.5	670	690	730	780	835	890	935	1 000	1 040	1 050	1 050
2.0	1 040	1 100	1 170	1 245	1 325	1 400	1 470	1 575	1 640	1 660	1 660
2.5	1 460	1 565	1 675	1 780	1 880	1 980	2 075	2 210	2 285	2 305	2 305
3.0	1 925	2 065	2 205	2 340	2 470	2 590	2 695	2 845	2 925	2 950	2 950
3.5	2 425	2 605	2 770	2 930	3 075	3 205	3 320	3 480	3 570	3 595	3 595
4.0	2 950	3 160	3 355	3 535	3 690	3 830	3 950	4 120	4 210	4 235	4 240
4.5	3 495	3 725	3 940	4 130	4 295	4 440	4 565	4 750	4 850	4 880	4 885
5.0	4 050	4 305	4 535	4 735	4 910	5 060	5 190	5 385	5 490	5 525	5 530
6.0	5 175	5 465	5 720	5 945	6 135	6 300	6 445	6 655	6 775	6 815	6 825
7.0	6 300	6 620	6 905	7 150	7 365	7 445	7 700	7 930	8 055	8 105	8 115
8.0	7 425	7 780	8 090	8 360	8 590	8 685	8 950	9 200	9 340	9 395	9 410
9.0	8 550	8 935	9 275	9 565	9 820	9 930	10 205	10 475	10 620	10 685	10 705
10.0	9 680	10 095	10 460	10 770	11 045	11 270	11 460	11 745	11 905	11 975	11 997

h = altura do grão, em metros, a partir da base da divisória (*b*).
L = extensão longitudinal da carga do grão a granel, em metros.

(*a*) Para converter estas cargas em unidades inglesas (t/pé) considera-se que 1 kg por metro de comprimento equivale a 0,0003 t por pé de comprimento.
(*b*) Quando a distância entre uma divisória e um alimentador ou uma escotilha for de 1 m ou menos, considera-se a altura *h* tomada até ao nível do grão dentro da escotilha ou do alimentador. Nos outros casos a altura deve ser tomada até à coberta situada por cima, ao nível da divisória.

Para outros valores de *h* ou *L* a carga deve ser determinada por interpolação ou extrapolação linear, conforme necessário.

c) *Distribuição vertical das cargas:*

Se for necessário, pode supor-se que a carga total por unidade de comprimento das divisórias, de acordo com as tabelas I e II, tem uma distribuição trapezoidal em função da altura. Nestes casos as reacções nos extremos superior e inferior de um elemento vertical ou prumo não são iguais. A reacção no extremo superior, expressa como percentagem da carga total suportada pelo elemento vertical ou prumo, será a indicada nas tabelas III e IV seguintes:

TABELA III

Divisórias longitudinais com carga de um só lado

Valores da reacção no extremo superior do prumo em percentagem de carga (tabela I)

	B (*m*)							
h (*m*)	2	3	4	5	6	7	8	10
1.5	43.3	45.1	45.9	46.2	46.2	46.2	46.2	46.2
2	44.5	46.7	47.6	47.8	47.8	47.8	47.8	47.8
2.5	45.4	47.6	48.6	48.8	48.8	48.8	48.8	48.8
3	46.0	48.3	49.2	49.4	49.4	49.4	49.4	49.4
3.5	46.5	48.8	49.7	49.8	49.8	49.8	49.8	49.8
4	47.0	49.1	49.9	50.1	50.1	50.1	50.1	50.1
4.5	47.4	49.4	50.1	50.2	50.2	50.2	50.2	50.2
5	47.7	49.4	50.1	50.2	50.2	50.2	50.2	50.2
6	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
7	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
8	47.9	49.5	50.1	50.2	40.2	50.2	50.2	50.2
9	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2
10	47.9	49.5	50.1	50.2	50.2	50.2	50.2	50.2

B = extensão transversal do grão a granel, em metros.

Para outros valores de *h* ou *B* as reacções devem ser determinadas por interpolação ou extrapolação linear, conforme necessário.

TABELA IV

Divisórias transversais carregadas de um só lado

Valores da reacção no extremo superior do prumo como percentagem da carga (tabela II)

	L (*m*)										
h (*m*)	2	3	4	5	6	7	8	10	12	14	16
1.5	37.3	38.7	39.7	40.6	41.4	42.1	42.6	43.6	44.3	44.8	45.0
2	39.6	40.6	41.4	42.1	42.7	43.1	43.6	44.3	44.7	45.0	45.2
2.5	41.0	41.8	42.5	43.0	43.5	43.8	44.2	44.7	45.0	45.2	45.2
3	42.1	42.8	43.3	43.8	44.2	44.5	44.7	45.0	45.2	45.3	45.3
3.5	42.9	43.5	43.9	44.3	44.6	44.8	45.0	45.2	45.3	45.3	45.3
4	43.5	44.0	44.4	44.7	44.9	45.0	45.2	45.4	45.4	45.4	45.4
5	43.9	44.3	44.6	44.8	45.0	45.2	45.3	45.5	45.5	45.5	45.5
6	44.2	44.5	44.8	45.0	45.2	45.3	45.4	45.6	45.6	45.6	45.6
7	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
8	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
9	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6
10	44.3	44.6	44.9	45.1	45.3	45.4	45.5	45.6	45.6	45.6	45.6

L = extensão longitudinal do grão a granel, em metros.

Para outros valores de *h* e *L* as reacções devem ser determinadas por interpolação ou extrapolação, conforme necessário.

A resistência das uniões dos extremos destes elementos verticais ou prumos deve ser calculada com base na máxima carga que se admite imposta em cada extremo. Estas cargas são as seguintes:

Divisórias longitudinais:

Carga máxima na parte superior — 50% da carga total correspondente à da tabela I;

Carga máxima na parte inferior — 55% da carga total correspondente à da tabela I.

Divisórias transversais:

Carga máxima da parte superior — 45% da carga total correspondente à da tabela II;

Carga máxima da parte inferior — 60% da carga total correspondente à da tabela II.

A espessura das tábuas de madeira horizontais podem também ser calculadas considerando uma distribuição vertical das cargas indicadas nas tabelas III e IV, e nestes casos

$$t = 10a \sqrt{\frac{p \times K}{h \times 213{,}3}}$$

onde:

t = espessura das tábuas, em milímetros;
a = vão horizontal da tábua, isto é, distância entre prumos, em metros;
h = altura do grão desde a parte inferior da divisória, em metros;
p = carga total por unidade de comprimento tomada nas tabelas I e II, em quilos;
k = factor dependente da distribuição vertical de carga.

Se se admitir que a distribuição vertical das cargas é uniforme, isto é, rectangular, considera-se K igual a 0,1. Para uma distribuição trapezoidal

$$K = 1{,}0 + 0{,}06\ (50 - R)$$

onde:

R = valor da reacção no extremo superior, tomado das tabelas III e IV.

d) Estais ou escoras:

As dimensões dos estais e das escoras devem ser calculadas de forma que as suas cargas, obtidas nas tabelas I e II, que figuram nos parágrafos precedentes *a)* e *b)*, não excedam um terço das cargas de rotura.

D) Cavidades («saucers»)

Quando se usa uma cavidade para reduzir o momento inclinante num «compartimento cheio», a sua altura, medida do fundo da cavidade até à linha do pavimento, deve ser como a seguir se especifica:

Para navios com a boca na ossada até 9,1 m, a altura mínima deve ser de 1,2 m;
Para navios com a boca na ossada de 18,3 m, ou superior, a altura mínima deve ser de 1,8 m;
Para navios com a boca na ossada compreendida entre 9,1 m e 18,3 m, a altura mínima da cavidade deve ser calculada por interpolação.

O topo (boca) da cavidade é formado pela estrutura inferior do pavimento, na escotilha, isto é, pelas sicordas ou braçolas e os vaus dos extremos das escotilhas. A cavidade e a escotilha acima devem ser completamente cheias com grão ensacado ou outra carga apropriada assente sobre um tecido resistente de separação ou outro material equivalente e estivada compactamente contra as estruturas adjacentes e vaus desmontáveis, se estes estiverem colocados nos seus lugares.

E) Cobertura da carga a granel

Como alternativa ao enchimento da cavidade *(saucer)* com grão ensacado ou outra carga apropriada pode-se usar uma cobertura sobre o grão a granel obedecendo a:

a) A cavidade deve ser forrada com um material aceitável pela Administração com a resistência mínima à tracção de 274 kg para uma tira de 5 cm e provida de meios apropriados de fixação ao topo da cavidade;

b) Em alternativa ao parágrafo *a)* acima indicado pode-se usar um material aceitável pela Administração, com a resistência mínima à tracção de 137 kg para uma tira de 5 cm, se a cavidade for feita como se indica a seguir:

Dentro da cavidade formada no grão forem colocadas peias transversais aceitáveis pela Administração e com intervalos entre si não superiores a 2,4 m. Estas peias podem ter um comprimento que permita esticá-las firmemente e amarrá-las ao topo da cavidade;
Sobre as peias deve ser colocada, no sentido de proa a popa, madeira de estiva de espessura mínima de 25 mm ou outro material de igual resistência com uma largura entre 150 mm e 300 mm para evitar corte ou fricção do material que é colocado para revestimento da cavidade;

c) A cavidade deve ser cheia com grão a granel e segura no topo, excepto quando se use material aprovado de acordo com o parágrafo *b)* acima indicado; além disso, deve ser colocada madeira de estiva no topo depois de aplicar o material e antes da cavidade estar segura pela montagem das peias;

d) Se mais de uma folha de material for usada no revestimento da cavidade, estas devem ser ligadas entre si por costura ou por uma dobra dupla;

e) O topo da cavidade deve coincidir com a parte inferior dos vaus desmontáveis quando estes se encontrem montados e também quando a carga geral apropriada ou o grão a granel possa ser colocado entre os vaus sobre a cavidade.

F) Fixação das tampas das escotilhas em compartimentos cheios

Se não houver grão a granel ou outra carga sobre um «compartimento cheio», as tampas das escotilhas devem ser fixas de forma aprovada, tendo em atenção o peso e o sistema existente para a sua fixação.

Nos documentos de autorização emitidos de acordo com a regra 10 do presente capítulo devem ser incluídos os preceitos de segurança considerados necessários pela Administração.

SECÇÃO II

Fixação da carga do grão nos compartimentos parcialmente cheios

A) Modalidades de fixação

a) Quando, com o objectivo de eliminar os momentos inclinantes em «compartimentos parcialmente cheios», se utilizam correias ou cabos, a fixação deve ser feita do seguinte modo:

i) O grão deve ser estivado e nivelado até que a sua superfície fique ligeiramente abaulada e então será coberta com separações de serapilheira, lonas ou equivalente;

ii) As serapilheiras, lonas, etc., devem sobrepor-se em, pelo menos, 1,80 m;

iii) Devem ser colocados dois pisos sólidos, de tábuas de 25 mm por 150 mm a 300 mm, com o superior estendido no sentido longitudinal e pregado ao inferior, disposto no sentido transversal. Alternativamente, pode ser usado um piso de tábuas de 50 mm estendido longitudinalmente e pregado à face superior de uma base inferior de suportes de 50 mm por não menos de 150 mm de largura. Estes suportes estendem-se por toda a boca do compartimento e devem ser dispostos com separações intermédias não superiores a 2,40 m. Outros arranjos utilizando materiais diferentes podem ser aceites, sempre que a Administração os considere equivalentes aos anteriores em eficiência.

iv) As peias podem ser de cabos de aço (diâmetro de 19 mm ou equivalente), de tira dupla de aço (50 mm × 1,30 mm, com uma carga de rotura mínima de 5000 kg) ou de corrente com resistência equivalente, utilizando-se, em todo o caso, um esticador de 32 mm para alcançar a tensão necessária. Quando se utilizam tiras de aço, o esticador pode ser substituído por um sistema de aperto equipado com travão, sempre que se disponha de chaves adequadas para regular a tensão. E também quando se utilizam estas tiras os extremos devem ser seguros, pelo menos com três ranhuras próprias. Quando são usados cabos, utilizam-se, pelo menos, quatro mordeduras para formar as garras;

v) Antes de terminar a operação de carga as peias devem ser firmemente ajustadas às balizas a uma distância de cerca de 450 mm abaixo da superfície que se prevê como definitiva para o grão, mediante uma manilha de 25 mm ou uma braçadeira de resistência equivalente;

vi) As peias devem ser espaçadas de 2,40 m no máximo e cada uma delas deve ser fixa num suporte cravado na face superior do piso longitudinal. Estes suportes devem ser tábuas de madeira de 25 mm × 150 mm, no mínimo, ou de material equivalente, e devem ser dispostos de modo que ocupem toda a boca do compartimento;

vii) Durante a viagem as peias devem ser inspeccionadas regularmente e esticadas, quando necessário.

B) **Modos de sobreposição de carga**

Quando se utiliza grão ensacado ou outra carga apropriada para assegurar a carga nos «compartimentos parcialmente cheios», a superfície livre do grão deve ser coberta com um tecido resistente de separação ou outro meio equivalente ou uma plataforma adequada. Esta plataforma deve consistir em suportes de madeira, dispostos com um espaçamento máximo de 1,20 m e por pranchas de 25 mm de espessura, dispostas sobre aqueles com um espaçamento máximo de 100 mm. Só devem ser construídas plataformas com outros materiais desde que a Administração os considere equivalentes aos anteriores.

C) **Grão ensacado**

Só devem ser utilizados sacos que estejam em bom estado, os quais devem ser bem cheios e seguramente fechados.

CAPÍTULO VII

Transporte de cargas perigosas

Regra 1

Aplicação

a) O presente capítulo, salvo indicação em contrário, aplica-se ao transporte de cargas perigosas a bordo dos navios abrangidos pelas presentes regras.

b) As disposições do presente capítulo não se aplicam às dotações de bordo, nem ao equipamento dos navios, nem a cargas especiais transportadas em navios expressamente construídos ou transformados para esse fim, como os navios-tanques.

c) O transporte de cargas perigosas é proibido, a não ser quando se efectue de acordo com as disposições do presente capítulo.

d) Em complemento das disposições do presente capítulo, cada Governo Contratante deve publicar, ou fazer publicar, instruções pormenorizadas sobre as condições de embalagem e de estiva de certas cargas perigosas ou categorias de cargas perigosas, as quais incluirão as precauções que é necessário tomar em relação à proximidade de outras cargas.

Regra 2

Classificação

As cargas perigosas dividem-se nas seguintes classes:

Classe 1 — Explosivos;
Classe 2 — Gases comprimidos, liquefeitos ou dissolvidos sob pressão;
Classe 3 — Líquidos inflamáveis;
Classe 4.1 — Sólidos inflamáveis;
Classe 4.2 — Sólidos inflamáveis ou substâncias sujeitas a combustão espontânea;
Classe 4.3 — Sólidos inflamáveis ou substâncias que em contacto com a água emitem gases inflamáveis;
Classe 5.1 — Substâncias oxidantes;
Classe 5.2 — Peróxidos orgânicos;
Classe 6.1 — Substâncias venenosas (tóxicas);
Classe 6.2 — Substâncias infecciosas;
Classe 7 — Substâncias radioactivas;
Classe 8 — Substâncias corrosivas;
Classe 9 — Substâncias perigosas diversas, isto é, quaisquer outras substâncias que a experiência revelou, ou possa revelar, serem de natureza tão perigosa que lhes devem ser aplicadas as regras do presente capítulo.

Regra 3

Embalagem

a) A embalagem das cargas perigosas deve:

i) Ser bem feita e estar em bom estado;

ii) Ser tal que as paredes interiores, com as quais o conteúdo pode entrar em contacto, não sejam perigosamente atacadas pela substância transportada;

iii) Ser capaz de suportar os riscos normais de manuseamento e de transporte marítimo.

b) Quando se emprega para a embalagem de líquidos em recipientes um material absorvente ou de enchimento, esse material deve:

i) Reduzir os riscos a que os líquidos podem dar lugar;

ii) Ser disposto de modo a evitar o movimento e a garantir que o recipiente permaneça envolvido por ele;

iii) Ser em quantidade tanto quanto possível suficiente para absorver o líquido no caso de rotura do recipiente.

c) Os recipientes que contêm líquidos perigosos devem ter uma margem de enchimento suficiente, à temperatura de enchimento, para ter em conta a mais alta temperatura que possa ser atingida durante um transporte em condições normais.

d) Os cilindros ou recipientes para gases sob pressão devem satisfazer as normas adequadas de construção, ser convenientemente experimentados e conservados e cheios correctamente.

e) Os recipientes vazios que tenham servido no transporte de substâncias perigosas devem ser considerados como carga perigosa, a não ser que tenham sido lavados e secos ou bem fechados, quando a natureza da substância que contiverem o permitir com segurança.

Regra 4

Marcas e rótulos (etiquetas)

Todo o recipiente que contiver substâncias perigosas deve ser marcado com o nome técnico correcto da respectiva substância (não se admitem designações comerciais) e identificado com uma etiqueta distintiva, ou uma marcação a tinta, de forma a ficar bem clara a natureza perigosa da carga. Cada recipiente deve ser marcado deste modo, com excepção dos que contenham produtos químicos embalados em pequenas quantidades e os carregamentos importantes, que podem ser estivados, manuseados e identificados como um só lote.

Regra 5

Documentos

a) Em todos os documentos relativos ao transporte marítimo de cargas perigosas nos quais as mercadorias são designadas devem empregar-se os nomes técnicos correctos (não se admitem designações comerciais) e a sua descrição correcta deve ser feita de acordo com a classificação expressa na regra 2 do presente capítulo.

b) Os conhecimentos preparados pelo carregador devem incluir ou ser acompanhados de um certificado ou de uma declaração que ateste que a mercadoria a transportar está devidamente embalada, marcada e etiquetada e que satisfaz às condições exigidas para o transporte.

c) Qualquer navio que transporte cargas perigosas deve ter uma lista ou manifesto especial que enumere, de acordo com a regra 2 do presente capítulo, as cargas perigosas embarcadas e que indique o seu local de estiva. Em substituição desta lista ou manifesto pode ser usado um plano de carga pormenorizado que indique por classes a localização de todas as cargas perigosas a bordo.

Regra 6

Condições de estiva

a) As cargas perigosas devem ser estivadas com segurança e de modo conveniente, segundo a natureza das mercadorias. As cargas incompatíveis devem ser separadas umas das outras.

b) Os explosivos (com excepção de munições) que constituam sério perigo devem ser estivados em paióis, os quais devem manter-se fachados com segurança durante a navegação. Esses explosivos devem estar separados dos detonadores. A aparelhagem eléctrica e os condutores dos compartimentos em que são transportados explosivos devem ser concebidos e utilizados de modo a reduzir ao mínimo os riscos de incêndio ou de explosão.

c) As cargas que libertem vapores perigosos devem ser estivadas em local bem ventilado ou no convés.

d) A bordo dos navios que transportem líquidos ou gases inflamáveis devem tomar-se precauções especiais, quando necessário, contra incêndio ou explosão.

e) As substâncias susceptíveis de aquecimento ou inflamação espontânea não devem ser transportadas senão quando se tomarem as precauções convenientes para evitar que se declare incêndio.

Regra 7

Explosivos transportados em navios de passageiros

a) Só podem ser transportados a bordo de navios de passageiros os explosivos a seguir designados:

i) Cartuchos e rastilhos de segurança;

ii) Pequenas quantidades de explosivos, cujo peso líquido total não exceda 9 kg (20 libras);

iii) Sinais de socorro para navios ou aeronaves, cujo peso total não exceda 1016 kg (2240 libras);

iv) Fogos de artifício pouco susceptíveis de explodir violentamente, excepto nos navios que transportem passageiros de coberta.

b) Apesar das disposições do parágrafo *a*) da presente regra, podem ser transportadas em navios de passageiros quantidades maiores ou tipos diferentes de explosivos quando sejam aplicadas medidas especiais de segurança aprovadas pela Administração.

CAPÍTULO VIII

Navios nucleares

Regra 1

Aplicação

O presente capítulo aplica-se a todos os navios nucleares, com excepção dos navios de guerra.

Regra 2

Aplicação dos outros capítulos

As regras contidas nos outros capítulos da presente Convenção são aplicáveis aos navios nucleares, sob reserva das modificações introduzidas pelo presente capítulo.

Regra 3

Isenções

Um navio nuclear não pode, em caso algum, ser isento das prescrições de qualquer das regras da presente Convenção.

Regra 4

Aprovação da instalação do reactor

O projecto, a construção e as normas de inspecção e de montagem da instalação do reactor devem ser julgadas satisfatórias e aprovadas pela Administração e devem ter em conta os limites impostos às vistorias pela existência de radiações.

Regra 5

Adaptação da instalação do reactor às condições do serviço de bordo

A instalação do reactor deve ser projectada tendo em consideração as condições particulares do serviço a bordo de um navio em todas as circunstâncias, normais ou excepcionais, de navegação.

Regra 6

Protecção contra as radiações

A Administração deve tomar as medidas necessárias para assegurar a ausência de riscos fora do razoável provenientes de radiações ou de outras causas de origem nuclear, no mar ou em porto, para as pessoas embarcadas, assim como para as populações, as vias navegáveis, os alimentos ou as águas.

Regra 7

Documentação de segurança

a) Deve ser elaborada documentação de segurança que permita a avaliação das condições de segurança da instalação nuclear e do navio, de modo a garantir a ausência de riscos fora do razoável provenientes das radiações ou de qualquer outra causa de origem nuclear, no mar ou em porto, para as pessoas embarcadas, assim como para as populações as vias navegáveis, os alimentos ou as águas. Esta documentação deve ser submetida para aprovação ao exame da Administração e será sempre mantida em dia.

b) A documentação de segurança deve ser posta à disposição dos Governos Contratantes dos países que o navio nuclear deva visitar, com a antecedência suficiente para que estes possam apreciar a segurança do navio.

Regra 8

Manual de condução

Deve ser preparado um manual de condução completo e pormenorizado, contendo, para uso do pessoal, informações e directivas para o auxiliar a resolver, no exercício das suas funções, todos os assuntos relativos à condução da instalação nuclear, dando particular importância à segurança. Este manual de condução deve ser submetido para aprovação a exame da Administração.

A bordo deve haver um exemplar do manual, o qual deve ser sempre mantido em dia.

Regra 9

Vistorias

As vistorias dos navios nucleares devem satisfazer às prescrições aplicáveis da regra 7 do capítulo I ou das regras 8, 9 e 10 do mesmo capítulo, salvo na medida em que essas vistorias são limitadas pela presença das radiações. As vistorias devem também satisfazer a todas as prescrições especiais da documentação de segurança. Em todos os casos, apesar das disposições das regras 8 e 10 do capítulo I, as vistorias devem realizar-se pelo menos uma vez por ano.

Regra 10

Certificados

a) As disposições do parágrafo *a*) da regra 12 do capítulo I e da regra 14 do mesmo capítulo não se aplicam aos navios nucleares.

b) Um certificado denominado «Certificado de segurança para navio nuclear de passageiros» é concedido depois da inspecção e vistoria de um navio nuclear de passageiros que satisfaça às prescrições dos capítulos II-1, II-2, III, IV e VIII e a todas as outras prescrições aplicáveis das presentes regras.

c) Um certificado denominado «Certificado de segurança para navio nuclear de carga» é concedido depois da inspecção e vistoria de um navio nuclear de carga que satisfaça às prescrições relativas a vistorias de navios de carga expressas na regra 10 do capítulo I e, bem assim, às prescrições dos capítulos II-1, II-2, III, IV e VIII e a todas as prescrições aplicáveis das presentes regras.

d) Os certificados de segurança para navios nucleares de passageiros e os certificados de segurança para navios nucleares de carga devem declarar que: «Este navio, que é um navio nuclear, satisfaz a todas as prescrições do capítulo VIII da Convenção e está conforme com a documentação de segurança aprovada para o navio.»

e) A validade dos certificados de segurança para navio nuclear de passageiros e dos certificados de segurança para navio nuclear de carga não deve exceder doze meses.

f) Os certificados de segurança para navio nuclear de passageiros e os certificados de segurança para navio nuclear de carga devem ser concedidos pela Administração ou por qualquer outra pessoa ou organização por ela devidamente autorizada. Em qualquer caso, a Administração assume inteira responsabilidade pelo certificado.

Regra 11

Fiscalização especial

Além da fiscalização estipulada na regra 19 do capítulo I, os navios nucleares podem ser sujeitos, antes da entrada nos portos dos Governos Contratantes, assim como durante a permanência nesses portos, a fiscalização especial, a fim de verificar se o navio tem o certificado de segurança para navio nuclear válido e se não apresenta riscos fora do razoável provenientes de radiações ou de qualquer outra causa de origem nuclear, tanto no mar como em porto, para as pessoas embarcadas, as populações, as vias navegáveis, os alimentos ou as águas.

Regra 12

Acidentes

No caso de se produzir qualquer acidente susceptível de criar perigo no meio ambiente, o comandante do navio nuclear deve informar imediatamente a Administração. O comandante deve também avisar imediatamente as Administrações competentes de qualquer país em cujas águas o navio se encontre ou daquele de cujas águas se aproxime.

APÊNDICE

Modelo de certificado dc segurança para navios de passageiros:

CERTIFICADO DE SEGURANÇA PARA NAVIO DE PASSAGEIROS

(Selo oficial) *(País)*

Para uma viagem internacional / viagem internacional curta

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Pormenores de viagens autorizadas de harmonia com a regra 27, *c*), *vii*), do capítulo III	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)*, certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado foi devidamente vistoriado de acordo com as disposições da Convenção acima citada.

II — Que a vistoria mostrou que o navio satisfaz às exigências das regras anexas à referida Convenção no que diz respeito:

1) À estrutura, às caldeiras principais e auxiliares e outros recipientes sujeitos a pressão e às máquinas;
2) À disposição e pormenores relativos à compartimentagem estanque;
3) Às linhas de carga de compartimentagem seguintes:

Linhas de carga de compartimentagem determinadas e marcadas no costado a meio navio (regra 11 do capítulo II-1).	Bordo livre	A preencher quando o espaço destinado a passageiros inclui os volumes seguintes, que podem ser ocupados quer por passageiros, quer por carga.
C.1	. . .	. . .
C.2	. . .	. . .
C.3	. . .	. . .

III — Que os meios de salvação são suficientes para um número total máximo de . . . pessoas, a saber:

. . . embarcações salva-vidas (incluindo . . . embarcações salva-vidas com motor) capazes de acomodar . . . pessoas e . . . embarcações salva-vidas com motor providas de instalação radiotelegráfica e de projector (incluídas no número total de embarcações salva-vidas acima indicado) e . . . embarcações salva-vidas com motor providas apenas de projector (igualmente incluídas no número total de embarcações salva-vidas acima indicado), exigindo . . . tripulantes encartados;
. . . jangadas salva-vidas, servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas;
. . . jangadas salva-vidas não servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas;
. . . balsas capazes de suportar . . . pessoas;
. . . bóias salva-vidas;
. . . coletes de salvação.

IV — Que as embarcações e jangadas salva-vidas estão equipadas de acordo com as disposições das regras.

V — Que o navio está munido de um aparelho lança-cabos e de um equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas de acordo com as disposições das regras.

VI — Que o navio obedece às prescrições das regras no que diz respeito às instalações radiotelegráficas, a saber:

	Prescrições das regras	Disposições existentes a bordo
Horas de escuta por operador	. . .	. . .
Número de operadores	. . .	. . .
Tem auto-alarme?	. . .	. . .
Tem instalação principal?	. . .	. . .
Tem instalação de reserva?	. . .	. . .

	Prescrições das regras	Disposições existentes a bordo
Os emissores principal e de reserva estão electricamente separados ou conjugados?	...	...
Tem equipamento para radiolocalização na frequência radiotelefónica de socorro?	...	...
Tem radar?	...	...
Tem radiogoniómetro?	...	...
Número de passageiros para o qual foi concedido este certificado	...	...

VII — Que as instalações radiotelegráficas das embarcações salva-vidas com motor e/ou o equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, se existir, funcionam conforme as prescrições das regras.

VIII — Que o navio obedece às exigências das regras no que diz respeito aos meios de detecção e extinção de incêndios, radar, sonda acústica e girobússola e está munido de luzes e sinais de navegação, escada de pilotos, bem como de meios para fazer sinais sonoros e de perigo de acordo com as prescrições das regras e com as das Regras Internacionais para Evitar Abalroamentos no Mar em vigor.

IX — Que o navio obedece a todas as outras prescrições das regras nas partes que lhe são aplicáveis.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19 . . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1952, 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

No caso de o navio transformado nos termos da regra 1, *b*), *i*), do capítulo II-1 ou regra 1, *a*), *i*), do capítulo II-2 da Convenção indicar a data em que tiveram início os trabalhos de transformação.

Modelo de certificado de segurança de construção para navios de carga:

Certificado de segurança de construção para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)* certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

Que o navio acima mencionado foi devidamente vistoriado, conforme as disposições da regra 10 do capítulo I da Convenção acima citada, e que nessa vistoria foi verificado que o estado do casco, das máquinas e do equipamento, como definido na referida regra, é satisfatório sob todos os aspectos e que o navio está conforme as prescrições aplicáveis dos capítulos II-1 e II-2 (com excepção das que se referem aos dispositivos de extinção de incêndios e aos planos de combate a incêndios).

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1952, 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

Modelo de certificado de segurança do equipamento para navios de carga:

Certificado de segurança do equipamento para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)* certifica:
Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado foi devidamente vistoriado de acordo com as disposições da Convenção acima citada.

II — Que a vistoria mostrou que os meios de salvação são suficientes para o número total máximo de . . . pessoas, a saber:

. . .embarcações salva-vidas a bombordo capazes de acomodar . . . pessoas;
. . . embarcações salva-vidas a estibordo capazes de acomodar . . . pessoas;
. . . embarcações salva-vidas com motor (incluídas no número total de embarcações salva-vidas acima mencionado), compreendendo
. . . embarcações salva-vidas com motor providas de instalação radiotelegráfica e de projector e . . . embarcações salva-vidas com motor providas apenas de projector;
. . . jangadas salva-vidas, servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas;
. . . jangadas salva-vidas, não servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas;
. . . bóias salva-vidas;
. . . coletes de salvação.

III — Que as embarcações e as jangadas salva-vidas estão equipadas de acordo com as disposições das regras anexas à Convenção.

IV — Que o navio está munido de aparelho lança-cabos e de equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas de acordo com as disposições das regras.

V — Que o navio obedece às exigências da Convenção no que diz respeito aos meios de detecção e extinção de incêndios, radar, sonda acústica e girobússola e está munido de luzes e sinais de navegação, escada de pilotos, bem como de meios para fazer sinais sonoros e de perigo de acordo com as prescrições das regras e com as das Regras Internacionais para Evitar Abalroamentos no Mar em vigor.

VI — Que o navio obedece a todas as outras prescrições das regras nas partes que lhe são aplicáveis.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1952, 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

Modelo de certificado de segurança radiotelegráfica para navios de carga:

Certificado de segurança radiotelegráfica para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)* certifica:
Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado obedece às prescrições das regras anexas à Convenção acima citada no que diz respeito à radiotelegrafia e radar:

	Prescrições das regras	Disposições existentes a bordo
Horas de escuta por operador	. . .	. . .
Número de operadores	. . .	. . .
Tem auto-alarme?	. . .	. . .
Tem instalação principal?	. . .	. . .
Tem instalação de reserva?	. . .	. . .
Os emissores principal e de reserva estão electricamente separados ou conjugados?	. . .	. . .
Tem radiogoniómetro?	. . .	. . .
Tem equipamento para radiolocalização na frequência radiotelefónica de socorro?	. . .	. . .
Tem radar?	. . .	. . .

II — Que as instalações radiotelegráficas das embarcações saiva-vidas com motor c ou o equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, se existir, funcionam conforme as prescrições das presentes regras.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1952, 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

Modelo de certificado de segurança radiotelefónica para navios de carga:

Certificado de segurança radiotelefónica para navio de carga

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Data do *assentamento* da quilha (veja nota)

O Governo . . . *(nome)* certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado obedece às prescrições das regras anexas à Convenção acima citada no que diz respeito à radiotelefonia.

	Prescrições das regras	Disposições existentes a bordo
Horas de escuta por operador	. . .	. . .
Número de operadores	. . .	. . .

II — Que o funcionamento do equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, se existir, satisfaz às disposições das referidas regras.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1952, 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

Modelo de certificado de dispensa:

Certificado de dispensa

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta

O Governo . . . *(nome)* certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

Que o navio acima mencionado está dispensado, em virtude da regra . . . do capítulo . . . das regras anexas à Convenção acima citada, da aplicação das prescrições de (*a*) . . . da Convenção para as viagens de . . . a . . .

Indicar aqui as condições, se elas existem, sob as quais o certificado de dispensa é concedido. } . . . . . .

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

(*a*) Inserir aqui referências aos capítulos e regras, especificando os parágrafos.

Modelo de certificado de segurança para navios nucleares de passageiros:

Certificado de segurança para navio nuclear de passageiros

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Pormenores de viagens autorizadas de harmonia com a regra 27, *c*), *vii*), do capítulo III	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)* certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado foi devidamente vistoriado de acordo com as disposições da Convenção acima citada.

II — Que este navio, sendo um navio nuclear, satisfaz todas as prescrições do capítulo VIII da Convenção e está conforme a documentação de segurança aprovada para este navio.

III — Que a vistoria constatou que o navio satisfaz as exigências das regras anexas à referida Convenção no que diz respeito:

1) À estrutura, às caldeiras principais e auxiliares e outros recipientes sujeitos a pressão e às máquinas;
2) À disposição e pormenores relativos à compartimentagem estanque;
3) Às linhas de carga de compartimentagem seguintes:

Linhas de carga de compartimentagem determinadas e marcadas no costado a meio navio (regra 11 do capítulo II).	Bordo livre	A preencher quando o espaço destinado a passageiros inclui os volumes seguintes, que podem ser ocupados quer por passageiros, quer por carga.
C.1	. . .	. . .
C.2	. . .	. . .
C.3	. . .	. . .

IV — Que os meios de salvação são suficientes para um número total máximo de . . . pessoas, a saber:

. . . embarcações salva-vidas (incluindo . . . embarcações salva-vidas com motor) capazes de acomodar . . . pessoas, . . . embarcações salva-vidas com motor providas de instalação radiotelegráfica e de projector (incluídas no número total de embarcações salva-vidas acima indicado) e . . . embarcações salva-vidas com motor providas apenas de projector (igualmente incluídas no número total de embarcações salva-vidas acima indicado), exigindo . . . tripulantes encartados;
. . . jangadas salva-vidas, servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas; e
. . . jangadas salva-vidas, não servidas por dispositivos aprovados para as arriar à água, capazes de acomodar . . . pessoas;
. . . balsas capazes de suportar . . . pessoas;
. . . bóias salva-vidas;
. . . coletes de salvação.

V — Que as embarcações e jangadas salva-vidas estão equipadas de acordo com as disposições das regras.

VI — Que o navio está munido de um aparelho lança-cabos e de um equipamento de radiocomunicações radioeléctrico portátil para embarcações e jangadas salva-vidas de acordo com as disposições das regras.

VII — Que o navio obedece às prescrições das regras no que diz respeito às instalações radiotelegráficas, a saber:

	Prescrições das regras	Disposições existentes a bordo
Horas de escuta por operador	. . .	. . .
Número de operadores	. . .	. . .
Tem auto-alarme?	. . .	. . .
Tem instalação principal?	. . .	. . .
Tem instalação de reserva?	. . .	. . .
Os emissores principal e de reserva estão electricamente separados ou conjugados?	. . .	. . .
Tem equipamento para radiolocalização na frequência radiotelefónica de socorro?	. . .	. . .
Tem radar?	. . .	. . .
Tem radiogoniómetro?	. . .	. . .
Número de passageiros para o qual foi concedido este certificado	. . .	. . .

VIII — Que as instalações radiotelegráficas das embarcações salva-vidas com motor e ou o equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, se existir, funcionam conforme as prescrições das regras.

IX — Que o navio obedece às exigências da Convenção no que diz respeito aos meios de detecção e extinção de incêndios, radar, sonda acústica e girobússola está munido de luzes e sinais de navegação e escada de pilotos, bem como de meios para fazer sinais sonoros e de perigo de acordo com as prescrições das regras e com as das Regras Internacionais para Evitar Abalroamentos no Mar em vigor.

X — Que o navio obedece a todas as outras prescrições das regras nas partes que lhe são aplicáveis.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19. . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

No caso de o navio transformado nos termos da regra 1, *b*), *i*), do capítulo II-1 ou regra 1, *a*), *i*), do capítulo II-2 da Convenção, indicar a data em que tiveram início os trabalhos de transformação.

Modelo de certificado de segurança para navios nucleares de carga:

Certificado de segurança para navio nuclear de carga

(Selo oficial) *(País)*

Passado segundo as prescrições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Nome do navio	Distintivo do navio em números ou letras	Porto de registo	Tonelagem bruta	Data do assentamento da quilha (veja nota)

O Governo . . . *(nome)* certifica:

Eu, abaixo assinado, . . . *(nome)*, certifico:

I — Que o navio acima mencionado foi devidamente vistoriado de acordo com as disposições da Convenção acima citada.

II — Que este navio, sendo um navio nuclear, satisfaz todas as prescrições do capítulo VIII da Convenção e está conforme a documentação de segurança aprovada para este navio.

III — Que a vistoria constatou que o navio satisfaz as exigências da regra 10 do capítulo I da Convenção no que se refere ao casco, às máquinas e ao equipamento e está conforme as prescrições aplicáveis dos capítulos II-1 e II-2.

IV — Que os meios de salvação são suficientes para um número total máximo de . . . pessoas, a saber:

. . . embarcações salva-vidas a bombordo capazes de acomodar . . . pessoas;

. . . embarcações salva-vidas a estibordo capazes de acomodar . . . pessoas;

. . . embarcações salva-vidas com motor (incluídas no número total das embarcações salva-vidas acima mencionadas) compreendendo . . . embarcações salva-vidas com motor providas de instalação radiotelegráfica e de projector e . . . embarcações salva-vidas com motor providas apenas de projector;

. . . jangadas salva-vidas servidas por dispositivos aprovados para as arriar à água capazes de acomodar . . . pessoas;

. . . jangadas salva-vidas não servidas por dispositivos aprovados para as arriar à água capazes de acomodar . . . pessoas;

. . . bóias salva-vidas;

. . . coletes de salvação.

V — Que as embarcações e jangadas salva-vidas estão equipadas de acordo com as disposições das regras anexas à Convenção.

VI — Que o navio está munido de um aparelho lança-cabos e de um equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas de acordo com as disposições das regras.

VII — Que o navio obedece às prescrições das regras no que diz respeito às instalações radiotelegráficas, a saber:

	Prescrições das regras	Disposições existentes a bordo
Horas de escuta por operador	. . .	. . .
Número de operadores	. . .	. . .
Tem auto-alarme?	. . .	. . .
Tem instalação principal?	. . .	. . .
Tem instalação de reserva?	. . .	. . .
Os emissores principal e de reserva estão electricamente separados ou estão conjugados?	. . .	. . .
Tem radiogoniómetro?	. . .	. . .
Tem equipamento para radiolocalização na frequência radiotelefónica de socorro?	. . .	. . .
Tem radar?	. . .	. . .

VIII — Que as instalações radiotelegráficas das embarcações salva-vidas com motor e/ou o equipamento de radiocomunicações portátil para embarcações e jangadas salva-vidas, se existir, funcionam conforme as prescrições das regras.

IX — Que o navio obedece às exigências da Convenção no que diz respeito aos meios de detecção e extinção de incêncios, radar, sonda acústica e girobússola, está munido de luzes e sinais de navegação, escada de pilotos, bem como de meios para fazer sinais sonoros e de perigo de acordo com as prescrições das regras e com as das Regras Internacionais para Evitar Abalroamentos no Mar em vigor.

X — Que o navio obedece a todas as outras prescrições das regras nas partes que lhe são aplicáveis.

Este certificado é concedido sob a autoridade do Governo . . .

É válido até . . .

Passado em . . . de . . . de 19 . . .

(Colocar aqui o selo ou assinatura da autoridade encarregada de conceder este certificado.)

(Selo)

Se este certificado for assinado, acrescentar o parágrafo seguinte:

O abaixo assinado declara que está devidamente autorizado pelo dito Governo a conceder este certificado.

(Assinatura)

Nota. — Basta indicar o ano de assentamento da quilha ou o ano em que o navio se encontrava numa fase equivalente de construção, salvo se for 1965 e o ano de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, casos em que deve ser indicada a data completa.

DOCUMENTO 2

Resoluções adoptadas pela Conferência Internacional para a Salvaguarda da Vida Humana no Mar, 1974

Resolução 1

Que inclui a revisão da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

A Conferência,

Tendo-se concluído a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, para substituir a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960;

Notando que alterações substanciais às prescrições técnicas da Convenção de 1960 agora incorporadas na Convenção de 1974 foram limitadas por:

a) Emendas à Convenção de 1960 adoptadas pela Assembleia da Organização Marítima Consultiva Intergovernamental (IMCO); e

b) Novos regulamentos recomendados pela Assembleia para serem incluídos na Convenção de 1974;

Considerando a necessidade de uma revisão completa das prescrições técnicas da Convenção de 1974, para reflectir o desenvolvimento tecnológico;

Considerando também que a Convenção de 1974 estipula no artigo VIII melhores métodos de correcção para possibilitar que tal revisão técnica seja adoptada e prontamente posta em vigor;

Tomando nota do trabalho que o Comité de Segurança Marítima da Organização está a efectuar e o que se propõe efectuar tendo em vista a vasta revisão da Convenção de Segurança:

Convida a Organização a prosseguir os seus trabalhos neste campo, dando-lhe grande prioridade, para que as prescrições técnicas da Convenção de 1974 possam ser revistas, se necessário, com referência particular para os assuntos cobertos pelas recomendações deste Apêndice.

APÊNDICE

Recomendações para ulterior aperfeiçoamento do Regulamento Internacional para a Salvaguarda da Vida Humana no Mar

1 — Estabilidade intacta de navios

A Conferência,

Notando:

a) Que a Recomendação sobre estabilidade intacta de navios de passageiros e de navios de carga com um comprimento inferior a 100 m, adoptada pela Assembleia da Organização pela Resolução A.167(ES.IV), emendada pela Resolução A.206(VII), pode nem sempre ser apropriada especialmente em relação aos novos tipos de navios, de projecto e construção de carácter inovador; e

b) Que em alguns casos devem ser exigidos requisitos especiais no que diz respeito à estabilidade intacta dos navios de 100 m de comprimento ou mais:

Recomenda que sejam tomadas medidas para formular normas internacionais melhoradas sobre estabilidade intacta de navios, levando em conta, entre outras, as das forças externas que actuam sobre o navio quando a navegar, podendo-o fazer naufragar ou provocar-lhe ângulos de inclinação inaceitáveis.

2 — Subdivisão de navios excepto navios de passageiros

A Conferência,

Notando práticas diversas em vários países e as disposições da Convenção Internacional das Linhas de Carga, 1966, e a Convenção Internacional para a Prevenção da Poluição por Navios, 1973, na medida em que elas se referem à compartimentagem de navios, excepto navios de passageiros;

Sendo da opinião que devem ser adoptados os mesmos critérios para a salvaguarda da vida humana no mar, nos casos em que for possível em relação a todas as pessoas embarcadas, incluindo passageiros ou tripulação:

Recomenda que sejam feitos esforços para formular requisitos internacionais sobre compartimentagem de navios além de navios de passageiros, tendo em conta, entre outras, a compatibilidade de tais requisitos com as condições práticas da exploração.

3 — Medidas de segurança contra incêndio nos navios

A Conferência,

Notando:

a) Que os requisitos de segurança contra incêndios para navios de carga, excepto navios-tanques, e para navios de passageiros que não transportem mais do que 36 passageiros estão ainda em muitos aspectos insuficientes e devem ser melhorados; e

b) Que os requisitos de segurança contra incêndios para novos tipos de embarcações e navios para fins especiais estão ainda sobre reflexão:

Recomenda que novas medidas sejam tomadas para introduzir requisitos completos de segurança contra incêndio para aqueles tipos de navios.

4 — Dispositivos de salvamento

A Conferência,

Notando que o Comité de Organização de Segurança Marítima decidiu proceder à revisão total do capítulo III da Convenção com prioridade e que os trabalhos preparatórios sobre aquela revisão tinham começado;

Concordando com as decisões tomadas pelo Comité de Segurança Marítima sobre esta matéria:

Recomenda que este trabalho seja completado o mais depressa possível.

5 — Aparelho de propulsão principal

A Conferência,

Notando aumentos nas dimensões e potências dos navios e na complexidade e potência nominal da maquinaria;

Considerando a importância da confiança no aparelho propulsor principal de modo a garantir uma navegação segura, particularmente durante as manobras:

Recomenda a continuação do trabalho para aperfeiçoamento dos regulamentos relativos à construção, comando e conservação do aparelho propulsor principal.

6 — Casa das máquinas periodicamente não assistida

A Conferência,

Notando o incremento usado na automatização dos navios;

Considerando a dependência da segurança dos navios na eficiência e confiança do equipamento incluído, assim como a redução do número de tripulantes resultante da automatização dos navios:

Recomenda que os requisitos de segurança devem ser desenvolvidos cobrindo todos os aspectos automáticos e instalações de *contrôle* remoto, e que deve ser tomada especial atenção à determinação da lotação mínima de tripulantes tendo em conta a necessidade de enfrentar situações de emergência.

7 — Navios nucleares

A Conferência,

Notando progressos na engenharia nuclear, a experiência adquirida por vários países com navios que operam com propulsão nuclear e o presumível desenvolvimento no uso de navios de propulsão nuclear:

Recomenda a revisão das disposições aplicáveis da Convenção no que diz respeito a navios nucleares.

8 — Medidas de segurança para certos tipos de navios

A Conferência,

Levando em conta o desenvolvimento de certos tipos de navios para os quais as disposições da Convenção não se aplicam, quer navios de passageiros, quer de carga, ou para os quais aquelas disposições não são adequadas ou suficientes;

Considerando a necessidade de futuras modificações para a Convenção neste aspecto:

Recomenda a continuação do desenvolvimento e aperfeiçoamento dos requisitos específicos de segurança para navios de transportes especiais, novos tipos de embarcações, navios de transporte de produtos químicos e gases liquefeitos a granel e outros novos tipos de navios.

9 — Unificação de definições e disposições em diferentes convenções e códigos

A Conferência,

Notando que a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, e outras convenções e códigos preparados sob os auspícios da Organização contêm, em relação a alguns assuntos, definições e disposições diferentes:

Recomenda que continuem a fazer-se esforços para conseguir a unificação das definições e disposições usadas no mesmo contexto em documentos diferentes.

10 — Fusão das convenções

A Conferência,

Notando os desígnios comuns da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, e a Convenção Internacional das Linhas de Carga, 1966, no que diz respeito à segurança no mar:

Recomenda que continuem a ser feitos esforços para a fusão destas Convenções.

11 — Transporte de cargas perigosas

A Conferência,

Notando o rápido incremento no transporte de cargas perigosas por diferentes meios de transporte;

Compreendendo a necessidade de assegurar eficazmente o transporte económico de cargas perigosas unificando as leis nacionais, regionais e internacionais, respeitantes ao carregamento, estiva e manuseamento de cargas perigosas por todos os meios de transporte:

Recomenda que a Organização deve continuar o seu trabalho em cooperação com outras organizações internacionais interessadas e em particular com o Comité de Peritos das Nações Unidas do Transporte de Cargas Perigosas, com vista a adoptar com a maior brevidade possível uma convenção internacional única de transporte de cargas perigosas para todos os meios de transporte.

Resolução 2

Rápido processo de emendas e de entrada em vigor da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

A Conferência,

Consciente dos principais objectivos referidos na Resolução A.304(VIII) da Assembleia da Organização Marítima Consultiva Intergovernamental;

Tomando nota do parágrafo *a*) do artigo I da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, pela qual os Governos Contratantes se encarregam de pôr em uso as disposições da Convenção e do seu Anexo;

Nota com particular interesse o artigo VIII da Convenção, o qual providencia por uma conduta simplificada para forçar a entrada em vigor de futuras alterações às disposições técnicas do Anexo à Convenção;

Compreende que a eficácia daquelas alterações depende grandemente de se adoptar legislação que rapidamente aprove as alterações introduzidas:

Solicita aos Estados que se tornem partes da Convenção o mais depressa possível e a porem em uso a adopção de alterações em atraso com um mínimo de demora.

Resolução 3

Direito a votar no Comité de Segurança Marítimo para a adopção de alterações

A Conferência,

Recordando que um dos principais objectivos da Conferência foi incorporar melhores aperfeiçoamentos numa nova convenção para substituir a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960;

Tendo concluído que a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, substituiu a Convenção de 1960;

Notando que as disposições do artigo VIII da Convenção de 1974 permitem emendas à Convenção e podem ser adoptadas por uma maioria de dois terços dos Governos Contratantes presentes e votantes no Comité de Segurança Marítima da Organização Marítima Consultiva Intergovernamental, sendo ou não membros da Organização;

Notando que a Assembleia da Organização, na sua 5.ª sessão extraordinária, decidiu pela Resolução A.317(ES V) que a Organização tomaria em consideração emendar a sua Convenção, de modo a, entre outros, permitir que o Comité de Segurança Marítima adopte procedimentos de votação, como previsto noutras convenções, quando exercendo funções que lhe são conferidas por tais convenções;

Considerando que a interpretação da Convenção criada pela Organização é uma prerrogativa da Assembleia da Organização de acordo com o artigo 55.º daquela Convenção:

Recomenda à Assembleia que exerça essa prerrogativa aquando da interpretação da Convenção da Organização, a fim de permitir ao Comité de Segurança Marítima seguir os procedimentos de voto previstos no artigo VIII da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, para adopção de alterações à referida Convenção.

Resolução 4

Recomendações da Conferência de Segurança de 1960 e resoluções da Assembleia da Organização relativas às Regras da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974.

A Conferência,

Tendo revisto sumariamente as recomendações da Conferência Internacional para a Salvaguarda da Vida Humana no Mar, 1960:

Chama a atenção dos Governos Contratantes para as recomendações que são ainda aplicáveis;

Recomenda que se continuem a examinar no seio da Organização, ou em colaboração com outros organismos interessados, as recomendações que só foram parcialmente postas em vigor e que se tenham em conta, por ocasião da aplicação destas recomendações, os elementos novos que foram introduzidos desde a Conferência de 1960;

Recomenda ainda que os Governos Contratantes, quando completada a Convenção para a Salvaguarda da Vida Humana no Mar, 1974, devam ter em conta todas as recomendações relevantes adoptadas pela Assembleia da Organização e, em particular, aquelas que explicitem, completem ou desenvolvam as disposições técnicas da Convenção de 1960, as quais ainda sejam aplicáveis, tais como as Resoluções A.123(V), A.163(ES.IV), A.166(ES.IV), A.167(ES.IV), A.206(VII), A.210(VII), A.211(VII), A.214(VII), A.215(VII), A.266(VIII) e A.270(VIII) em referência nos capítulos II-1 e II-2,

Solicita aos Governos Contratantes interessados aceitar como equivalente à parte B do capítulo II-1 da Convenção de 1974 as regras relativas à compartimentagem e estabilidade de navios de passageiros, como equivalente à parte B do capítulo II da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1960, adoptada pela Assembleia da Organização mediante a Resolução A.265(VIII), quando aplicadas na sua totalidade.

Resolução 5

Recomendações para uso de um sistema de unidades na Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974

A Conferência,

Reconhecendo que no futuro somente deve ser usado um sistema de unidades na Convenção para a Salvaguarda da Vida Humana no Mar, 1974;

Reconhecendo que, por enquanto, é impraticável eliminar as unidades inglesas da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974:

Recomenda que a Organização futuramente tenha em conta que é desejável exprimir, os valores somente em unidades do sistema métrico e em números redondos, sempre que possível, sem prejuízo das normas existentes ou práticas comercialmente aceites:

Convida a Organização a estudar também o Sistema Internacional de Unidades, com vista ao seu uso na Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974, como e quando conveniente.

DOCUMENTO 3

Recomendações aplicáveis a navios nucleares

Nota. — Nas recomendações que seguem, a expressão «a presente Convenção» significa a Convenção Internacional para a Salvaguarda da Vida Humana no Mar, 1974. Chama-se a atenção para as regras relativas a navios nucleares do capítulo VIII da presente Convenção.

1 — Princípios gerais de segurança dos navios nucleares

a) Dado que os sinistros que afectam os elementos não nucleares de um navio nuclear, tais como avaria do leme, incêndio ou abalroamento, etc., são susceptíveis de pôr em perigo a instalação nuclear, é de desejar que esses elementos ofereçam a máxima segurança praticamente realizável. Em geral, todo o navio nuclear deve satisfazer às prescrições da presente Convenção, às da Administração interessada e às de uma sociedade de classificação reconhecida. Os elementos e as instalações, tais como anteparas estanques, dispositivos de protecção contra incêndios, instalação de esgoto de porões, meios de extinção de incêndios, instalação eléctrica, máquina do leme, dispositivo de marcha a ré, dispositivos para estabilidade e auxiliares da navegação devem ser ob-

jecto de cuidados especiais, com vista a garantir ao navio protecção conveniente que reduza ao mínimo os riscos de acidentes que possam atingir a instalação nuclear. Convirá estudar os documentos relativos a acidentes no mar ocorridos com navios de idênticas dimensões, a fim de se tomarem todas as medidas tendentes a evitar o risco de libertação não controlada de substâncias radioactivas ou tóxicas em caso de acidente.

b) Deve ser dispensada especial atenção à resistência geral da estrutura dos navios nucleares, assim como à resistência local das estruturas que se encontram no interior e em torno do compartimento do reactor.

c) Um navio nuclear deve continuar a flutuar e conservar uma estabilidade suficiente com, pelo menos, dois quaisquer compartimentos principais contíguos alagados em todas as condições de carga.

d) O sistema de protecção contra incêndios e a estanquidade da compartimentagem devem ser, pelo menos, equivalentes às normas mais elevadas da presente Convenção.

2 — Prescrições gerais relativas à instalação nuclear

a) Deve provar-se, por meio de cálculos e de experiências, que a instalação nuclear e o seu invólucro são dotados de propriedades tais que garantam, nos limites das possibilidades práticas, o máximo de protecção das pessoas embarcadas, das povoações, das vias navegáveis, dos alimentos e das águas contra acidentes ou deficiências de que resulte irradiação excessiva.

b) A instalação do reactor deve ser projectada de modo a evitar qualquer reacção em cadeia não controlada em todas as condições previsíveis de exploração e de avaria, incluindo o caso do afundamento do navio.

c) Um navio nuclear equipado com um aparelho propulsor de um só reactor, cujo grau de segurança não tenha sido demonstrado, deve ser provido de um aparelho propulsor de emergência capaz de dar ao navio velocidade suficiente para manobrar. Esse aparelho propulsor de emergência deve estar pronto a entrar imediatamente em serviço quando o navio navegar em águas territoriais.

d) O aparelho propulsor nuclear deve ser tal que ofereça possibilidades de manobra equivalentes às de um navio do mesmo tipo de propulsão clássica.

e) As exigências relativas aos elementos de reserva e de emergência respeitantes à parte clássica da instalação nuclear devem ser idênticas às que estão em vigor para os navios clássicos análogos. Os elementos dos sistemas de reserva e de emergência da instalação nuclear deverão ser estudados e estabelecidos em função do tipo de instalação nuclear utilizada.

f) Os sistemas de reserva, quando indispensáveis para a segurança da instalação nuclear, devem ser distintos dos sistemas principais, de modo a dar o máximo de protecção em caso de acidente.

g) Deve existir uma fonte de energia de emergência capaz de alimentar os órgãos necessários para garantir a interrupção de funcionamento do reactor e para o manter em condições de segurança.

h) O compartimento do reactor não deve conter materiais inflamáveis além dos necessários para o funcionamento da instalação do reactor.

i) Não devem ser usados no reactor materiais susceptíveis de entrar em reacção química com o ar ou a água, de modo perigoso, a não ser que se prove que no sistema considerado estão incorporados meios de segurança adequados.

j) A instalação do reactor e sua aparelhagem devem ser projectadas para funcionar satisfatoriamente em serviço no mar, tendo em conta as posições, acelerações e vibrações do navio.

k) Os sistemas de refrigeração do reactor devem permitir evacuar com toda a segurança o calor residual e evitar temperaturas excessivas, em todas as previsíveis condições de funcionamento e de avaria, com todas as inclinações de caimento ou de adornamento em que o navio se mantenha estável. A avaria dos meios de evacuação do calor residual não deve provocar a libertação de quantidades perigosas de substâncias radioactivas ou tóxicas fora do invólucro da instalação do reactor.

l) O reactor deve ser provido de dispositivos apropriados de comando, protecção e medida.

m) Os necessários dispositivos de comando e medida devem ser dispostos de modo a permitir o comando da instalação do reactor do exterior do invólucro.

3 — Protecção e invólucro da instalação do reactor

a) A instalação do reactor deve ser disposta, protegida e solidamente fixada, de modo a reduzir ao mínimo os riscos de avaria em caso de acidente do navio.

b) A instalação do reactor deve ser provida de invólucros, sistemas ou outros dispositivos destinados a impedir, em caso de avaria dos seus componentes, a libertação de quantidades perigosas de substâncias radioactivas ou tóxicas nos locais de serviço e nos alojamentos e ainda na proximidade do navio. Estes retentores, sistemas ou dispositivos exteriores devem ser sujeitos a verificações apropriadas para provar o seu satisfatório comportamento em todos os casos previsíveis de acidente.

c) Os invólucros, sistemas ou dispositivos utilizados devem ser colocados de modo a reduzir ao mínimo os danos na eventualidade de colisão ou encalhe. Na construção devem prever-se, na medida das possibilidades práticas, disposições que facilitem recuperar do navio o reactor ou os seus órgãos essenciais, no caso de naufrágio, sem que essas disposições prejudiquem a segurança da instalação do reactor em serviço normal.

d) Devem prever-se meios tendentes a garantir que incêndios no interior ou no exterior da instalação do reactor não afectem a integridade dos invólucros, sistemas ou dispositivos utilizados ou a eficácia dos meios de interromper o funcionamento do reactor e de o manter em condições de segurança.

4 — Blindagem e protecção contra as radiações

a) Qualquer instalação nuclear deve ser provida de uma blindagem que garanta, de maneira eficaz, a protecção biológica das pessoas a bordo ou das que se encontrem na proximidade imediata do navio contra os efeitos nocivos das radiações, tanto em

condições de exploração normal como em caso de acidente. O nível máximo admissível de radiações nos alojamentos e nos locais de serviço deve estar de acordo com os níveis internacionais que venham a ser estabelecidos.

b) Tendo em vista a conveniente protecção contra as radiações, devem estabelecer-se para cada navio nuclear instruções de condução e de conservação. A Administração deve verificar periodicamente se o pessoal da instalação nuclear conhece essas instruções.

c) Os aparelhos de detecção das radiações devem ser colocados em locais apropriados e devem dar alarme quando as radiações excedam um nível de segurança predeterminado.

5 — Resíduos radioactivos

a) Deve haver meios especiais de armazenar provisoriamente com segurança, quando necessário, e de evacuar seguramente todos os resíduos radioactivos sólidos, líquidos ou gasosos.

b) Os sistemas de evacuação destes resíduos devem ser munidos de meios de detecção que dêem alarme e, eventualmente, provoquem uma intervenção se as radiações excederem o nível de segurança predeterminado.

c) Os níveis máximos admissíveis de radiação para a evacuação dos resíduos no alto mar devem estar de acordo com as normas internacionais que venham a ser estabelecidas.

6 — Reabastecimento do reactor e conservação

a) As operações de reabastecimento do reactor devem ser exclusivamente efectuadas em locais convenientemente equipados para tal fim.

b) Devem ser tomadas as medidas necessárias para assegurar que as operações de descarga, reabastecimento, preparação para utilização e conservação do combustível nuclear se realizem sem expor o pessoal a radiações que excedam a dose admissível e sem libertação perigosa de substâncias radioactivas ou tóxicas para o meio ambiente.

7 — Pessoal

O comandante, os oficiais e os outros membros da tripulação de um navio nuclear devem possuir as habilitações necessárias e devem ter recebido um treino adequado às suas responsabilidades e funções, conforme as disposições tomadas pela Administração. Este pessoal deve igualmente ser instruído sobre as precauções a tomar em matéria de protecção contra as radiações.

8 — Manual de condução

O manual de condução deve fornecer instruções pormenorizadas sobre o método a seguir para efectuar todas as operações relativas aos diversos dispositivos e sistemas utilizados, tanto em condições normais de funcionamento como em casos de avaria; deve também conter prescrições relativas à elaboração de registos apropriados sobre o funcionamento do reactor, dos níveis de radiação, da evacuação de resíduos e dos ensaios e verificações que interessem à segurança da instalação do reactor.

9 — Documentação de segurança

a) A documentação de segurança deve conter informações suficientemente pormenorizadas para permitir ao pessoal qualificado apreciar o grau de segurança do navio e da sua instalação nuclear, incluindo as normas e os processos utilizados, e determinar se o arranque da instalação e a sua exploração regular se farão com segurança. Os pontos principais que devem figurar na documentação de segurança são: descrição do navio, do reactor e do sistema de propulsão; estudo da condução nas condições normais de navegação no mar, em porto e em caso de emergência; descrição do comando do reactor, do invólucro da protecção contra as radiações, da evacuação dos resíduos radioactivos, do reabastecimento do reactor, dos componentes dos dispositivos de reserva e de emergência, dos processos de verificação, das medidas tomadas acerca do pessoal e do seu treino, e uma avaliação dos acidentes previsíveis demonstrativa de os riscos terem sido reduzidos ao mínimo. A documentação de segurança deve indicar que a instalação do reactor não apresenta perigo anormal para as pessoas embarcadas, as populações, as vias navegáveis, os alimentos ou as águas.

b) O conteúdo da documentação de segurança não fica porém limitado às informações acima indicadas, devendo também ser dado conhecimento de todos os dados específicos suplementares que forem necessários. Deve ser preparada uma documentação de segurança completa para a primeira instalação de um tipo de reactor em determinado tipo de navio. Quando se trate de tipos de reactores e de navios derivados de tipos em que as condições de funcionamento e de segurança tenham sido demonstradas, a sua aceitação poderá basear-se no estudo analítico das modificações do projecto primitivo.

10 — Publicação de prescrições

Os Governos Contratantes devem publicar todas as prescrições especiais que venham a estabelecer acerca da chegada de navios nucleares à proximidade dos seus portos e a sua entrada e permanência nesses portos.

11 — Fiscalização especial

Desde que a segurança do navio nuclear e da sua instalação nuclear esteja devidamente demonstrada, as medidas seguintes serão, em geral, suficientes para determinar se as condições de funcionamento oferecem a devida segurança:

a) Exame do diário de bordo acerca do comportamento da instalação nuclear durante um período razoável, podendo ir de uma semana a um mês, incluída a permanência no último porto visitado;

b) Verificação de estarem em ordem os certificados da instalação nuclear e de terem sido feitos os exames periódicos exigidos pelo manual de condução;

c) Verificação de que os níveis de radiação, nas zonas do interior do navio e nas suas proximidades acessíveis ao pessoal de terra, não excedem os valores máximos fixados no manual de condução; esta verificação pode ser feita pelo exame dos registos de bordo ou por medidas executadas independentemente;

d) Determinação da quantidade e do grau de actividade dos resíduos radioactivos armazenados a bordo, feita por exames dos registos de bordo ou por medição independente; verificação dos processos e planos de evacuação;

e) Verificação de que os dispositivos de protecção e o invólucro do reactor estão intactos e que qualquer operação prevista que implique uma abertura do compartimento satisfaz às prescrições do manual de condução;

f) Verificação de que os dispositivos e o equipamento clássico e de emergência, cuja segurança de funcionamento é essencial para a navegação em águas restritas, estão em boas condições de funcionamento.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 171/99

de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1987, aprovada pelo Decreto n.º 45/90, de 20 de Outubro, cujo texto foi publicado no *Diário da República* 1.ª série, de 20 de Outubro de 1990.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com o referido decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 45/90

de 20 de Outubro

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

Artigo único. São aprovadas, para adesão, as emendas introduzidas ao Regulamento Internacional para evitar Abalroamentos no Mar, 1972, concluídas em Londres em Novembro de 1987, cuja versão autêntica em língua inglesa e respectiva tradução para língua portuguesa seguem em anexo ao presente decreto.

共和國總統府

共和國總統令 第171/99號
八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九八七年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；該修正案係經十月二十日第 45/90 號命令通過，且文本已公布於一九九零年十月二十日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過修正案之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月五日第 181 期《共和國公報》第一組-A）

外交部

命令 第45/90號
十月二十日

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

獨一條 —— 通過一九八七年十一月在倫敦訂立之《1972 年國際海上避碰規則公約修正案》，以待加入；該修正案之英文原文及葡文譯本附於本命令。

Visto e aprovado em Conselho de Ministros de 30 de Agosto de 1990. — *Joaquim Fernando Nogueira — Joaquim Fernando Nogueira — Álvaro José Brilhante Laborinho Lúcio — João de Deus Rogado Salvador Pinheiro — Álvaro Severiano da Silva Magalhães — Fernando Nunes Ferreira Real.*

Ratificado em 28 de Setembro de 1990.

Publique-se.

O Presidente da República, MÁRIO SOARES.

Referendado em 3 de Outubro de 1990.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 243, I Série, de 20 de Outubro de 1990)

一九九零年八月三十日於部長會議批閱及通過——*Joaquim Fernando Nogueira* —— *Joaquim Fernando Nogueira* —— *Álvaro José Brilhante Laborinho Lúcio* —— *João de Deus Rogado Salvador Pinheiro* —— *Álvaro Severiano da Silva Magalhães* —— *Fernando Nunes Ferreira Real*

一九九零年九月二十八日批准。

命令公布。

共和國總統

MÁRIO SOARES

一九九零年十月三日副署。

總理

Aníbal António Cavaco Silva

（一九九零年十月二十日第243期《共和國公報》第一組）

ANNEX

AMENDMENTS TO THE INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA, 1972

1 — Rule 1 (*e*) — Vessel of special construction:
The existing text is replaced by the following:

(*e*) Whenever the Government concerned shall have determined that a vessel of special construction or purpose cannot comply fully with the provisions of any of these rules with respect to the number, position, range or arc of visibility of lights or shapes, as well as to the disposition and characteristics of sound-signalling appliances, such vessel shall comply with such other provisions in regard to the number, position, range or arc of visibility of lights or shapes, as well as to the disposition and characteristics of sound-signalling appliances, as her Government shall have determined to be the closest possible compliance with these rules in respect of that vessel.

2 — Rule 3 (*h*) — Vessel constrained by her draught:
The existing text is replaced by the following:

(*h*) The term «vessel constrained by her draught» means a power-driven vessel which, because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.

3 — New rule 8 (*f*) — Not to impede:
The following new paragraph (*f*) is added:

(*f*) (*i*) A vessel which, by any of these rules, is required not to impede the passage or safe passage of another vessel shall, when required by the circumstances of the case, take early action to allow sufficient sea room for the safe passage of the other vessel.

(*ii*) A vessel required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision and shall, when taking action, have full regard to the action which may be required by the rules of this part.

(*iii*) A vessel the passage of which is not to be impeded remains fully obliged to comply with the rules of this part when the two vessels are approaching one another so as to involve risk of collision.

4 — Rule 10 (*a*) — Traffic separation schemes adopted by the Organization:
The existing text is replaced by the following:

(*a*) This rule applies to traffic separation schemes adopted by the Organization and does not relieve any vessel of her obligation under any other rule.

5 — Rule 10 (*c*) — Crossing traffic lanes:
The existing text is replaced by the following:

(*c*) A vessel shall, so far as practicable, avoid crossing traffic lanes but if obliged to do so shall cross on a heading as nearly as practicable at right angles to the general direction of traffic flow.

6 — Annex I, section 2 (*d*) — Uppermost light:
The existing text is replaced by the following:

(*d*) A power-driven vessel of less than 12 metres in length may carry the uppermost light at a height of less than 2.5 metres above the gunwale. When however a masthead light is carried in addition to sidelights and a sternlight or the all-round light prescribed in rule 23 (*c*) (*i*) is carried in addition to sidelights, then such masthead light or all-round light shall be carried at least 1 metre higher than the sidelights.

7 — Annex I, section 2 (*i*) (*ii*) — Vertical spacing of lights:
The existing text is replaced by the following:

(*ii*) On a vessel of less than 20 metres in length such lights shall be spaced not less than 1 metre apart and the lowest of these lights shall, except where a towing light is required, be placed at a height of not less than 2 metres above the gunwale.

8 — Annex I, section 10 — Sailing vessels lights:
In section 10 (*a*):

In the lead-in, the word «underway» is added after «sailing vessels».

In section 10 (*b*):

In the lead-in, the word «underway» is added after «sailing vessels».

9 — Annex IV, new paragraph 1 (*o*) — Distress signals:

The following new paragraph (*o*) is added:

(*o*) Approved signals transmitted by radiocommunication systems.

ANEXO

ALTERAÇÃO AO REGULAMENTO INTERNACIONAL PARA EVITAR ABALROAMENTOS NO MAR, 1972

1 — Regra 1 (*e*) — Navio de construção especial:
O texto actual é substituído pelo seguinte:

(*e*) Sempre que um Governo interessado tenha determinado que um navio de construção especial ou destinado a actividades especiais não pode cumprir todas as disposições estabelecidas por qualquer das presentes regras respeitantes ao número, localização, alcance ou sector de visibilidade de faróis ou balões, bem como à implantação e características dos dispositivos de sinalização sonora, este navio deverá satisfazer todas as outras disposições relativas ao número, localização, alcance ou sector de visibilidade de faróis ou balões, bem como à implantação e características dos dispositivos de sinalização sonora, que o Governo interessado julgar susceptíveis de, tanto quanto possível, permitirem a aplicação das presentes regras relativamente a este navio.

2 — Regra 3 (*h*) — Navio condicionado pelo seu calado:
O texto actual é substituído pelo seguinte:

(*h*) A expressão «navio condicionado pelo seu calado» designa todo o navio de propulsão que, devido à relação calado-profundidade-largura de água disponível, tem severamente limitada a sua capacidade de alterar o rumo em que navega.

3 — Nova regra 8 (*f*) — Não interferir:
Inserir o novo parágrafo (*f*):

(*f*) (*i*) Um navio a que, por qualquer destas regras, seja recomendado não interferir com a passagem ou deixar safa a passagem a um outro navio deve, sempre que as circunstâncias assim o exijam, manobrar com a devida antecedência, a fim de conceder ao outro navio espaço suficiente para uma passagem safa.

(*ii*) Um navio a que seja recomendado não interferir com a passagem ou deixar safa a passagem de outro navio não é dispensado desta obrigação, mesmo que se aproxime do outro navio de modo a verificar-se uma situação de risco de colisão, e deve, ao manobrar, fazê-lo de acordo com as regras desta parte.

(*iii*) Um navio com direito a rumo fica obrigado a manobrar de acordo com as regras desta parte, sempre que ocorra a aproximação a outro navio, criando-se uma situação de risco de colisão.

4 — Regra 10 (*a*) — Esquemas de separação de tráfego adoptados pela Organização:
O texto actual é substituído pelo seguinte:

(*a*) Esta regra aplica-se aos esquemas de separação de tráfego adoptados pela Organização e não dispensa nenhum navio do cumprimento de qualquer outra regra.

5 — Regra 10 (*c*) — Cruzamento dos corredores de tráfego:

O texto actual é substituído pelo seguinte:

(*c*) Um navio deve evitar, tanto quanto possível, cruzar os corredores de tráfego, mas, se a isso for obrigado, deve fazê-lo a uma proa que seja, na medida do possível, perpendicular à direcção geral do tráfego.

6 — Anexo I, secção 2 (*d*) — Farol mais elevado:
O texto actual é substituído pelo seguinte:

(*d*) Um navio de propulsão mecânica de comprimento inferior a 12 m pode ter o farol de mastro mais elevado a uma altura inferior a 2,5 m acima da borda. Quando, contudo, tem um farol de mastro, para além dos faróis de borda e do farol de popa, ou o farol de luz branca visível em todo o horizonte referido na regra 23 (*c*) (*i*), para além dos faróis de borda, o farol de mastro ou o farol de luz branca visível em todo o horizonte deve estar, pelo menos, 1 m acima dos faróis de borda.

7 — Anexo I, secção 2 (*i*) (*ii*) — Espaçamento vertical dos faróis:

O texto actual é substituído pelo seguinte:

(*ii*) A bordo de um navio de comprimento inferior a 20 m, os faróis devem estar espaçados de, pelo menos, 1 m e o farol mais abaixo deve ficar a uma altura não inferior a 2 m acima da borda falsa, excepto quando o navio deva utilizar um farol de reboque.

8 — Anexo I, secção 10 — Faróis de navios à vela:
Na secção 10 (*a*):

Inserir a expressão «a navegar» depois de «navios à vela».

Na secção 10 (*b*):

Inserir a expressão «a navegar» depois de «navios à vela».

9 — Anexo IV, novo parágrafo 1 (*o*) — Sinais de perigo:

Inserir o novo parágrafo (*o*):

(*o*) Sinais aprovados transmitidos por sistemas de radiocomunicações.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 157/99

de 8 de Julho

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Internacional para a Supressão do Tráfico de Mulheres e Crianças, aprovada, para ratificação, pela Lei n.º 1544, de 4 de Fevereiro de 1924, cujo texto foi publicado no *Diário do Governo*, 1.ª série, n.º 26, de 4 de Fevereiro de 1924.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 29 de Junho de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com a referida lei de aprovação e o texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 157, I Série-A, de 8 de Julho de 1999)

Lei n.º 1:544

Em nome da Nação, o Congresso da República decreta, e eu promulgo, a lei seguinte:

Artigo 1.º É aprovada para ser ratificada a Convenção Internacional para a supressão do tráfico de mulheres e crianças, celebrada em Genebra, em 30 de Setembro de 1921, entre Portugal, a Africa do Sul, a Albânia, a Austrália, a Áustria, a Bélgica, o Brasil, o Império Britânico, o Canada, o Chile, a Colômbia, a Costa Rica, a Estónia, a Grécia, a Itália, o Japão, a Letónia, a Lituânia, a Noruega, a Pérsia, o Sião, a Suíça e a Nova Zelândia.

Art. 2.º Fica revogada a legislação em contrário.

O Ministro dos Negócios Estrangeiros a faça imprimir, publicar e correr. Paços do Govêrno da República, 6 de Agosto de 1923.— ANTÓNIO JOSÉ DE ALMEIDA — *Domingos Leite Pereira.*

共和國總統府

共和國總統令 第157/99號

七月八日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將《禁止販賣婦孺國際公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經一九二四年二月四日第1544號法律通過，以待批准，且文本已公布於一九二四年二月四日第二十六期《政府公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年六月二十九日簽署。

將本總統令連同上述通過公約之法律及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年七月八日第157期《共和國公報》第一組-A）

法律 第1:544號

共和國國會以國家名義命令制定以下法律，並由本人頒布：

第一條

通過葡萄牙、南非、阿爾巴尼亞、澳大利亞、奧地利、比利時、巴西、大不列顛帝國、加拿大、智利、哥倫比亞、哥斯達黎加、愛沙尼亞、希臘、意大利、日本、拉脫維亞、立陶宛、挪威、波斯、暹邏、瑞士與新西蘭之間於一九二一年九月三十日在日內瓦訂立之《禁止販賣婦孺國際公約》，以待批准。

第二條

廢止與本法律相抵觸之法例。

外交部部長命令印刷、公布及傳播。

一九二三年八月六日於共和國政府大樓 —— ANTÓNIO JOSÉ DE ALMEIDA —— *Domingos Leite Pereira*

MANUEL TEIXEIRA GOMES — Presidente da República Portuguesa pelo voto do Congresso:

Faço saber aos que a presente Carta da Confirmação e Ratificação virem que, aos trinta dias de Setembro de 1921, foi assinada em Genebra uma Convenção Internacional para a repressão do tráfico das mulheres e crianças, a qual foi feita num único exemplar, que ficou depositado nos arquivos da Sociedade das Nações.

Visto, examinado e considerado quanto se contém na referida Convenção, aprovada por lei de 6 de Agosto de 1923, é pela presente Carta a mesma Convenção confirmada e ratificada, assim no todo, como em cada uma das suas cláusulas e estipulações e dada por firme e válida para produzir os seus devidos efeitos e ser inviolàvelmente cumprida e observada.

Em testemunho do que a presente Carta vai por mim assinada e selada com o sêlo da República.

Paços do Govêrno da República, 25 de Outubro de 1923. — MANUEL TEIXEIRA GOMES — *Domingos Leite Pereira.*

(D.G. n.º 26, I Série, de 4 de Fevereiro de 1924)

MANUEL TEIXEIRA GOMES —— 國會投票選出之葡萄牙共和國總統：

本人現讓閱覽本確認批准書者周知：《禁止販賣婦孺國際公約》已於一九二一年九月三十日在日內瓦簽署，該公約爲獨一文本，已交存國際聯盟檔案處。

經批閱、審查及考慮上述由一九二三年八月六日法律通過之公約之內容後，以本確認批准書確認及批准該公約，包括公約之整體、每一條款及規定；本確認批准書使該公約得以落實及生效，以產生應有之效力，並使履行及遵守該公約時不受侵犯。

本確認批准書由本人簽署，並蓋上共和國國璽，以資證明。

一九二三年十月二十五日於共和國政府大樓 —— MANUEL TEIXEIRA GOMES —— *Domingos Leite Pereira*

（一九二四年二月四日第26期《葡萄牙政府公報》第一組）

Convenção internacional para a supressão do tráfico de mulheres e crianças

No desejo de assegurar por uma forma mais completa a repressão do tráfico de mulheres e crianças, indicado nos preâmbulos do Acôrdo de 18 de Maio de 1904 e da Convenção do 4 de Maio de 1910, sob a designação de Tráfico das Brancas;

Tendo tomado conhecimento das recomendações mencionadas no acto final da Conferência Internacional que se reüniu em Genebra, a convite do Conselho da Sociedade das Nações, desde 30 de Junho até 5 de Julho de 1921; e

Tendo decidido concluir uma Convenção adicional ao Acôrdo e à Convenção supra mencionadas:

Designaram para êste fim como seus plenipotenciários:

a África do Sul — E. H. Walton;
a Albânia — F. S. Noli;
a Austrália — S. M. Bruce, que fez a seguinte restrição: «Declaro que a minha assinatura não obriga a Papuásia, a Ilha de Norfolk e o território sob mandato da Nova Guiné»;
a Áustria — Albert Mensdorff;
a Bélgica — Michel Levie;
o Brasil — Gastão da Cunha;
o Império Britânico — Artur James Balfour, que fez a seguinte restrição: «Declaro que a minha assinatura não obriga a Ilha de Terra Nova, as colónias e protectorados britânicos, a Ilha de Nauru, nem os territórios administrados sob mandato pela Grã-Bretanha».
o Canadá — Charles J. Doherty;
o Chile — Agustin Edwards e Manuel Rivas Vicuña;
a Colômbia — Francisco José Urrutia e A. J. Restrepo, «com reserva da ulterior aprovação do Congresso da Colômbia»;
a Costa Rica — Manuel M. de Peralta;
a Estónia — Ant. Piip;
a Grécia — Vassili Dendramis;
a Itália — Imperiali, com a seguinte restrição: «Até nova declaração do Govêrno do Rei, declaro que a minha assinatura não obriga as colónias italianas».
o Japão — Hayashi, que fez a seguinte declaração: «O abaixo assinado, delegado do Japão, reserva o direito, em nome do seu Govêrno, de adiar a confirmação do artigo 5.º da presente Convenção e declara que a sua assinatura não obriga nem a Coroa, nem a Formosa, nem o Chantung»;
a Letónia — M. V. Salnais;
a Lituânia — Galvanauskas;
a Noruega — Fridtjof Mansen;
a Pérsia — Príncipe Arfa-ed-Dowleh;
Portugal — A. Freire de Andrade;
o Sião — Charoon, «com reservas sôbre o limite de idade prescrito no parágrafo *b*) do Protocolo final da Convenção de 1910 e do artigo 5.º da presente Convenção, pelo que diz respeito aos naturais do Sião»;
a Suíça — Motta, «Sob reserva de ratificação pela Assemblea Federal»;
a Nova Zelândia — J. Allen, com a seguinte declaração: «Declaro que a minha assinatura não obriga o território, sob mandato, de Samoa ocidental»; os quais depois de haverem transmitido os seus plenos poderes reconhecidos em boa e devida forma, convierem nas disposições seguintes:

ARTIGO 1.º

As Altas Partes contratantes convêm, no caso de não terem ainda sido Partes no Acôrdo de 18 de Maio de 1904 e na Convenção de 4 de Maio de 1910, em comunicar, no mais curto prazo e na forma prevista nestes instrumentos, as suas ratificações ou as suas adesões aos mesmos Actos.

ARTIGO 2.º

As Altas Partes contratantes convêm em tomar todas as medidas para descobrir e punir os indivíduos que se entregarem ao tráfico de crianças de ambos os sexos, entendendo-se esta infracção no sentido do artigo 1.º da Convenção de 4 de Maio de 1910.

ARTIGO 3.º

As Altas Partes contratantes convêm em tomar as medidas necessárias para punir as tentativas de infracção, e, dentro dos limites legais, os actos preparatórios das infracções previstas nos artigos 1.º e 2.º da Convenção de 4 de Maio de 1910.

ARTIGO 4.º

As Altas Partes contratantes convêm, no caso de não existir entre elas Convenções de extradição, em tomar todas as medidas que estiverem ao seu alcance para a extradição dos indivíduos acusados das infracções especificadas nos artigos 1.º e 2.º da Convenção de 4 de Maio de 1910, ou condenados por tais infracções.

ARTIGO 5.º

No § B do protocolo final da Convenção de 1910, as palavras «vinte anos passados» serão substituídas pelas palavras «vinte e um anos passados».

ARTIGO 6.º

As Altas Partes contratantes convêm, no caso de não terem ainda tomado medidas legislativas ou administrativas a respeito da autorização e fiscalização das agências e escritórios de colocação, em publicar regulamentos neste sentido a fim de assegurar a protecção das mulheres e crianças que procurarem trabalho em outro país.

ARTIGO 7.º

As Altas Partes contratantes convêm, no que respeita aos seus serviços de emigração e imigração, em adoptar medidas administrativas e legislativas destinadas a combater o tráfico de mulheres e crianças. Convêm principalmente em publicar os regulamentos necessários à protecção das mulheres e crianças que viajarem a bordo de navios de emigrantes, tanto à partida e à chegada, como durante a viagem, o em adoptar providências para a afixação, nas gares do caminho do ferro e nos portos, de avisos prevenindo as mulheres e crianças dos perigos do tráfico, e indicando os lugares onde elas podem encontrar alojamento, auxílio e assistência.

ARTIGO 8.º

A presente Convenção, cujos textos em francês e inglês fazem igualmente fé, será datada de hoje e poderá ser assinada até 31 de Março de 1922.

ARTIGO 9.º

A presente Convenção fica sujeita a ratificação. Os instrumentos de ratificação serão transmitidos ao Secretário Geral da Sociedade das Nações, que notificará a sua recepção aos outros membros da Sociedade e aos Estados admitidos a assinar a Convenção. Os instrumentos de ratificação serão depositados nos arquivos do Secretariado.

De conformidade com as disposições do artigo 18.º do Pacto da Sociedade das Nações, o Secretário Geral registará a presente Convenção logo que se tenha efectuado o depósito da primeira ratificação.

ARTIGO 10.º

Os Membros da Sociedade das Nações que não tiverem assinado a presente Convenção antes de 1 de Abril de 1922 poderão aderir a ela.

A mesma faculdade terão os Estados não Membros da Sociedade aos quais o Conselho da Sociedade poderá decidir comunicar oficialmente a presente Convenção.

As adesões serão notificadas ao Secretário Geral da Sociedade, que as participará a todas as Potências interessadas, mencionando a data da notificação.

ARTIGO 11.º

A presente Convenção entrará em vigor para cada Parte na data do depósito da sua ratificação ou do seu acto de adesão.

ARTIGO 12.º

A presente Convenção poderá ser denunciada por qualquer Membro da Sociedade ou Estado que fôr parte na dita Convenção, com o aviso prévio de doze meses. A denúncia será feita por uma notificação escrita dirigida ao Secretário Geral da Sociedade. Êste transmitirá imediatamente a todas as outras Partes exemplares desta notificação, indicando a data de recepção.

A denúncia produzirá efeito um ano após a data da notificação ao Secretário Geral e não será válida senão para o Estado que a tiver notificado.

ARTIGO 13.º

O Secretário Geral da Sociedade possuïrá uma lista de todas as Partes que tiverem assinado, ratificado ou denunciado a presente Convenção ou a ela aderiram. Esta lista poderá ser em qualquer ocasião consultada pelos Membros da Sociedade e será publicada o maior número de vezes possível, conforme as instruções do Conselho.

ARTIGO 14.º

Qualquer Membro ou Estado signatário pode declarar que a sua assinatura não obriga quer todas, quer algumas das suas colónias, possessões ultramarinas, protectorados ou territórios sujeitos à sua soberania ou à sua autoridade, e-podo, ulteriormente, aderir separadamente em nome de qualquer dessas colónias, possessões ultramarinas, protectorados ou territórios excluídos por esta declaração.

A denúncia poderá igualmente efectuar-se separadamente para qualquer dessas colónias, possessões ultramarinas, protectorados ou territórios submetidos à sua soberania ou autoridade; as disposições do artigo 12.º aplicar-se hão a esta denúncia.

Feito em Genebra, em 30 de Setembro de 1921, em um único exemplar, que fica depositado nos arquivos da Sociedade das Nações.

(*Seguem as assinaturas*).

A ratificação, por parte da República Portuguesa, foi depositada nos Arquivos da Sociedade das Nações em 1 de Dezembro de 1923.

Depositaram ratificações os seguintes países nas datas abaixo indicadas:

Grécia. 9 de Abril de 1923;
Cuba, 7 de Maio, idem;
Bélgica, 15 de Junho, idem;
Império Britânico (abrangendo o Canadá, a Austrália, a União Sul-Africana, a Nova Zelândia e a Índia), 28 de Junho, idem;
Sião, 13 de Julho, idem;
Áustria, 9 de Agosto, idem;
Noruega, 16 de Agosto, idem;
Roménia, 5 de Setembro, idem;
Países-Baixos, 19 de Setembro, idem; e
Tchecco-Eslováquia, 29 de Setembro, idem.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 189/99 de 22 de Outubro

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção Alfandegária Relativa à Simplificação de Formalidades Quanto à Importação de Bens para Exibição ou Utilização em Exposições, Feiras ou Encontros Similares, de 8 de Junho de 1961, cujo texto foi publicado no *Diário do Governo*, 1.ª série, de 20 de Setembro de 1962.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 15 de Outubro de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com o texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 247, I Série-A, de 22 de Outubro de 1999)

共和國總統府

共和國總統令 第189/99號

十月二十二日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九六一年六月八日之《關於在展覽會、交易會、會議等事項中便利展出和需用物品進口的海關公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約之文本已公布於一九六二年九月二十日《政府公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年十月十五日簽署。

將本總統令連同公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年十月二十二日第247期《共和國公報》第一組-A）

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Direcção-Geral dos Negócios Económicos e Consulares

Aviso

Por ordem superior se faz público que em 31 de Março de 1962 foi assinada, em Bruxelas, na sede do Conselho de Cooperação Aduaneira, a Convenção aduaneira relativa às facilidades concedidas para a importação de mercadorias destinadas a serem apresentadas ou utilizadas em exposições, feiras, congressos ou manifestações semelhantes.

Nos termos do seu artigo 19.º a referida Convenção, cujos textos em francês e respectiva tradução para português são a seguir publicados, entrou em vigor, em 13 de Julho de 1962, relativamente aos países que a assinaram sem reserva de ratificação, ou sejam: Portugal, Níger e Checoslováquia, e em relação às Repúblicas Malgaxe e Centro-Africana, que a ela aderiram, res-

外交部

經濟領事事務統籌司

通告

茲按上級命令公布：已於一九六二年三月三十一日在布魯塞爾海關合作理事會總部簽署《關於在展覽會、交易會、會議等事項中便利展出和需用物品進口的海關公約》。

本公約之法文本及有關之葡文譯本附於本通告一併公布。對於葡萄牙、尼日爾及捷克斯洛伐克，以及對分別於一九六二年四月一日及二日加入本公約之馬達加斯加共和國及中非共和國等在簽署公約時無作批准之保留之國家而言，上述公約已根據公約第十九條之規定，於一九六二年七月十三

pectivamente em 1 e 12 de Abril de 1962. A mesma Convenção, ratificada pela República de Cuba em 2 de Maio de 1962, entrou em vigor em relação àquele país em 3 de Agosto corrente.

Direcção-Geral dos Negócios Económicos e Consulares, 13 de Agosto de 1962. — O Director-Geral, *Albano Pires Fernandes Nogueira.*

(D.G. n.º 217, I Série, de 20 de Setembro de 1962)

日開始生效。古巴共和國於一九六二年五月二日批准之同一公約，於本年八月三日開始對該國生效。

一九六二年八月十三日於經濟領事事務統籌司

統籌司司長

Albano Pires Fernandes Nogueira

（一九六二年九月二十日第217期《葡萄牙政府公報》第一組）

Convention douanière relative aux facilités accordées pour l'importation des marchandises destinées à être présentées ou utilisées à une exposition, une foire, un congrès ou une manifestation similaire.

PREAMBULE

Les Etats signataires de la présente Convention,

Réunis sous les auspices du Conseil de Coopération Douanière, avec le concours de la Commission Economique pour l'Europe des Nations Unies (C. E. E.) et de l'Organisation des Nations Unies pour l'Education, la Science et la Culture (U. N. E. S. C. O.),

Considérant les vœux exprimés par les représentants du commerce international et par d'autres milieux intéressés,

Désireux d'accorder des facilités aux marchandises destinées à être présentées à une exposition, une foire, un congrès ou une manifestation similaire de caractère commercial, technique, religieux, éducatif, scientifique, culturel ou philanthropique,

Convaincus que l'adoption de règles générales relatives au régime douanier de ces marchandises apportera des avantages substantiels au commerce international et favorisera l'échange, sur le plan international, des idées et des connaissances,

Sont convenus de ce qui suit:

CHAPITRE I

Définitions

ARTICLE PREMIER

Pour l'application de la présente Convention on entend:

(*a*) par «manifestation»:

1. Les expositions, foires, salons et manifestations similaires du commerce, de l'industrie, de l'agriculture et de l'artisanat;
2. Les expositions ou manifestations organisées principalement dans un but philanthropique;
3. Les expositions ou manifestations organisées principalement dans un but scientifique, technique, artisanal, artistique, éducatif ou culturel, sportif, religieux ou cultuel, ou encore en vue d'aider les peuples à se mieux comprendre;
4. Les réunions de représentants d'organisations ou de groupements internationaux;
5. Les cérémonies et les manifestations de caractère officiel ou commémoratif;

à l'exception des expositions organisées à titre privé dans des magasins ou locaux commerciaux, en vue de la vente de marchandises étrangères;

(*b*) Par «droits à l'importation»: les droits de douane et tous autres droits et taxes perçus à l'importation ou à l'occasion de l'importation, ainsi que tous les droits d'accise et taxes intérieures dont sont passibles les marchandises importées, à l'exclusion toutefois des redevances et impositions qui sont limitées au coût approximatif des services rendus et qui ne constituent pas une protection indirecte des produits nationaux ou des taxes de caractère fiscal à l'importation;

(*c*) Par «admission temporaire»: l'importation temporaire en franchise de droits à l'importation, sans prohibitions ni restrictions d'importation, à charge de réexportation;

(*d*) Par «Conseil»: l'organisation instituée par la Convention portant création d'un Conseil de Coopération Douanière conclue à Bruxelles le 15 décembre 1950;

(*e*) Par «personne»: aussi bien une personne physique qu'une personne morale, à moins que le contexte n'en dispose autrement.

CHAPITRE II

Admission temporaire

ARTICLE 2

1. Bénéficient de l'admission temporaire:

(*a*) Les marchandises destinées à être exposées ou à faire l'objet d'une démonstration à une manifestation;

(*b*) Les marchandises destinées à être utilisées pour les besoins de la présentation des produits étrangers à une manifestation, telles que:

(*i*) Les marchandises nécessaires pour la démonstration des machines ou appareils étrangers exposés;

(*ii*) Le matériel de construction et de décoration, y compris l'équipement électrique, pour les stands provisoires d'exposants étrangers;

(*iii*) Le matériel publicitaire et de démonstration, destiné manifestement à être utilisé à titre de publicité pour les marchandises étrangères exposées, tel que les enregistrements sonores, films et dispositives, ainsi que l'appareillage nécessaire à leur utilisation;

(*c*) Le matériel — y compris les installations d'interprétation, les appareils d'enregistrement du son et les films à caractère éducatif, scientifique ou culturel — destiné à être utilisé aux réunions, conférences et congrès internationaux.

2. Les facilités visées au paragraphe 1 ci-dessus sont accordées à condition que:

(*a*) Les marchandises puissent être identifiées lors de leur réexportation;

(*b*) Le nombre ou la quantité d'articles identiques importés soit raisonnable compte tenu de leur destination;

(*c*) Les autorités douanières du pays d'importation temporaire estiment que les conditions posées par la présente Convention seront remplies.

ARTICLE 3

Aussi longtemps qu'elles bénéficient des facilités prévues par la présente Convention et sauf si les lois et règlements du pays d'importation temporaire le permettent, les marchandises placées en admission temporaire ne peuvent pas être:

(*a*) Prêtées, louées, ou utilisées moyennant rétribution;

(*b*) Transportées hors du lieu de la manifestation.

ARTICLE 4

1. Les marchandises placées en admission temporaire doivent être réexportées dans un délai de six mois à partir de la date de leur importation. Toutefois, les autorités douanières du pays d'importation temporaire peuvent exiger, compte tenu des circonstances et notamment de la durée et de la nature de la manifestation, que les marchandises soient réexportées dans un délai plus court, mais qui doit couvrir, à tout le moins, une période d'un mois après la fin de la manifestation.

2. Nonobstant les dispositions du premier alinéa du présent Article, les autorités douanières autorisent les intéressés à laisser dans les pays d'importation temporaire les marchandises destinées à être présentées ou utilisées à une manifestation ultérieure, à condition qu'ils se conforment aux dispositions des lois et règlements de ce pays et que les marchandises soient réexportées dans un délai d'un an à partir de la date de leur importation.

3. Pour des raisons valables, les autorités douanières peuvent, dans les limites prévues par les lois et règlements en vigueur dans le pays d'importation temporaire, soit accorder des délais plus longs que ceux prévus aux paragraphes 1 et 2 du présent Article, soit prorroger le délai initial.

4. Lorsque les marchandises placées en admission temporaire ne peuvent pas être réexportées par suite d'une saisie et que cette saisie n'a pas été pratiquée à la requête de particuliers, l'obligation de réexportation prévue par le présent Article est suspendue pendant la durée de la saisie.

ARTICLE 5

1. Nonobstant l'obligation de réexportation prévue dans la présente Convention, la réexportation des marchandises périssables, ou gravement endommagées ou de faible valeur, n'est pas exigée, pourvu qu'elles soient, selon la décision des autorités douanières:

(*a*) Soumises aux droits à l'importation dus en l'espèce; ou

(*b*) Abandonnées, libres de tous frais, au Trésor public du pays d'importation temporaire; ou

(*c*) Détruites, sous contrôle oficiel, sans qu'il puisse en résulter de frais pour le Trésor public du pays d'importation temporaire.

2. Les marchandises placées en admission temporaire peuvent recevoir une destination autre que la réexportation et notamment être mises à la consommation intérieure, sous réserve qu'il soit satisfait aux conditions et aux formalités qui seraient appliquées, en vertu des lois et règlements du pays d'importation temporaire, si elles étaient importées directement de l'étranger.

CHAPITRE III

Dispense du payment des droits à l'importation

ARTICLE 6

1. Sauf pour les marchandises qui ont fait l'objet de réserves notifiées dans les conditions prévues à l'article 23 de la présente Convention, les droits à l'importation ne sont pas perçus, les prohibitions ou restrictions à l'importation ne sont pas appliquées et, si l'admission temporaire a été accordée, la réexportation n'est pas exigée, dans les cas suivants:

(*a*) Petits échantillons représentatifs des marchandises étrangères exposées à une manifestation, y compris les échantillons de produits alimentaires et de boissons, importés comme tels ou obtenus à la manifestation à partir de marchandises importées en vrac, pourvu:

(*i*) Qu'il s'agisse de produits étrangers fournis gratuitement et qui servent uniquement à des distributions gratuites au public à la manifestation pour être utilisés ou consommés par les personnes à qui ils auront été distribués,

(*ii*) Que ces produits soient identifiables comme étant des échantillons à caractère publicitaire ne présentant qu'une faible valeur unitaire,

(*iii*) Qu'ils ne se prêtent pas à la commercialisation et qu'ils soient, le cas échéant, conditionnés en quantités nettement plus petites que celles contenues dans le plus petit emballage vendu au détail,

(*iv*) Que les échantillons de produits alimentaires et de boissons qui ne sont pas distribués dans des emballages conformément à l'alinéa (*iii*) ci-dessus soient consommés à la manifestation, et

(*v*) Que la valeur globale et la quantité des marchandises soient raisonnables de l'avis des autorités douanières du pays d'importation, eu égard à la nature de la manifestation, au nombre de visiteurs et à l'importance de la participation de l'exposant à la manifestation;

(*b*) Marchandises importées uniquement en vue de leur démonstration, ou pour la démonstration de machines et appareils étrangers présentés à la manifestation, et qui sont consommées ou détruites au cours de ces démonstrations, pourvu que la valeur globale et la quantité des marchandises soient raisonnables, de l'avis des autorités douanières du pays d'importation, eu égard à la nature de la manifestation, au nombre de visiteurs et à l'importance de la participation de l'exposant à la manifestation;

(*c*) Produits de faible valeur, utilisés pour la construction, l'aménagement et la décoration des stands provisoires des étrangers exposant à la manifestation

(peintures, vernis, papiers de tenture, etc.) détruits du fait de leur utilisation;

(*d*) Imprimés, catalogues, prospectus, prixcourants, affiches publicitaires, calendriers (illustrés ou non) et photographies non encadrées, destinés manifestement à être utilisés à titre de publicité pour les marchandises étrangères exposées à la manifestation, pourvu:

(*i*) Qu'il s'agisse de produits étrangers fournis gratuitement et qui servent uniquement à des distribuitions gratuites au public sur le lieu de la manifestation,

(*ii*) Que la valeur globale et la quantité des marchandises soient raisonnables, de l'avis des autorités douanières du pays d'importation, eu égard à la nature de la manifestation, au nombre de visiteurs et à l'importance de la participation de l'exposant à la manifestation.

2. Les dispositions du paragraphe 1 ci-dessus ne sont pas applicables aux boissons alcooliques, aux tabacs et aux combustibles.

ARTICLE 7

Sont exonérés des droits à l'importation et ne sont soumis à aucune prohibition ou restriction d'importation les dossiers, archives, formules et autres documents destinés à être utilisés comme tels au cours ou à l'occasion de réunions, conférences ou congrès internationaux.

CHAPITRE IV

Simplification des formalités

ARTICLE 8

Chaque Partie Contractante réduit au minimum les formalités douanières afférentes aux facilités prévues par la présente Convention et publie, dans les plus brefs délais, les règlements qu'elle édicte au sujet de ces formalités.

ARTICLE 9

1. Lorsqu'une Partie Contractante exige la constitution d'une garantie afin de s'assurer de l'exécution des conditions requises pour bénéficier des facilités prévues par la présente Convention, le montant de cette garantie ne peut excéder de plus de 10 pour cent celui des droits à l'importation exigibles.

2. Toutefois, cette Partie Contractante s'efforcera d'accepter, dans tous les cas où cela sera possible, la substitution d'une garantie globale fournie par les organisateurs de la manifestation ou par toute autre personne agréée par les autorités douanières, aux garanties individuelles qui pourraient être exigées en application des dispositions de l'alinéa précédent.

ARTICLE 10

1. A l'entrée comme à la sortie, la vérification et le dédouanement des marchandises qui vont être ou qui ont été présentées ou utilisées à une manifestation sont effectués, dans tous les cas où cela est possible et opportun, sur les lieux de cette manifestation.

2. Chaque Partie Contractante s'efforcera, dans tous les cas où elle l'estimera utile, compte tenu de l'importance de la manifestation, d'ouvrir pour une durée raisonnable, un bureau de douane sur les lieux de la manifestation organisée sur son territoire.

3. La réexportation de marchandises placées en admission temporaire peut s'effectuer en une ou en plusieurs fois et par tout bureau de douane ouvert à ces opérations, même s'il est différent du bureau d'importation, sauf si l'importateur s'engage, afin de bénéficier d'une procédure simplifiée, à réexporter les marchandises par le bureau d'importation.

CHAPITRE V

Dispositions diverses

ARTICLE 11

Les produits accessoirement obtenus au cours de la manifestation, à partir de marchandises importées temporairement, à l'occasion de la démonstration de machines ou d'appareils exposés, sont soumis aux dispositions de la présente Convention.

ARTICLE 12

Les dispositions de la présente Convention établissent des facilités minima et ne mettent pas obstacle à l'application de facilités plus grandes que certaines Parties Contractantes accordent ou accorderaient soit par des dispositions unilatérales, soit en vertu d'accords bilatéraux ou multilatéraux.

ARTICLE 13

Pour l'application de la présente Convention, les territoires des Parties Contractantes qui forment une union douanière ou économique peuvent être considérés comme un seul territoire.

ARTICLE 14

Les dispositions de la présente Convention ne mettent pas obstacle à l'application:

(*a*) Des dispositions nationales ou conventionnelles non douanières concernant l'organisation de manifestations;

(*b*) Des prohibitions et restrictions dérivant des lois et règlements nationaux et fondées sur des considérations de moralité ou d'ordre publics, de sécurité publique, d'hygiène ou de santé publiques ou sur des considérations d'ordre vétérinaire ou phytopathologique, ou se rapportant à la protection des brevets, marques de fabrique et droits d'auteur et de reproduction.

ARTICLE 15

Toute infraction aux dispositions de la présente Convention, toute substitution, fausse déclaration ou manœuvre ayant pour effet de faire bénéficier indûment une personne ou un objet des facilités prévues par la présente Convention, expose le contrevenant, dans le pays où l'infraction est commise, aux sanctions prévues par les lois et règlements de ce pays et, le cas échéant, au paiement des droits à l'importation exigibles.

CHAPITRE VI

Clauses finales

ARTICLE 16

1. Les Parties Contractantes se réunissent lorsqu'il est nécessaire pour examiner les conditions dans lesquelles la présente Convention est appliquée afin, notament, de rechercher les mesures propres à en assurer l'interprétation et l'application uniformes.

2. Ces réunions sont convoquées par le Secrétaire Général du Conseil, sur la demande d'une Partie Contractante, et, sauf décision contraire des Parties Contractantes, elles se tiennent au siège du Conseil.

3. Les Parties Contractantes établissent le règlement intérieur de leurs réunions. Les décisions des Parties Contractantes sont prises à la majorité des deux tiers de celles qui sont présentes et qui prennent par au vote.

4. Les Parties Contractantes ne peuvent valablement se prononcer sur une question que si plus de la moitié d'entre elles sont présentes.

ARTICLE 17

1. Tout différend entre Parties Contractantes en ce qui concerne l'interprétation ou l'application de la présente Convention est, autant que possible, réglé par voie de négociations directes entre lesdites parties.

2. Tout différend qui n'est pas réglé par voie de négociations directes est porté, par les parties en cause, devant les Parties Contractantes, réunies dans les conditions prévues à l'article 16 de la présente Convention, qui examinent le différend et font des recommandations en vue de son règlement.

3. Les parties au différend peuvent convenir d'avance d'accepter les recommandations des Parties Contractantes.

ARTICLE 18

1. Tout Etat membre du Conseil et tout Etat membre de l'Organisation des Nations Unies ou de ses institutions spécialisées peut devenir Partie Contractante à la présente Convention:

(*a*) En la signant, sans réserve de ratification;

(*b*) En déposant un instrument de ratification après l'avoir signée sous réserve de ratification; ou

(*c*) En y adhérant.

2. La présente Convention est ouverte jusqu'au 31 mars 1962, au siège du Conseil, à Bruxelles, à la signature des Etats visés au paragraphe 1 du présent article. Après cette date, elle sera ouverte à leur adhésion.

3. Dans le cas prévu au paragraphe 1 (*b*) du présent article, la Convention est soumise à la ratification des Etats signataires conformément à leurs procédures constitutionnelles respectives.

4. Tout Etat non membre des organisations visées au paragraphe 1 du présent article, auquel une invitation est adressée à cet effet par le Secrétaire Général du Conseil, sur la demande des Parties Contractantes, peut devenir Partie Contractante à la présente Convention en y adhérant après son entrée en vigueur.

5. Les instruments de ratification ou d'adhésion sont déposés auprès du Secrétaire Général du Conseil.

ARTICLE 19

1. La présente Convention entre en vigueur trois mois après que cinq des Etats mentionnés au paragraphe 1 de l'article 18 de la présente Convention l'ont signée sans réserve de ratification ou ont déposé leur instrument de ratification ou d'adhésion.

2. À l'égard de tout Etat qui ratifie la présente Convention ou y adhère, après que cinq Etats ont soit signé la Convention sans réserve de ratification, soit déposé leur instrument de ratification ou d'adhésion, la présente Convention entre en vigueur trois mois après le dépôt de l'instrument de ratification ou d'adhésion dudit Etat.

ARTICLE 20

1. La présente Convention est conclue pour une durée illimitée. Toutefois, toute Partie Contractante peut la dénoncer à tout moment après la date de son entrée en vigueur, telle qu'elle est fixée à l'article 19 de la présente Convention.

2. La dénonciation est notifiée par un instrument écrit déposé auprès du Secrétaire Général du Conseil.

3. La dénonciation prend effet six mois après la réception de l'instrument de dénonciation par le Secrétaire Général du Conseil.

ARTICLE 21

1. Les Parties Contractantes, réunies dans les conditions prévues à l'Article 16 ci-dessus, peuvent recommander des amendements à la présente Convention.

2. Le texte de tout amendement ainsi recommandé est communiqué par le Secrétaire Général du Conseil à toutes les Parties Contractantes, à tous les autres Etats signataires ou adhérents, au Secrétaire Général de l'Organisation des Nations Unies et à l'U. N. E. S. C. O.

3. Dans un délai de six mois à compter de la date de la communication de l'amendement recommandé, toute Partie Contractante peut faire connaître au Secrétaire Général du Conseil:

(*a*) Soit qu'elle a une objection à l'amendement recommandé,

(*b*) Soit que, bien qu'elle ait l'intention d'accepter l'amendement recommandé, les conditions nécessaires à cette acceptation ne se trouvent pas encore remplies dans son pays.

4. Tant qu'une Partie Contractante qui a adressé la communication prévue ci-dessus au paragraphe 3 (*b*) n'a pas notifié au Secrétaire Général du Conseil son acceptation, elle peut, pendant un délai de neuf mois à partir de l'expiration du délai de six mois prévu au paragraphe 3 du présent Article, présenter une objection à l'amendement recommandé.

5. Si une objection à l'amendement recommandé est formulée dans les conditions prévues aux paragraphes 3 et 4 du présent Article, l'amendement est considéré comme n'ayant pas été accepté et reste sans effet.

6. Si aucune objection à l'amendement recommandé n'a été formulée dans les conditions prévues aux paragraphes 3 et 4 du présent Article, l'amendement est réputé accepté à la date suivante:

(*a*) Lorsque aucune Partie Contractante n'a adressé de communication en application du paragraphe 3 (*b*) du présent Article, à l'expiration du délai de six mois visé à ce paragraphe 3;

(*b*) Lorsqu'une ou plusieurs Parties Contractantes ont adressé une communication en application du paragraphe 3 (*b*) du présent Article, à la plus rapprochée des deux dates suivantes:

(*i*) Date à laquelle toutes les Parties Contractantes ayant adressé une telle communication ont notifié au Secrétaire Général du Conseil leur acceptation de l'amendement recommandé, cette date étant toutefois reportée à l'expiration du délai de six mois visé au paragraphe 3 du présent Article si toutes les acceptations ont été notifiées antérieurement à cette expiration;

(*ii*) Date d'expiration du délai de neuf mois visé au paragraphe 4 du présent Article.

7. Tout amendement réputé accepté entre en vigueur six mois après la date à laquelle il a été réputé accepté.

8. Le Secrétaire Général du Conseil notifie le plus tôt possible à toutes les Parties Contractantes toute objection formulée conformément au paragraphe 3 (*a*) du présent Article ainsi que toute communication adressée conformément au paragraphe 3 (*b*). Il fait savoir ultérieurement à toutes les Parties Contractantes si la ou les Parties Contractantes qui ont adressé une telle communication élèvent une objection contre l'amendement recommandé ou l'acceptent.

9. Tout Etat qui ratifie la présente Convention ou y adhère est réputé avoir accepté les amendements entrés en vigueur à la date du dépôt de son instrument de ratification ou d'adhésion.

ARTICLE 22

1. Tout Etat peut, soit au moment de la signature sans réserve de ratification, de la ratification ou de l'adhésion, soit ultérieurement, notifier au Secrétaire Général du Conseil que la présente Convention s'étend à l'ensemble ou à certains des territoires dont les relations internationales sont placées sous sa responsabilité; la Convention est applicable auxdits territoires trois mois après la date de réception de cette notification par le Secrétaire Général du Conseil, mais pas avant la date d'entrée en vigueur de la présente Convention à l'égard de cet Etat.

2. Tout Etat ayant, en vertu du paragraphe 1 du présent Article, accepté la présente Convention pour un territoire dont les relations internationales sont placées sous sa responsabilité, peut notifier au Secrétaire Général du Conseil, conformément aux dispositions de l'Article 20 de la présente Convention, que ce territoire cessera d'appliquer la Convention.

ARTICLE 23

1. Tout Etat peut déclarer au moment où il signe ou ratifie la présente Convention ou y adhère, ou bien, après être devenu Partie Contractante à la Convention, notifier au Secrétaire Général du Conseil qu'il ne se considère pas lié par les dispositions de l'Article 6, paragraphe 1, alinéa (*a*), de la présente Convention.

Ces déclarations et notifications doivent indiquer explicitement les marchandises à l'égard desquelles la réserve est formulée. Les notifications adressées au Secrétaire Général prennent effet le quatre-vingt-dixième jour après qu'elles ont été reçues par le Secrétaire Général.

2. Si une Partie Contractante formule une réserve conformément au paragraphe 1 du présent Article, les autres Parties Contractantes ne sont pas liées par les dispositions de l'Article 6, paragraphe 1, alinéa (*a*), de la présente Convention à l'égard de cette Partie Contractante en ce qui concerne les marchandises spécifiées dans cette réserve.

3. Toute Partie Contractante qui a formulé une réserve conformément au paragraphe 1 du présente Article, peut à tout moment lever cette réserve par notification au Secrétaire Général du Conseil.

4. Aucune autre réserve à la présente Convention n'est admise.

ARTICLE 24

Le Secrétaire Général du Conseil notifie à toutes les Parties Contractantes ainsi qu'aux autres Etats signataires ou adhérents, au Secrétaire Général des Nations Unies et à l'U. N. E. S. C. O.

(*a*) Les signatures, ratifications et adhésions visées à l'Article 18;

(*b*) La date à laquelle la présente Convention entre en vigueur conformément à l'Article 19;

(*c*) Les dénonciations et annulations notifiées conformément à l'Article 20;

(*d*) Les amendements réputés acceptés conformément à l'Article 21 ainsi que la date de leur entrée en vigueur;

(*e*) Les déclarations et notifications reçues conformément à l'Article 22;

(*f*) Les déclarations et notifications reçues conformément à l'Article 23, paragraphes 1 et 3, ainsi que la date à laquelle les réserves entrent en vigueur ou celle à compter de laquelle elles sont levées.

ARTICLE 25

Conformément à l'Article 102 de la Charte des Nations Unies, la présente Convention sera enregistrée au Secrétariat des Nations Unies à la requête du Secrétaire Général du Conseil.

En foi de quoi les plénipotentiaires soussignés ont signé la présente Convention.

Fait à Bruxelles, le huit juin mil neuf cent soixante et un, en langues française et anglaise, les deux textes faisant également foi, en un seul exemplaire qui sera déposé auprès du Secrétaire Général du Conseil qui en transmettra à tous les Etats visés au paragraphe 1 de l'Article 18 de la présente Convention, des copies certifiées conformes.

Pour l'Autriche, sous réserve de ratification:

Josef Stangelberger.

Pour l'Italie, sous réserve de ratification:

Ugo Calderoni.

Pour la Suisse, sous réserve de ratification:

Charles Lenz.

Pour l'Espagne, sous réserve de ratification:

Comte de Casa Miranda.

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, sous réserve de ratification:

John Nichols.

Pour Cuba, sous réserve de ratification:

Gustavo Arcos Bergnes.

Pour la République Fédérale d'Allemagne, sous réserve de ratification:

Kurt Oppler.
Karl Zepf.

Pour le Niger, sans réserve:

Georges Condat.

Pour l'Australie, sous réserve de ratification:

James William Crawford Cumes.

Pour le Danemark, sous réserve de ratification:

Eggert Adam Knuth.

Pour la Tchecoslovaquie, sans réserve:
Vladimir Ludvik.

Pour la Suède, sous réserve de ratification:
Gunnar Ljungdahl.

Pour la France, sous réserve de ratification:
Raymond Bousquet.

Pour l'Iran, sous réserve de ratification:
Khosrow Hedayat.

Pour la Turquie, sous réserve de ratification:
Hasan Esat Isik.

Pour le Portugal, sans réserve:
Eduardo Vieira Leitão.

Convenção aduaneira relativa às facilidades concedidas para a importação de mercadorias destinadas a serem apresentadas ou utilizadas em exposições, feiras, congressos ou manifestações semelhantes.

PREÂMBULO

Os Estados signatários da presente Convenção,

Reunidos sob os auspícios do Conselho de Cooperação Aduaneira, com o concurso da Comissão Económica para a Europa das Nações Unidas (C. E. E.) e da Organização das Nações Unidas para a Educação, Ciência e Cultura (U. N. E. S. C. O.),

Considerando os votos expressos pelos representantes do comércio internacional e por outros meios interessados,

Desejosos de conceder facilidades às mercadorias destinadas a serem apresentadas em exposições, feiras, congressos ou manifestações semelhantes de carácter comercial, técnico, religioso, educativo, científico, cultural ou filantrópico,

Convencidos de que a adopção de regras gerais relativas ao regime aduaneiro dessas mercadorias trará vantagens substanciais ao comércio internacional e favorecerá o intercâmbio no plano internacional de ideias e conhecimentos,

Acordam no que se segue:

CAPITULO I

Definições

ARTIGO 1.º

Para os fins da presente Convenção:

a) O termo «manifestação» designa:

1. As exposições, feiras e manifestações semelhantes do comércio, indústria, agricultura e artesanato;
2. As exposições ou manifestações organizadas com um fim essencialmente filantrópico;
3. As exposições ou manifestações organizadas com um fim essencialmente científico, técnico, artesanal, artístico, educativo ou cultural, desportivo, religioso ou de culto, ou ainda com o objectivo de auxiliar os povos para uma melhor compreensão recíproca;
4. As reuniões de representantes de organizações ou de agrupamentos internacionais;
5. As cerimónias e manifestações de carácter oficial ou comemorativo;

com exclusão das exposições organizadas a título privado, em estabelecimentos ou recintos comerciais, com o objectivo de vender mercadorias estrangeiras;

b) O termo «direitos de importação» designa os direitos aduaneiros e todos os outros direitos e taxas cobrados na importação ou em consequência da importação e inclui todos os direitos de consumo e taxas internas aplicáveis aos produtos importados, mas não inclui, todavia, os direitos e encargos que são limitados ao custo aproximado dos serviços prestados e que não constituem protecção indirecta dos produtos nacionais ou tributação de carácter fiscal da importação;

c) O termo «importação temporária» designa a importação, com isenção de direitos, de uma mercadoria destinada a reexportação, não sendo de admitir nem proibições nem restrições de importação;

d) O termo «Conselho» designa a organização instituída pela Convenção de Bruxelas, firmada em 15 de Dezembro de 1950, que criou um Conselho de Cooperação Aduaneira;

e) O termo «pessoa» designa tanto uma pessoa física como moral, a não ser que o contexto disponha de outro modo.

CAPITULO II

Importação temporária

ARTIGO 2.º

1. Beneficiarão de importação temporária:

a) As mercadorias destinadas a exposições ou a demonstrações numa manifestação;

b) As mercadorias destinadas a serem utilizadas para apresentação de produtos estrangeiros numa manifestação, tais como:

i) Mercadorias necessárias para demonstração das máquinas ou aparelhos estrangeiros expostos;

ii) Material de construção ou de decoração, compreendendo o apetrechamento eléctrico, dos pavilhões provisórios de expositores estrangeiros;

iii) Material publicitário e de demonstração destinado manifestamente a utilizar-se a título de publicidade das mercadorias estrangeiras expostas, tal como gravações sonoras, filmes e dispositivos e ainda a aparelhagem necessária ao seu uso;

c) O material, compreendendo as instalações de interpretação, os aparelhos de gravação de som e os filmes de carácter educativo, científico ou cultural, destinado a utilizar-se em reuniões, conferências e congressos internacionais.

2. Conceder-se-ão as facilidades previstas no parágrafo 1 do presente artigo, desde que:

a) As mercadorias se possam identificar no acto da sua reexportação;

b) Consoante o seu destino, seja razoável o número ou a quantidade de artefactos idênticos importados;

c) As autoridades aduaneiras do país de importação temporária considerem que serão satisfeitas as condições estabelecidas pela presente Convenção.

ARTIGO 3.º

Enquanto beneficiarem das facilidades previstas na presente Convenção, e salvo se as leis e regulamentos

do país de importação temporária o permitirem, as mercadorias importadas temporàriamente não poderão ser:

a) Emprestadas, alugadas ou utilizadas mediante retribuição;

b) Transportadas para recinto diferente do da manifestação.

ARTIGO 4.º

1. A reexportação das mercadorias importadas temporàriamente deve realizar-se no prazo de seis meses, a contar da data da importação. No entanto, as autoridades aduaneiras do país de importação temporária podem exigir, consoante as circunstâncias e, designadamente, a duração e natureza da manifestação, que as mercadorias sejam reexportadas num prazo mais curto, que não deve ser inferior a um mês depois do fim da manifestação.

2. Não obstante as disposições do parágrafo 1 do presente artigo, as autoridades aduaneiras autorizarão os interessados a deixar no país de importação temporária as mercadorias destinadas a serem apresentadas ou utilizadas numa manifestação ulterior desde que se conformem com as disposições das leis e regulamentos desse país e que as mercadorias sejam reexportadas no prazo de um ano, a contar da data da importação.

3. Por razões válidas, as autoridades aduaneiras poderão, nos limites previstos pelas leis e regulamentos em vigor no país de importação temporária, conceder prazos mais longos do que os previstos nos parágrafos 1 e 2 do presente artigo ou prorrogar o prazo inicial.

4. Quando as mercadorias importadas temporàriamente não puderem ser reexportadas em virtude de uma confiscação de natureza diferente das que são efectuadas a requerimento de particulares, a obrigação de reexportação prevista no presente artigo fica suspensa enquanto durar a confiscação.

ARTIGO 5.º

1. Não obstante a obrigação de reexportação prevista na presente Convenção, não se exigirá a reexportação das mercadorias deterioráveis, gravemente avariadas ou de diminuto valor, desde que, mediante decisão das autoridades aduaneiras:

a) No estado em que se encontram, sobre elas se façam incidir os competentes direitos de importação; ou

b) Sejam abandonadas, sem qualquer despesa para o Tesouro público do país de importação temporária; ou

c) Sejam destruídas, mediante fiscalização oficial, sem que daí resultem despesas para o país de importação temporária.

2. As mercadorias importadas temporàriamente poderão não ser reexportadas, sendo de admitir que entrem no consumo interno sujeitas às condições e formalidades previstas nas leis e regulamentos do país de importação temporária em relação a idênticas mercadorias importadas directamente do estrangeiro.

CAPITULO III

Dispensa de pagamento dos direitos de importação

ARTIGO 6.º

1. Excluídas as mercadorias que forem objecto de reservas notificadas nas condições previstas no artigo 23.º da presente Convenção, os direitos de importação não serão cobrados, as proibições ou restrições de importação não serão aplicadas e, se a importação temporária tiver sido concedida, a reexportação não será exigida, nos seguintes casos:

a) Pequenas amostras representativas das mercadorias estrangeiras expostas numa manifestação, compreendendo amostras de produtos alimentares e de bebidas, importadas como tais ou obtidas na manifestação a partir de mercadorias que na importação se apresentavam acondicionadas de modo diferente, desde que:

i) Sejam produtos estrangeiros fornecidos gratuitamente e que sirvam apenas para distribuições gratuitas ao público da manifestação, para serem utilizados ou consumidos pelas pessoas a quem forem distribuídas;

ii) Esses produtos se possam identificar como amostras de carácter publicitário, de diminuto valor unitário;

iii) Não se prestem a comercialização e, como tal, se apresentem acondicionadas em quantidades nitidamente inferiores às contidas na mais pequena das embalagens para venda a retalho;

iv) As amostras de produtos alimentares ou de bebidas, que não forem distribuídas nas embalagens a que se refere a alínea *iii*) acima indicada, sejam consumidas na manifestação; e

v) O valor global e a quantidade das mercadorias sejam razoáveis, segundo parecer das autoridades aduaneiras do país de importação e tendo em vista a natureza da manifestação, o número de visitantes e a importância da participação do expositor na manifestação;

b) Mercadorias importadas ùnicamente com o objectivo da sua demonstração, ou para demonstração de máquinas e aparelhos estrangeiros apresentados na manifestação, consumidas ou destruídas no decurso dessas demonstrações, desde que o valor global e a quantidade das mercadorias sejam razoáveis, segundo parecer das autoridades aduaneiras do país de importação e tendo em vista a natureza da manifestação, o número de visitantes e a importância da participação do expositor na manifestação;

c) Produtos de diminuto valor, utilizados na construção, mobiliário e decoração dos pavilhões provisórios dos expositores estrangeiros da manifestação (tintas, vernizes, papéis para forrar casas, etc.), cujo uso determina a sua inutilização;

d) Impressos, catálogos, prospectos, preçários, cartazes publicitários, calendários (mesmo ilustrados) e fotografias não encaixilhadas, que se destinem manifestamente a constituir material publicitário das mercadorias estrangeiras expostas na manifestação, desde que:

i) Sejam produtos estrangeiros fornecidos gratuitamente e que sirvam apenas para distribuição gratuita ao público no recinto da manifestação;

ii) O valor global e a quantidade das mercadorias sejam razoáveis, segundo parecer das autoridades aduaneiras do país de importação e tendo em vista a natureza da manifestação, o número de visitantes e a importância da participação do expositor na manifestação.

2. As disposições do parágrafo 1 do presente artigo não serão aplicáveis a bebidas alcoólicas, tabaco e combustíveis.

ARTIGO 7.º

Serão isentos de direitos de importação, e não ficarão sujeitos a nenhuma proibição ou restrição de importação, os *dossiers*, arquivos, fórmulas e outros documentos destinados a serem utilizados como tais em reuniões, conferências ou congressos internacionais.

CAPITULO IV

Simplificação de formalidades

ARTIGO 8.º

Cada Parte Contratante reduzirá ao mínimo as formalidades aduaneiras relativas às facilidades previstas na presente Convenção e publicará, nos mais curtos espaços de tempo, os regulamentos referentes a essas formalidades.

ARTIGO 9.º

1. Quando uma parte Contratante exigir uma garantia para se assegurar da execução das condições requeridas para se obter o benefício das facilidades previstas na presente Convenção, o montante dessa garantia não poderá exceder em mais de 10 por cento o dos direitos de importação exigíveis.

2. Todavia, essa Parte Contratante, quando for possível, esforçar-se-á por aceitar uma garantia global prestada pelos organizadores da manifestação ou por qualquer outra pessoa aprovada pelas autoridades aduaneiras, em substituição das garantias individuais que seriam de exigir de acordo com as disposições da alínea anterior.

ARTIGO 10.º

1. Tanto na importação como na reexportação, a verificação e desalfandegação das mercadorias, que serão ou foram apresentadas ou utilizadas numa manifestação, efectuar-se-ão, sempre que seja possível e oportuno, no recinto dessa manifestação.

2. Cada Parte Contratante, quando o julgar útil e tendo em vista a importância da manifestação, esforçar-se-á por instalar uma estância aduaneira no recinto da manifestação organizada no seu território, durante um espaço de tempo razoável.

3. A reexportação das mercadorias importadas temporàriamente poderá efectuar-se, por uma ou várias vezes, através de uma das estâncias aduaneiras habilitadas a realizar estas operações, ainda mesmo que não seja a da importação, a não ser que o importador se comprometa a reexportar as mercadorias por esta última estância, a fim de beneficiar de um processo simplificado.

CAPITULO V

Disposições diversas

ARTIGO 11.º

Os produtos acessòriamente obtidos no decurso da manifestação, a partir de mercadorias importadas temporàriamente e como resultado da demonstração das máquinas ou aparelhos expostos, ficarão sujeitos às disposições da presente Convenção.

ARTIGO 12.º

As disposições da presente Convenção estabelecem facilidades mínimas, não se opondo à aplicação de facilidades maiores concedidas ou a conceder por algumas Partes Contratantes, quer por disposições unilaterais, quer em virtude de acordos bilaterais ou multilaterais.

ARTIGO 13.º

Para os fins da presente Convenção, os territórios das Partes Contratantes que formarem uma união aduaneira ou económica poderão considerar-se como um único território.

ARTIGO 14.º

As disposições da presente Convenção não obstarão à aplicação:

a) Das disposições nacionais ou convencionais não aduaneiras relativas à organização de manifestações;

b) Das proibições e restrições impostas por leis e regulamentos nacionais e fundadas em considerações de moralidade ou de ordem públicas, de segurança pública, de higiene ou de saúde públicas, em considerações de ordem veterinária ou fitopatológica ou relacionadas com a protecção de patentes, marcas de fábrica e direitos de autor e de reprodução.

ARTIGO 15.º

Qualquer infracção às disposições da presente Convenção, qualquer substituição, falsa declaração ou manobra tendentes a fazer beneficiar indevidamente uma pessoa ou um objecto das facilidades previstas na referida Convenção exporá o contraventor, no país em que a infracção for cometida, às sanções previstas nas leis e regulamentos desse país e, se for caso disso, ao pagamento dos direitos de importação exigíveis.

CAPITULO VI

Cláusulas finais

ARTIGO 16.º

1. As Partes Contratantes reunir-se-ão quando for necessário para examinar as condições em que a presente Convenção é aplicada, a fim, nomeadamente, de procurar as medidas adequadas para assegurar a sua interpretação e aplicação uniformes.

2. Essas reuniões serão convocadas pelo secretário-geral do Conselho, a pedido de uma das Partes Contratantes, e, salvo decisão em contrário das mesmas Partes, realizar-se-ão na sede do Conselho.

3. As Partes Contratantes estabelecerão o regulamento interno das suas reuniões. As suas decisões serão tomadas por maioria de dois terços das que estiverem presentes e que tomarem parte na votação.

4. As Partes Contratantes não poderão vàlidamente pronunciar-se sobre uma questão, a não ser que mais de metade delas esteja presente.

ARTIGO 17.º

1. Qualquer diferendo entre as Partes Contratantes no que disser respeito à interpretação ou à aplicação da presente Convenção será, na medida do possível, regulado por via de negociações directas entre as ditas Partes.

2. Qualquer diferendo que não for regulado por via de negociações directas será levado, pelas partes em causa, à presença das Partes Contratantes, reunidas nas condições previstas no artigo 16.º da presente Conven-

ção, que examinarão o diferendo e farão recomendações com vista à sua resolução.

3. As partes no diferendo poderão convir antecipadamente a aceitação das recomendações das Partes Contratantes.

ARTIGO 18.º

1. Qualquer Estado membro do Conselho e qualquer Estado membro da Organização das Nações Unidas ou das suas instituições especializadas poderá tornar-se Parte Contratante à presente Convenção:

a) Assinando-a sem reserva de ratificação;

b) Depositando um instrumento de ratificação depois de a ter assinado sob reserva de ratificação; ou

c) Aderindo a ela.

2. A presente Convenção estará aberta até 31 de Março de 1962, na sede do Conselho, em Bruxelas, à assinatura dos Estados visados no parágrafo 1 do presente artigo. Depois desta data, estará aberta à sua adesão.

3. No caso previsto no parágrafo 1, *b*), do presente artigo, a Convenção será submetida à ratificação dos Estados signatários em conformidade com os seus processos constitucionais respectivos.

4. Todo o Estado não membro das organizações visadas no parágrafo 1 do presente artigo, ao qual para esse efeito for dirigido um convite pelo secretário-geral do Conselho, a pedido das Partes Contratantes, poderá tornar-se Parte Contratante à presente Convenção, aderindo a ela depois da sua entrada em vigor.

5. Os instrumentos de ratificação ou de adesão serão depositados junto do secretário-geral do Conselho.

ARTIGO 19.º

1. A presente Convenção entrará em vigor três meses depois de cinco dos Estados mencionados no parágrafo 1 do artigo 18.º a terem assinado sem reserva de ratificação ou terem depositado o seu instrumento de ratificação ou de adesão.

2. Em relação a qualquer Estado que ratificar a presente Convenção ou que a ela aderir, depois de cinco Estados a terem assinado sem reserva de ratificação, ou terem depositado o seu instrumento de ratificação ou de adesão, a Convenção entrará em vigor três meses depois do depósito do instrumento de ratificação ou de adesão do referido Estado.

ARTIGO 20.º

1. A presente Convenção é concluída para uma duração ilimitada. Todavia, qualquer Parte Contratante poderá denunciá-la em qualquer momento depois da data da sua entrada em vigor, tal como se encontra fixada no seu artigo 19.º

2. A denúncia será notificada por um instrumento escrito depositado junto do secretário-geral do Conselho.

3. A denúncia efectivar-se-á seis meses depois da recepção do seu instrumento pelo secretário-geral do Conselho.

ARTIGO 21.º

1. As Partes Contratantes, reunidas nas condições previstas no artigo 16.º acima indicado, poderão recomendar emendas à presente Convenção.

2. O texto de qualquer emenda assim recomendada será comunicado pelo secretário-geral do Conselho a todas as Partes Contratantes, a todos os outros Estados signatários ou aderentes, ao secretário-geral da Organização das Nações Unidas e à U. N. E. S. C. O.

3. Num prazo de seis meses, a contar da data da comunicação da emenda recomendada, qualquer Parte Contratante poderá fazer reconhecer ao secretário-geral do Conselho:

a) Que tem uma objecção a fazer à emenda recomendada;

b) Ou que, se bem que tenha a intenção de aceitar a emenda recomendada, não se encontram ainda preenchidas no seu país as condições necessárias para essa aceitação.

4. Enquanto a Parte Contratante que tiver dirigido a comunicação prevista no parágrafo 3, *b*), acima indicado não tiver notificado o secretário-geral do Conselho da sua aceitação, poderá, durante um período de nove meses a partir da expiração do prazo de seis meses previsto no parágrafo 3 do presente artigo, apresentar objecções à emenda recomendada.

5. Se for formulada qualquer objecção à emenda recomendada, nas condições previstas nos parágrafos 3 e 4 do presente artigo, a emenda será considerada como não aceite e ficará sem efeito.

6. Se não for formulada nenhuma objecção à emenda recomendada nas condições previstas nos parágrafos 3 e 4 do presente artigo, a emenda será considerada como aceite na seguinte data:

a) Quando nenhuma Parte Contratante tiver dirigido a comunicação prevista no parágrafo 3, *b*), do presente artigo, na expiração do prazo de seis meses visado nesse parágrafo;

b) Quando uma ou várias Partes Contratantes tiverem dirigido a comunicação prevista no parágrafo 3, *b*), do presente artigo, na mais aproximada das duas datas seguintes:

i) Data na qual todas as Partes Contratantes que tiverem dirigido uma tal comunicação notificaram o secretário-geral do Conselho da sua aceitação da emenda recomendada, sendo todavia essa data reportada à expiração do prazo de seis meses visado no parágrafo 3 do presente artigo, se todas as aceitações tiverem sido notificadas anteriormente a essa expiração;

ii) Data da expiração do prazo de nove meses visado no parágrafo 4 do presente artigo.

7. Toda a emenda considerada como aceite entrará em vigor seis meses depois da data na qual como tal foi considerada.

8. O secretário-geral do Conselho notificará o mais cedo possível todas as Partes Contratantes de qualquer objecção formulada em conformidade com o parágrafo 3, *b*). Fará ulteriormente saber a todas as Partes Contratantes se a ou as Partes Contratantes que tiverem dirigido uma tal comunicação levantam objecções à emenda recomendada ou se a aceitam.

9. Todo o Estado que ratificar a presente Convenção ou que aderir a ela será considerado como tendo aceitado as emendas entradas em vigor à data do depósito do seu instrumento de ratificação ou de adesão.

ARTIGO 22.º

1. Qualquer Estado poderá, quer no momento da assinatura sem reserva de ratificação, da ratificação ou da adesão, quer ulteriormente, notificar o secretário-geral do Conselho de que a presente Convenção se estenderá ao conjunto ou a certos dos territórios cujas

relações internacionais estão colocadas sob a sua responsabilidade; a Convenção será aplicável aos ditos territórios três meses depois da data da recepção dessa notificação pelo secretário-geral do Conselho, mas nunca antes da entrada em vigor da presente Convenção em relação a esse Estado.

2. Qualquer Estado que tiver, em virtude do parágrafo 1 do presente artigo, aceitado a presente Convenção para um território cujas relações internacionais estejam colocadas sob a sua responsabilidade, poderá notificar o secretário-geral do Conselho, em conformidade com as disposições do artigo 20.º da Convenção, de que esse território deixará de aplicar a Convenção.

ARTIGO 23.º

1. Qualquer Estado poderá declarar, no momento em que assinar ou ratificar a presente Convenção ou em que aderir a ela, ou, depois de se ter tornado Parte Contratante à Convenção, notificar o secretário-geral do Conselho de que não se considera ligado pelas disposições do artigo 6.º, parágrafo 1, alínea *a*), da Convenção. Essas declarações e notificações deverão indicar explicitamente as mercadorias em relação às quais a reserva for formulada. As notificações dirigidas ao secretário-geral tomarão efeito no octogésimo dia após terem sido por ele recebidas.

2. Se uma Parte Contratante formular uma reserva em conformidade com o parágrafo 1 do presente artigo, as outras Partes Contratantes não ficarão ligadas pelas disposições do artigo 6.º, parágrafo 1, alínea *a*), da presente Convenção no que disser respeito às mercadorias especificadas nessa reserva.

3. Qualquer Parte Contratante que tiver formulado uma reserva em conformidade com o parágrafo 1 do presente artigo poderá, a qualquer momento, levantar essa reserva por notificação ao secretário-geral do Conselho.

4. Não será admitida qualquer outra reserva à presente Convenção.

ARTIGO 24.º

O secretário-geral do Conselho notificará todas as Partes Contratantes, bem como os outros Estados signatários ou aderentes, o secretário-geral das Nações Unidas e a U. N. E. S. C. O.:

a) Das assinaturas, ratificações e adesões visadas no artigo 18.º;

b) Da data na qual a presente Convenção entrará em vigor, em conformidade com o artigo 20.º;

c) Das denúncias e anulações notificadas em conformidade com o artigo 20.º;

d) Das emendas consideradas como aceites em conformidade com o artigo 21.º, assim como da data da sua entrada em vigor;

e) Das declarações e notificações recebidas em conformidade com o artigo 22.º;

f) Das declarações e notificações recebidas em conformidade com o artigo 23.º, parágrafos 1 e 3, assim como da data na qual as reservas entrarão em vigor ou daquela a contar da qual foram levantadas.

ARTIGO 25.º

Em conformidade com o artigo 102.º da Carta das Nações Unidas, a presente Convenção será registada no Secretariado das Nações Unidas a pedido do secretário-geral do Conselho.

Em fé do que os plenipotenciários abaixo indicados assinaram a presente Convenção.

Feito em Bruxelas, a 8 de Junho de 1961, em línguas francesa e inglesa, fazendo os dois textos igualmente fé, num só exemplar, que será depositado junto do secretário-geral do Conselho, que dele transmitirá a todos os Estados visados no parágrafo 1 do artigo 18.º da presente Convenção cópias certificadas conformes.

Pela Áustria, com reserva de ratificação:
Josef Stangelberger.

Pela Itália, com reserva de ratificação:
Ugo Calderoni.

Pela Suíça, com reserva de ratificação:
Charles Lenz.

Pela Espanha, com reserva de ratificação:
Conde de Casa Miranda.

Pelo Reino Unido da Grã-Bretanha e da Irlanda do Norte, com reserva de ratificação:
John Nichols.

Por Cuba, com reserva de ratificação:
Gustavo Arcos Bergnes.

Pela República Federal da Alemanha, com reserva de ratificação:
Kurt Oppler.
Karl Zepf.

Pela Nigéria, sem reserva de ratificação:
Georges Condat.

Pela Austrália, com reserva de ratificação:
James William Crawford Cumes.

Pela Dinamarca, com reserva de ratificação:
Eggert Adam Knuth.

Pela Checoslováquia, sem reserva de ratificação:
Vladimir Ludvik.

Pela Suécia, com reserva de ratificação:
Gunnar Ljungdahl.

Pela França, com reserva de ratificação:
Raymond Bousquet.

Pelo Irão, com reserva de ratificação:
Khosrow Hedayat.

Pela Turquia, com reserva de ratificação:
Hasan Esat Isik.

Por Portugal, sem reserva de ratificação:
Eduardo Vieira Leitão.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 188/99

de 22 de Outubro

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção sobre o Reconhecimento e Execução de Sentenças Arbitrais Estrangeiras, de 10 de Junho de 1958, ratificada pelo Decreto do Presidente da República n.º 52/94, de 8 de Julho, cujo texto foi publicado no *Diário da República*, l.ª série, de 8 de Julho de 1994.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 15 de Outubro de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com os referidos decreto de ratificação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 247, I Série-A, de 22 de Outubro de 1999)

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 52/94

de 8 de Julho

O Presidente da República decreta, nos termos do artigo 138.º, alínea *b*), da Constituição, o seguinte:

É ratificada a Convenção sobre o Reconhecimento e a Execução de Sentenças Arbitrais Estrangeiras, celebrada em Nova Iorque, a 10 de Junho de 1958, e aprovada, para ratificação, pela Resolução da Assembleia da República n.º 37/94, em 10 de Março de 1994, com a formulação da seguinte reserva, nos termos do n.º 3 do artigo 1.º da Convenção: no âmbito do princípio da reciprocidade, Portugal só aplicará a Convenção no caso de as sentenças arbitrais terem sido proferidas no território de Estados a ela vinculados.

Assinado em 1 de Junho de 1994.

Publique-se.

O Presidente da República, MÁRIO SOARES.

Referendado em 7 de Junho de 1994.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 156, I Série-A, de 8 de Julho de 1994)

共和國總統府

共和國總統令 第188/99號

十月二十二日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九五八年六月十日之《關於承認和執行外國仲裁裁決的公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該公約係經七月八日第52/94號共和國總統令批准，且文本已公布於一九九四年七月八日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年十月十五日簽署。

將本總統令連同上述批准公約之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年十月二十二日第247期《共和國公報》第一組-A）

共和國總統府

共和國總統令 第52/94號

七月八日

共和國總統根據《憲法》第一百三十八條b項之規定，命令如下：

批准一九五八年六月十日在紐約訂立，經一九九四年三月十日第37/94號共和國議會決議通過以待批准之《關於承認和執行外國仲裁裁決的公約》，並根據公約第一條第三款之規定作出以下保留：在互惠原則之範圍內，葡萄牙僅對在受公約約束之國家之領土內所作成之仲裁裁決適用本公約。

一九九四年六月一日簽署。

命令公布。

共和國總統

蘇亞雷斯

一九九四年六月七日副署。

總理

施華高

（一九九四年七月八日第156期《共和國公報》第一組-A）

ASSEMBLEIA DA REPÚBLICA

Resolução da Assembleia da República n.º 37/94

Aprova, para ratificação, a Convenção sobre o Reconhecimento e a Execução de Sentenças Arbitrais Estrangeiras.

A Assembleia da República resolve, nos termos dos artigos 164.º, alínea *j*), e 169.º, n.º 5, da Constituição, o seguinte:

Artigo 1.º É aprovada, para ratificação, a Convenção sobre o Reconhecimento e a Execução de Sentenças Arbitrais Estrangeiras, celebrada em Nova Iorque, a 10 de Junho de 1958, cuja versão autêntica em língua francesa e respectiva tradução em língua portuguesa seguem em anexo à presente resolução.

Art. 2.º Nos termos do n.º 3 do artigo 1.º da Convenção, Portugal formula a seguinte reserva: no âmbito do princípio da reciprocidade, Portugal só aplicará a Convenção no caso de as sentenças arbitrais terem sido proferidas no território de Estados a ela vinculados.

Aprovada em 10 de Março de 1994.

O Presidente da Assembleia da República, *António Moreira Barbosa de Melo.*

(*D.R. n.º 156, I Série-A, de 8 de Julho de 1994*)

共和國議會

共和國議會決議　第 37/94 號

通過《關於承認和執行外國仲裁裁決的公約》以待批准

共和國議會根據《憲法》第一百六十四條 j 項及第一百六十九條第五款之規定，議決如下：

第一條 —— 通過一九五八年六月十日在紐約訂立之《關於承認和執行外國仲裁裁決的公約》，以待批准；該公約之法文原文及葡文譯本附於本決議。

第二條 —— 根據公約第一條第三款之規定，葡萄牙作出以下保留：在互惠原則之範圍內，葡萄牙僅對在受公約約束之國家之領土內所作成之仲裁裁決適用本公約。

一九九四年三月十日通過。

共和國議會議長

António Moreira Barbosa de Melo

（一九九四年七月八日第 156 期《共和國公報》第一組 -A）

CONVENTION POUR LA RECONNAISSANCE ET L'EXÉCUTION DES SENTENCES ARBITRALES ÉTRANGÈRES, FAITE À NEW-YORK, LE 10 JUIN 1958 (*).

Article premier

1 — La présente Convention s'applique à la reconnaissance et à l'exécution des sentences arbitrales rendues sur le territoire d'un État autre que celui où la reconnaissance et l'exécution des sentences sont demandées, et issues de différends entre personnes physiques ou morales. Elle s'applique également aux sentences arbitrales qui ne sont pas considérées comme sentences nationales dans l'État où leur reconnaissance et leur exécution sont demandées.

2 — On entend par «sentences arbitrales» non seulement les sentences rendues par des arbitres nommés pour des cas déterminés, mais également celles qui sont rendues par des organes d'arbitrage permanents auxquels les parties se sont soumises.

3 — Au moment de signer ou de ratifier la présente Convention, d'y adhérer ou de faire la notification d'extension prévue à l'article x, tout État pourra, sur la base de la réciprocité, déclarer qu'il appliquera la Convention à la reconnaissance et à l'exécution des seules sentences rendues sur le territoire d'un autre État contractant. Il pourra également déclarer qu'il appliquera la Convention uniquement aux différends issus de rapports de droit, contractuels ou non contractuels, qui sont considérés comme commerciaux par sa loi nationale.

Article II

1 — Chacun des États contractants reconnaît la convention écrite par laquelle les parties s'obligent à soumettre à un arbitrage tous les différends ou certains des différends qui se sont élevés ou pourraient s'élever entre elles au sujet d'un rapport de droit déterminé, contractuel ou non contractuel, portant sur une question susceptible d'être réglée par voie d'arbitrage.

2 — On entend par «convention écrite» une clause compromissoire insérée dans un contrat, ou un compromis, signés par les parties ou contenus dans un échange de lettres ou de télégrammes.

3 — Le tribunal d'un État contractant, saisi d'un litige sur une question au sujet de laquelle les parties ont conclu une convention au sens du présent article, renverra les parties à l'arbitrage, à la demande de l'une d'elles, à moins qu'il ne constate que ladite convention est caduque, inopérante ou non susceptible d'être appliquée.

Article III

Chacun des États contractants reconnaîtra l'autorité d'une sentence arbitrale et accordera l'exécution de cette sentence conformément aux règles de procédure suivies dans le territoire où la sentence est invoquée, aux conditions

(*) Conformément à son article XII, la Convention est entrée en vigueur le 7 juin 1959, le quatre-vingt-dixième jour suivant la date du dépôt du troisième instrument de ratification ou d'adhésion auprès du Secrétaire général de l'Organisation des Nations Unies. Les États ci-après ont déposé leurs instruments de ratification ou d'adhésion (*a*) aux dates indiquées ci-dessous:

Israël — 5 janvier 1959;
Marroc — 12 février 1959 (*a*);
République arabe unie — 9 mars 1959 (*a*).

établies dans les articles suivants. Il ne sera pas imposé, pour la reconnaissance ou l'exécution des sentences arbitrales auxquelles s'applique la présente Convention, de conditions sensiblement plus rigoureuses, ni de frais de justice sensiblement plus élevés, que ceux qui sont imposés pour la reconnaissance ou l'exécution des sentences arbitrales nationales.

Article IV

1 — Pour obtenir la reconnaissance et l'exécution visées à l'article précédent, la partie qui demande la reconnaissance et l'exécution doit fournir, en même temps que la demande:

a) L'original dûment authentifié de la sentence ou une copie de cet original réunissant les conditions requises pour son authenticité;
b) L'original de la convention visée à l'article II, ou une copie réunissant les conditions requises pour son authenticité.

2 — Si ladite sentence ou ladite convention n'est pas rédigée dans une langue officielle du pays où la sentence est invoquée, la partie qui demande la reconnaissance et l'exécution de la sentence aura à produire une traduction de ces pièces dans cette langue. La traduction devra être certifiée par un traducteur officiel ou un traducteur juré ou par un agent diplomatique ou consulaire.

Article V

1 — La reconnaissance et l'exécution de la sentence ne seront refusées, sur requête de la partie contre laquelle elle est invoquée, que si cette partie fournit à l'autorité compétente du pays où la reconnaissance et l'exécution sont demandées la preuve:

a) Que les parties à la convention visée à l'article II étaient, en vertu de la loi à elles applicable, frappées d'une incapacité, ou que ladite convention n'est pas valable en vertu de la loi à laquelle les parties l'ont subordonnée ou, à défaut d'une indication à cet égard, en vertu de la loi du pays où la sentence a été rendue; ou
b) Que la partie contre laquelle la sentence est invoquée n'a pas été dûment informée de la désignation de l'arbitre ou de la procédure d'arbitrage, ou qu'il lui a été impossible, pour une autre raison, de faire valoir ses moyens; ou
c) Que la sentence porte sur un différend non visé dans le compromis ou n'entrant pas dans les prévisions de la clause compromissoire, ou qu'elle contient des décisions qui dépassent les termes du compromis ou de la clause compromissoire; toutefois, si les dispositions de la sentence qui ont trait à des questions soumises à l'arbitrage peuvent être dissociées de celles qui ont trait à des questions non soumises à l'arbitrage, les premières pourront être reconnues et exécutées; ou
d) Que la constitution du tribunal arbitral ou la procédure d'arbitrage n'a pas été conforme à la convention des parties, ou, à défaut de convention, qu'elle n'a pas été conforme à la loi du pays où l'arbitrage a eu lieu; ou
e) Que la sentence n'est pas encore devenue obligatoire pour les parties ou a été annulée ou suspendue par une autorité compétente du pays dans lequel, ou d'après la loi duquel, la sentence a été rendue.

2 — La reconnaissance et l'exécution d'une sentence arbitrale pourront aussi être refusées si l'autorité compétente du pays où la reconnaissance et l'exécution sont requises constate:

a) Que, d'après la loi de ce pays, l'objet du différend n'est pas susceptible d'être réglé par voie d'arbitrage; ou
b) Que la reconnaissance ou l'exécution de la sentence serait contraire à l'ordre public de ce pays.

Article VI

Si l'annulation ou la suspension de la sentence est demandée à l'autorité compétente visée à l'article V, paragraphe 1, *e*), l'autorité devant qui la sentence est invoquée peut, si elle l'estime approprié, surseoir à statuer sur l'exécution de la sentence; elle peut aussi, à la requête de la partie qui demande l'exécution de la sentence, ordonner à l'autre partie de fournir des sûretés convenables.

Article VII

1 — Les dispositions de la présente Convention ne portent pas atteinte à la validité des accords multilatéraux ou bilatéraux conclus par les États contractants en matière de reconnaissance et d'exécution de sentences arbitrales et ne privent aucune partie intéressée du droit qu'elle pourrait avoir de se prévaloir d'une sentence arbitrale de la manière et dans la mesure admises par la législation ou les traités du pays où la sentence est invoquée.

2 — Le Protocole de Genève de 1923 relatif aux clauses d'arbitrage et la Convention de Genève de 1927 pour l'exécution des sentences arbitrales étrangères cesseront de produire leurs effets entre les États contractants du jour, et dans la mesure, où ceux-ci deviendront liés par la présente Convention.

Article VIII

1 — La présente Convention est ouverte jusqu'au 31 décembre 1958 à la signature de tout État membre des Nations Unies, ainsi que de tout autre État qui est, ou deviendra par la suite, membre d'une ou plusieurs institutions spécialisées des Nations Unies ou partie au Statut de la Cour internationale de Justice, ou qui aura été invité par l'Assemblée générale des Nations Unies.

2 — La présente Convention doit être ratifiée et les instruments de ratification déposés auprès du Secrétaire général de l'Organisation des Nations Unies.

Article IX

1 — Tous les États visés à l'article VIII peuvent adhérer à la présente Convention.

2 — L'adhésion se fera par le dépôt d'un instrument d'adhésion auprès du Secrétaire général de l'Organisation des Nations Unies.

Article X

1 — Tout État pourra, au moment de la signature, de la ratification ou de l'adhésion, déclarer que la présente Convention s'étendra à l'ensemble des territoires qu'il représente sur le plan international, ou à l'un ou plusieurs d'entre eux. Cette déclaration produira ses effets au moment de l'entrée en vigueur de la Convention pour ledit État.

2 — Par la suite, toute extension de cette nature se fera par notification adressée au Secrétaire général de l'Organisation des Nations Unies et produira ses effets à partir du quatre-vingt-dixième jour qui suivra la date à laquelle le Secrétaire général de l'Organisation des Nations Unies aura reçu la notification, ou à la date d'entrée en vigueur de la Convention pour ledit État si cette dernière date est postérieure.

3 — En ce qui concerne les territoires auxquels la présente Convention ne s'applique pas à la date de la signature, de la ratification ou de l'adhésion, chaque État intéressé examinera la possibilité de prendre les mesures voulues pour étendre la Convention à ces territoires sous réserve le cas échéant, lorsque des motifs constitutionnels l'exigeront, de l'assentiment des gouvernements de ces territoires.

Article XI

Les dispositions ci-après s'appliqueront aux États fédératifs ou non unitaires:

a) En ce qui concerne les articles de la présente Convention qui relèvent de la compétence législative du pouvoir fédéral, les obligations du gouvernement fédéral seront les mêmes que celles des États contractants qui ne sont pas des États fédératifs;

b) En ce qui concerne les articles de la présente Convention qui relèvent de la compétence législative de chacun des États, ou provinces constituants, qui ne sont pas, en vertu du système constitutionnel de la fédération, tenus de prendre des mesures législatives, le gouvernement fédéral portera le plus tôt possible, et avec son avis favorable, lesdits articles à la connaissance des autorités compétentes des États ou provinces constituants;

c) Un État fédératif Partie à la présente Convention communiquera, à la demande de tout autre État contractant qui lui aura été transmise par l'intermédiaire du Secrétaire général de l'Organisation des Nations Unies, un exposé de la législation et des pratiques en vigueur dans la fédération et ses unités constituantes, en ce qui concerne telle ou telle disposition de la Convention, indiquant la mesure dans laquelle effet a été donné, par une action législative ou autre, à ladite disposition.

Article XII

1 — La présente Convention entrera en vigueur le quatre-vingt-dixième jour qui suivra la date du dépôt du troisième instrument de ratification ou d'adhésion.

2 — Pour chacun des États qui ratifieront la Convention ou y adhéreront après le dépôt du troisième instrument de ratification ou d'adhésion, elle entrera en vigueur le quatre-vingt-dixième jour qui suivra la date du dépôt par cet État de son instrument de ratification ou d'adhésion.

Article XIII

1 — Tout État contractant pourra dénoncer la présente Convention par notification écrite adressée au Secrétaire général de l'Organisation des Nations Unies. La dénonciation prendra effet un an après la date où le Secrétaire général de l'Organisation des Nations Unies aura reçu la notification.

2 — Tout État qui aura fait une déclaration ou une notification conformément à l'article X pourra notifier ultérieurement au Secrétaire général de l'Organisation des Nations Unies que la Convention cessera de s'appliquer au territoire en question un an après la date à laquelle le Secrétaire général aura reçu cette notification.

3 — La présente Convention demeurera applicable aux sentences arbitrales au sujet desquelles une procédure de reconnaissance ou d'exécution aura été entamée avant l'entrée en vigueur de la dénonciation.

Article XIV

Un État contractant ne peut se réclamer des dispositions de la présente Convention contre d'autres États contractants que dans la mesure où il est lui-même tenu d'appliquer cette Convention.

Article XV

Le Secrétaire général de l'Organisation des Nations Unies notifiera à tous les États visés à l'article VIII:

a) Les signatures et ratifications visées à l'article VIII;
b) Les adhésions visées à l'article IX;
c) Les déclarations et notifications visées aux articles premier, X et XI;
d) La date où la présente Convention entrera en vigueur, en application de l'article XII;
e) Les dénonciations et notifications visées à l'article XIII.

Article XVI

1 — La présente Convention, dont les textes anglais, chinois, espagnol, français et russe font également foi, sera déposée dans les archives de l'Organisation des Nations Unies.

2 — Le Secrétaire général de l'Organisation des Nations Unies remettra une copie certifiée conforme de la présente Convention aux États visés à l'article VIII.

CONVENÇÃO SOBRE O RECONHECIMENTO E A EXECUÇÃO DE SENTENÇAS ARBITRAIS ESTRANGEIRAS, CELEBRADA EM NOVA IORQUE AOS 10 DE JUNHO DE 1958 (*).

Artigo I

1 — A presente Convenção aplica-se ao reconhecimento e à execução das sentenças arbitrais proferidas no território

(*) Nos termos do seu artigo XII, a Convenção entrou em vigor em 7 de Junho de 1959, no 90.º dia a seguir à data de depósito do terceiro instrumento de ratificação ou de adesão junto do Secretário-Geral da Organização das Nações Unidas. Os Estados a seguir indicados depositaram os respectivos instrumentos de ratificação ou de adesão (*a*) nas seguintes datas:

Israel — 5 de Janeiro de 1959;
Marrocos — 12 de Fevereiro de 1959 (*a*);
República Árabe Unida — 9 de Março de 1959 (*a*).

de um Estado que não aquele em que são pedidos o reconhecimento e a execução das sentenças e resultantes de litígios entre pessoas singulares ou colectivas. Aplica-se também às sentenças arbitrais que não forem consideradas sentenças nacionais no Estado em que são pedidos o seu reconhecimento e execução.

2 — Entende-se por «sentenças arbitrais» não apenas as sentenças proferidas por árbitros nomeados para determinados casos, mas também as que forem proferidas por órgãos de arbitragem permanentes aos quais as Partes se submeteram.

3 — No momento da assinatura ou da ratificação da presente Convenção, da adesão a esta ou da notificação de extensão prevista no artigo X, qualquer Estado poderá, com base na reciprocidade, declarar que aplicará a Convenção ao reconhecimento e à execução apenas das sentenças proferidas no território de um outro Estado Contratante. Poderá também declarar que aplicará apenas a Convenção aos litígios resultantes de relações de direito, contratuais ou não contratuais, que forem consideradas comerciais pela respectiva lei nacional.

Artigo II

1 — Cada Estado Contratante reconhece a convenção escrita pela qual as Partes se comprometem a submeter a uma arbitragem todos os litígios ou alguns deles que surjam ou possam surgir entre elas relativamente a uma determinada relação de direito, contratual ou não contratual, respeitante a uma questão susceptível de ser resolvida por via arbitral.

2 — Entende-se por «convenção escrita» uma cláusula compromissória inserida num contrato, ou num compromisso, assinado pelas Partes ou inserido numa troca de cartas ou telegramas.

3 — O tribunal de um Estado Contratante solicitado a resolver um litígio sobre uma questão relativamente à qual as Partes celebraram uma convenção ao abrigo do presente artigo remeterá as Partes para a arbitragem, a pedido de uma delas, salvo se constatar a caducidade da referida convenção, a sua inexequibilidade ou insusceptibilidade de aplicação.

Artigo III

Cada um dos Estados Contratantes reconhecerá a autoridade de uma sentença arbitral e concederá a execução da mesma nos termos das regras de processo adoptadas no território em que a sentença for invocada, nas condições estabelecidas nos artigos seguintes. Para o reconhecimento ou execução das sentenças arbitrais às quais se aplica a presente Convenção, não serão aplicadas quaisquer condições sensivelmente mais rigorosas, nem custas sensivelmente mais elevadas, do que aquelas que são aplicadas para o reconhecimento ou a execução das sentenças arbitrais nacionais.

Artigo IV

1 — Para obter o reconhecimento e a execução referidos no artigo anterior, a Parte que requerer o reconhecimento e a execução deverá juntar ao seu pedido:

a) O original devidamente autenticado da sentença, ou uma cópia do mesmo, verificadas as condições exigidas para a sua autenticidade;

b) O original da convenção referida no artigo II, ou uma cópia da mesma, verificadas as condições exigidas para a sua autenticidade.

2 — No caso de a referida sentença ou convenção não estar redigida numa língua oficial do país em que for invocada a sentença, a Parte que requerer o reconhecimento e a execução da mesma terá de apresentar uma tradução dos referidos documentos nesta língua. A tradução deverá estar autenticada por um tradutor oficial ou por um agente diplomático ou consular.

Artigo V

1 — O reconhecimento e a execução da sentença só serão recusados, a pedido da Parte contra a qual for invocada, se esta Parte fornecer à autoridade competente do país em que o reconhecimento e a execução forem pedidos a prova:

a) Da incapacidade das Partes outorgantes da convenção referida no artigo II, nos termos da lei que lhes é aplicável, ou da invalidade da referida convenção ao abrigo da lei a que as Partes a sujeitaram ou, no caso de omissão quanto à lei aplicável, ao abrigo da lei do país em que for proferida a sentença; ou

b) De que a Parte contra a qual a sentença é invocada não foi devidamente informada quer da designação do árbitro quer do processo de arbitragem, ou de que lhe foi impossível, por outro motivo, deduzir a sua contestação; ou

c) De que a sentença diz respeito a um litígio que não foi objecto nem da convenção escrita nem da cláusula compromissória, ou que contém decisões que extravasam os termos da convenção escrita ou da cláusula compromissória; no entanto, se o conteúdo da sentença referente a questões submetidas à arbitragem puder ser destacado do referente a questões não submetidas à arbitragem, o primeiro poderá ser reconhecido e executado; ou

d) De que a constituição do tribunal arbitral ou o processo de arbitragem não estava em conformidade com a convenção das Partes ou, na falta de tal convenção, de que não estava em conformidade com a lei do país onde teve lugar a arbitragem; ou

e) De que a sentença ainda não se tornou obrigatória para as Partes, foi anulada ou suspensa por uma autoridade competente do país em que, ou segundo a lei do qual, a sentença foi proferida.

2 — Poderão igualmente ser recusados o reconhecimento e a execução de uma sentença arbitral se a autoridade competente do país em que o reconhecimento e a execução foram pedidos constatar:

a) Que, de acordo com a lei desse país, o objecto de litígio não é susceptível de ser resolvido por via arbitral; ou

b) Que o reconhecimento ou a execução da sentença são contrários à ordem pública desse país.

Artigo VI

Se a anulação ou a suspensão da sentença for requerida à autoridade competente prevista no artigo V, n.º 1, alínea *e*), a autoridade perante a qual a sentença for invocada poderá, se o considerar adequado, diferir o momento da sua decisão relativa à execução da sentença; poderá igualmente, a requerimento da parte que solicitar a execução da sentença, exigir da outra Parte a prestação das garantias adequadas.

Artigo VII

1 — As disposições da presente Convenção não prejudicam a validade dos acordos multilaterais ou bilaterais celebrados pelos Estados Contratantes em matéria de reconhecimento e de execução de sentenças arbitrais, nem prejudicam o direito de invocar a sentença arbitral que qualquer das Partes interessadas possa ter nos termos da lei ou dos tratados do país em que for invocada.

2 — O Protocolo de Genebra de 1923 Relativo às Cláusulas de Arbitragem e a Convenção de Genebra de 1927 Relativa à Execução das Sentenças Arbitrais Estrangeiras deixarão de produzir efeitos entre os Estados Contratantes a partir do momento, e na medida, em que aqueles se encontrem obrigados pela presente Convenção.

Artigo VIII

1 — A presente Convenção pode ser assinada até 31 de Dezembro de 1958 por qualquer Estado membro das Nações Unidas, ou por qualquer outro Estado que seja, ou venha a ser posteriormente, membro de uma ou várias agências especializadas das Nações Unidas ou parte do Estatuto do Tribunal Internacional de Justiça, ou que seja convidado pela Assembleia Geral das Nações Unidas.

2 — A presente Convenção deve ser ratificada e os instrumentos de ratificação depositados junto do Secretário-Geral da Organização das Nações Unidas.

Artigo IX

1 — Todos os Estados referidos no artigo VIII podem aderir à presente Convenção.

2 — A adesão efectuar-se-á através do depósito de um instrumento de adesão junto do Secretário-Geral da Organização das Nações Unidas.

Artigo X

1 — Qualquer Estado poderá, no acto da assinatura, da ratificação ou da adesão, declarar que a presente Convenção será extensível ao conjunto, ou apenas a um ou vários, dos territórios que representa a nível internacional. Esta declaração produzirá os seus efeitos a partir do momento da entrada em vigor da presente Convenção naquele Estado.

2 — Posteriormente, qualquer extensão desta natureza far-se-á através de notificação dirigida ao Secretário-Geral da Organização das Nações Unidas e produzirá os seus efeitos a partir do 90.º dia seguinte à data do recebimento da notificação pelo Secretário-Geral da Organização das Nações Unidas, ou na data de entrada em vigor da Convenção naquele Estado, se esta for posterior.

3 — No que respeita aos territórios aos quais não se aplica a presente Convenção na data da assinatura, da ratificação ou da adesão, cada Estado interessado examinará a possibilidade de tomar as medidas que desejar para estender a Convenção a esses territórios, sob reserva, se for caso disso, do acordo dos governos desses territórios quando exigido por razões constitucionais.

Artigo XI

As disposições seguintes aplicar-se-ão aos Estados federativos ou não unitários:

a) No que respeita aos artigos da presente Convenção que relevem da competência legislativa do poder federal, as obrigações do governo federal serão as mesmas que as dos Estados Contratantes que não sejam Estados federativos;

b) No que respeita aos artigos da presente Convenção que relevem da competência legislativa de cada um dos Estados ou províncias constituintes, que não sejam, em virtude do sistema constitucional da federação, obrigados a tomar medidas legislativas, o governo federal levará, o mais cedo possível, e com parecer favorável, os referidos artigos ao conhecimento das autoridades competentes dos Estados ou províncias constituintes;

c) Um Estado federativo Parte na presente Convenção comunicará, a pedido de qualquer outro Estado contratante, transmitido por intermédio do Secretário-Geral da Organização das Nações Unidas, uma exposição da legislação e das práticas em vigor na federação e nas suas unidades constituintes, no que respeita a qualquer disposição da Convenção, indicando qual o efeito dado a essa disposição através de uma acção legislativa ou outra.

Artigo XII

1 — A presente Convenção entrará em vigor no 90.º dia seguinte à data do depósito do terceiro instrumento de ratificação ou de adesão.

2 — Para cada Estado que ratificar a Convenção ou a ela aderir após o depósito do terceiro instrumento de ratificação ou de adesão, a Convenção entrará em vigor a partir do 90.º dia seguinte à data do depósito por esse Estado do seu instrumento de ratificação ou de adesão.

Artigo XIII

1 — Qualquer Estado contratante poderá denunciar a presente Convenção através de notificação escrita dirigida ao Secretário-Geral da Organização das Nações Unidas. A denúncia produzirá efeitos um ano após a data do recebimento da notificação pelo Secretário-Geral da Organização das Nações Unidas.

2 — Qualquer Estado que tenha feito uma declaração ou uma notificação, nos termos do artigo X, poderá notificar posteriormente o Secretário-Geral da Organização das Nações Unidas de que a Convenção cessará a sua aplicação no território em questão um ano após a data do recebimento desta notificação pelo Secretário-Geral.

3 — A presente Convenção continuará a ser aplicável às sentenças arbitrais relativamente às quais tiver sido iniciado um processo de reconhecimento ou de execução antes da entrada em vigor da denúncia.

Artigo XIV

Um Estado Contratante só se poderá prevalecer das disposições da presente Convenção contra outros Estados Contratantes na medida em que ele próprio esteja obrigado a aplicá-la.

Artigo XV

O Secretário-Geral da Organização das Nações Unidas notificará a todos os Estados referidos no artigo VIII:

a) As assinaturas e ratificações referidas no artigo VIII;
b) As adesões referidas no artigo IX;
c) As declarações e notificações referidas nos artigos I, X e XI;
d) A data de entrada em vigor da presente Convenção, nos termos do artigo XII;
e) As denúncias e notificações referidas no artigo XIII.

Artigo XVI

1 — A presente Convenção, cujas versões em inglês, chinês, espanhol, francês e russo são igualmente autênticas, será depositada nos arquivos da Organização das Nações Unidas.

2 — O Secretário-Geral da Organização das Nações Unidas enviará uma cópia autenticada da presente Convenção aos Estados referidos no artigo VIII.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 185/99

de 28 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentido ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo à Alteração do Artigo 56.º da Convenção sobre Aviação Civil Internacional, de 6 de Outubro de 1989, aprovado pelo Decreto n.º 48/97, de 3 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 3 de Setembro de 1997.

Foram ouvidos os órgãos de governo próprio do território de Macau.

Assinado em 20 de Agosto de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com os referidos decreto de aprovação e texto do Proto-colo.

O Presidente da República, JORGE SAMPAIO.

(*D.R. n.º 201, I Série-A, de 28 de Agosto de 1999*)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 48/97

de 3 de Setembro

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

共和國總統府

共和國總統令 第185/99號

八月二十八日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九八九年十月六日之《關於修改國際民用航空公約第五十六條的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用；該議定書係經九月三日第48/97號命令通過，且文本已公布於一九九七年九月三日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年八月二十日簽署。

將本總統令連同上述通過議定書之命令及議定書之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月二十八日第201期《共和國公報》第一組-A）

外交部

命令 第48/97號

九月三日

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

Artigo único

É aprovado, para ratificação, o Protocolo Relativo à Alteração do Artigo 56.º da Convenção sobre Aviação Civil Internacional, aprovada pelo Decreto-Lei n.º 36 158, de 17 de Fevereiro de 1947, adoptado em 6 de Outubro de 1989, em Montreal, cujo texto original em inglês e francês e respectiva tradução em português seguem em anexo ao presente diploma.

Visto e aprovado em Conselho de Ministros de 17 de Julho de 1997. — *António Manuel de Oliveira Guterres — José Alberto Rebelo dos Reis Lamego — José Manuel da Costa Monteiro Consiglieri Pedroso.*

Ratificado em 11 de Agosto de 1997.

Publique-se.

O Presidente da República, JORGE SAMPAIO.

Referendado em 14 de Agosto de 1997.

O Primeiro-Ministro, *António Manuel de Oliveira Guterres.*

(D.R. n.º 203, I Série-A, de 3 de Setembro de 1997)

PROTOCOL RELATING TO AN AMENDMENT TO ARTICLE 56 OF THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

Signed at Montreal on 6 October 1989

The Assembly of the International Civil Aviation Organization:

Having met in its Twenty-seventh Session at Montreal on 6 October 1989;

Having noted that it is the general desire of Contracting States to enlarge the membership of the Air Navigation Commission;

Having considered it proper to increase the membership of that body from fifteen to nineteen; and

Having considered it necessary to amend, for the purpose aforesaid, the Convention on International Civil Aviation, done at Chicago on the seventh day of December 1944:

1 — Approves, in accordance with the provisions of article 94, *a*), of the Convention aforesaid, the following proposed amendment to the said Convention:

«In article 56 of the Convention the expression 'fifteen members' shall be replaced by 'nineteen members'.»

2 — Specifies, pursuant to the provisions of the said article 94, *a*), of the said Convention, one hundred and eight as the number of Contracting States upon whose ratification the aforesaid amendment shall come into force.

3 — Resolves that the Secretary General of the International Civil Aviation Organization shall draw up a Protocol, in the English, French, Russian an Spanish languages, each of which shall be of equal authenticity, embodying the amendment above-mentioned and the matters hereinafter appearing:

a) The Protocol shall be signed by the President of the Assembly and its Secretary General;

b) The Protocol shall be open to ratification by any State which has ratified or adhered to the said Convention on International Civil Aviation;

c) The instruments of ratification shall be deposited with the International Civil Aviation Organization;

d) The Protocol shall come into force in respect of the States that have ratified it on the date on which the one hundred and eighth instrument of ratification is so deposited;

e) The Secretary General shall immediately notify all Contracting States of the date of deposit of each ratification of the Protocol;

f) The Secretary shall immediately notify all States parties to the said Convention of the date on which the Protocol comes into force;

g) With respect to any Contracting State ratifying the Protocol after the date aforesaid, the Protocol shall come into force upon deposit of its instrument of ratification with the International Civil Aviation Organization.

Consequently, pursuant to the aforesaid action of the Assembly, this Protocol has been draw up by the Secretary General of the Organization.

In witness whereof, the President and the Secretary General of the aforesaid Twenty-seventh Session of the Assembly of the International Civil Aviation Organization, being authorized thereto by the Assembly, sign this Protocol.

Done at Montreal on the 6 day of October of the year one thousand nine hundred and eighty-nine, in a single document in the English, French, Russian and Spanish languages, each text being equally authentic. This Protocol shall remain deposited in the archives of the International Civil Aviation Organization, and certified copies thereof shall be transmitted by the Secretary General of the Organization to all States parties to the Convention on International Civil Aviation, done at Chicago on the seventh day of December 1944.

A. Alegría, President of the Twenty-seventh Session of the Assembly — *S. S. Sidhu,* Secretary General.

獨一條

通過一九八九年十月六日在蒙特利爾通過之《關於修改國際民用航空公約第五十六條的議定書》，以待批准；該公約係經一九四七年二月十七日第 36158 號法令通過，而該議定書之英文及法文之原文及葡文譯本附於本命令。

一九九七年七月十七日於部長會議批閱及通過——*António Manuel de Oliveira Guterres* —— *José Alberto Rebelo dos Reis Lamego* —— *José Manuel da Costa Monteiro Consiglieri Pedroso.*

一九九七年八月十一日批准。

命令公布。

共和國總統

JORGE SAMPAIO

一九九七年八月十四日副署。

總理

António Manuel de Oliveira Guterres

（一九九七年九月三日第 203 期《共和國公報》第一組-A）

PROTOCOLE PORTANT AMENDEMENT DE L'ARTICLE 56 DE LA CONVENTION RELATIVE À L'AVIATION CIVILE INTERNATIONALE

Signé à Montréal le 6 octobre 1989

L'Assemblée de l'Organisation de l'aviation civile internationale:

S'étant réunie à Montréal le 6 octobre 1989, en sa vingt-septième session;

Ayant pris acte du désir général des États contractants d'augmenter le nombre des membres de la Commission de navigation aérienne;

Ayant jugé qu'il convenait de porter de quinze à dix-neuf le nombre des membres de cet organe;

Ayant jugé nécessaire d'amender à cette fin la Convention relative à l'aviation civile internationale faite à Chicago le septième jour de décembre 1944:

1 — Approuve, conformément aux dispositions de l'alinéa *a*) de l'article 94 de la Convention précitée, le projet suivant d'amendement de ladite Convention:

«Remplacer l'expression 'quinze membres' par 'dix-neuf membres' dans l'article 56 de la Convention.»

2 — Fixe à cent huit le nombre d'États contractants dont la ratification est nécessaire à l'entrée en vigueur dudit amendement, conformément aux dispositions de l'alinéa *a*) de l'article 94 de ladite Convention.

3 — Décide que le Secrétaire général de l'Organisation de l'aviation civile internationale établira dans les langues française, anglaise, espagnole e russe, chacune faisant également foi, un Protocole concernant l'amendement précité et comprenant les dispositions ci-dessous:

a) Le Protocole sera signé par le Président et par le Secrétaire général de l'Assemblée;

b) Il sera soumis à la ratification de tout État contractant qui a ratifié la Convention relative à l'aviation civile internationale ou y a adhéré;

c) Les instruments de ratification seront déposés auprès de l'Organisation de l'aviation civile internationale;

d) Le Protocole entrera en vigueur le jour du dépôt du cent huitième instrument de ratification à l'égard des États qui l'auront ratifié;

e) Le Secrétaire général notifiera immédiatement à tous les États contractants la date du dépôt de chaque instrument de ratification du Protocole;

f) Le Secrétaire général notifiera immédiatement à tous les États parties à ladite Convention la date à laquelle ledit Protocole entrera en vigueur;

g) Le Protocole entrera en vigueur, à l'égard de tout État contractant qui l'aura ratifié après la date précitée, dès que cet État aura déposé son instrument de ratification auprés de l'Organisation de l'aviation civile internationale.

En conséquence, conformément à la décision ci-dessous de l'Assemblée, le présent Protocole a été établi par le Secrétaire général de l'Organisation.

En foi de quoi, le Président et le Secrétaire général de la vingt-septième session de l'Assemblée de l'Organisation de l'aviation civile internationale, dûment autorisés à cet effet par l'Assemblée, ont apposé leur signature au présent Protocole.

Fait à Montréal le 6 octobre 1989 de l'an mil neuf cent quatre-vingt-neuf, en un seul document dans les langues française, anglaise, espagnole e russe, chacun des textes faisant également foi. Le présent Protocole sera déposé dans les archives de l'Organisation de l'aviation civile internationale et des copies certifiées conformes seront transmises par le Sécretaire général de l'Organisation à tous les États parties à la Convention relative à l'aviation civile internationale faite à Chicago le 7 décembre 1944.

A. Alegría, Président de la 27ᵉ session de l'Assemblée — *S. S. Sidhu,* Secrétaire général.

PROTOCOLO RELATIVO A UMA EMENDA AO ARTIGO 56.º DA CONVENÇÃO SOBRE AVIAÇÃO CIVIL INTERNACIONAL

Assinado em Montreal a 6 de Outubro de 1989

A Assembleia da Organização da Aviação Civil Internacional:

Reunida em Montreal na sua 27.ª Sessão, no dia 6 de Outubro de 1989;

Tendo em conta o desejo geral dos Estados Contratantes de aumentar o número de membros da Comissão de Navegação Aérea;

Considerando conveniente elevar de 15 para 19 o número de membros deste órgão; e

Considerando que, para o efeito, é necessário emendar a Convenção sobre a Aviação Civil Internacional, assinada em Chicago a 7 de Dezembro de 1944:

1 — Aprova, de acordo com o disposto na alínea *a*) do artigo 94.º da referida Convenção, o seguinte projecto de emenda àquela Convenção:

«Substituir a expressão '15 membros' por '19 membros', no artigo 56.º da Convenção.»

2 — Fixa em 108 o número de Estados Contratantes cuja ratificação é necessária para a entrada em vigor da referida emenda, de acordo com o disposto na alínea *a*) do artigo 94.º daquela Convenção.

3 — Decide que o Secretário-Geral da Organização da Aviação Civil Internacional redigirá em inglês, francês, espanhol e russo, fazendo cada um dos idiomas igual fé, um Protocolo relativo à emenda acima mencionada e compreendendo as seguintes disposições:

a) O Protocolo será assinado pelo Presidente e pelo Secretário-Geral da Assembleia;

b) O Protocolo ficará aberto para ratificação de qualquer Estado que tenha a referida Convenção sobre Aviação Civil Internacional ou a ela tenha aderido;

c) Os instrumentos de ratificação serão depositados junto da Organização da Aviação Civil Internacional;

d) O Protocolo entrará em vigor, em relação aos Estados que o tiverem ratificado, no dia do depósito do 108.º instrumento de ratificação;

e) O Secretário-Geral notificará imediatamente todos os Estados Contratantes da data de depósito de cada instrumento de ratificação do Protocolo;

f) O Secretário-Geral notificará imediatamente todos os Estados Partes da referida Convenção da data da entrada em vigor do Protocolo;

g) O Protocolo entrará em vigor em relação a qualquer Estado Contratante que o tiver ratificado após aquela data a partir do momento em que tal Estado depositar o respectivo instrumento de ratificação junto da Organização da Aviação Civil Internacional.

Em consequência, de acordo com a referida decisão da Assembleia, o presente Protocolo foi redigido pelo Secretário-Geral da Organização.

Em fé do que o Presidente e o Secretário-Geral da 27.ª Sessão da Assembleia da Organização da Aviação Civil Internacional, para esse efeito autorizados pela Assembleia, assinam o presente Protocolo.

Feito em Montreal, a 6 de Outubro de 1989, num só exemplar redigido em inglês, francês, espanhol e russo, fazendo cada idioma igual fé. O presente Protocolo ficará depositado nos arquivos da Organização da Aviação Civil Internacional, e o Secretário-Geral da Organização enviará cópias autenticadas a todos os Estados Partes da Convenção sobre Aviação Civil Internacional, assinada em Chicago a 7 de Dezembro de 1944.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 184/99

de 28 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendido ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo a Uma Emenda ao Artigo 83.º-Bis da Convenção sobre Aviação Civil Internacional, de 6 de Outubro de 1980, aprovado pelo Decreto n.º 49/97, de 3 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 3 de Setembro de 1997.

Foram ouvidos os órgãos de governo próprio do território de Macau.

Assinado em 20 de Agosto de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com os referidos decreto de aprovação e texto do Protocolo.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 201, I Série-A, de 28 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 49/97

de 3 de Setembro

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição da República Portuguesa, o Governo decreta o seguinte:

Artigo único

É aprovado, para ratificação, o Protocolo Relativo a Uma Emenda ao Artigo 83.º-bis da Convenção sobre Aviação Civil Internacional, adoptado em 6 de Outubro de 1980 em Montréal, cujo texto original em inglês e francês e respectiva tradução em português seguem em anexo ao presente diploma.

共和國總統府

共和國總統令 第184/99號

八月二十八日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九八零年十月六日之《關於國際民用航空公約第八十三條分條修正案的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用；該議定書係經九月三日第 49/97 號命令通過，且文本已公布於一九九七年九月三日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年八月二十日簽署。

將本總統令連同上述通過議定書之命令及議定書之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月二十八日第201期《共和國公報》第一組-A）

外交部

命令 第49/97號

九月三日

政府根據《葡萄牙共和國憲法》第二百條第一款 c 項之規定，命令制定法規如下：

獨一條

通過一九八零年十月六日在蒙特利爾通過之《關於國際民用航空公約第八十三條分條修正案的議定書》，以待加入；該議定書之英文及法文之原文，以及葡文譯本附於本命令。

Visto e aprovado em Conselho de Ministros de 17 de Julho de 1997. — *António Manuel de Oliveira Guterres — José Alberto Rebelo dos Reis Lamego — José Manuel da Costa Monteiro Consiglieri Pedroso.*

Ratificado em 11 de Agosto de 1997.

Publique-se.

O Presidente da República, JORGE SAMPAIO.

Referendado em 14 de Agosto de 1997.

O Primeiro-Ministro, *António Manuel de Oliveira Guterres.*

(D.R. n.º 203, I Série-A, de 3 de Setembro de 1997)

一九九七年七月十七日於部長會議批閱及通過——*António Manuel de Oliveira Guterres —— José Alberto Rebelo dos Reis Lamego —— José Manuel da Costa Monteiro Consiglieri Pedroso*

一九九七年八月十一日批准。

命令公布。

共和國總統

JORGE SAMPAIO

一九九七年八月十四日副署。

總理

António Manuel de Oliveira Guterres

（一九九七年九月三日第203期《共和國公報》第一組-A）

PROTOCOL RELATING TO AN AMENDMENT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

The Assembly of the International Civil Aviation Organization:

Having met in its Twenty-third Session at Montreal on 6 October 1980;

Having noted Resolutions A21-22 and A22-28 on lease, charter and interchange of aircraft in international operations;

Having noted the draft amendment to the Convention on International Civil Aviation prepared by the 23rd Session of the Legal Committee;

Having noted that it is the general desire of Contracting States to make a provision for the transfer of certain functions and duties from the State of registry to the State of the operator of the aircraft in the case of lease, charter or interchange or any similar arrangements with respect to such aircraft;

Having considered it necessary to amend, for the purpose aforesaid, the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944:

1 — Approves, in accordance with the provisions of article 94, *a*), of the Convention aforesaid, the following proposed amendment to the said Convention:

Insert after article 83 the following new article 83 bis:

«Article 83 bis

Transfer of certain functions and duties

a) Notwithstanding the provisions of articles 12, 30, 31 and 32, *a*), when an aircraft registered in a contracting State is operated pursuant to an agreement for the lease, charter or interchange of the aircraft or any similar arrangement by an operator who has his principal place of business or, if he has no such place of business, his permanent residence in another contracting State, the State of registry may, by agreement with such other State, transfer to it all or part of its functions and duties as State of registry in respect of that aircraft under articles 12, 30, 31 and 32, *a*). The State of registry shall be relieved of responsibility in respect of the functions and duties transferred.

b) The transfer shall not have effect in respect of other contracting States before either the agreement between States in which it is embodied has been registered with the Council and made public pursuant to article 83 or the existence and scope of the agreement have been directly communicated to the authorities of the other contracting State or States concerned by a State party to the agreement.

c) The provisions of paragraphs *a*) and *b*) above shall also be applicable to cases covered by article 77.»

2 — Specifies, pursuant to the provisions of the said article 94, *a*), of the said Convention, ninety-eight as the number of Contracting States upon whose ratification the proposed amendment aforesaid shall come into force.

3 — Resolves that the Secretary General of the International Civil Aviation Organization draw up a Protocol, in the English, French, Russian and Spanish languages, each of which shall be of equal authenticity, embodying the proposed amendment above-mentioned and the matter hereinafter appearing:

a) The Protocol shall be signed by the President of the Assembly and its Secretary General;

b) The Protocol shall be open to ratification by any State which has ratified or adhered to the said Convention on International Civil Aviation;

c) The instruments of ratification shall be deposited with the International Civil Aviation Organization;

d) The Protocol shall come into force in respect of the States which have ratified it in the date on which the ninety-eighth instrument of ratification is so deposited;

e) The Secretary General shall immediately notify all Contracting States of the date of deposit of each ratification of the Protocol;

f) The Secretary General shall immediately notify all States parties to the said Convention of the date on which the Protocol comes into force;

g) With respect to any Contracting State ratifying the Protocol after the date aforesaid, the Protocol shall come into force upon deposit of its instrument of ratification with the International Civil Aviation Organization.

Consequently, pursuant to the aforesaid action of the Assembly, this Protocol has been drawn up by the Secretary General of the Organization.

In witness whereof, the President and the Secretary General of the aforesaid Twenty-third Session of the Assembly of the International Civil Aviation Organization, being authorized thereto by the Assembly, sign this Protocol.

Done at Montreal on the sixth day of October of the year one thousand nine hundred and eighty, in a single document in the English, French, Russian and Spanish languages, each of which shall be of equal authenticity. This Protocol shall remain deposited in the archives of the International Civil Aviation Organization, and certified copies thereof shall be transmitted by the Secretary General of the Organization to all States parties to the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944.

R. S. Nyaga, President of the 23rd Session of the Assembly — *Yves Lambert,* Secretary General.

PROTOCOLE PORTANT AMENDEMENT DE LA CONVENTION RELATIVE A L'AVIATION CIVILE INTERNATIONALE

L'Assemblée de l'Organisation de l'aviation civile internationale:

S'étant réunie à Montréal, le 6 octobre 1980, en sa vingt-troisième session;

Ayant pris acte des Résolutions A21-22 et A22-28 sur la location, l'affrètement et la banalisation d'aéronefs en exploitation internationale;

Ayant pris acte du projet d'amendement à la Convention relative à l'Aviation civile internationale établi par la 23ème session du Comité juridique;

Ayant pris acte du désir général des États contractants de permettre le transfert de certaines fonctions et obligations de l'État d'immatriculation à l'État de l'exploitant d'un aéronef en cas de location, d'affrètement ou de banalisation ou de tout arrangement similaire relatif audit aéronef;

Ayant estimé qu'il était nécessaire d'amender à cette fin la Convention relative à l'aviation civile internationale, faite à Chicago de 7 décembre 1944:

1 — Approuve, conformément aux dispositions de l'article 94, alinéa *a*), de ladite Convention, l'amendement ci-après qu'il est proposé d'apporter à ladite Convention:

Insérer après l'article 83 le nouvel article 83 bis ci-après:

«Article 83 bis

Transfert de certaines fonctions et obligations

a) Nonobstant les dispositions des articles 12, 30, 31 et 32, *a*), lorsqu'un aéronef immatriculé dans un État contractant est exploité en vertu d'un accord de location, d'affrètement ou de banalisation de l'aéronef, ou de tout autre arrangement similaire, par un exploitant qui a le siège principal de son exploitation, ou à défaut, sa résidence permanente dans un autre État contractant, l'État d'immatriculation peut, par accord avec cet autre État, transférer à celui-ci tout ou partie des fonctions et obligations que les articles 12, 30, 31 et 32, *a*), lui confèrent, à l'égard de cet aéronef, en sa qualité d'État d'immatriculation. L'État d'immatriculation sera dégagé de sa responsabilité en ce qui concerne les fonctions et obligations transférées.

b) Le transfert ne portera pas effet à l'égard des autres États contractants avant que l'accord dont il fait l'objet ait été enregistré au Conseil et rendu public conformément à l'article 83 ou que l'existence et la portée de l'accord aient été notifiées directement aux autorités de l'État ou des autres États contractants intéressés par un État partie à l'accord.

c) Les dispositions des alinéas *a*) et *b*) ci-dessus sont également applicables dans les cas envisagés à l'article 77.»

2 — Fixe, conformément aux dispositions dudit article 94, alinéa *a*), de ladite Convention, à quatre-vingt-dix-huit le nombre d'États contractants dont la ratification est nécessaire à l'entrée en vigueur dudit amendement.

3 — Décide que le Secrétaire général de l'Organisation de l'aviation civile internationale devra établir en langues française, anglaise, espagnole et russe, chacune faisant également foi, un Protocole concernant l'amendement précité et comprenant les dispositions ci-dessous:

a) Le Protocole sera signé par le Président et le Secrétaire général de l'Assemblée;

b) Le Protocole sera ouvert à la ratification de tout État qui aura ratifié la Convention relative à l'aviation civile internationale ou y aura adhéré;

c) Les instruments de ratification seront déposés auprès de l'Organisation de l'aviation civile internationale;

d) Le Protocole entrera en vigueur à l'égard des États qui l'auront ratifié le jour du dépôt du quatre-vingt-dix-huitième instrument de ratification;

e) Le Secrétaire général notifiera immédiatement à tous les États contractants la date du dépôt de chaque instrument de ratification du Protocole;

f) Le Secrétaire général notifiera immédiatement à tous les États qui sont parties à ladite Convention la date à laquelle ledit Protocole entrera en vigueur;

g) Le Protocole entrera en vigueur, à l'égard de tout État contractant qui l'aura ratifié après la date précitée, dès que cet État aura déposé son instrument de ratification auprès de l'Organisation de l'aviation civile internationale.

En conséquence, conformément à la décision ci-dessus de l'Assemblée, le présent Protocole a été établi par le Secrétaire générale de l'Organisation.

En foi de quoi, le Président et le Secrétaire général de la vingt-troisième session de l'Assemblée de l'Organisation de l'aviation civile internationale, dûment autorisés à cet effet par l'Assemblée, ont apposé leur signature au présent Protocole.

Fait à Montréal le six octobre de l'an mil neuf cent quatre-vingt, en un seul document dans les langues française, anglaise, espagnole et russe, chacun des textes faisant également foi. Le présent Protocole sera déposé dans les archives de l'Organisation de l'aviation civile internationale et des copies certifiées conformes seront transmises par le Secrétaire général de l'Organisation à tous les États parties à la Convention relative à l'aviation civile internationale, faite à Chicago le 7 décembre 1944.

R. S. Nyaga, Président de la 23ème session de l'Assemblée — *Yves Lambert,* Secrétaire général.

PROTOCOLO RELATIVO A UMA EMENDA À CONVENÇÃO SOBRE AVIAÇÃO CIVIL INTERNACIONAL

A Assembleia da Organização da Aviação Civil Internacional:

Reunida na sua 23.ª Sessão, em Montréal, em 6 de Outubro de 1980;

Tendo em conta as Resoluções A21-22 e A22-28, sobre o aluguer, fretamento e intercâmbio de aeronaves em operações internacionais;

Tendo em conta o projecto de emenda à Convenção sobre Aviação Civil Internacional elaborado pela 23.ª Sessão do Comité Jurídico;

Tendo em conta o desejo geral dos Estados Contratantes de permitirem a transferência de certas funções e obrigações do Estado de matrícula para o Estado do operador da aeronave em caso de aluguer, fretamento ou intercâmbio, ou quaisquer arranjos similares relativos àquela aeronave;

Considerando necessário emendar, para os efeitos acima mencionados, a Convenção sobre Aviação Civil Internacional, assinada em Chicago a 7 de Dezembro de 1944:

1 — Aprova, em conformidade com as disposições da alínea *a*) do artigo 94.º da referida Convenção, o seguinte projecto de emenda àquela Convenção:

Inserir depois do artigo 83.º o seguinte novo artigo 83.º-bis:

«Artigo 83.º-bis

Transferência de certas funções e obrigações

a) Não obstante o disposto nos artigos 12.º, 30.º, 31.º e 32.º, alínea *a*), quando uma aeronave matriculada num Estado Contratante é explorada em conformidade com um contrato de aluguer, fretamento ou intercâmbio de aeronaves, ou qualquer arranjo similar, por um operador que tenha a sede das suas operações, ou, na falta desta, a sua residência permanente noutro Estado Contratante, o Estado de matrícula, mediante acordo com esse outro Estado, poderá transferir para o mesmo todas ou parte das funções e obrigações que os artigos 12.º, 30.º, 31.º e 32.º, alínea *a*), lhe conferem, relativamente àquela aeronave, na sua qualidade de Estado de matrícula. O Estado de matrícula será eximido da sua responsabilidade em relação às funções e obrigações transferidas.

b) A transferência não produzirá efeitos relativamente aos outros Estados Contratantes enquanto o acordo de que é objecto não tiver sido registado no Conselho e tornado público em conformidade com o artigo 83.º, ou enquanto um Estado Parte no referido acordo não tiver comunicado a existência e o alcance do acordo directamente aos outros Estados Contratantes interessados.

c) As disposições das alíneas *a*) e *b*) anteriores são igualmente aplicáveis nos casos previstos no artigo 77.º»

2 — Fixa, em conformidade com as disposições da alínea *a*) do artigo 94.º da referida Convenção, em 98 o número de Estados Contratantes cuja ratificação é necessária para que a emenda proposta entre em vigor.

3 — Decide que o Secretário-Geral da Organização da Aviação Civil Internacional redija em inglês, francês, espanhol e russo, fazendo cada um dos idiomas igual fé, um Protocolo relativo à emenda acima mencionada, e compreendendo as seguintes disposições:

a) O Protocolo será assinado pelo Presidente e pelo Secretário Geral da Assembleia;

b) O Protocolo ficará aberto para ratificação de qualquer Estado que tenha ratificado a Convenção sobre Aviação Civil Internacional ou a ela tenha aderido;

c) Os instrumentos de ratificação serão depositados junto da Organização da Aviação Civil Internacional;

d) O Protocolo entrará em vigor, em relação aos Estados que o tiverem ratificado, no dia do depósito do 98.º instrumento de ratificação;

e) O Secretário-Geral notificará imediatamente todos os Estados Contratantes da data de depósito de cada instrumento de ratificação do Protocolo;

f) O Secretário-Geral notificará imediatamente todos os Estados Partes da referida Convenção da data de entrada em vigor do Protocolo;

g) O Protocolo entrará em vigor, em relação a qualquer Estado Contratante que o ratificar depois da data acima mencionada, quando esse Estado depositar o seu instrumento de ratificação junto da Organização da Aviação Civil Internacional.

Em consequência, de acordo com a referida decisão da Assembleia, o presente Protocolo foi redigido pelo Secretário-Geral da Organização.

Em fé do que o Presidente e o Secretário-Geral da referida 23.ª Sessão da Assembleia da Organização da Aviação Civil Internacional, para o efeito autorizados pela Assembleia, assinam o presente Protocolo.

Feito em Montréal a 6 de Outubro de 1980, num só exemplar, redigido em inglês, francês, espanhol e russo, fazendo cada idioma igual fé. O presente Protocolo ficará depositado nos arquivos da Organização da Aviação Civil Internacional, e o Secretário-Geral desta Organização enviará cópias autenticadas a todos os Estados Partes da Convenção sobre Aviação Civil Internacional, assinada em Chicago em 7 de Dezembro de 1944.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 183/99

de 28 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a Convenção sobre as Substâncias Psicotrópicas, de 21 de Fevereiro de 1971,

共和國總統府

共和國總統令 第183/99號

八月二十八日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九七一年二月二十一日之《精神藥物公約》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；

aprovada pelo Decreto n.º 10/79, de 30 de Janeiro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 30 de Janeiro de 1979.

Foram ouvidos os órgãos de governo próprio do território de Macau.

Assinado em 20 de Agosto de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com os referidos decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 201, I Série-A, de 28 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Direcção-Geral dos Negócios Políticos

Decreto n.º 10/79

de 30 de Janeiro

Usando da faculdade conferida pelo artigo 200.º, n.º 1, alínea *c*), da Constituição da República Portuguesa, o Governo decreta o seguinte:

Artigo único. É aprovada, para adesão, a Convenção sobre as Substâncias Psicotrópicas, de 1971, aberta para assinatura em Viena em 21 de Fevereiro de 1971, cujo texto, em francês, e respectiva tradução, em português, vão anexos ao presente decreto.

Visto e aprovado em Conselho de Ministros. — *Carlos Alberto da Mota Pinto — João Carlos Lopes Cardoso de Freitas Cruz.*

Promulgado em 2 de Janeiro de 1979.

Publique-se.

O Presidente da República, ANTÓNIO RAMALHO EANES.

(D.R. n.º 25, I Série, de 30 de Janeiro de 1979)

CONVENTION SUR LES SUBSTANCES PSYCHOTROPES

Préambule

Les Parties,

Soucieuses de la santé physique et morale de l'humanité,

Préoccupées par le problème de santé publique et le problème social qui résultant de l'abus de certaines substances psychotropes,

Déterminées à prévenir et à combattre l'abus de ces substances et le trafic illicite auquel il donne lieu,

Considérant qu'il est nécessaire de prendre des mesures rigoureuses pour limiter l'usage de ces substances à des fins légitimes,

Reconnaissant que l'utilisation des substances psychotropes à des fins médicales et scientifiques est indispensable et que la possibilité de se procurer des substances à ces fins ne devrait faire l'objet d'aucune restriction injustifiée,

Croyant que pour être efficaces les mesures prises contre l'abus de ces substances doivent être coordonnées et universelles,

Reconnaissant la compétence de l'Organisation des Nations Unies en matière de contrôle des substances psychotropes et désirant que les organes internationaux intéressés exercent leur activité dans le cadre de cette Organisation,

Convaincues qu'une convention internationale est nécessaire pour réaliser ces fins,

conviennent de ce qui suit:

ARTICLE PREMIER

Glossaire

Sauf indication expresse en sens contraire, ou sauf si le contexte exige qu'il en soit autrement, les

該公約係經一月三十日第 10/79 號命令通過，且文本已公布於一九七九年一月三十日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年八月二十日簽署。

將本總統令連同上述通過公約之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月二十八日第 201 期《共和國公報》第一組-A）

外交部

政治事務統籌司

命令 第 10/79 號

一月三十日

政府行使《葡萄牙共和國憲法》第二百條第一款 c 項所賦予之權能，命令制定法規如下：

獨一條

通過一九七一年二月二十一日於維也納開放簽署之《1971 年精神藥物公約》，以待加入；該公約之法文本及葡文譯本附於本命令。

於部長會議批閱及通過——*Carlos Alberto da Mota Pinto*——*João Carlos Lopes Cardoso de Freitas Cruz*

一九七九年一月二日頒布。

命令公布。

共和國總統

ANTÓNIO RAMALHO EANES

（一九七九年一月三十日第 25 期《共和國公報》第一組）

expressions suivantes ont dans la présente Convention les significations indiquées ci-dessous:

a) L'expression «Conseil» désigne le Conseil économique et social des Nations Unies;

b) L'expression «Commission» désigne la Commission des stupéfiants du Conseil;

c) L'expression «Organe» désigne l'Organe internationale de contrôle des stupéfiants institué en vertu de la Convention unique sur les stupéfiants de 1961;

d) L'expression «Secrétaire général» désigne le Secrétaire général de l'Organisation des Nations Unies;

e) L'expression «substance psychotrope» désigne toute substance, qu'elle soit d'origine naturelle ou synthétique, ou tout produit naturel du tableau I, II, III ou IV;

f) L'expression «préparation» désigne:

i) Une solution ou un mélange, quel que soit son état physique, contenant une ou plusieurs substances psychotropes, ou

ii) Une ou plusieurs substances psychotropes divisées en unités de prise;

g) Les expressions «tableau I», «tableau II», tableau III» et «tableau IV» désignent les listes de substances psychotropes portant les numéros correspondants, annexées à la présente Convention, qui pourront être modiffées, conformément à l'article 2;

h) Les expressions «exportation» et «importation» désignent, chacune dans son acception particulière, le transfert matériel d'une substance psychotrope d'un État dans un autre État;

i) L'expression «fabrication» désigne toutes les opérations permettant d'obtenir des substances psychotropes, et comprend la purification et la transformation de substances psychotropes en d'autres substances psychotropes. Cette expression comprend aussi la fabrication de préparations autres que celles qui sont faites, sur ordonnance, dans une pharmacie;

j) L'expression «trafic illicite» désigne la fabrication ou le trafic de substances psychotropes, effectués contrairement aux dispositions de la présente Convention;

k) L'expression «région» désigne toute partie d'un État qui, en vertu de l'article 28, est traitée comme une entité distincte aux fins de la présente Convention;

l) L'expression «locaux» désigne les bâtiments, les parties de bâtiments ainsi que le terrain affecté auxdits bâtiments ou aux parties desdits bâtiments.

ARTICLE 2

Champ d'application du contrôle des substances

1 — Si une Partie ou l'Organisation mondiale de la santé est en possession de renseignements se rapportant à une substance non encore soumise au contrôle international qui, à son avis, peuvent rendre nécessaire son adjonction à l'un des tableaux de la présente Convention, elle adressera au Secrétaire général une notification, accompagnée de tous les renseignements pertinents à l'appui. Cette procédure sera de même appliquée lorsqu'une Partie ou l'Organisation mondiale de la santé sera en possession de renseignements qui justifient le transfert d'une substance d'un tableau à un autre, ou la suppression de son inscription à l'un des tableaux.

2 — Le Secrétaire général communiquera cette notification, ainsi que les renseignements qu'il jugera pertinents, aux Parties, à la Commission et, si la notification a été faite par une Partie, à l'Organisation mondiale de la santé.

3 — S'il résulte des reseignements accompagnant cette notification que ladite substance est susceptible d'être inscrite au tableau I ou au tableau II en vertu du paragraphe 4, les Parties examineront, à la lumière de tous les renseignements dont elles disposeront, la possibilité d'appliquer à titre provisoire à cette substance toutes les mesures de contrôle aplicables aux substances du tableau I ou du tableau II, selon le cas.

4 — Si l'Organisation mondiale de la santé constate:

a) Que ladite substance peut provoquer:

i) 1) Un état de dépendance, et

2) Une stimulation ou une dépression du système nerveux central donnant lieu à des hallucinations ou à des troubles de la fonction motrice ou du jugement ou du comportement ou de la perception ou de l'humeur, ou

ii) Des abus et des effets nocifs comparables à ceux d'une substance du tableau I, II, III ou IV, et

b) Qu'il existe des raisons suffisantes de croire que la substance donne ou risque de donner lieu à des abus tels qu'elle constitue un problème de santé publique et un problème social justifiant qu'elle soit placée sous contrôle international,

elle comuniquera à la Commission une évaluation de cette substance, où elle indiquera notamment la mesure dans laquelle la substance donne ou risque de donner lieu à des abus, le degré de gravité du problème de santé publique et du problème social et le degré d'utilité de la substance en thérapeutique, ainsi que des recommandations sur les mesures éventuelles de contrôle auxquelles il serait opportun de l'assujettir à la lumière de cette évaluation.

5 — Tenant compte de la communication de l'Organisation mondiale de la santé, dont les évaluations seront déterminantes en matière médicale et scientifique, et prenant en considération les facteurs d'ordre économique, social, juridique, administratif et tous autres facteurs qu'elle pourra juger pertinents, la Commission pourra ajouter ladite substance au tableau I, II III ou IV. Elle pourra demander des renseignements complémentaires à l'Organisation mondiale de la santé ou à d'autres sources appropriées.

6 — Si une notification faite en vertu du paragraphe 1 a trait à une substance déjà inscrite à l'un des tableaux, l'Organisation mondiale de la santé transmettra à la Commission ses nouvelles constatations ainsi que toute nouvelle évaluation de cette substance qu'elle pourra faire conformément aux dispositions du paragraphe 4 et toutes nouvelles recommandations portant sur des mesures de contrôle

qui pourront lui paraître appropriées à la lumière de ladite évaluation. La Commission, tenant compte de la communication reçue de l'Organisation mondiale de la santé conformément au paragraphe 5, ainsi que des facteurs énumérés dans ledit paragraphe, pourra décider de transférer cette substance d'un tableau à un autre, ou de supprimer son inscription aux tableaux.

7 — Toute décision de la Commission prise en vertu du présent article sera communiquée par le Secrétaire général à tous les États Membres de l'Organisation des Nations Unies, aux États non membres Parties à la présente Convention, à l'Organisation mondiale de la santé et à l'Organe. Cette décision prendra pleinement effet pour chaque Partie cent-quatre-vingts jours après la date de la communication, sauf pour une Partie qui, pendant cette période, et au sujet d'une décision ayant pour effet d'ajouter une substance à un tableau, aura informé par écrit le Secrétaire général qu'en raison de circonstances exceptionnelles elle n'est pas en mesure de soumettre cette substance à toutes les dispositions de la Convention applicables aux substances de ce tableau. Une telle notification exposera les motifs de cette décision exceptionnelle. Nonobstant cette notification, chaque Partie devra appliquer au minimum les mesures de contrôle énumérées ci-après.

a) La Partie qui a notifié au Secrétaire général une telle décision au sujet d'une substance jusque-là non soumise au contrôle et ajoutée au tableau I, tiendra compte, autant que possible, des mesures de contrôle spéciales énumérées à l'article 7 et, en ce qui concerne cette substance, devra:

i) Exiger des licences pour sa fabrication, son commerce et sa distribution, conformément aux dispositions prévues par l'article 8 pour les substances du tableau II;

ii) Exiger qu'elle ne soit fournie ou dispensée que sur ordennance médicale, conformément aux dispositions prévues par l'article 9 pour les substances du tableau II;

iii) Se conformer aux obligations relatives à l'exportation et à l'importation énoncées à l'article 12, sauf à l'égard d'une notification autre Partie ayant adressé au Secrétaire général une notification au sujet de la substance en question;

iv) Se conformer aux obligations énoncées pour les substances du tableau II à l'article 13, portant interdiction ou restrictions à l'exportation et à l'importation;

v) Fournir à l'Organe des rapports statistiques conformément aux dispositions de l'alinéa *a*) du paragraphe 4 de l'article 16; et

vi) Prendre des mesures conformes aux dispositions de l'article 22 en vue de réprimer tout acte contraire aux lois ou règlements adoptés en exécution des obligations ci-dessus.

b) La Partie qui a notifié au Secrétaire général une telle décision au sujet d'une substance jusque-là non soumise au contrôle et ajoutée au tableau II devra, en ce qui concerne cette substance:

i) Exiger des licences pour sa fabrication, son commerce et sa distribution, conformément aux dispositions de l'article 8;

ii) Exiger qu'elle ne soit fournie ou dispensée que sur ordonnance médicale, conformément aux dispositions de l'article 9;

iii) Se conformer aux obligations relatives à l'exportation et à l'importation énoncées à l'article 12, sauf à l'égard d'une autre Partie ayant adressé au Secrétaire général une notification au sujet de la substance en question;

iv) Se conformer aux obligations énoncées à l'article 13, portant interdiction ou restrictions à l'exportation et à l'importation;

v) Fournir à l'Organe des rapports statistiques conformément aux dispositions des alinéas *a*), *c*) et *d*) du paragraphe 4 de l'article 16; et

vi) Prendre des mesures conformes aux dispositions de l'article 22 en vue de réprimer tout acte contraire aux lois ou règlements adoptés en exécution des obligations ci-dessus.

c) La Partie qui a notifié au Secrétaire général une telle décision au sujet d'une substance jusque-là non soumise au contrôle et ajoutée au tableau III devra, en ce qui concerne cette substance:

i) Exiger des licences pour sa fabrication, son commerce et sa distribution, conformément aux dispositions de l'article 8;

ii) Exiger qu'elle ne soit fournie ou dispensée que sur ordennance médicale, conformément aux dispositions de l'article 9;

iii) Se conformer aux obligations relatives à l'exportation énoncées à l'article 12, sauf à l'égard d'une autre Partie ayant adressé au Secrétaire général une notification au sujet de la substance en question;

iv) Se conformer aux obligations énoncées à l'article 13, portant interdiction ou restrictions à l'exportation et à l'importation; et

v) Prendre des mesures conformes aux dispositions de l'article 22 en vue de réprimer tout acte contraire aux lois ou règlements adoptés en exécution des obligations ci-dessus.

d) La Partie qui a notifié au Secrétaire général une telle décision au sujet d'une substance jusque-là non soumise au contrôle et ajoutée au tableau IV devra, en ce qui concerne cette substance:

i) Exiger des licences pour sa fabrication, son commerce et sa distribution, conformément aux dispositions de l'article 8;

ii) Se conformer aux obligations énoncées à l'article 13, portant interdiction ou restrictions à l'exportation et à l'importation; et

iii) Prendre des mesures conformes aux dispositions de l'article 22 en vue de réprimer tout acte contraire aux lois ou règlements adoptés en exécution des obligations ci-dessus.

e) La Partie qui a notifié au Secrétaire général une telle décision au sujet d'une substance transférée à un tableau auquel s'appliquent des mesures de contrôle et des obligations plus strictes appliquera au minimum l'ensemble des dispositions de la présente Convention applicables au tableau d'où elle a été transférée.

8 — *a*) Les décisions de la Commission prises en vertu du présent article seront sujettes à revision par le Conseil si une Partie en formule la demande dans les cent-quatre-vingts jours suivant la réception de la notification de la décision. La demande de revision devra être adressée au Secrétaire général en même temps que tous les renseignements pertinents qui l'auront motivée.

b) Le Secrétaire général communiquera copie de la demande de revision et des renseignements perti-

nents à la Commission à l'Organisation mondiale de la santé et à toutes les Parties, en les invitant à lui communiquer leurs observations dans un délai de quatre-vingt-dix jours. Toutes les observations ainsi reçues seront soumises à l'examen du Conseil.

c) Le Conseil peut confirmer modifier ou annuler la décision de la Commission. Sa décision sera notifiée à tous les États Membres de l'Organisation des Nations Unies, aux États non membres Parties à la présente Convention, à la Commission, à l'Organisation mondiale de la santé et à l'Organe.

d) Au cours de la procédure de revision, la décision originale de la Commission restera en vigueur, sous réserve des dispositions du paragraphe 7.

9 — Les Parties feront tout ce qui est en leur pouvoir afin de soumettre à des mesures de surveillance autant que faire se pourra les substances qui ne sont pas visées par la présente Convention, mais qui peuvent être utilisées pour la fabrication illicite de substances psychotropes.

ARTICLE 3

Dispositions particulières relatives au contrôle des préparations

1 — Sous réserve de ce qui est stipulé aux paragraphes suivants du présent article, une préparation est soumise aux mêmes mesures de contrôle que la substance psychotrope qu'elle contient, et, si elle contient plus d'une telle substance, aux mesures applicables à celle de ces substances qui est le plus strictement contrôlée.

2 — Si une préparation qui contient une substance psychotrope autre qu'une substance du tableau I est composée de telle manière qu'elle ne présente qu'un risque d'abus négligeable ou nul, et que la substance ne peut pas être récupérée en quantité pouvant donner lieu à des abus, par des moyens facilement applicables, et qu'en conséquence cette préparation ne crée, ni un problème pour la santé publique, ni un problème social, ladite préparation pourra être exemptée de certaines des mesures de contrôle énoncées dans la présente Convention, conformément au paragraphe 3.

3 — Si une Partie constate qu'une préparation relève des dispositions du paragraphe précédent, elle peut décider de l'exempter, dans son pays ou dans l'une de ses régions, d'une ou de toutes les mesures de contrôle prévues dans la présente Convention; toutefois ladite préparation demeurera soumise aux obligations énoncées dans les articles suivants:

a) Article 8 (licences), en ce qu'il s'applique à la fabrication;

b) Article 11 (enregistrement), en ce qu'il s'applique aux préparations exemptées;

c) Article 13 (interdiction et restrictions à l'exportation et à l'importation);

d) Article 15 (inspection), en ce qu'il s'applique à la fabrication;

e) Article 16 (renseignements à fournir par les Parties), en ce qu'il s'applique aux préparations exemptées; et

f) Article 22 (dispositions pénales), dans la mesure nécessaire à la répression d'actes contraires aux lois ou règlements adoptés conformément aux obligations ci-dessus.

Ladite Partie notifiera au Secrétaire général toutes décisions de ce genre, ainsi que le nom et la composition de la préparation exemptée, et les mesures de contrôle dont celle-ci est exemptée. Le Secrétaire général transmettra la notification aux autres Parties, à l'Organisation mondiale de la santé et à l'Organe.

4 — Si une Partie ou l'Organisation mondiale de la santé a des informations sur une préparation exemptée en vertu du paragraphe 3, qui, à son avis, justifient la suppression complète ou partielle de l'exemption, elle les notifiera au Secrétaire général et lui fournira les informations à l'appui de cette notification. Le Secrétaire général transmettra cette notification, accompagnée de toute information qu'il jugera pertinente, aux Parties, à la Commission et, lorsque la notification sera faite par une Partie, à l'Organisation mondiale de la santé. L'Organisation mondiale de la santé communiquera à la Commission une évaluation de la préparation prenant en considération les facteurs énumérés au paragraphe 2, ainsi qu'une recommandation relative aux mesures de contrôle dont la préparation devrait éventuellement cesser d'être exemptée. La Commission, tenant compte de la communication de l'Organisation mondiale de la santé, dont l'évaluation sera déterminante en matière médicale et scientifique, et prenant en considération les facteurs d'ordre économique, social, juridique, administratif et autres, qu'elle pourra juger pertinents, pourra décider que la préparation cessera d'être exemptée d'une ou de toutes les mesures de contrôle. Le Secrétaire général communiquera toute décision de la Commission prise en vertu du présent paragraphe à tous les États Membres de l'Organisation des Nations Unies, aux États non membres Parties à la présente Convention, à l'Organisation mondiale de la santé et à l'Organe. Toutes les Parties prendront des dispositions en vue de supprimer l'exemption de la ou des mesures de contrôle en question dans un délai de cent-quatre-vingts jours à compter de la date de la communication du Secrétaire général.

ARTICLE 4

Autres dispositions particulières relatives au champ d'application du contrôle

En ce qui concerne les substances psychotropes autres que celles du tableau I, les Parties pourront autoriser:

a) Le transport par les voyageurs internationaux de petites quantités de préparations pour leur usage personnel; chaque Partie pourra cependant s'assurer que ces préparations ont été légalement obtenues;

b) L'emploi de ces substances dans l'industrie pour la fabrication de substances ou produits non psychotropes, sous réserve que leur soient appliquées les mesures de contrôle requises par la présente Convention jusqu'à ce que l'état des substances psychotropes soit tel qu'elles ne puissent pas, dans la pratique, donner lieu à des abus ou être récupérées; et

c) L'utilisation de ces substances, sous réserve que leur soient appliquées les mesures de contrôle requises par la présente Convention, pour la capture d'animaux par des personnes expressément autorisées par les autorités compétentes à utiliser lesdites substances à cet effet.

ARTICLE 5

Limitation de l'utilisation aux fins médicales et scientifiques

1 — Chaque Partie limitera l'utilisation des substances du tableau I ainsi qu'il est prévu à l'article 7.

2 — Chaque Partie devra, sous réserve des dispositions de l'article 4, limiter, par les mesures qu'elle jugera appropriées, la fabrication, l'exportation, l'importation, la distribution, les stocks, le commerce, l'emploi et la détention de substances des tableaux II, III et IV aux fins médicales et scientifiques.

3 — Il est souhaitable que les Parties n'autorisent pas la détention de substances des tableaux II, III et IV, sauf dans les conditions prévues par la loi.

ARTICLE 6

Administration spéciale

Il est souhaitable qu'à effet d'appliquer les dispositions de la présente Convention chaque Partie institue et entretienne une administration spéciale. Il peut y avoir avantage à ce que cette administration soit la même que l'administration spéciale qui a été instituée en vertu des dispositions des conventions soumettant les stupéfiants à un contrôle, ou qu'elle travaille en étroit collaboration avec cette administration spéciale.

ARTICLE 7

Dispositions spéciales visant les substances du tableau I

En ce qui concerne les substances du tableau I, les Parties devront:

a) Interdire toute utilisation de ces substances, sauf à des fins scientifiques ou à des fins médicales très limitées, par des personnes dûment autorisées qui travaillent dans des établissements médicaux ou scientifiques relevant directement de leurs gouvernements ou expressément autorisés par eux;

b) Exiger que la fabrication, le commerce, la distribution et la détention de ces substances soient subordonnés à la possession d'une licence spéciale ou d'une autorisation préalable;

c) Prévoir une surveillance étroit des activités et des actes mentionnés aux alinéas *a*) et *b*);

d) Ne permettre de délivrer à une personne dûment autorisée que la quantité de ces substances nécessaire aux fins pour lesquelles l'autorisation a été accordée;

e) Exiger que les personnes exerçant des fonctions médicales et scientifiques enregistrent l'acquisition de ces substances et les détails de leur utilisation, lesdits enregistrements devant être conservés pendant au moins deux ans après la dernière utilisation qui y aura été consignée; et

f) Interdire l'exportation et l'importation de ces substances sauf lorsque l'exportateur et l'importateur seront l'un et l'autre l'autorité ou l'administration compétente du pays ou de la région exportateurs et importateurs, respectivement, ou d'autres personnes ou entreprises que les autorités compétentes de leurs pays ou régions auront expressément autorisées à cet effet. Les exigences prévues au paragraphe 1 de l'article 12 en ce qui concerne les autorisations d'exportation et d'importation pour les substances du tableau II s'appliqueront également aux substances du tableau I.

ARTICLE 8

Licences

1 — Les Parties exigeront une licence ou autre mesure de contrôle similaire pour la fabrication, le commerce (y compris le commerce d'exportation et d'importation) et la distribution des substances des tableaux II, III et IV.

2 — Les Parties:

a) Exerceront une surveillance sur toutes les personnes et entreprises dûment autorisées se livrant à la fabrication, au comerce (y compris le commerce d'exportation et d'importation) ou à la distribution des substances visées au paragraphe 1;

b) Soumettront à un régime de licence ou autre mesure de contrôle similaire les établissements et les locaux dans lesquels cette fabrication, ce commerce ou cette distribution peuvent se faire; et

c) Feront en sorte que des mesures de sécurité soient prises pour ces établissements et ces locaux, de manière à prévenir les vols ou autres détournements de stocks.

3 — Les dispositions des paragraphes 1 et 2 du présent article concernant le régime de licence ou autres mesures de contrôle similaires ne s'appliqueront pas nécessairement aux personnes dûment autorisées à exercer des fonctions thérapeutiques ou scientifiques et agissant dans l'exercice de ces fonctions.

4 — Les Parties exigeront que toutes les personnes à qui des licences sont délivrées en application de la présent Convention ou qui possèdent des autorisations équivalentes conformément aux dispositions prévues au paragraphe 1 du présent article ou à l'alinéa *b*) de article 7 soient dûment qualifiées pour appliquer effectivement et fidèlement les dispositions des lois et réglements adoptés en exécution de la présent Convention.

ARTICLE 9

Ordonnances médicales

1 — Les Parties exigeront que les substances des tableaux II, III et IV ne soient fournies ou dispensées pour être utilisées par des particuliers que sur ordonnance médicale, sauf dans les cas où des particuliers peuvent légalment obtenir, utiliser, dispenser ou administrer ces substances dans l'exercice dûment autorisé de fonctions thérapeutiques ou scientifiques.

2 — Les Parties prendront les mesures nécessaires pour que les ordonnances prescrivant des substances des tableaux II, III et IV soient délivrées conformément à la pratique médicale et soumises, en ce qui concerne notamment le nombre des renouvellements possibles et la durée de leur validité, à une réglementation qui assure la protection de la santé et de l'intérêt publics.

3 — Nonobstant les dispositions du paragraphe 1, une Partie peut si, à son avis, la situation locale l'exige et dans les conditions qu'elle pourra prescrire, y compris en matière d'enregistrement, autoriser les pharmaciens sous licence ou tous autres distributeurs de détail sous licence désignés par les autorités chargées de la santé publique dans son pays ou une partie de celui-ci, à fournir, à leur discrétion et sans ordonnance, pour être utilisées par des particuliers dans des cas exceptionnels et à des fins médicales, de petites quantités de substances des tableaux III et IV, dans les limites que les Parties définiront.

ARTICLE 10

Mises en garde à porter sur le conditionnement et annonces publicitaires

1 — Chaque Partie exigera, compte tenu des réglementations ou recommandations pertinentes de l'Organisation mondiale de la santé, que soient indiqués sur les étiquettes, lorsqu'il sera possible de le faire et de toute façon sur la notice accompagnant le conditionnement pour la distribution au détail des substances psychotropes, le mode d'emploi ainsi que les précautions à prendre et les mises en garde qui sont nécessaires, à son avis, pour la sécurité de l'usager.

2 — Chaque Partie, tenant dûment compte des dispositions de sa constitution, interdira les annonces publicitaires ayant trait aux substances psychotropes et destinées au grand public.

ARTICLE 11

Enregistrement

1 — Les Parties exigeront que, pour les substances du tableau I, les fabricants et toutes autres personnes autorisées en vertu de l'article 7 à faire le commerce de ces substances et à les distribuer procèdent à l'enregistrement, dans les conditions déterminées par chaque Partie, de manière à faire apparaître, de façon précise, les quantités fabriquées ou détenues en stock ainsi que pour chaque acquisition et pour chaque cession, la quantité, la date et les noms du fournisseur et de l'acquéreur.

2 — Les Parties exigeront que, pour les substances des tableaux II et III, les fabricants, les distributeurs de gros, les exportateurs et les importateurs procèdent à l'enregistrement dans les conditions déterminées par chaque Partie, de manière à faire apparaître de façon précise, les quantités fabriquées ainsi que, pour chaque acquisition et pour chaque cession, la quantité, la date et les noms du fournisseur et de l'acquéreur.

3 — Les Parties exigeront que, pour les substances du tableau II, les distributeurs de détail, les établissements hospitaliers, les centres de traitement et les institutions scientifiques procèdent à l'enregistrement dans les conditions déterminées pour chaque Partie, de manière à faire apparaître, de façon précise, pour chaque acquisition et pour chaque cession, la quantité, la date et les noms du fournisseur et de l'acquéreur.

4 — Les Parties veilleront, par des méthodes appropriées et en tenant compte des pratiques professionnelles et commerciales qui leur sont propres, à ce que les informations relatives à l'acquisition et à la cession de substances du tableau III par des distributeurs de détail, des établissements hospitaliers, des centres de traitement et des institutions scientifiques puissent être facilement consultées.

5 — Les Parties exigeront que, pour les substances du tableau IV, les fabricants, les exportateurs et les importateurs procèdent à l'enregistrement, dans les conditions déterminées par chaque Partie, de manière à faire apparaître les quantités fabriquées, exportées et importées.

6 — Les Parties exigeront des fabricants de préparations exemptées conformément au paragraphe 3 de l'article 3 qu'ils enregistrent la quantité de chaque substance psychotrope utilisée dans la fabrication d'une préparation exemptée, la nature et la quantité totale de la préparation exemptée fabriquée à partir de cette substance, ainsi que les mentions relatives à la première cession de ladite préparation.

7 — Les Parties veilleront à ce que les enregistrements et les informations visées au présent article et qui sont nécessaires à l'établissement des rapports prévus à l'article 16, soient conservés pendant deux ans au moins.

ARTICLE 12

Dispositions relatives au commerce international

1 — *a*) Toute Partie autorisant l'exportation ou l'importation de substances du tableau I ou II doit exiger qu'une autorisation d'importation ou d'importation ou d'exportation distincte, rédigée sur un formulaire d'un modèle établi par la Commission, soit obtenue pour chaque exportation ou importation, qu'il s'agisse d'une ou de plusieurs substances.

b) Cette autorisation doit comporter la dénomination commune internationale de la substance ou, en l'absence d'une telle dénomination, la désignation de la substance dans le tableau, la quantité à exporter ou à importer, la forme pharmaceutique, le nom et l'adresse de l'exportateur et de l'importateur, et la période au cours de laquelle l'exportation ou l'importation doit avoir lieu. Si la substance est exportée ou importée sous forme de préparation, le nom de la préparation, s'il en existe un, sera aussi indiqué. L'autorisation d'exportation doit aussi indiquer le numéro et la date du certificat d'importation, et spécifier l'autorité qui l'a délivré.

c) Avant de délivrer une autorisation d'exportation les Parties exigeront une autorisation d'importation délivrée par les autorités compétentes du pays ou de la région importateurs et attestant que l'importation de la substance ou des substances dont il est question est approuvée, et cette autorisation sera produite par la personne ou l'établissement demandant l'autorisation d'exportation.

d) Une copie de l'autorisation d'exportation sera jointe à chaque envoi, et le gouvernement qui délivre l'autorisation d'exportation en adressera une copie au gouvernement du pays ou de la région importateurs.

e) Lorsque l'importation a été effectuée, le gouvernement du pays ou de la région importateurs renverra au governement du pays ou de la région exportateurs l'autorisation d'exportation avec une attestation certificant la quantité effectivement importée.

2 — *a*) Les Parties exigeront que, pour chaque exportation de substances du tableau III, les exportateurs établissent en trois exemplaires une déclaration, rédigée sur un formulaire d'un modèle établi par la Commission, contenant les renseignements suivants:

i) Le nom et l'adresse de l'exportateur et de l'importateur;

ii) La dénomination commune internationale ou, en l'absence d'une telle dénomination, la désignation de la substance dans le tableau;

iii) La quantité de la substance et la forme pharmaceutique sous laquelle la substance est exportée, et, si c'est sous la forme d'une préparation, le nom de cette préparation, s'il existe; et

iv) La date d'envoi.

b) Les exportateurs fourniront aux autorités compétentes de leur pays ou de leur région deux exemplaires de cette déclaration. Ils joindront le troisième exemplaire à leur envoi.

c) La Partie du territoire de laquelle une substance du tableau III a été exportée devra, aussitôt que possible mais au plus tard quatre-vingt-dix jours après la date d'envoi, transmettre aux autorités compétentes du pays ou de la région importateurs, sous pli recommandé avec accusé de réception, un exemplaire de la déclaration reçue de l'exportateur.

d) Les Parties pourront exiger que, dès réception colis, l'importateur adresse aux autorités compétentes de son pays ou de sa région l'exemplaire qui accompagne l'envoi dûment endossé, en indiquant les quantités reçues et la date de réception.

3 — Les substances des tableaux I et II seront en outre soumises aux dispositions ci-après:

a) Les Parties exerceront dans les ports francs et les zones franches la même surveillance et le même contrôle que dans les autres parties de leur territoire, étant entendu, toutefois, qu'elles pourront appliquer un régime plus sévère.

b) Les exportations sous forme d'envois adressés à une banque au compte d'une personne différente de celle dont le nom figure sur l'autorisation d'exportation ou à une boîte postale seront interdites.

c) Les exportations de substances du tableau I sous forme d'envois adressés à un entrepôt de douane seront interdites. Les exportations de substances du tableau II sous forme d'envois adressés à un entrepôt de douane seront interdites, sauf si le Gouvernement du pays importateur précise, sur le certificat d'importation produit par la personne ou l'établissement qui demande l'autorisation d'exportation, qu'il a approuvé l'importation de l'envoi afin que celui-ci soit déposé dans un entrepôt de douane. En pareil cas, l'autorisation d'exportation précisera que l'envoi est effectué à cette fin. Tout l'envoi est effectué à cette fin. Tout retrait de l'entrepôt de douane sera subordonné à la présentation d'un permis émanant des autorités dont relève l'entrepôt, et, dans le cas d'un envoi à destination de l'étranger, il sera assimilé à une exportation nouvelle au sens de la présente Convention.

d) Les envois entrant sur le territoire d'une Partie ou en sortant sans être accompagnés d'une autorisation d'exportation seront retenus par les autorités compétentes.

e) Une Partie n'autorisera pas le passage en transit sur son territoire, en direction d'un autre pays, d'un envoi quelconque de ces substances, que cet envoi soit ou non déchargé du véhicule qui le transporte, sauf si la copie de l'autorisation d'exportation pour cet envoi est présentée aux autorités compétentes de ladite Partie.

f) Les autorités compétentes d'un pays ou d'une région quelconque à travers lesquels le passage d'un envoi de ces substances est autorisé prendront toutes les mesures nécessaires pour empêcher le déroutement dudit envoi vers une destination autre que celle qui figure sur la copie de l'autorisation l'exportation jointe à l'envoi, à moins que le Gouvernement du pays ou de la région à travers lesquels ledit envoi s'effectue n'autorise ce déroutement. Le Gouvernement de ce pays ou de cette région de transit traitera toute demande de déroutement comme s'il s'agissait d'une exportation du pays ou de la région de transit vers le pays ou la région de la nouvelle destination. Si le déroutement est autorisé, les dispositions de l'alinéa *e*) du paragraphe 1 s'appliqueront également entre le pays ou la région de transit et le pays ou la région d'où l'envoi a primitivement été exporté.

g) Aucun envoi de ces substances en transit ou déposé dans un entrepôt de douane ne peut être soumis à un traitement quelconque qui modifierait la nature des substances. L'emballage ne peut être modifié sans l'agrément des autorités compétentes.

h) Les dispositions des alinéas *e*) à *g*) relatives au transit de ces substances sur le territoire d'une Partie ne sont pas applicables si l'envoi est transporté par la voie aérienne à condition que l'aéronef n'atterrisse pas dans le pays ou la région de transit. Si l'aéronef atterrit dans ce pays ou cette région, ces dispositions s'appliqueront dans la mesure où les circonstances l'exigent.

i) Les dispositions du présent paragraphe ne portent pas préjudice à celles de tout accord international qui limite le contrôle pouvant être exercé par toute Partie sur ces substances en transit.

ARTICLE 13

Interdiction et restrictions à l'exportation et à l'importation

1 — Une Partie peut notifier à toutes les autres Parties par l'intermédiaire du Secrétaire général qu'elle interdite l'importation dans son pays ou dans l'une de ses régions d'une ou plusieurs substances du tableau II, III ou IV, spécifiées dans sa notification. Dans cette notification, elle indiquera le nom donné à la substance dans le tableau II, III ou IV.

2 — Si une Partie a reçu une notification d'interdiction comme prévu au paragraphe 1, elle prendra les mesures nécessaires pour qu'aucune des substances spécifiées dans ladite notification ne soit exportée vers le pays ou l'une des régions de la Partie qui a fait la notification.

3 — Nonobstant les dispositions des paragraphes précédents, une Partie qui a fait une notification conformément au paragraphe 1 peut, en délivrant dans chaque cas un permis spécial d'importation, autoriser l'importation de quantités déterminées des substances en question ou de préparations qui en contiennent. L'autorité du pays importateur qui aura délivré le permis spécial d'importation l'adressera en deux exemplaires, qui porteront le nom et l'adresse de l'importateur et de l'exportateur, à l'autorité compétente du pays ou de la région exportateurs, qui pourra alors autoriser l'exportateur à faire l'expédition. Celle-ci sera accompagnée d'un exemplaire du permis spécial d'importation dûment visé par l'autorité compétente du pays ou de la région exportateurs.

ARTICLE 14

Dispositions spéciales concernant le transport des substances psychotropes dans les trousses de premiers secours des navires, aéronefs ou autres moyens de transport public effectuant des parcours internationaux.

1 — Le transport international par navires, aéronefs ou autres moyens de transport public inter-

national, tels que les trains et autocars internationaux, de quantités limitées de substances du tableau II, III ou IV susceptibles d'être nécessaires pendant le voyage pour l'administration des premiers secours et pour les cas d'urgence ne sera pas considéré comme une exportation, une importation ou un transit au sens de la présente Convention.

2 — Des précautions appropriées seront prises par le pays d'immatriculation pour empêcher l'usage indu des substances mentionnées au paragraphe 1 ou leur détournement à des fins illicites. La Comission recommandera ces précautions en consultation avec les organisations internationales compétentes.

3 — Les substances transportées par navires, aéronefs ou autres moyens de transport public international, tels que les trains et autocars internationaux, conformément aux dispositions du paragraphe 1, seront soumises aux lois, règlements, permis et licences du pays d'immatriculation, sans préjudice du droit des autorités locales compétentes de procéder à des vérifications, inspections et autres opérations de contrôle à bord de ces moyens de transport. L'administration de ces substances en cas d'urgence ne sera pas considérée comme contrevenant aux dispositions du paragraphe 1 de l'article 9.

ARTICLE 15

Inspection

Les Parties institueront un système d'inspection des fabricants, des exportateurs, des importateurs et des distributeurs de gros et de détail de substances psychotropes, ainsi que des institutions médicales et scientifiques qui utilisent ces substances. Elles prévoiront des inspections aussi fréquentes qu'elles le jugeront nécessaire des locaux, des stocks et des enregistrements.

ARTICLE 16

Renseignements à fournir par les Parties

1 — Les Parties fourniront au Secrétaire général les renseignements que la Commission peut demander en tant que nécessaires pour l'exercice de ses fonctions, et notamment un rapport annuel ayant trait au fonctionnement de la Convention sur leurs territoires et contenant des renseignements sur:

a) Les modifications importantes apportées à leurs lois et règlements relatifs aux substances psychotropes; et

b) Les faits particulièrement significatifs qui se seront produits sur leurs territoires en matière d'abus et de trafic illicite des substances psychotropes.

2 — Les Parties communiqueront d'autre part ao Secrétaire général les noms et adresses des autorités gouvernementales mentionnées à l'alinéa *f*) de l'article 7, à l'article 12 et au paragraphe 3 de l'article 13. Le Secrétaire général diffusera ces renseignements à toutes les Parties.

3 — Les Parties adresseront au Secrétaire général, dans les plus brefs délais, un rapport sur les cas de trafic illicite de substances psychotropes et de saisie de substances faisant l'objet de ce trafic illicite, lorsque ces cas leur paraîtront importants en raison:

a) Des tendances nouvelles mises en évidence;

b) Des quantités en cause;

c) De la lumière qu'elles jettent sur les sources d'approvisionnement; ou

d) Des méthodes employées par les trafiquants illicites.

Des copies du rapport seront communiquées conformément à l'alinéa *b*) de l'article 21.

4 — Les Parties fourniront à l'Organe des rapports statistiques annuels, en utilisant à cet effet les formulaires établis par l'Organe. Ces rapports porteront:

a) En ce qui concerne chacune des substances des tableaux I et II, sur les quantités fabriquées, exportées à destination de et importées en provenance de chaque pays ou région, ainsi que sur les stocks détenus par les fabricants;

b) En ce qui concerne chacune des substances des tableaux III et IV, sur les quantités fabriquées, ainsi que sur les quantités totales exportées et importées;

c) En ce qui concerne chacune des substances des tableaux II et III, sur les quantités utilisées pour la fabrication de préparations exemptées; et

d) En ce qui concerne chacune des substances inscrites à un tableau autre que le tableau I, sur les quantités employées à des fins industrielles, conformément aux dispositions de l'alinéa *b*) de l'article 4.

Les quantités fabriquées qui sont visées aux alinéas *a*) et *b*) du présent paragraphe ne comprennent pas les quantités de préparations fabriquées.

5 — Une Partie fournira à l'Organe, sur sa demande, des renseignements statistiques supplémentaires ayant trait à des périodes à venir sur les quantités de telle ou telle substance des tableaux III et IV exportées à destination de chaque pays ou région et importées en provenance de chaque pays ou région. Cette Partie pourra demander à l'Organe de donner un caractère confidentiel tant à sa demande de renseignements qu'aux renseignements fournis en vertu du présent paragraphe.

6 — Les Parties fourniront les renseignements mentionnés dans les paragraphes 1 et 4 de la manière et aux dates que la Commission ou l'Organe pourra fixer.

ARTICLE 17

Fonctions de la Commission

1 — La Commission peut examiner toutes les questions ayant trait aux buts de la présente Convention et à l'application de ses dispositions et faire des recommandations à cet effet.

2 — Les décisions de la Commission prévues à l'article 2 et à l'article 3 seront prises à la majorité des deux tiers des membres de la Commission.

ARTICLE 18

Rapports de l'Organe

1 — L'Organe établit sur ses travaux des rapports annuels dans lesquels figurent une analyse des renseignements statistiques dont il dispose et, dans les cas appropriés, un exposé des explications que les gouvernements ont pu fournir ou ont été requis de fournir, ainsi que toute observation et recommandation que l'Organe peut vouloir formuler. L'Organe peut également faire

tous rapports supplémentaires qu'il peut juger nécessaires. Les rapports sont présentés au Conseil par l'intermédiaire de la Commission, qui peut formuler les observations qu'elle juge opportunes.

2 — Les rapports de l'Organe sont communiqués aux Parties et publiés ultérieurement par le Secrétaire général. Les Parties autorisent la libre distribution de ces rapports.

ARTICLE 19

Mesures à prendre par l'Organe pour assurer l'exécution des dispositions de la Convention

1 — *a*) Si, après examen des renseignements adressés à l'Organe par les gouvernements ou des renseignements communiqués par des organes des Nations Unies, l'Organe a motif de croire que les buts de la présente Convention sont sérieusement compromis du fait qu'un pays ou une région n'exécute pas ses dispositions, l'Organe a le droit de demander des explications au Gouvernement du pays ou de la région intéressés. Sous réserve du droit qu'il possède d'appeler l'attention des Parties, du Conseil et de la Commission sur la question visée à l'alinéa *c*), l'Organe considérera comme confidentielle une demande de renseignements ou une explication fournie par un gouvernement conformément au présent alinéa.

b) Après avoir agi conformément à l'alinéa *a*), l'Organe peut, s'il juge nécessaire de le faire, demander au Gouvernement intéressé de prendre les mesures correctives qui, en raison des circonstances, peuvent paraître nécessaires pour assurer l'exécution des dispositions de la présente Convention.

c) Si l'Organe constate que le Gouvernement intéressé n'a pas donné des explications satisfaisantes lorsqu'il a été invité à le faire conformément à l'alinéa *a*), ou a négligé d'adopter toute mesure corrective qu'il a été invité à prendre conformément à l'alinéa *b*), il peut appeler l'attention des Parties, du Conseil et de la Commission sur la question.

2 — Lorsqu'il appelle l'attention des Parties, du Conseil et de la Commission sur une question conformément à l'alinéa *c*) du paragraphe 1, l'Organe peut, s'il juge une telle mesure nécessaire, recommander aux Parties d'arrêter l'exportation de substances psychotropes à destination du pays ou de la région intéressés ou l'importation de substances psychotropes en provenance de ce pays ou de cette région, ou à la fois l'exportation et l'importation, soit pour une période déterminée, soit jusqu'à ce que la situation dans ce pays ou cette région lui donne satisfaction. L'État intéressé a le droit de porter la question devant le Conseil.

3 — L'Organe a le droit de publier un rapport sur toute question visée par les dispositions du présent article, et de le communiquer au Conseil qui le transmettra à toutes les Parties. Si l'Organe publie dans ce rapport une décision prise en vertu du présent article ou des renseignements concernant cette décision, il doit également publier l'avis du Gouvernement intéressé si celui-ci le demande.

4 — Dans les cas où une décision de l'Organe publiée conformément au présent article n'a pas été prise à l'unanimité, l'opinion de la minorité doit être exposée.

5 — Tout État sera invité à se faire représenter aux séances de l'Organe au cours desquelles est examinée une question l'intéressant directement aux termes du présent article.

6 — Les décisions de l'Organe prises en vertu du présent article doivent être adoptées à la majorité des deux tiers du nombre total des membres de l'Organe.

7 — Les dispositions des paragraphes précédents s'appliqueront également si l'Organe a motif de croire que les buts de la présente Convention sont sérieusement compromis du fait d'une décision prise par une Partie en vertu des disposition du paragraphe 7 de l'article 2.

ARTICLE 20

Mesures contre l'abus des substances psychotropes

1 — Les Parties prendront toutes les mesures susceptibles de prévenir l'abus des substances psychotropes et assurer le prompt dépistage ainsi que le traitement, l'éducation, la post-cure, la réadaptation et la réintégration sociale des personnes intéressées; elles coordonneront leurs efforts à cette fin.

2 — Les Parties favoriseront, autant que possible, la formation d'un personnel pour assurer le traitement, la post-cure, la réadaptation et la réintégration sociale des personnes qui abusent de substances psychotropes.

3 — Les Parties aideront les personnes qui en ont besoin dans l'exercice de leur profession à acquérir la connaissance des problèmes posés par l'abus des substances psychotropes et par sa prévention, et elles développeront aussi cette connaissance parmi le grand public s'il y a lieu de craindre que l'abus de ces substances ne se répande très largement.

ARTICLE 21

Lutte contre le trafic illicite

Compte dûment tenu de leurs régimes constitutionnel, juridique et administratif, les Parties:

a) Assureront sur le plan national la coordination de l'action préventive et répressive contre le trafic illicite; à cette fin elles pourront utilement désigner un service approprié chargé de cette coordination;

b) S'assisteront mutuellement dans la lutte contre le trafic illicite des substances psychotropes, et en particulier transmettront immédiatement aux autres Parties directement intéressées, par la voie diplomatique ou par l'intermédiaire des autorités compétentes qu'elles auront désignées à cet effet, copie de tout rapport qu'elles auraient adressé au Secrétaire général en vertu de l'article 16 à la suite de la découverte d'une affaire de trafic illicite ou d'une saisie;

c) Coopéreront étroitement entre elles et avec les organisations internationales compétentes dont elles sont membres afin de mener une lutte coordonnée contre le trafic illicite.

d) Veilleront à ce que la coopération internationale des services appropriés se réalise par des voies rapides; et

e) S'assureront que, lorsque des pièces de procédure sont transmises entre des pays pour l'exercice d'une action judiciaire, la transmission soit effectuée par des voies rapides à l'adresse des instances dé-

signées par les Parties; cette disposition ne porte pas atteinte au droit des Parties de demander que les pièces de procédure leur soient envoyées par la voie diplomatique.

ARTICLE 22

Dispositions pénales

1 — *a*) Sous réserve de ses dispositions constitutionnelles, chaque Partie considérera comme une infraction punissable tout acte commis intentionnellement qui contrevient à une loi ou à un règlement adopté en exécution de ses obligations découlant de la présente Convention, et prendra les mesures nécessaires por que les infractions graves soient dûment sanctionnées, par exemple par une peine d'emprisonnement ou une autre peine privative de liberté.

b) Nonobstant les dispositions figurant à l'alinéa précédent, lorsque des personnes utilisant de façon abusive des substances psychotropes auront commis ces infractions, les Parties pourront, au lieu de les condamner ou de prononcer une sanction pénale à leur encontre, ou comme complément de la sanction pénale, soumettre ces personnes à des mesures de traitement, d'éducation, de post-cure, de réadaptation et de réintégration sociale, conformément aux dispositions du paragraphe 1 de l'article 20.

2 — Sous réserve des dispositions constitutionnelles, du système juridique et de la législation nationale de chaque Partie:

a) *i*) Si une suite d'actes qui sont liés entre eux et qui constituent des infractions en vertu du paragraphe 1 ci-dessus a été commise dans des pays différents, chacun de ces actes sera considéré comme une infraction distincte;

ii) La participation intentionnelle à l'une quelconque desdites infractions, l'association ou l'entente en vue de la commettre ou la tentative de la commettre, ainsi que les actes préparatoires et les opérations financières intentionnellement accomplis, relatifs aux infractions mentionnées dans le présent article, constitueront des infractions passibles des peines prévues au paragraphe 1;

iii) Les condamnations prononcées à l'étranger pour ces infractions seront prises en considération aux fins d'établissement de la récidive; et

iv) Les infractions graves précitées, qu'elles soient commises par des nationaux ou des étrangers, seront poursuivies par la Partie sur le territoire de laquelle l'infraction a été commise ou par la Partie sur le territoire de laquelle le délinquant se trouve si l'extradition n'est pas compatible avec la législation de la Partie à laquelle la demande est adressée et si le délinquant n'a pas déjà été poursuivi et jugé.

b) Il est souhaitable que les infractions mentionnées au paragraphe 1 et dans la partie *ii*) de l'alinéa *a*) du paragraphe 2 soient considérées comme des cas d'extradition aux termes de tout traité d'extradition conclu ou à conclure entre des Parties, et soient reconnues comme cas d'extradition entre elles par les Parties qui ne subordonnent pas l'extradition à l'existence d'un traité ou à la réciprocité, étant entendu, toutefois, que l'extradition sera accordée conformément à la législation de la Partie à qui la demande d'extradition est adressée et que ladite Partie aura le droit de refuser de procéder à l'arrestation du délinquant ou de refuser d'accorder son extradition si les autorités compétentes considèrent que l'infraction n'est pas suffisamment grave.

3 — Toute substance psychotrope, toute autre substance et tout matériel utilisés ou qu'il était envisagé d'utiliser pour commettre l'une quelconque des infractions visées aux paragraphes 1 et 2, pourront être saisis et confisqués.

4 — Aucune disposition du présent article ne portera atteinte aux dispositions de la législation nationale d'une Partie en matière de compétence.

5 — Aucune disposition du présent article ne portera atteinte au principe selon lequel les infractions auxquelles il se réfère seront définies, poursuivies et punies conformément à la législation nationale de chacune des Parties.

ARTICLE 23

Application de mesures de contrôle plus sévères que celles qu'exige le Convention

Les Parties pourront adopter des mesures de contrôle plus strictes ou plus sévères que celles qui sont prévues par la présente Convention si elles le jugent opportun ou nécessaire pour la protection de la santé et de l'intérêt publics.

ARTICLE 24

Dépenses des organes internationaux encourues pour l'administration des dispositions de la Convention

Les dépenses de la Commission et de l'Organe pour l'exécution de leurs fonctions respectives en vertu de la présente Convention seront assumées par l'Organisation des Nations Unies dans les conditions qui seront déterminées par l'Assemblée générale. Les Parties qui ne sont pas membres de l'Organisation des Nations Unies contribueront à ces dépenses, l'Assemblée générale fixant périodiquement, après avoir consulté les Gouvernements des ces Parties, le montant des contributions qu'elle jugera équitable.

ARTICLE 25

Procédure d'admission, de signature, de ratification et d'adhésion

1 — Les États Membres de l'Organisation des Nations Unies, les États non membres de l'Organisation des Nations Unies qui sont membres d'une institution spécialisée des Nations Unies ou de l'Agence internationale de l'énergie atomique, ou qui sont Parties au Statut de la Cour internationale de Justice, ainsi que tout autre État invité par le Conseil, peuvent devenir Parties à la présente Convention:

a) En la signant; ou

b) En la ratifiant après l'avoir signée sous réserve de ratification; ou

c) En y adhérant.

2 — La présente Convention sera ouverte à la signature jusqu'au 1er janvier 1972 inclus. Elle sera ensuite ouverte à l'adhésion.

3 — Les instruments de ratification ou d'adhésion seront déposés auprès du Secrétaire général.

ARTICLE 26

Entrée en vigueur

1 — La présente Convention entrera en vigueur quatre-vingt-dix jours après que quarante des États visés au paragraphe 1 de l'article 25 l'auront signée sans réserve de ratification ou auront déposé leurs instruments de ratification ou d'adhésion.

2 — Pour tout autre État qui signe sans réserve de ratification, ou qui dépose un instrument de ratification ou d'adhésion après la date de la dernière signature ou du dernier dépôt visés au paragraphe précédent, la présente Convention entrera en vigueur quatre-vingt-dix jours après la date de sa signature ou du dépôt de son instrument de ratification ou d'adhésion.

ARTICLE 27

Application territoriale

La présente Convention s'appliquera à tous les territoires non métropolitains qu'une Partie représente sur le plan international, sauf si le consentement préalable d'un tel territoire est nécessaire en vertu soit de la Constitution de la Partie ou du territoire intéressé, soit de la coutume. En ce cas, la Partie s'efforcera d'obtenir dans le plus bref délai le consentement du territoire qui est nécessaire et, lorsque ce consentement aura été obtenu, elle le notifiera au Secrétaire général. La présente Convention s'appliquera au territoire ou aux territoires désignés par ladite notification, dès la date de la réception de cette dernière par le Secrétaire général. Dans les cas où le consentement préalable du territoire non métropolitain n'est pas nécessaire, la Partie intéressée déclarera, au moment de la signature, de la ratification ou de l'adhésion, à quel territoire ou territoires non métropolitains s'applique la présente Convention.

ARTICLE 28

Régions aux fins de la présente Convention

1 — Toute Partie peut notifier au Secrétaire général qu'aux fins de la présente Convention, son territoire est divisé en deux ou plusieurs régions, ou que deux ou plusieurs de ses régions sont groupées en une seule.

2 — Deux ou plusieurs Parties peuvent notifier au Secrétaire général qu'à la suite de l'institution d'une union douanière entre elles, ces Parties constituent une région aux fins de la présente Convention.

3 — Toute notification faite en vertu du paragraphe 1 ou 2 prendra effet au 1er janvier de l'année qui suivra celle où ladite notification aura été faite.

ARTICLE 29

Dénonciation

1 — A l'expiration d'un délai de deux ans à compter de la date de l'entrée en vigueur de la présente Convention, toute Partie pourra, en son nom ou au nom d'un territoire qu'elle représente sur le plan international et qui a retiré le consentement donné en vertu de l'article 27, dénoncer la présente Convention en déposant un instrument à cet effet auprès du Secrétaire général.

2 — Si le Secrétaire général reçoit la dénonciation avant le 1er juillet ou à cette date, elle prendra effet le 1er janvier de l'année suivante; si la dénonciation est reçue après le 1er juillet, elle prendra effet comme si elle avait été reçue l'année suivante avant le 1er juillet ou à cette date.

3 — La présente Convention viendra à expiration si, par suite de dénonciations notifiées conformément aux dispositions des paragraphes 1 et 2, les conditions de son entrée en vigueur prévues au paragraphe 1 de l'article 26 cessent d'être remplies.

ARTICLE 30

Amendements

1 — Toute Partie pourra proposer un amendement à la présente Convention. Le texte dudit amendement et les raisons qui l'ont motivé seront communiqués au Secrétaire général qui les communiquera aux Parties et au Conseil. Le Conseil pourra décider soit:

a) De convoquer une conférence, conformément au paragraphe 4 de l'article 62 de la Charte des Nations Unies, en vue d'étudier l'amendement proposé; soit

b) De demander aux Parties si elles acceptent l'amendement proposé et aussi de les prier de présenter éventuellement au Conseil leurs observations sur cette proposition.

2 — Si un projet d'amendement distribué conformément à l'alinéa *b*) du paragraphe 1 n'a été rejeté par aucune Partie dans les dix-huit mois qui suivent sa communication, il entrera immédiatement en vigueur. Si toutefois il est rejeté par une Partie, le Conseil pourra décider, compte tenu des observations des Parties, s'il convient de convoquer une conférence chargée d'étudier ledit amendement.

ARTICLE 31

Différends

1 — S'il s'élève entre deux ou plusieurs Parties un différend concernant l'interprétation ou l'application de la présente Convention, lesdites Parties se consulteront en vue de régler ce différend par voie de négociation, d'enquête, de médiation, de conciliation, d'arbitrage, de recours à des organismes régionaux, par voie judiciaire ou par d'autres moyens pacifiques de leur choix.

2 — Tout différend de ce genre qui n'aura pas été réglé par les moyens prévus au paragraphe 1 sera soumis, à la demande de l'une des parties au différend, à la Cour Internationale de Justice.

ARTICLE 32

Réserves

1 — Aucune réserve n'est autorisée en dehors des réserves faites conformément aux paragraphes 2, 3 et 4 du présent article.

2 — Tout État peut, au moment de la signature, de la ratification ou de l'adhésion, faite des réserves sur les dispositions suivantes de la présente Convention:

a) Article 19, paragraphes 1 et 2;
b) Article 27; et
c) Article 31.

3 — Tout État qui désire devenir Partie à la Convention, mais qui veut être autorisé à faire des réserves autres que celles qui sont énumérées aux paragraphes 2 et 4, peut aviser le Secrétaire général de cette intention. À moins qu'à l'expiration de douze mois après la date de la communication de la réserve en question par le Secrétaire général, un tiers des États qui ont signé sans réserve de ratification ou ratifié la Convention ou y ont adhéré avant la fin de ladite période n'aient élevé des objections contre elle, elle sera considérée comme autorisée, étant entendu toutefois que les États qui auront élevé des objections contre cette réserve n'auront pas à assumer à l'égard de l'État qui l'a formulée l'obligation juridique découlant de la présente Convention, sur laquelle porte la réserve.

4 — Tout État sur le territoire duquel poussent à l'état sauvage des plantes contenant des substances psychotropes du tableau I utilisées traditionnellement par certains groupes restreints bien déterminés à l'occasion de cérémonies magiques ou religieuses, peut, au moment de la signature de la ratification ou de l'adhésion, faire des réserves concernant ces plantes sur les dispositions de l'article 7, sauf sur celles relatives au commerce international.

5 — L'État qui aura fait des réserves pourra à tout moment et par voie de notification écrite au Secrétaire général retirer tout ou partie de ses réserves.

ARTICLE 33

Notifications

Le Secrétaire général notifiera à tous les États mentionnés au paragraphe 1 de l'article 25:

a) Les signatures, ratifications ou adhésions conformément à l'article 25;

b) La date à laquelle la présente Convention entrera en vigueur conformément à l'article 26;

c) Les dénonciations conformément à l'article 29; et

d) Les déclarations et notifications conformément aux articles 27, 28, 30 et 32.

En foi de quoi, les soussignés, dûment autorisés, ont signé la présente Convention au nom de leurs Gouvernements respectifs.

Fait à Vienne, le 21 février 1971, en un seul exemplaire, en anglais, chinois, espagnol, français et russe, les cinq textes faisant également foi. La Convention sera déposée auprès du Secrétaire général de l'Organisation des Nations Unies qui en transmettra des copies certifiées conformes à tous les États Membres de l'Organisation des Nations Unies et aux autres États visés au paragraphe 1 de l'article 25.

Listes des substances figurant aux tableaux *

Liste des substances figurant au tableau I

DCI	Autres noms communs ou vulgaires	Désignation chimique
1.	DET	*N*,*N*-diéthyltryptamine.
2.	DMHP	Hydroxy-1 (diméthyl-1,2 heptyl)-3 tétrahydro-7,8,9,10 triméthyl-6,6,9 6*H*-dibenzo [*b*,*d*] pyranne.
3.	DMT	*N*,*N*-diméthyltryptamine.
4. (+)-*Lysergide*	LSD, LSD-25	(+)-*N*,*N*-diéthyllysergamide (diéthylamide de l'acide dextro-lysergique).
5.	Mescaline	Triméthoxy-3,4,5 phénéthylamine.
6.	Parahexyl	Hydroxy-1 *n*-hexyl-3 tétrahydro-7,8,9,10 triméthyl-6,6,9 6*H*-dibenzo [*b*,*d*] pyranne.
7.	Psilocine, psilotsin	(Diméthylamino-2 éthyl)-3 hydroxy-4 indol.
8. *Psilocybine*	—	Dihydrogénophosphate de (diméthylamino-2 éthyl)-3 indolyle-4.
9.	STP, DOM	Amino-2 (diméthoxy-2,5 méthyl-4) phényl-1 propane.
10.	Tétrahydrocannabinols, les isomères suivants: Δ6*a*(10*a*), Δ6*a*(7), Δ7, Δ8, Δ9, Δ10, Δ9(11), et ses variantes stereochimicales.	—

Les sels des substances i scrites en ce tableau toutes les fois que l'existance de ces sels est possible.

Liste des substances figurant au tableau II

DCI	Autres noms communs ou vulgaires	Désignation chimique
1. *Amphetamine*	—	(±)-amino-2 phényl-1 propane.
2. *Dexamphetamine*	—	(+)-amino-2 phényl-1 propane.
3. *Methamphetamine*	—	(+) méthylamino-2 phényl-1 propa e.
4. *Methylphenidate*	—	Phényl-2 (pipéridyl-2)-2 acétate de méthyle.
5. *Phencyclidine*	—	(Phényl-1 cyclohexyl)-1 pipéridine.
6. *Phenmetrazine*	—	Méthyl-3 phényl-2 morpholine.

Les sels des substances i scrites en ce tableau toutes les fois que l'existance de ces sels est possible.

Liste des substances figurant au tableau III

DCI	Autres noms communs ou vulgaires	Désignation chimique
1. *Amobarbital*	—	Acide éthyl-5 (méthyl-3 butyl)-5 barbiturique.
2. *Cyclobarbital*	—	Acide (cyclohexène-1 yl-1)-5 éthyl-5 barbiturique.
3. *Glutethimide*	—	Éthyl-2 phényl-2 glutarimide.
4. *Pentobarbital*	—	Acide éthyl-5 (méthyl-1 butyl)-5 barbiturique.
5. *Secobarbital*	—	Acide allyl-5 (méthyl-1 butyl)-5 barbiturique.

Les sels des substances inscrites en ce tableau toutes les fois que l'existance de ces sels est possible.

Liste des substances figurant au tableau IV

DCI	Autres noms communs ou vulgaires	Désignation chimique
1. *Amfepramone*	—	(Diéthylamino)-2 phényl-1 propione.
2. *Barbital*	—	Acide diéthyl-5,5 barbiturique.
3.	Éthchlorvynol	Éthylchlorovinyl-2 éthynylcarbinol.
4. *Ethinamate*	—	Carbamate d'éthynyl-1 cyclohexyle.
5. *Meprobamate*	—	Dicarbamate de méthyl-2 propyl-2 propanédiol-1,3.
6. *Methaqualone*	—	Méthyl-2 *o*-tolyl-3 3*H*-quinazolione-4.
7. *Methylphenobarbital*	—	Acide éthyl-5 méthyl-1 phényl-5 barbiturique.
8. *Methyprylone*	—	Diéthyl-3,3 méthyl-5 pipéridinedione-2,4.
9. *Phenobarbital*	—	Acide éthyl-5 phényl-5 barbiturique.
10. *Pipradol*	—	Diphényl-1,1 (pipéridyl-2)-1 méthanol.
11.	SPA	(−)-diméthylamino-1 diphényl-1,2 éthane.

Les sels des substances inscrites en ce tableau toutes les fois que l'existance de ces sels est possible.

« Les noms figurant en italique dans la colonne de gauche sont des Dénominations communes internationales (DCI). A l'exception du (+)-*Lysergide*, les autres dénominations ou noms communs ne sont indiqués que si aucune DCI n'a encore été proposée.

CONVENÇÃO SOBRE AS SUBSTÂNCIAS PSICOTRÓPICAS

Preâmbulo

As Partes:

Atentas à saúde física e moral da humanidade,

Preocupadas com o problema da saúde pública e os problemas sociais resultantes do abuso de certas substâncias psicotrópicas,

Decididas a prevenir e combater o abuso destas substâncias e o tráfico ilícito a que dá lugar,

Considerando que são necessárias medidas rigorosas para limitar o uso destas substâncias a fins legítimos,

Reconhecendo que a utilização das substâncias psicotrópicas para fins médicos e científicos é indispensável e que a possibilidade de adquirir substâncias para estes fins não deveria ser objecto de nenhuma restrição injustificada,

Crendo que, para serem eficazes, as medidas tomadas contra o abuso destas substâncias devem ser coordenadas e universais,

Reconhecendo a competência da Organização das Nações Unidas em matéria de fiscalização das substâncias psicotrópicas e desejando que os órgãos internacionais interessados exerçam a sua actividade no quadro desta Organização,

Considerando que é necessária uma convenção internacional para realizar este objectivo,

acordam no seguinte:

ARTIGO 1

Glossário

Salvo indicação em contrário, e ressalvando a possibilidade de o contexto exigir uma interpretação diferente, as expressões seguintes têm na presente Convenção o significado indicado:

a) A expressão «Conselho» designa o Conselho Económico e Social das Nações Unidas;

b) A expressão «Comissão» designa a Comissão dos Estupefacientes do Conselho;

c) A expressão «Órgão» designa o Órgão Internacional de Fiscalização dos Estupefacientes instituído em virtude da Convenção Única sobre Estupefacientes de 1961;

d) A expressão «Secretário-Geral» designa o Secretário-Geral da Organização das Nações Unidas;

e) A expressão «substância psicotrópica» designa qualquer substância, de origem natural ou sintética, ou qualquer produto natural das listas I, II, III ou IV;

f) A expressão «preparação» designa:

i) Uma solução ou uma mistura, qualquer que seja o seu estado físico, que inclua uma ou várias substâncias psicotrópicas, ou

ii) Uma ou várias substâncias psicotrópicas em forma dosificada;

g) As expressões «lista I», «lista II», «lista III» e «lista IV» designam as listas de substâncias psicotrópicas que com essa numeração se anexam à presente Convenção, que poderão ser modificadas de acordo com o artigo 2;

h) As expressões «exportação» e «importação» designam, cada uma na sua acepção particular, a transferência material de uma substância psicotrópica de um Estado para outro Estado;

i) A expressão «fabrico» designa todas as operações que permitam obter substâncias psicotrópicas e inclui a purificação e a transformação de substâncias psicotrópicas noutras substâncias psicotrópicas. Esta expressão inclui também o fabrico de pre-

parações diferentes das que são feitas por receita numa farmácia;

j) A expressão «tráfico ilícito» designa o fabrico ou o tráfico de substâncias psicotrópicas efectuados contrariamente às disposições da presente Convenção;

k) A expressão «região» designa qualquer parte de um Estado que, em virtude do artigo 28, é considerada como uma entidade distinta para efeitos da presente Convenção;

l) A expressão «locais» designa os edifícios ou partes de edifício, assim como o terreno adjacente aos ditos edifícios ou às ditas partes de edifício.

ARTIGO 2

Domínio da aplicação da fiscalização das substâncias

1 — Se uma Parte ou a Organização Mundial de Saúde estiver na posse de informações ligadas a uma substância ainda não submetida à fiscalização internacional que, na sua opinião, possam tornar necessária a sua inscrição numa das listas da presente Convenção, deverá dirigir ao Secretário-Geral uma notificação acompanhada de todas as informações pertinentes em seu abono. Este processo será ainda aplicado quando uma Parte ou a Organização Mundial de Saúde estiver na posse de informação que justifique a transferência de uma substância de uma lista para outra, ou a supressão da sua inscrição numa das listas.

2 — O Secretário-Geral comunicará esta notificação, juntamente com as informações que julgar pertinentes, às Partes, à Comissão e, se a notificação for feita por uma Parte, à Organização Mundial de Saúde.

3 — Se das informações que acompanham esta notificação resultar que a dita substância é susceptível de ser inscrita na lista I ou na lista II em virtude do parágrafo 4, as Partes examinarão, à luz de todas as informações que tiverem, a possibilidade de aplicar, a título provisório, a esta substância todas as medidas de fiscalização aplicáveis às substâncias da lista I ou da lista II, conforme o caso.

4 — Se a Organização Mundial de Saúde constatar:

a) Que a dita substância pode provocar:

i) 1) Um estado de dependência, e

2) Um estímulo ou uma depressão do sistema nervoso central, dando lugar a alucinações ou a perturbações da função motora, do julgamento, do comportamento, de percepção ou da disposição, ou

ii) Abusos e efeitos nocivos comparáveis aos de uma substância da lista I, II, III ou IV, e

b) Que existem razões suficientes para crer que a substância dá ou pode dar lugar a abusos tais que constitua um problema de saúde pública e um problema social, justificando a sua fiscalização internacional,

deverá transmitir à Comissão um parecer sobre esta substância, onde indicará nomeadamente em que medida a substância dá ou pode dar lugar a abusos, a gravidade do problema de saúde pública e do problema social que constitui e o grau de utilidade da substância na terapêutica, assim como as recomendações sobre medidas eventuais de fiscalização a que seria oportuno sujeitá-la à luz desta avaliação.

5 — Tendo em conta a comunicação da Organização Mundial de Saúde, cujas opiniões serão determinantes em matéria médica e científica, e tendo ainda em consideração os factores de ordem económica, social, jurídica, administrativa e todos os outros que possa julgar pertinentes, a Comissão poderá acrescentar a dita substância à lista I, II, III ou IV. Poderá pedir informações complementares à Organização Mundial de Saúde ou a outras fontes apropriadas.

6 — Se uma notificação feita nos termos do parágrafo 1 disser respeito a uma substância já inscrita numa das listas, a Organização Mundial de Saúde transmitirá à Comissão as suas novas constatações, assim como qualquer novo parecer sobre esta substância que possa fazer de acordo com as disposições do parágrafo 4 e quaisquer novas recomendações sobre medidas de fiscalização que lhe pareçam apropriadas à luz do dito parecer. A Comissão, tendo em conta a comunicação recebida da Organização Mundial de Saúde, nos termos do parágrafo 5, assim como os factores enumerados no dito parágrafo, poderá decidir transferir esta substância de uma lista para outra ou suprimir a sua inscrição nas listas.

7 — Qualquer decisão da Comissão assumida nos termos do presente artigo será comunicada pelo Secretário-Geral a todos os Estados Membros da Organização das Nações Unidas, aos Estados não Membros Partes da presente Convenção, à Organização Mundial de Saúde e ao Órgão. Esta decisão terá pleno efeito para cada Parte cento e oitenta dias depois da data da comunicação, excepto para uma Parte que, durante este período, e relativamente a uma decisão de inscrição de uma substância numa lista, tenha informado por escrito o Secretário-Geral que devido a circunstâncias excepcionais não se encontra em condição de sujeitar esta substância a todas as disposições da Convenção aplicáveis às substâncias dessa lista. Uma tal notificação exporá os motivos desta decisão excepcional. Apesar desta notificação, cada Parte deverá aplicar no mínimo as medidas de fiscalização, que em seguida se enumeram:

a) A Parte que haja notificado o Secretário-Geral sobre uma tal decisão acerca de substância ainda não sujeita à fiscalização e acrescentada à lista I terá em conta, tanto quanto possível, as medidas de fiscalização especiais enumeradas no artigo 7 e, em relação a esta substância, deverá:

i) Exigir licenças para o seu fabrico, o seu comércio e a sua distribuição, de acordo com as disposições previstas pelo artigo 8 para as substâncias da lista II;

ii) Exigir que o seu fornecimento ou cedência se efectue apenas sob apresentação da receita médica, de acordo com as disposições previstas pelo artigo 9 para as substâncias da lista II;

iii) Sujeitar-se às obrigações relativas à exportação e à importação enunciada no artigo 12, excepto em relação a uma outra Parte que tenha dirigido ao Secretário-Geral uma notificação sobre a substância em questão;

iv) Sujeitar-se às obrigações enunciadas no artigo 13 para as substâncias da lista II, incluindo a proibição ou restrições à exportação e à importação;

v) Fornecer ao Órgão relatórios estatísticos de acordo com as disposições da alínea *a*) do parágrafo 4 do artigo 16; e

vi) Tomar medidas de acordo com as disposições do artigo 22, com vista a reprimir qualquer acto contrário às leis ou regulamentos adoptados em execução das obrigações acima mencionadas.

b) A Parte que haja notificado o Secretário-Geral sobre uma tal decisão acerca de substância ainda não sujeita à fiscalização e acrescentada à lista II deverá, em relação a esta substância:

i) Exigir licenças para o seu fabrico, o seu comércio e a sua distribuição, de acordo com as disposições do artigo 8;

ii) Exigir que o seu fornecimento ou cedência se efectue apenas sob apresentação de receita médica, de acordo com as disposições do artigo 9;

iii) Sujeitar-se às obrigações relativas à exportação e à importação enunciadas no artigo 12, excepto em relação a uma outra Parte que tenha dirigido ao Secretário-Geral uma notificação acerca da substância em questão;

iv) Sujeitar-se às obrigações enunciadas no artigo 13, incluindo proibição ou restrições à exportação e à importação;

v) Fornecer ao Órgão relatórios estatísticos, de acordo com as disposições das alíneas *a*), *c*) e *d*) do parágrafo 4 do artigo 16; e

vi) Tomar medidas de acordo com as disposições do artigo 22, com vista a reprimir qualquer acto contrário às leis ou regulamentos adoptados em execução das obrigações acima mencionadas;

c) A Parte que haja notificado o Secretário-Geral sobre uma tal decisão acerca de substância ainda não sujeita a fiscalização e acrescentada à lista III deverá, em relação a esta substância:

i) Exigir licenças para o seu fabrico, o seu comércio e a sua distribuição, de acordo com as disposições do artigo 8;

ii) Exigir que o seu fornecimento ou cedência se efectue apenas sob apresentação de receita médica, de acordo com as disposições do artigo 9;

iii) Sujeitar-se às obrigações relativas à exportação enunciadas no artigo 12, excepto em relação a uma outra Parte que tenha dirigido ao Secretário-Geral uma notificação acerca da substância em questão;

iv) Sujeitar-se às obrigações enunciadas no artigo 13, incluindo proibição ou restrições à exportação e à importação; e

v) Tomar medidas de acordo com as disposições do artigo 22, com vista a reprimir qualquer acto contrário às leis ou regulamentos adoptados em execução das obrigações acima mencionadas;

d) A Parte que haja notificado o Secretário-Geral sobre uma tal decisão acerca de substância ainda não sujeita a fiscalização e acrescentada à lista IV deverá, em relação a esta substância:

i) Exigir licenças para o seu fabrico, o seu comércio e a sua distribuição, de acordo com as disposições do artigo 8;

ii) Sujeitar-se às obrigações enunciadas no artigo 13, incluindo proibição ou restrições à exportação e à importação; e

iii) Tomar medidas de acordo com as disposições do artigo 22, com vista a reprimir qualquer acto contrário às leis ou regulamentos adoptados em execução das obrigações acima mencionadas;

e) A Parte que haja notificado o Secretário-Geral sobre uma tal decisão acerca de substância transferida para uma lista a que se aplicam medidas de fiscalização e obrigações mais estritas aplicará no mínimo o conjunto das disposições da presente Convenção aplicáveis à lista donde foi transferida.

8 — *a*) As decisões da Comissão tomadas nos termos do presente artigo serão sujeitas à revisão pelo Conselho se uma Parte formular um pedido neste sentido nos cento e oitenta dias seguintes à recepção da notificação da decisão. O pedido de revisão deverá ser dirigido ao Secretário-Geral juntamente com todas as informações pertinentes que a justifiquem.

b) O Secretário-Geral entregará cópias do pedido de revisão e das informações pertinentes à Comissão, à Organização Mundial de Saúde e a todas as Partes, convidando-as a comunicar-lhe as suas observações num prazo de noventa dias. Todas as observações assim recebidas serão submetidas ao exame do Conselho.

c) O Conselho pode confirmar, modificar ou anular a decisão da Comissão. A sua decisão será notificada a todos os Estados Membros da Organização das Nações Unidas, aos Estados não Membros Partes da presente Convenção, à Comissão, à Organização Mundial de Saúde e ao Órgão.

d) No decorrer do processo de revisão, a decisão original da Comissão manter-se-á em vigor, sob reserva do consignado no parágrafo 7.

9 — As Partes farão tudo o que estiver ao seu alcance para aplicar as possíveis medidas de vigilância às substâncias que, embora se não encontrem assinaladas na presente Convenção, possam ser utilizadas para o fabrico ilícito de substâncias psicotrópicas.

ARTIGO 3

Disposições particulares relativas à fiscalização das preparações

1 — Sem prejuízo do que é estipulado nos parágrafos seguintes do presente artigo, uma preparação é sujeita às mesmas medidas de fiscalização que a substância psicotrópica que contém e, se contém mais de uma dessas substâncias, às medidas aplicáveis à substância mais estritamente fiscalizada.

2 — Se uma preparação que contém uma substância psicotrópica não inscrita na lista I apresentar uma composição que comporte um risco de abuso negligenciável ou nulo e esta substância não puder ser recuperada em quantidades que permitam abusos, por meios facilmente aplicáveis, e se, portanto, esta substância não originar um problema para a saúde pública nem um problema social, a dita preparação poderá ser

isenta de algumas das medidas de fiscalização enunciadas na presente Convenção, de acordo com os termos do parágrafo 3.

3 — Se uma Parte constatar que uma preparação está de acordo com as disposições do parágrafo precedente, pode decidir isentá-la, no seu país ou numa das suas regiões, de uma ou de todas as medidas de fiscalização previstas na presente Convenção; no entanto, a dita preparação ficará sujeita às obrigações enunciadas nos artigos seguintes:

a) Artigo 8 (licenças) no que se refere ao seu fabrico;

b) Artigo 11 (registo) no que se aplica às preparações isentas;

c) Artigo 13 (proibição e restrições à exportação e à importação);

d) Artigo 15 (inspecção) no que se aplica ao fabrico;

e) Artigo 16 (informações a fornecer pelas Partes) no que se aplica às preparações isentas; e

f) Artigo 22 (disposições penais), na medida em que tal for necessário à repressão de actos contrários às leis ou regulamentos adoptados de acordo com as obrigações acima mencionadas.

A dita Parte notificará ao Secretário-Geral todas as decisões deste género, assim como o nome e a composição da preparação isenta, e as medidas de fiscalização de que está isenta. O Secretário-Geral transmitirá a notificação às outras Partes, à Organização Mundial de Saúde e ao Órgão.

4 — Se uma Parte ou a Organização Mundial de Saúde detiver informações sobre uma preparação isenta nos termos do parágrafo 3 que, na sua opinião, justifiquem a supressão completa ou parcial da isenção, deverá notificar o Secretário-Geral e fornecer-lhe as informações que abonem tal notificação. O Secretário-Geral transmitirá esta notificação, acompanhada de quaisquer informações que considere pertinentes, às Partes, à Comissão e, quando a notificação for feita por uma Parte, à Organização Mundial de Saúde. A Organização Mundial de Saúde comunicará à Comissão um parecer sobre a preparação, tendo em conta os factores enumerados no parágrafo 2, assim como uma recomendação sobre as medidas de fiscalização de que a preparação deveria eventualmente deixar de ser isenta. A Comissão, tendo em conta a comunicação da Organização Mundial de Saúde, cuja opinião será determinante em matéria médica e científica, e tomando em consideração os factores de ordem económica, social, jurídica, administrativa e outros, que possa considerar pertinentes, poderá decidir que a preparação deixe de estar isenta de uma ou de todas as medidas de fiscalização. O Secretário-Geral comunicará qualquer decisão da Comissão tomada nos termos do presente parágrafo a todos os Estados Membros da Organização das Nações Unidas, aos Estados não membros Partes da presente Convenção, à Organização Mundial de Saúde e ao Órgão. Todas as Partes tomarão as disposições necessárias com vista a suprimir a isenção da ou das medidas de fiscalização consideradas, num prazo de cento e oitenta dias a contar da data da comunicação do Secretário-Geral.

ARTIGO 4

Outras disposições particulares relativas ao domínio de aplicação da fiscalização

No que respeita às substâncias psicotrópicas não incluídas na lista I, as Partes poderão autorizar:

a) O transporte pelos viajantes internacionais de pequenas quantidades de preparações para seu uso pessoal; cada Parte poderá, no entanto, assegurar-se de que estas preparações foram legalmente adquiridas;

b) O emprego destas substâncias na indústria para o fabrico de substâncias ou produtos não psicotrópicos, na condição de lhes serem aplicadas as medidas de fiscalização requeridas pela presente Convenção até que o estado das substâncias psicotrópicas seja tal que não possam, na prática, dar lugar a abusos ou ser recuperadas; e

c) A utilização destas substâncias, desde que lhes sejam aplicadas as medidas de fiscalização requeridas pela presente Convenção, para a captura de animais por pessoas expressamente autorizadas pelas autoridades competentes para utilizar as ditas substâncias para esse efeito.

ARTIGO 5

Limitação da utilização para fins médicos e científicos

1 — Cada Parte limitará a utilização das substâncias da lista I da maneira prevista no artigo 7.

2 — Cada Parte deverá, sob ressalva do que vem disposto no artigo 4, limitar, pelas medidas que considere apropriadas, o fabrico, a exportação, a importação, a distribuição, as existências, o comércio, o emprego e a detenção de substâncias inscritas nas listas II, III e IV para fins médicos e científicos.

3 — É desejável que as Partes não autorizem a detenção de substâncias das listas II, III e IV, excepto nas condições previstas pela lei.

ARTIGO 6

Serviço especial

É desejável que, para efeitos de aplicação das disposições da presente Convenção, cada Parte institua e mantenha um serviço especial. Pode haver vantagem em que este serviço seja o mesmo que foi criado ao abrigo das convenções que sujeitam os estupefacientes a uma fiscalização, ou com este serviço trabalhe em estreita colaboração.

ARTIGO 7

Disposições especiais visando as substâncias da lista I

No que respeita às substâncias inscritas na lista I, as Partes deverão:

a) Proibir qualquer utilização destas substâncias, excepto para fins científicos ou médicos muito limitados, e por pessoas devidamente autorizadas que trabalham em estabelecimentos médicos ou científicos que dependam directamente dos Governos ou sejam expressamente autorizados por estes;

b) Exigir que o fabrico, o comércio, a distribuição e a detenção destas substâncias sejam subordinados à posse de uma licença especial ou de uma autorização prévia;

c) Prever uma vigilância estreita das actividades e dos actos mencionados nas alíneas *a*) e *b*);

d) Só permitir a cedência a uma pessoa devidamente autorizada da quantidade de substâncias necessária aos fins para os quais a autorização foi concedida;

e) Exigir que as pessoas que exerçam funções médicas e científicas registem a aquisição destas substâncias e os pormenores da sua utilização, devendo ser estes registos conservados durante, pelo menos, dois anos depois da última utilização aí consignada; e tâncias, excepto quando tanto o exportador como o importador sejam a autoridade ou a administração competente do país ou da região exportadores e importadores, respectivamente, ou outras pessoas ou empresas que as autoridades competentes do seu país ou região tenham expressamente autorizado para este efeito. As exigências previstas no parágrafo 1 do artigo 12 no que respeita à concessão de autorizações de exportação e de importação para as substâncias da lista II aplicar-se-ão igualmente às substâncias da lista I.

ARTIGO 8

Licenças

1 — As Partes comprometem-se a exigir uma licença ou outra medida de fiscalização semelhante para o fabrico, o comércio (incluindo o comércio de exportação e importação) e a distribuição das substâncias das listas II, III e IV.

2 — As Partes:

a) Comprometem-se a exigir uma vigilância sobre todas as pessoas e empresas devidamente autorizadas que tratem do fabrico, do comércio (incluindo o comércio de exportação e importação) ou da distribuição das substâncias visadas no parágrafo 1;

b) Comprometem-se a submeter a um regime de licenças ou outra medida de fiscalização semelhante os estabelecimentos e os locais onde este fabrico, este comércio ou esta distribuição se podem efectuar; e

c) Comprometem-se a actuar de maneira que sejam tomadas medidas de segurança em relação a estes estabelecimentos e locais, de modo a evitar os roubos e outros desvios das existências.

3 — As disposições dos parágrafos 1 e 2 do presente artigo que referem o regime de licenças ou outras medidas de fiscalização semelhante não se aplicarão necessariamente às pessoas devidamente autorizadas a exercer funções terapêuticas ou científicas e actuando no exercício das suas funções.

4 — As Partes comprometem-se a exigir que todas as pessoas a quem são concedidas licenças em aplicação da presente Convenção ou que possuam autorizações equivalentes de acordo com as disposições previstas no parágrafo 1 do presente artigo ou na alínea *b*) do artigo 7 sejam devidamente qualificadas para aplicar efectiva e fielmente as disposições das leis e regulamentos adoptados para a execução da presente Convenção.

ARTIGO 9

Receitas médicas

1 — As Partes comprometem-se a exigir que as substâncias inscritas nas listas II, III e IV só sejam fornecidas ou dispensadas para utilização por particulares contra apresentação de receita médica, excepto nos casos em que os particulares podem legalmente obter, utilizar, ceder ou administrar estas substâncias no exercício devidamente autorizado de funções terapêuticas ou científicas.

2 — As Partes comprometem-se a adoptar as medidas necessárias para que as receitas prescrevendo a ministração de substâncias inscritas nas listas II, III e IV sejam preenchidas de acordo com a prática médica e sujeitas, no que diz nomeadamente respeito ao número de repetições possíveis e à duração da sua validade, a uma regulamentação que assegure a protecção da saúde e do interesse público.

3 — Apesar das disposições do parágrafo 1, uma Parte pode, se em sua opinião a situação local o exigir e nas condições que determine, incluindo a obrigação de efectuar um registo, autorizar os farmacêuticos ou qualquer outro distribuidor a retalho sob licença, designados pelas autoridades encarregadas da saúde pública no seu país ou numa parte deste, a fornecer à sua discrição e sem receita, para serem utilizadas por particulares em casos excepcionais e para fins médicos, pequenas quantidades de substâncias inscritas nas listas III e IV, nos limites que as Partes se comprometem a definir.

ARTIGO 10

Advertências nas embalagens e propaganda

1 — Cada Parte compromete-se a exigir, tendo em conta as regulamentações ou recomendações pertinentes da Organização Mundial de Saúde, que seja indicado nas etiquetas, quando seja possível fazê-lo, e de qualquer modo nas instruções que acompanham a embalagem para a distribuição a retalho das substâncias psicotrópicas, o modo de emprego, assim como as precauções a tomar e as advertências que, em sua opinião, são necessárias para a segurança do utente.

2 — Cada Parte, tendo em conta as disposições da sua Constituição, proibirá os anúncios publicitários relativos às substâncias psicotrópicas e destinados ao grande público.

ARTIGO 11

Registo

1 — As Partes comprometem-se a exigir que, para as substâncias inscritas na lista I, os fabricantes e todas as outras pessoas autorizadas nos termos do artigo 7 a fazer o comércio e a distribuição dessas substâncias procedam ao registo nas condições determinadas por cada Parte, de modo a mostrar claramente as quantidades fabricadas ou existentes em armazém, assim como, no caso de qualquer aquisição ou cedência, a quantidade, a data e os nomes do fornecedor e do comprador.

2 — As Partes comprometem-se a exigir que, para as substâncias das listas II e III, os fabricantes, os armazenistas, os exportadores e os importadores procedam ao registo nas condições determinadas por cada Parte, de maneira a mostrar claramente as quantidades fabricadas, assim como, para cada aquisição ou cedência, a quantidade, a data e os nomes do fornecedor e do comprador.

3 — As Partes comprometem-se a exigir que, para as substâncias inscritas na lista II, os distribuidores a retalho, os estabelecimentos hospitalares, os centros

de tratamento e as instituições científicas procedam ao registo nas condições determinadas por cada Parte, de maneira a mostrar claramente, para cada aquisição ou cedência, a quantidade, a data e os nomes do fornecedor e do comprador.

4 — As Partes comprometem-se a assegurar por métodos apropriados, e tendo em conta as práticas profissionais e comerciais que lhes são próprias, a possibilidade de consultar facilmente as informações relativas à aquisição e à cedência de substâncias inscritas na lista III por distribuidores a retalho, estabelecimentos hospitalares, centros de tratamento e instituições científicas.

5 — As Partes comprometem-se a exigir que, para as substâncias inscritas na lista IV, os fabricantes, os exportadores e os importadores procedam a um registo efectuado nas condições determinadas por cada Parte, de modo a mostrar claramente as quantidades fabricadas, exportadas e importadas.

6 — As Partes comprometem-se a exigir dos fabricantes de preparações isentas de acordo com o parágrafo 3 do artigo 3 que registem a quantidade de cada substância psicotrópica utilizada no fabrico de uma preparação isenta, a natureza, a quantidade total e o destino inicial da preparação isenta fabricada a partir dessa substância.

7 — As Partes comprometem-se a exigir que os registos e as informações visados no presente artigo e necessários para o estabelecimento dos relatórios previstos no artigo 16 sejam conservados durante dois anos, pelo menos.

ARTIGO 12

Disposições relativas ao comércio internacional

1 — *a*) Qualquer Parte que autorize a exportação ou importação de substâncias inscritas na lista I ou II deve exigir que seja obtida para cada exportação ou importação uma autorização de importação ou exportação distinta, redigida segundo um modelo de formulário estabelecido pela Comissão, e isto quer se trate de uma ou de várias substâncias.

b) Esta autorização deve referir a denominação comum internacional da substância ou, na sua ausência, a designação da substância na lista, quantidade a exportar ou a importar, a sua forma farmacêutica, o nome e o endereço do exportador e do importador e o período em que se deve verificar a exportação ou importação. Se a substância é exportada ou importada sob a forma de preparação, o nome da preparação, se existe, será também indicado. A autorização de exportação deve também indicar o número e a data do certificado de importação e especificar a autoridade que a concedeu.

c) Antes de conceder uma autorização de exportação, as Partes comprometem-se a exigir uma autorização de importação concedida pelas autoridades competentes do país ou da região importadoras, atestando que a importação da substância ou das substâncias consideradas se encontra aprovada, devendo ser esta autorização apresentada pela pessoa ou pelo estabelecimento que pede a autorização de exportação.

d) Uma cópia da autorização de exportação deverá acompanhar cada remessa, devendo o Governo que concede a autorização de exportação enviar uma cópia desta ao Governo do país ou da região importadora.

e) Quando a importação se efectuou, o Governo do país ou da região importadora devolverá ao Governo do país ou da região exportadora a autorização de exportação, acompanhada de um atestado, pelo qual certifique a quantidade efectivamente importada.

2 — *a*) As Partes comprometem-se a exigir que, para cada exportação de substâncias inscritas na lista III, os exportadores preencham uma declaração em três exemplares, redigida segundo um modelo de formulário estabelecido pela Comissão, contendo as informações seguintes:

i) O nome e o endereço do exportador e do importador;

ii) A denominação comum internacional ou, na sua ausência, a designação da substância na lista;

iii) A quantidade da substância e a forma farmacêutica sob a qual a substância é exportada e, se for sob a forma de uma preparação, o nome desta preparação, se existe; e

iv) A data de expedição.

b) Os exportadores fornecerão às autoridades competentes do seu país ou da sua região dois exemplares desta declaração e juntarão o terceiro exemplar à encomenda.

c) A Parte de cujo território uma substância inscrita na lista III foi exportada deverá, tão cedo quanto possível, mas o mais tardar até noventa dias a contar da data de expedição, enviar às autoridades competentes do país ou da região importadora, por correio registado com aviso de recepção, um exemplar da declaração recebida do exportador.

d) As Partes reservam-se o direito de exigir que, aquando da recepção da encomenda, o importador dirija às autoridades do seu país ou da sua região o exemplar que acompanha a encomenda devidamente assinado, indicando as quantidades recebidas e a data da recepção.

3 — As substâncias inscritas nas listas I e II serão sujeitas às seguintes disposições adicionais:

a) As Partes comprometem-se a exercer nos portos francos ou nas zonas francas a mesma vigilância e fiscalização que efectuam nas outras partes do seu território, admitindo-se, no entanto, que possam aplicar um regime mais severo;

b) Serão proibidas as exportações dirigidas a uma caixa postal ou a um banco para a conta de uma pessoa diferente da designada na autorização de exportação;

c) As exportações de substâncias inscritas na lista I sob a forma de encomendas dirigidas a um entreposto alfandegário serão proibidas. As exportações de substâncias inscritas na lista II sob a forma de encomendas dirigidas a um entreposto alfandegário serão proibidas, excepto se o Governo do país importador indicar no certificado de importação apresentado pela pessoa ou entidade que pede a autorização de exportação que aprova a importação da encomenda para um entreposto alfandegário. Neste caso, a autorização de exportação indicará que a encomenda é efectuada para este fim. Qualquer levantamento do entreposto alfandegário será subordinado à apresentação de uma autorização passada pelas autoridades das quais depende o entreposto e, no caso de uma encomenda destinada ao estrangeiro, será considerada como uma nova exportação, nos termos da presente Convenção;

d) As encomendas que entram no território de uma

Parte ou dele saem sem estarem acompanhadas de uma autorização de exportação serão retidas pelas autoridades competentes;

e) Uma Parte não autorizará a passagem em trânsito pelo seu território, em direcção a um outro país, de nenhuma encomenda destas substâncias, quer esta encomenda seja ou não descarregada do veículo que a transporta, excepto no caso de a cópia da autorização de exportação para esta encomenda ser apresentada às autoridades competentes da dita Parte;

f) As autoridades competentes de um país ou de uma região qualquer, através dos quais é autorizada a passagem de uma encomenda destas substâncias, comprometem-se a adoptar todas as medidas necessárias para impedir o seu desvio para um destino diferente do que vem inscrito na cópia da autorização de exportação anexa à encomenda, a menos que o Governo do país ou da região através dos quais a dita encomenda se efectua autorize este desvio. O Governo deste país ou desta região de trânsito considerará qualquer pedido de desvio como se se tratasse de uma exportação do país ou da região de trânsito para o país ou a região do novo destino. Se o desvio é autorizado, as disposições da alínea *e*) do parágrafo 1 aplicar-se-ão igualmente entre o país ou a região de trânsito e o país ou a região donde a encomenda foi primitivamente exportada;

g) Nenhuma encomenda destas substâncias em trânsito ou depositadas num entreposto alfandegário pode ser sujeita a qualquer tratamento que modifique a natureza das substâncias. A embalagem não pode ser modificada sem autorização das autoridades competentes;

h) As disposições das alíneas *e*) a *g*) relativas ao trânsito destas substâncias no território de uma Parte não são aplicáveis no caso de a encomenda ser transportada por via aérea, desde que a aeronave não aterre no país ou na região de trânsito. Se a aeronave aterra neste país ou nesta região, aquelas disposições serão aplicadas na medida em que as circunstâncias o exigirem;

i) As disposições do presente parágrafo devem ser entendidas sem prejuízo do preceituado em qualquer acordo internacional que limite a fiscalização a exercer por qualquer Parte sobre estas substâncias em trânsito.

ARTIGO 13

Proibição e restrições à exportação e importação

1 — Uma Parte pode notificar todas as outras Partes, por intermédio do Secretário-Geral, de que proíbe a importação no seu país ou numa das suas regiões de uma ou várias substâncias inscritas nas listas II, III e IV, especificadas na sua notificação. Nesta notificação deverá indicar o nome dado à substância na lista II, III ou IV.

2 — Se uma Parte recebeu uma notificação de proibição nos termos do parágrafo 1, tomará todas as medidas necessárias para que nenhuma das substâncias especificadas na dita notificação seja exportada para o país ou para uma das regiões da Parte que produz a notificação.

3 — Apesar das disposições dos parágrafos precedentes, uma Parte que efectuou uma notificação nos termos do parágrafo 1 pode, concedendo em cada caso uma autorização especial de importação, autorizar a importação de determinadas quantidades das substâncias em questão ou de preparações que as incluem. A autoridade do país importador que tenha concedido a autorização especial de importação envia-la-á em dois exemplares, contendo o nome e o endereço do importador e do exportador, à autoridade competente do país ou da região exportadora, a qual poderá então autorizar o exportador a expedir a encomenda. Esta será acompanhada de um exemplar da autorização especial de importação devidamente visada pela autoridade competente do país ou da região exportadora.

ARTIGO 14

Disposições especiais sobre o transporte das substâncias psicotrópicas nos estojos de primeiros socorros dos navios, aeronaves ou outros meios de transporte público que efectuem percursos internacionais.

1 — O transporte internacional por navios, aeronaves ou outros meios de transporte público internacional, tais como comboios e autocarros internacionais, de quantidades limitadas de substâncias inscritas nas listas II, III ou IV, susceptíveis de serem necessárias durante a viagem, para administrar os primeiros socorros e para casos de urgência, não será considerada como uma exportação, uma importação ou um trânsito por um país, no sentido da presente Convenção.

2 — Precauções apropriadas serão tomadas pelo país de matrícula para impedir o uso indevido das substâncias mencionadas no parágrafo 1 ou o seu desvio para fins ilícitos. A Comissão recomendará estas precauções, consultando as organizações internacionais competentes.

3 — As substâncias transportadas por navios, aeronaves ou outros meios de transporte público internacional, tais como comboios ou autocarros internacionais, de acordo com as disposições do parágrafo 1, serão submetidas às leis, regulamentos, autorizações e licenças do país de matrícula, sem prejuízo do direito de as autoridades locais competentes procederem a verificações, inspecções e outras operações de fiscalização a bordo destes meios de transporte. A administração destas substâncias, em caso de urgência, não será considerada uma violação às disposições do parágrafo 1 do artigo 9.

ARTIGO 15

Inspecção

As Partes comprometem-se a instituir um sistema de inspecção dos fabricantes, dos exportadores, dos importadores, dos armazenistas e retalhistas das substâncias psicotrópicas, assim como das instituições médicas e científicas que utilizam estas substâncias. As Partes devem criar as condições para que as inspecções dos locais, existências e registos sejam tão frequentes quanto necessário.

ARTIGO 16

Informações a fornecer pelas Partes

1 — As Partes comprometem-se a fornecer ao Secretário-Geral as informações que a Comissão possa

pedir por considerar necessárias ao exercício das suas funções, e nomeadamente um relatório anual relativo ao funcionamento da Convenção nos seus territórios e contendo informações sobre:

a) As modificações importantes introduzidas nas suas leis e regulamentos relativos às substâncias psicotrópicos; e

b) Os factos particularmente significativos que se tenham produzido nos seus territórios em matéria de abuso e de tráfico ilícito das substâncias psicotrópicas.

2 — Por outro lado, as Partes comprometem-se a comunicar ao Secretário-Geral os nomes e os endereços das autoridades governamentais mencionadas na alínea *f*) do artigo 7, no artigo 12 e no parágrafo 3 do artigo 13. O Secretário-Geral difundirá estas informações a todas as Partes.

3 — As Partes comprometem-se a dirigir ao Secretário-Geral, no mais curto prazo, um relatório sobre os casos de tráfico ilícito de substâncias psicotrópicas e de apreensão de substâncias que sejam objecto deste tráfico, quando estes casos lhes parecerem importantes devido:

a) A novas tendências postas em evidência;

b) Às quantidades em causa;

c) Aos dados que fornecem sobre as fontes de abastecimento; ou

d) Aos métodos empregues pelos traficantes.

Deverão ser fornecidas cópias do relatório de acordo com a alínea *b*) do artigo 21.

4. As Partes comprometem-se a fornecer ao Órgão relatórios estatísticos anuais, utilizando para este efeito os formulários estabelecidos pelo Órgão. Estes relatórios terão:

a) No que diz respeito a cada uma das substâncias inscritas nas listas I e II, as quantidades fabricadas, exportadas e importadas para ou de cada país ou região, assim como as existências em poder dos fabricantes;

b) No que diz respeito a cada uma das substâncias inscritas nas listas III e IV, as quantidades fabricadas e as quantias totais exportadas e importadas;

c) No que diz respeito a cada uma das substâncias inscritas nas listas II e III, as quantidades utilizadas para o fabrico de preparação isentas; e

d) No que diz respeito a cada uma das substâncias inscritas numa lista que não seja a lista I, as quantidades empregues para fins industriais, de acordo com as disposições da alínea *b*) do artigo 4.

As quantidades fabricadas que são visadas pelas alíneas *a*) e *b*) do presente parágrafo não incluem as quantidades de preparação fabricadas.

5 — Qualquer Parte deverá fornecer ao Órgão, a seu pedido, informações estatísticas suplementares relativas a períodos posteriores, sobre as quantidades de qualquer substância inscrita nas listas III e IV exportadas com destino a cada país ou região e importadas de cada país ou região. Esta Parte poderá pedir ao Órgão para conferir carácter confidencial tanto ao seu pedido de informações como às informações fornecidas nos termos do presente parágrafo.

6 — As Partes comprometem-se a fornecer as informações mencionadas nos parágrafos 1 e 4, da maneira e nas datas que a Comissão ou o Órgão fixar.

ARTIGO 17

Funções da Comissão

1 — O Órgão efectua sobre os seus trabalhos relatórios anuais onde figura uma análise das informações estatísticas de que dispõe e, nos casos apropriados, um relato das explicações que os Governos tenham fornecido ou lhe hajam solicitado, assim como qualquer observação e recomendação que o Órgão possa querer formular. O Órgão pode igualmente proceder à elaboração de todos os relatórios suplementares que considere necessários. Os relatórios são apresentados ao Conselho por intermédio da Comissão, que pode formular as observações que julgar oportunas.

2 — Os relatórios do Órgão são comunicados às Partes e publicados ulteriormente pelo Secretário-Geral. As Partes autorizam a livre distribuição destes relatórios.

ARTIGO 19

Medidas a tomar pelo órgão para assegurar a execução das disposições da Convenção

1 — *a*) Se, após exame das informações dirigidas ao Órgão pelos Governos, ou das informações comunicadas pelos órgãos das Nações Unidas, o Órgão tem motivo para crer que os fins da presente Convenção são seriamente comprometidos pelo facto de um país ou uma região não executar as suas disposições, o Órgão tem direito de pedir explicações ao Governo do país ou da região interessada. Sob reserva do direito que possui de chamar a atenção das Partes, do Conselho e da Comissão sobre a questão visada na alínea *c*), o Órgão considerará confidencial um pedido de informação ou uma explicação fornecida por um Governo, nos termos da presente alínea;

b) Depois de ter actuado segundo o prescrito na alínea *a*), o Órgão pode, se julga necessário fazê-lo, solicitar ao Governo interessado a adopção de medidas correctivas que, face às circunstâncias, possam revelar-se necessárias à boa execução das disposições da presente Convenção;

c) Se o Órgão constatar que o Governo interessado não deu explicações satisfatórias quando foi convidado a fazê-lo, nos termos da alínea *a*), ou negligenciou a adopção de todas as medidas correctivas que foi convidado a assumir, de acordo com a alínea *b*), pode chamar a atenção das Partes, do Conselho e da Comissão para o assunto.

2 — Quando chama a atenção das Partes, do Conselho e da Comissão para uma questão, de acordo com a alínea *c*) do parágrafo 1, o Órgão pode, se entender necessária tal medida, recomendar às Partes que interrompam a exportação de substâncias psicotrópicas para este país ou região, ou a importação das substâncias psicotrópicas provenientes deste país ou região, ou ainda simultaneamente a exportação e a importação, quer por um período determinado, quer até ao momento em que a situação neste país ou nesta região seja considerada aceitável pelo Órgão.

O Estado interessado tem o direito de apresentar a questão perante o Conselho.

3 — O Órgão tem o direito de publicar um relatório sobre qualquer questão visada pelas disposições do presente artigo e de comunicá-lo ao Conselho, que

o transmitirá a todas as Partes. Se o Órgão publica neste relatório uma decisão adoptada nos termos do presente artigo ou informações relativas a esta decisão, deve igualmente publicar a opinião do Governo interessado, se este o pede.

4 — Nos casos em que uma decisão do Órgão publicada nos termos do presente artigo não haja sido adoptada por unanimidade, a opinião da minoria deve ser expressa.

5 — Qualquer Estado será convidado a fazer-se representar nas sessões do Órgão em que seja examinada uma questão que directamente o interesse, nos termos do presente artigo.

6 — As decisões do Órgão assumidas nos termos do presente artigo devem ser adoptadas por maioria de dois terços do número total dos membros do Órgão.

7 — As disposições dos parágrafos precedentes aplicar-se-ão igualmente no caso de o Órgão ter motivos para crer que os fins da presente Convenção são ser amente comprometidos devido a uma decisão tomada por uma Parte de acordo com as disposições do parágrafo 7 do artigo 2.

ARTIGO 20

Medidas contra o abuso das substâncias psicotrópicas

1 — As Partes comprometem-se a adoptar todas as medidas susceptíveis de prevenir o abuso das substâncias psicotrópicas e assegurar a rápida identificação, assim como o tratamento, a educação, a pós-cura, a readaptação e a reintegração social das pessoas envolvidas; elas comprometem-se a coordenar os seus esforços para a consecução desse fim.

2 — As Partes comprometem-se a favorecer tanto quanto possível a formação do pessoal para assegurar o tratamento, a pós-cura, a readaptação e a reintegração social das pessoas que abusam de substâncias psicotrópicas.

3 — As Partes comprometem-se a auxiliar as pessoas que necessitem de apoio no exercício da sua profissão, no sentido de adquirirem o conhecimento dos problemas resultantes do abuso das substâncias psicotrópicas e pela sua prevenção, e comprometem-se a desenvolver igualmente este conhecimento no seio do grande público, no caso de se considerar que o abuso destas substâncias alastre muito rapidamente.

ARTIGO 21

Luta contra o tráfico ilícito

Tendo devidamente em consideração os seus regimes constitucional, jurídico e administrativo, as Partes:

a) Comprometem-se a assegurar no plano nacional a coordenação da acção preventiva e repressiva contra o tráfico ilícito; para este fim poderão utilmente designar um serviço apropriado encarregue desta coordenação;

b) Comprometem-se a assistir-se mutuamente na luta contra o tráfico ilícito das substâncias psicotrópicas, e em particular a transmitir imediatamente às outras Partes directamente interessadas, pela via diplomática ou através das autoridades competentes que hajam designado para esse efeito, cópias de qualquer relatório que tenham dirigido ao Secretário-Geral, nos termos do artigo 16, em consequência da descoberta de um caso de tráfico ilícito ou de uma apreensão;

c) Cooperarão estreitamente entre elas e com as organizações internacionais competentes de que são membros para travarem uma luta coordenada contra o tráfico ilícito;

d) Comprometem-se a actuar de modo que a cooperação internacional dos serviços apropriados se realize pelas vias mais rápidas; e

e) Comprometem-se a assegurar-se de que, quando peças de processo forem transmitidas entre países para o exercício de uma acção judiciária, a transmissão seja efectuada pelas vias mais rápidas e dirigida às instâncias designadas pelas Partes; esta disposição não prejudica o direito de as Partes pedirem que as peças do processo lhes sejam enviadas por via diplomática.

ARTIGO 22

Disposições penais

1 — *a*) Ressalvando as suas disposições constitucionais, cada Parte considerará como uma infracção punível qualquer acto cometido intencionalmente em contravenção a uma lei ou regulamento adoptados para execução das suas obrigações decorrentes da presente Convenção, e tomará as medidas necessárias para que as infracções graves sejam devidamente sancionadas, por exemplo por uma pena de prisão ou uma outra pena privativa da liberdade;

b) Sem prejuízo das disposições que figuram na precedente alínea, quando as pessoas que tenham cometido estas infracções utilizem de maneira abusiva as substâncias psicotrópicas, as Partes poderão, em vez de as condenar ou de pronunciar uma sanção penal contra elas, ou como complemento da sanção penal, sujeitar estas pessoas a medidas de tratamento de educação de pós-cura, de readaptação e de reintegração social, conforme as disposições do parágrafo 1 do artigo 20.

2 — Ressalvando as disposições constitucionais, do sistema jurídico e da legislação nacional de cada Parte:

a) *i*) Se uma série de actos ligados entre si e que constituam infracções nos termos do anterior parágrafo 1 for cometida em países diferentes, cada um destes actos será considerado como uma infracção distinta;

ii) A participação intencional numa qualquer das ditas infracções, a associação ou o entendimento com vista a cometê-la ou a tentativa de cometê-la, assim como os actos preparatórios e as operações financeiras intencionalmente efectuadas, relativas às infracções mencionadas no presente artigo, constituirão infracções passíveis das penas previstas no parágrafo 1;

iii) As condenações pronunciadas no estrangeiro sobre estas infracções serão tomadas em consideração a fim de estabelecer a reincidência; e

iv) As infracções graves citadas acima, quer sejam cometidas por nacionais ou por estrangeiros, serão submetidas a procedimento judicial pela Parte em cujo território a infracção foi cometida ou pela Parte em cujo território o delinquente se encontra, no caso de a extradição não ser compatível com a legislação da Parte à qual o pedido foi dirigido e se o delinquente não foi já apresentado a juízo e julgado.

b) É desejável que as infracções mencionadas no parágrafo 1 e na parte *ii*) da alínea *a*) do parágrafo 2 sejam consideradas como casos de extradição nos termos de qualquer tratado de extradição concluído ou a concluir entre Partes e sejam reconhecidas como casos de extradição entre si pelas Partes que não sujeitam a extradição à existência de um tratado ou à reciprocidade, entendendo-se, todavia, que a extradição será concedida de acordo com a legislação da Parte a quem o pedido de extradição foi dirigido, tendo a dita Parte o direito de recusar a execução da detenção do delinquente ou recusar o seu acordo à extradição se as autoridades competentes considerarem que a infracção não é suficientemente grave.

3 — Qualquer substância psicotrópica ou outra substância e qualquer utensílio utilizado ou destinado a ser utilizado para cometer uma qualquer das infracções visadas nos parágrafos 1 e 2 poderão ser apreendidos e confiscados.

4 — Nenhuma disposição do presente artigo prejudicará as disposições da legislação nacional de uma Parte em matéria de competência.

5 — Nenhuma disposição do presente artigo prejudicará o princípio segundo o qual as infracções a que se refere serão definidas, apreciadas em juízo e condenadas de acordo com a legislação nacional de cada uma das Partes.

ARTIGO 23

Aplicação de medidas de fiscalização mais severas do que as exigidas pela Convenção

As Partes poderão adoptar medidas de fiscalização mais restritas ou mais severas do que as previstas pela presente Convenção se o considerarem oportuno ou necessário para a protecção da saúde e do interesse público.

ARTIGO 24

Despesas dos órgãos internacionais resultantes da aplicação das disposições da Convenção

As despesas da Comissão e do Órgão na execução das suas funções respectivas em virtude da presente Convenção serão assumidas pela Organização das Nações Unidas nas condições que serão determinadas pela Assembleia Geral. As Partes que não são membros da Organização das Nações Unidas contribuirão para estas despesas, devendo a Assembleia Geral fixar periodicamente, depois de consultar os Governos destas Partes, o montante das contribuições que considere equitativo.

ARTIGO 25

Processo de admissão, de assinatura, de ratificação e de adesão

1 — Os Estados membros da Organização das Nações Unidas, os Estados não membros da Organização das Nações Unidas que sejam membros de uma instituição especializada das Nações Unidas ou da Agência Internacional da Energia Atómica ou Partes no Estatuto do Tribunal Internacional de Justiça, assim como qualquer outro Estado convidado pelo Conselho, podem tornar-se Partes na presente Convenção:

a) Assinando-a; ou

b) Ratificando-a, depois de a ter assinado sob reserva de ratificação; ou

c) Aderindo a ela.

2 — A presente Convenção será aberta para assinatura até ao dia 1 de Janeiro de 1972, inclusive. Será a seguir aberta a adesão.

3 — Os instrumentos de ratificação ou de adesão serão depositados junto do Secretário-Geral.

ARTIGO 26

Entrada em vigor

1 — A presente Convenção entrará em vigor noventa dias depois de quarenta dos Estados visados no parágrafo 1 do artigo 25 a terem assinado sem reserva de ratificação ou terem depositado os seus instrumentos de ratificação ou de adesão.

2 — Para qualquer outro Estado que assine sem reserva de ratificação, ou que deposite um instrumento de ratificação ou de adesão depois da data da última assinatura ou do último depósito visados no parágrafo precedente, a presente Convenção entrará em vigor noventa dias depois da data da sua assinatura ou do depósito do seu instrumento de ratificação ou de adesão.

ARTIGO 27

Aplicação territorial

A presente Convenção aplicar-se-á a todos os territórios não metropolitanos que uma Parte represente no plano internacional, excepto no caso de ser necessário o consentimento prévio de um tal território em virtude da Constituição da Parte ou do território interessado, ou do costume. Neste caso, a Parte esforçar-se-á por obter, no mais curto prazo de tempo, o consentimento do território e, quando este consentimento tiver sido obtido, notificará o Secretário-Geral. A presente Convenção aplicar-se-á ao território ou aos territórios designados pela dita notificação na data de recepção desta última pelo Secretário-Geral. Nos casos em que o consentimento prévio do território não metropolitano não seja necessário, a Parte interessada deverá declarar, no momento da assinatura da ratificação ou da adesão, a que território ou territórios não metropolitanos se aplica a presente Convenção.

ARTIGO 28

Regiões no entender da presente Convenção

1 — Qualquer Parte pode notificar o Secretário-Geral de que, para os fins da presente Convenção, o seu território é dividido em duas ou várias regiões ou que duas ou várias das suas regiões são agrupadas numa só.

2 — Duas ou várias Partes podem notificar o Secretário-Geral de que, em consequência da instituição de uma união alfandegária entre si, estas Partes constituem uma região para efeitos da presente Convenção.

3 — Qualquer notificação efectuada nos termos do parágrafo 1 ou 2 tornar-se-á efectiva no dia 1 de Janeiro do ano seguinte àquele em que a dita notificação houver sido feita.

ARTIGO 29

Denúncia

1 — Decorrido o prazo de dois anos sobre a data de entrada em vigor da presente Convenção, qualquer Parte poderá, em nome próprio ou em nome de um território que represente no plano internacional e que retirou o consentimento dado, nos termos do artigo 27, denunciar a presente Convenção, depositando um instrumento para este efeito junto do Secretário-Geral.

2 — Se o Secretário-Geral receber a denúncia antes do dia 1 de Julho ou nesta data, ela tornar-se-á efectiva no dia 1 de Janeiro do ano seguinte; se a denúncia for recebida depois de 1 de Julho, tornar-se-á efectiva como se houvesse sido recebida no ano seguinte antes de 1 de Julho ou nesta data.

3 — A presente Convenção expirará se, em consequência de denúncias notificadas de acordo com as disposições dos parágrafos 1 e 2, as condições da sua entrada em vigor previstas no parágrafo 1 do artigo 26 deixarem de ser preenchidas.

ARTIGO 30

Emendas

1 — Qualquer Parte poderá propor uma emenda à presente Convenção. O texto da dita emenda e as razões que a motivaram serão comunicadas ao Secretário-Geral, que as comunicará às Partes e ao Conselho. O Conselho poderá decidir:

a) Convocar uma conferência de acordo com o parágrafo 4 do artigo 62 da Carta das Nações Unidas, com vista a estudar a emenda proposta; ou

b) Perguntar às Partes se aceitam a emenda proposta e pedir ainda que apresentem ao Conselho as suas observações eventuais sobre esta proposta.

2 — Se um projecto de emenda distribuído de acordo com a alínea *b*) do parágrafo 1 não for rejeitado por nenhuma Parte nos dezoito meses que se seguem à sua comunicação, entrará imediatamente em vigor. Se, no entanto, for rejeitado por uma Parte, o Conselho poderá decidir, tendo em conta as observações das Partes, sobre a conveniência em convocar uma conferência à qual seja cometido o estudo da sobredita emenda.

ARTIGO 31

Diferendos

1 — Se surgir entre duas ou várias Partes um diferendo no que se refere à interpretação ou à aplicação da presente Convenção, as ditas Partes realizarão consultas entre si para resolver este diferendo por via de negociações, de inquéritos, de mediação, de conciliação, de arbitragem, de recurso a organismos regionais, por via judiciária ou por outros meios pacíficos da sua escolha.

2 — Qualquer diferendo deste género que não tenha sido resolvido pelos meios previstos no parágrafo 1 será submetido, a pedido de uma das Partes do diferendo, ao Tribunal Internacional de Justiça.

ARTIGO 32

Reservas

1 — Nenhuma reserva é autorizada fora das reservas feitas de acordo com os parágrafos 2, 3 e 4 do presente artigo.

2 — Qualquer Estado pode, na altura da assinatura, da ratificação ou da adesão, fazer reservas sobre as disposições seguintes da presente Convenção:

a) Artigo 19, parágrafos 1 e 2;
b) Artigo 27; e
c) Artigo 31.

3 — Qualquer Estado que deseje tornar-se Parte da Convenção, mas que pretenda ser autorizado a efectuar reservas diferentes das que são enumeradas nos parágrafos 2 e 4, pode avisar o Secretário-Geral desta sua intenção. A menos que, ao expirarem doze meses sobre a data da comunicação da reserva em questão pelo Secretário-Geral, um terço dos Estados que assinaram sem reserva de ratificação, ratificaram a Convenção ou aderiram a ela antes do termo do dito período levantem objecções contra ela, será considerada como autorizada, entendendo-se todavia que os Estados que hajam levantado objecções contra esta reserva não terão que assumir, em relação ao Estado que a formulou, a obrigação jurídica decorrente da presente Convenção, sobre a qual incide a reserva.

4 — Qualquer Estado em cujo território cresçam no estado selvagem plantas contendo substâncias inscritas na lista I e utilizadas tradicionalmente por certos grupos restritos bem determinados na ocasião de cerimónias mágicas ou religiosas, pode, na altura da assinatura da ratificação ou da adesão, fazer reservas sobre estas plantas no que se refere às disposições do artigo 7, excepto nas relativas ao comércio internacional.

5 — O Estado que tenha feito reservas poderá a qualquer altura, e por via de notificação escrita ao Secretário-Geral, levantar todas ou parte das reservas.

ARTIGO 33

Notificação

O Secretário-Geral notificará a todos os Estados mencionados no parágrafo 1 do artigo 25:

a) As assinaturas, ratificações ou adesões de acordo com o artigo 25;
b) A data em que a presente Convenção entrará em vigor de acordo com o artigo 26;
c) As denúncias de acordo com o artigo 29; e
d) As declarações e notificações de acordo com os artigos 27, 28, 30 e 32.

Em fé do que, os abaixo assinados, devidamente autorizados, assinaram a presente Convenção em nome dos seus Governos respectivos.

Feito em Viena, a 21 de Fevereiro de 1971, em exemplar único, em inglês, chinês, espanhol, francês e russo, fazendo os cinco textos igualmente fé. A Convenção será depositada junto do Secretário-Geral da Organização das Nações Unidas, que transmitirá cópias certificadas conformes a todos os Estados Membros da Organização das Nações Unidas e aos outros Estados visados no parágrafo 1 do artigo 25.

Lista das substâncias *

Substâncias da lista I

DCI	Outras denominações comuns	Nomenclatura química
1.	DET	*N*,*N*-dietiltriptamina.
2.	DMHP	3-(1,2-dimetil-heptil)-1-hidroxil-7,8,9,10-tetra-hidro-6,6,9-trimetil--6*H*-dibenzo[*b*,*d*]pirano.
3.	DMT	*N*,*N*-dimetiltriptamina.
4. (+)-Lisergida	LSD, LSD-25	(2)-*N*,*N*-dietilisergamida (dietilamida do ácido *d* lisérgico).
5.	Mescalina	3,4,5-trimetoxifenetilamina.
6.	Para-hexilo	3-hexil-1-hidroxi-7,8,9,10-tetra-hidro-6,6,9-trimetil-6*H*-dibenzo[*b*,*d*]pirano.
7.	Psilocina, psilotsina	3-(2-dimetilamincetil)-4-hidroxiindol.
8. *Psilocibina*	—	**Fosfato di-hidrogenado de** 3-(2-dimetil-aminoetil)-indol-4-ilo.
9.	STP, DOM	2-amino-1-2,5-dimtoxi-4-metil) fenilpropano.
10.	Tetra-hidrocanabinóis, os seguintes isómeros: Δ6*a*(10*a*), Δ6*a*(7), Δ7, Δ8, Δ9, Δ10, Δ9(11), e as suas variantes tereoquímicas.	—

Os sais das substâncias indicadas nesta lista, sempre que a existência de tais sais seja possível.

Substâncias da lista II

DCI	Outras denominações comuns	Nomenclatura química
1. *Anfetamina*	—	(±)-2-amino-1-fenilpropano.
2. *Dexanfetamina*	—	(+)-2-amino-1-fe ilpropano.
3. *Metanfetamina*	—	(+)-2-metilamino-1-fenilpropano.
4. *Metilfenidato*	—	Éster netílico do ácido 2-fefil-2-(2-piperidil) acético.
5. *Fenciclidina*	—	1-(fenilciclo-hexil)-pipedina.
6. *Fenmetrazina*	—	3-metil-2-fenilmorfolina.

Os sais das substâncias indicadas nesta lista, sempre que a existência de tais sais seja possível.

Substâncias da lista III

DCI	Outras denominações comuns	Nomenclatura química
1. *Amobarbital*	—	Ácido 5-etil-5-(3-metilbutil) barbitúrico.
2. *Ciclobarbital*	—	Ácido 5-(1 ciclo-hexeno-l-il)-5-etilbarbitúrico.
3. *Glutetimina*	—	2-etil-2-fenilglutarimida.
4. *Pentobarbital*	—	Ácido 5-etil-5-(1-metilbutil) barbitúrico.
5. *Secobarbital*	—	Ácido 5-alil-5-(1-metilbutil) barbitúrico.

Os sais das substâncias indicadas nesta lista, sempre que a existência de tais sais seja possível.

Substâncias da lista IV

DCI	Outras denominações comuns	Nomenclatura química
1. *Anfepramona*	—	2-(dietilamino) propiofenona.
2. *Barbital*	—	Ácido 5,5-dietilbarbitúrico.
3.	Etclorvinol	Etil-2-cloroviniletinilcarbinol.
4. *Etinamato*	—	Carbamato de l-etinilciclo-hexilo.
5. *Meprobamato*	—	Dicarbamato de 2-metil-2-propil-1,3-propa odiol.
6. *Metaqualona*	—	2-metil-3-*o*-totil-4-(3*H*)-quinazolinona.
7. *Metilfenobarbital*	—	Ácido 5-etil-1-metil-5-fenilbarbitúrico.
8. *Metiprilona*	—	3,3-dietil-5-metil-2,4-piperidinodiona.
9. *Fenobarbital*	—	Ácido 5-etil-5-fenilbarbitúrico.
10. *Pipradrol*	—	1,1-difenil-1-(2-piperidil) metanol.
11.	SPA	(−)-1-dimetilamino-1,2-difeniletano.

Os sais das substâncias indicadas nesta lista, sempre que a existência de tais sais seja possível.

* Os nomes que aparecerem em itálico na coluna da esquerda são as denominações comuns internacionais (DCI). Com uma excepção [(+)-Lisergida], somente se indicam outros nomes comuns quando ainda não tenha sido proposta ne huma DCI.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 178/99

de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1989, aprovada pelo Decreto n.º 56/91, de 21 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 21 de Setembro de 1991.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com o referido decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 56/91

de 21 de Setembro

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

Artigo único. São aprovadas, para ratificação, as emendas à regra 10 do Regulamento Internacional para Evitar Abalroamentos no Mar, cuja versão original em inglês e respectiva tradução portuguesa seguem em anexo ao presente decreto.

Visto e aprovado em Conselho de Ministros de 1 de Agosto de 1991. — *Joaquim Fernando Nogueira — Joaquim Fernando Nogueira — Vítor Ângelo Mendes da Costa Martins — Joaquim Martins Ferreira do Amaral — Carlos Alberto Diogo Soares Borrego.*

Ratificado em 6 de Setembro de 1991.

Publique-se.

O Presidente da República, MÁRIO SOARES.

Referendado em 10 de Setembro de 1991.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 218, I Série-A, de 21 de Setembro de 1991)

共和國總統府

共和國總統令 第178/99號

八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九八九年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；該修正案係經九月二十一日第 56/91 號命令通過，且文本已公布於一九九一年九月二十一日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過修正案之命令及公約之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年八月五日第 181 期《共和國公報》第一組-A）

外交部

命令 第56/91號

九月二十一日

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

獨一條 —— 通過《國際海上避碰規則公約第十條修正案》，以待批准；該修正案之英文原文及葡文譯本附於本命令。

一九九一年八月一日於部長會議批閱及通過——*Joaquim Fernando Nogueira* —— *Joaquim Fernando Nogueira* —— *Vítor Ângelo Mendes da Costa Martins* —— *Joaquim Martins Ferreira do Amaral* —— *Carlos Alberto Diogo Soares Borrego.*

一九九一年九月六日批准。

命令公布。

共和國總統

MÁRIO SOARES

一九九一年九月十日副署。

總理

Aníbal António Cavaco Silva

（一九九一年九月二十一日第 218 期《共和國公報》第一組-A）

Amendment to the International Regulations for Preventing Collisions at Sea, 1972

Rule 10 – Traffic Separation Schemes

The existing text of paragraph (*d*) is replaced by the following:

(*d*) (*i*) A vessel shall note use an inshore traffic zone when she can safely use the appropriate traffic lane within the adjacent traffic separation scheme. However, vessels of less than 20 metres in length, sailing vessels and vessels engaged in fishing may use the inshore traffic zone.

(*ii*) Notwithstanding subparagraph (*d*) (*i*), a vessel may use an inshore traffic zone when *en route* to or from a port, offshore installation or structure, pilot station or any other place situated within the inshore traffic zone, or to avoid immediate danger.

Emenda ao Regulamento Internacional para Evitar Abalroamentos no Mar, 1972

Regra 10 – Esquemas de Separação de Tráfego

O texto existente do parágrafo (*d*) é substituído pelo seguinte:

(*d*) (*i*) Um navio não deverá navegar numa zona de tráfego costeiro quando o possa fazer com segurança no corredor de tráfego apropriado do respectivo esquema de separação de tráfego. Contudo, navios com comprimento inferior a 20 m, navios à vela e navios em faina de pesca podem navegar na zona de tráfego costeiro.

(*ii*) Não obstante o subparágrafo (*d*) (*i*), um navio pode navegar numa zona de tráfego costeiro quando seguindo para ou provindo de um porto, instalação ou estrutura *offshore*, estação de pilotos ou qualquer outro destino localizado dentro da zona de tráfego costeiro, ou ainda para evitar um perigo imediato.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 177/99
de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentida ao território de Macau, nos mesmos termos em que a ela está vinculado o Estado Português, a emenda à Convenção sobre o Regulamento Internacional para Evitar Abalroamentos no Mar, adoptada em 1981, cujo texto foi publicado no *Diário da República*, 1.ª série, de 9 de Novembro de 1983.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com o referido texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(*D.R. n.º 181, I Série-A, de 5 de Agosto de 1999*)

共和國總統府

共和國總統令 第177/99號
八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九八一年通過之《國際海上避碰規則公約修正案》延伸至澳門地區，按照葡萄牙政府受該修正案約束之相同規定適用；有關文本已公布於一九八三年十一月九日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述公約之文本公布於《澳門政府公報》。

（一九九九年八月五日第181期《共和國公報》第一組-A）

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Direcção-Geral dos Negócios Económicos

Aviso

Para os devidos efeitos se torna público que Portugal, por força do artigo VI, parágrafos 4 e 5, da Convenção sobre o Regulamento Internacional para

外交部

經濟事務統籌司

通知

爲應有之效力，茲公布葡萄牙根據一九七二年《國際海上避碰規則公約》第六條第四款及第五款之規定，已接納

Evitar Abalroamentos no Mar, de 1972, aceitou a Resolução A.464, adoptada na 12.ª Assembleia da Organização Marítima Internacional em 19 de Novembro de 1981, que introduziu emendas à referida Convenção, e cujos textos em inglês e português acompanham o presente aviso.

Direcção-Geral dos Negócios Económicos, 26 de Setembro de 1983. — O Subdirector-Geral, *Roberto Nuno de Oliveira e Silva Pereira de Sousa.*

(D.R. n.º 258, I Série, de 9 de Novembro de 1983)

一九八一年十一月十九日在國際海事組織第十二次大會上通過之對上述公約引入修改之 A.464 決議；有關之英文本及葡文本附於本通告。

一九八三年九月二十六日於經濟事務統籌司

統籌司副司長

Roberto Nuno de Oliveira e Silva Pereira de Sousa

（一九八三年十一月九日第 258 期《共和國公報》第一組）

Resolution A.464 (XII)

(Adopted on 19 November 1981)

Amendments to the International Regulations for Preventing Collisions at Sea, 1972

The Assembly,

Recalling article VI of the Convention on the International Regulations for Preventing Collisions at Sea, 1972, on amendments to the Regulations;

Recalling also Resolution A.431 (XI) entitled «Recommendation concerning vessels restricted in their ability to manœuvre when engaged in an operation for the maintenance of safety of navigation in a traffic separation scheme» including the decision to consider at its twelfth session the adoption of a corresponding amendment to rule 10 of the International Regulations for Preventing Collisions at Sea, 1972;

Having considered the above and other amendments to the International Regulations for Preventing Collisions at Sea, 1972, adopted by the Maritime Safety Committee at its forty-fourth session and communicated to all Contracting Parties in accordance with paragraph 2 of article VI of that Convention and also the recommendations of the Maritime Safety Committee concerning entry into force of these amendments,

1 — Adopts, in accordance with paragraph 3 of article VI of the Convention, the amendments set out in the annex to the present resolution;

2 — Decides, in accordance with paragraph 4 of article VI of the Convention, that each amendment shall enter into force on 1 June 1983 unless by 1 June 1982 more than one third of the Contracting Parties have notified their objection to the amendments;

3 — Requests the Secretary-General, in conformity with paragraph 3 of article VI, to communicate this resolution to all Contracting Parties to the Convention for acceptance, together with copies to all Members of the Organization;

4 — Invites Contracting Parties to submit any objections to the amendments not later than 1 June 1982 whereafter the amendments will be deemed to enter into force as determined in this resolution.

ANNEX

Amendments to the International Regulations for Preventing Collisions at Sea, 1972

1 — *Rule 1, c):*
Amend to read:

c) Nothing in these rules shall interfere with the operation of any special rules made by the Government of any State with respect to additional station or signal lights, shapes or whistle signals for ships of war and vessels proceeding under convoy, or with respect to additional station or signal lights or shapes for fishing vessels engaged in fishing as a fleet. These additional station or signal lights, shapes or whistle signals shall, so far as possible, be such that they cannot be mistaken for any light, shape or signal authorized elsewhere under these rules.

2 — *Rule 3, g):*
Replace the sentence immediately before sub-paragraphs *i)* to *vi)* by the following:

The term «vessels restricted in their ability to manœuvre» shall include but not be limited to.

3 — *Rule 3, g), v):*
Replace the word «minesweeping» by the word «mineclearance».

4 — *Rule 10, b), iii):*
Replace the words «when joining or leaving from the side» by the words «when joining or leaving from either side».

5 — *Rule 10, d):*
Add the following sentence to the present text:

However, vessels of less than 20 metres in length and sailing vessels may under all circumstances use inshore traffic zones.

6 — *Rule 10, e):*
Amend to read:

e) A vessel other than a crossing vessel or a vessel joining or leaving a lane shall not normally enter ...

7 — *Rule 10, k):*
Add the following new paragraph:

k) A vessel restricted in her ability to manœuvre when engaged in an operation for the maintenance of safety of navigation in a traffic separation scheme is exempted from complying with this rule to the extent necessary to carry out the operation.

8 — *Rule 10, l):*
Add the following new paragraph:

l) A vessel restricted in her ability to manœuvre when engaged in an operation for **the laying, servicing** or picking up of a submarine cable, within a traffic separation scheme, is exempted from complying with this rule to the extent necessary to carry out the operation.

9 — *Rule 13, a):*
Amend to read:

a) Notwithstanding anything contained in the rules of part B, sections I and II ...

10 — *Rule 22, d):*
Add a new paragraph:

d) In inconspicuous, partly submerged vessels or objects being towed: — a white all-round light, 3 miles.

11 — *Rule 23, c):*
Amend to read:

c):

i) A power-driven vessel of less than 12 metres in length may in lieu of the lights prescribed in paragraph *a)* of this rule exhibit an all-round white light and sidelights;

ii) A power-driven vessel of less than 7 metres in length whose maximum speed does not exceed 7 knots may in lieu of the lights prescribed in paragraph *a)* of this rule exhibit an all-round white light and shall, if practicable, also exhibit sidelights;

iii) The masthead light or all-round white light on a power driven vessel of less than 12 metres in length may be displaced from the fore and aft centreline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft centreline of the vessel or located as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.

12 — *Rule 24, a), i) and c), i):*
Insert «or *a), ii)*» after «in rule 23, *a), i)*» and delete «forward».

13 — *Rule 24, d):*
Replace the words «paragraphs *a)* and *c)*» in the first line by the words «paragraph *a)* or *c)*».

14 — *Rule 24, e):*
Amend the lead-in sentence to read:

A vessel or object being towed, other than those mentioned in paragraph *g)* of this rule, shall exhibit:

15 — *Rule 24, g):*
Insert the following new paragraph *g):*

g) An inconspicuous, partly submerged vessel or object, or combination of such vessels or objects being towed, shall exhibit:

i) If it is less than 25 metres in breadth, one all-round white light at or near the forward end and one at or near the after end except that dracones need not exhibit a light at or near the forward end;

ii) If it is 25 metres or more in breadth, two additional all-round white lights at or near the extremities of its breadth;

iii) If it exceeds 100 metres in length, additional all-round white lights between the lights prescribed in sub-paragraphs *i)* and *ii)* so that the distance between the lights shall not exceed 100 metres;

iv) A diamond shape at or near the aftermost extremity of the last vessel or object being towed and if the length of the tow exceeds 200 metres an additional diamond shape where it can best be seen and located as far forward as is practicable.

16 — *Rule 24, h):*
Reletter existing paragraph *g)*, which becomes paragraph *h)*, and amend it to read:

h) Where from any sufficient cause it is impracticable for a vessel or object being towed to exhibit the lights or shapes prescribed in paragraph *e)* or *g)* of this rule, all possible measures shall be taken to light the vessel or object towed or at least to indicate the presence of such vessel or object.

17 — *Rule 24, i):*
Add the following new paragraph:

i) Where from any sufficient cause it is impracticable for a vessel not normally engaged in towing operations to display the lights prescribed in paragraph *a)* or *c)* of this rule, such vessel shall not be required to exhibit those lights when engaged in towing another vessel in distress or otherwise

in need of assistance. All possible measures shall be taken to indicate the nature of the relationship between the towing vessel and the vessel being towed as authorized by rule 36, in particular by illuminating the towline.

18 — *Rule 25, b):*

Amend «12 metres» to read «20 metres».

19 — *Rule 27, b), preamble:*

Replace the word «minesweeping» by the word «mineclearance» in the first sentence.

20 — *Rule 27, b), iii):*

Replace the words «masthead lights» by the words «a masthead light or lights».

21 — *Rule 27, c):*

Amend to read:

c) A power-driven vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course shall, in addition to the lights or shapes prescribed in rule 24, *a*), exhibit the lights or shapes prescribed in sub-paragraphs *b*), *i*) and *ii*) of this rule.

22 — *Rule 27, d):*

Replace the words «paragraph *b*)» by the words «sub-paragraphs *b*), *i*), *ii*) and *iii*)»;

Delete existing sub-paragraph *iii*);

Renumber existing sub-paragraph *iv*) which becomes *iii*) and amend it to read:

iii) When at anchor, the lights or shapes prescribed in this paragraph instead of the lights or shape prescribed in rule 30.

23 — *Rule 27, e):*

Amend to read:

e) Whenever the size of a vessel engaged in diving operations makes it impracticable to exhibit all lights and shapes prescribed in paragraph *d*) of this rule, the following shall be exhibited:

i) Three all-round lights in a vertical line where they can best be seen. The highest and lowest of these lights shall be red and the middle light shall be white;

ii) A rigid replica of the International Code flag «A» not less than 1 metre in height. Measures shall be taken to ensure its all-round visibility.

24 — *Rule 27, f):*

Amend to read:

f) A vessel engaged in mineclearance operations shall, in addition to the lights prescribed for a power-driven vessel in rule 23 or to the lights or shape prescribed for a vessel at anchor in rule 30 as appropriate, exhibit three all-round green lights or three balls. One of these lights or shapes shall be exhibited near the foremast head and one at each end of the fore yard. These lights or shapes indicate that it is dangerous for another vessel to approach within 1000 metres of the mineclearance vessel.

25 — *Rule 27, g):*

Amend to read:

g) Vessels of less than 12 metres in length, except those engaged in diving operations, shall not be required to exhibit the lights and shapes prescribed in this rule.

26 — *Rule 29, a), iii):*

Amend to read:

a):

iii) When at anchor, in addition to the lights prescribed in sub-paragraph *i*), the light, lights or shape prescribed in rule 30 for vessels at anchor.

27 — *Rule 30, a):*

Delete «or aground» and amend «shapes prescribed in paragraphs *a*), *b*) or *d*) of this rule» to read «shape prescribed in paragraphs *a*) and *b*) of this rule».

28 — *Rule 30, f):*

Add the following new paragraph:

f) A vessel of less than 12 metres in length, when aground, shall not be required to exhibit the lights or shapes prescribed in sub-paragraphs *d*), *i*) and *ii*) of this rule.

29 — *Rule 33, a):*

In the last line replace «required» by «prescribed».

30 — *Rule 34, b), iii):*

Add «to these Regulations» after the words «annex I».

31 — *Rule 35, d):*

Insert a new paragraph *d*) and reletter existing paragraphs *d*) to *i*) which become *e*) to *j*), as appropriate:

d) A vessel engaged in fishing, when at anchor, and a vessel restricted in her ability to manœuvre when carrying out her work at anchor, shall instead of the signals prescribed in paragraph *g*) of this rule sound the signal prescribed in paragraph *c*) of this rule.

32 — *Rule 36:*

Add the following at the end of the present text:

Any light to attract the attention of another vessel shall be such that it cannot be mistaken for any aid to navigation. For the purpose of this rule the use of high intensity intermittent or revolving lights, such as strobe lights, shall be avoided.

33 — *Rule 37:*
Replace the word «prescribed» by «described».
34 — *Rule 38:*
Insert «to these Regulations» after the words «annex I» in paragraphs *d*), *i*), *e*), *f*) and after the words «annex III» in paragraph *g*).
35 — *Rule 38, h):*
Add the following new paragraph:

h) The repositioning of all-round lights resulting from the prescription of section 9, *b*), of annex I to these Regulations, permanent exemption.

36 — *Annex* I, *section 1:*
Add the following sentence to the present text of the definition:

This height shall be measured from the position vertically beneath the location of the light.

37 — *Annex* I, *section 2, e*):
Amend to read as follows:

e) One of the two or three masthead lights prescribed for a power-driven vessel when engaged in towing or pushing another vessel shall be placed in the same position as either the forward masthead light or the after masthead light; provided that, if carried on the aftermast, the lowest after masthead light shall be at least 4.5 metres vertically higher than the forward masthead light.

38 — *Annex* I, *section 2, f):*
Amend to read:

f):

i) The masthead light or lights prescribed in rule 23, *a*), shall be so placed as to be above and clear of all other lights and obstructions except as described in sub-paragraph *ii*).

ii) When it is impracticable to carry the all-round lights prescribed by rule 27, *b*), *i*) or rule 28 below the masthead lights, they may be carried above the after masthead light(s) or vertically in between the forward masthead light(s) and after masthead light(s), provided that in the latter case the requirement of section 3, *c*), of this annex shall be complied with.

39 — *Annex* I, *section 2, i), i):*
Replace all words of this sub-paragraph after the word «required» in the penultimate line by the following «be placed at a height of not less than 4 metres above the hull».
40 — *Annex* I, *section 2, i), ii):*
Replace all words of this sub-paragraph after the word «required» in the penultimate line by the following «be placed at a height of not less than 2 metres above the hull».

41 — *Annex* I, *section 2, j):*
Delete «fishing» before «vessel».
42 — *Annex* I, *section 2, k):*
Insert «prescribed in rule 30, *a*), *i*)» between «light» and «when two are carried».
Replace all words after «shall» in the second sentence by «be placed at a height of not less than 6 metres above the hull».
43 — *Annex* I, *section 3, b):*
In the first line replace «On a vessel» by «On a power-driven vessel».
44 — *Annex* I, *section 3, c):*
Add the following new paragraph:

c) When the lights prescribed in rule 27, *b*), *i*), or rule 28 are placed vertically between the forward masthead light(s) and the after masthead light(s) these all-round lights shall be placed at a horizontal distance of not less than 2 metres from the fore and aft centreline of the vessel in the athwartship direction.

45 — *Annex* I, *section 5:*
Insert in the first line after «The sidelights» the words «of vessels of 20 metres or more in length» and add the following sentence after the first sentence:

On vessels of less than 20 metres in length the sidelights, if necessary to meet the requirements of section 9 of this annex, shall be fitted with inboard matt black screens.

46 — *Annex* I, *section 8:*
Add the following sentence to the note at the end of this section:

This shall not be achieved by a variable control of the luminous intensity.

47 — *Annex* I, *section 9, a), i):*
Replace «must» by «shall».
48 — *Annex* I, *section 9, a), ii). last line:*
Replace «limits» by «sectors».
49 — *Annex* I, *section 9, b):*
Insert «prescribed in rule 30» between «lights» and «which need not be ...».
50 — *Annex* I, *section 10, a) and b):*
Insert «as fitted» after «electric lights» in the introductory sentences of section 10, *a*) *and b*).

51 — *Annex* I, *section 13:*
Amend to read as follows:

The construction of lights and shapes and the installation of lights on board the vessel shall be to the satisfaction of the appropriate authority of the State whose flag the vessel is entitled to fly.

52 — *Annex* III, *section 1, d):*
Replace «4 dB below the sound pressure» by «4 dB below the prescribed sound pressure» and replace «10 dB below the sound pressure» by «10 dB below the prescribed sound pressure».

53 — *Annex* III, *section 2, a):*
Replace the words «1 metre» by the words «a distance of 1 metre from it».
54 — *Annex* III, *section 2, b):*
Amend the second sentence to read:

The diameter of the mouth of the bell shall be not less than 300 mm for vessels of 20 metres or more in length, and shall be not less than 200 mm for vessels of 12 metres or more but of less than 20 metres in length.

55 — *Annex* III, *section 3:*
Replace «the State where the vessel is registered» by «the State whose flag the vessel is entitled to fly»
56 — *Rule 35, b) (french text):*
Insert «à propulsion mécanique» between «navire» and «faisant route».

Resolução A.464 (XII)

(19 de Novembro de 1981)

ANEXO

Emendas ao Regulamento Internacional para Evitar Abalroamentos no Mar, 1972

1 — *Regra 1, parágrafo c):*
Alterar este parágrafo como segue:

c) Nenhuma disposição das presentes regras prejudicará a aplicação de normas especiais elaboradas pelo governo de um Estado relativas a faróis, balões, sinais luminosos ou sonoros adicionais a utilizar pelos navios de guerra e navios em comboio, ou faróis, balões ou sinais luminosos adicionais para navios em faina de pesca e constituindo um grupo de pesca. Estes faróis, balões, sinais luminosos ou sonoros adicionais devem, na medida do possível, ser tais que não possam confundir-se com qualquer outra luz, balão ou sinal autorizado em qualquer parte destas regras.

2 — *Regra 3, parágrafo g):*
Alterar a frase que precede imediatamente as alíneas *i*) a *vi*) de forma a ler:

A expressão «navio com capacidade de manobra reduzida» compreende, sem que esta lista seja restritiva:

3 — *Regra 3, parágrafo g), alínea v):*
Alterar as palavras «dragagem de minas» para «limpeza de minas».
4 — *Regra 10, parágrafo b), alínea iii):*
No texto inglês alterar o texto «when joining or leaving from the side» de forma a ler «when joining or leaving from either side».
5 — *Regra 10, parágrafo d):*
Acrescentar ao texto actual a seguinte frase:

Contudo, os navios de comprimento inferior a 20 m e os navios à vela podem, em todas as circunstâncias, utilizar as zonas de tráfego costeiro.

6 — *Regra 10, parágrafo e):*
Alterar este parágrafo como segue:

e) Um navio que não esteja a cruzar um esquema de separação de tráfego ou que não esteja a entrar ou sair de um corredor de tráfego normalmente não deve penetrar na zona de separação ou cruzar a linha de separação, excepto:

7 — *Regra 10, parágrafo k):*
Inserir um novo parágrafo como segue:

k) Um navio com capacidade de manobra reduzida, quando efectua uma operação destinada a manter a segurança da navegação num esquema de separação de tráfego, está isento de cumprir com a presente regra na medida do necessário para a execução dessa operação.

8 — *Regra 10, parágrafo l):*
Inserir um novo parágrafo como segue:

l) Um navio com capacidade de manobra reduzida, quando efectua uma operação destinada a lançar, reparar ou levantar um cabo submarino dentro de um esquema de separação de tráfego, está isento de cumprir com a presente regra na medida do necessário para a execução dessa operação.

9 — *Regra 13, parágrafo a):*
Alterar este parágrafo como segue:

a) Não obstante o disposto nas regras das secções I e II da parte B ...

10 — *Regra 22, parágrafo d):*
Inserir um novo parágrafo como segue:

d) Para os navios ou objectos rebocados que estão parcialmente submersos e de difícil avistamento:

Farol visível em todo o horizonte, de luz branca: 3 milhas.

11 — *Regra 23, parágrafo c):*
Alterar este parágrafo como segue:

c):

i) Um navio de propulsão mecânica de comprimento inferior a 12 m pode, em vez dos faróis prescritos no parágrafo *a*) desta regra, mostrar um farol de luz branca visível em todo o horizonte e faróis de borda;

ii) Um navio de propulsão mecânica de comprimento inferior a 7 m e cuja velocidade máxima não ultrapasse 7 nós pode, em vez dos faróis prescritos no parágrafo *a*) desta regra, mostrar um farol de luz branca visível em todo o horizonte e deve, se possível, mostrar faróis de borda;

iii) O farol de mastro ou o farol de luz branca visível em todo o horizonte num navio de propulsão mecânica de comprimento inferior a 12 m pode não se encontrar no eixo longitudinal do navio se não for possível a sua instalação sobre esse eixo, desde que os faróis de borda estejam combinados num farol colocado sobre o eixo longitudinal do navio ou tão perto quanto

possível da linha longitudinal sobre a qual se encontra o farol de mastro ou o farol de luz branca visível em todo o horizonte.

12 — *Regra 24, parágrafo a), alínea i), e parágrafo c), alínea i):*

Inserir as palavras «ou na regra 23, *a*), *ii*)» depois das palavras «prescrito na regra 23, *a*), *i*)» e suprimir a palavra «a vante».

13 — *Regra 24, parágrafo d):*

Alterar as palavras «parágrafos *a*) e *c*) desta» para «parágrafos *a*) ou *c*) desta».

14 — *Regra 24, parágrafo e):*

Alterar a primeira frase como segue:

e) Um navio ou objecto rebocado, com excepção dos mencionados no parágrafo *g*) desta regra, deve mostrar:

15 — *Regra 24, parágrafo g):*

Inserir o novo parágrafo *g*) como segue:

g) Um navio ou objecto rebocado que está parcialmente submerso e de difícil avistamento, ou um conjunto destes navios ou objectos rebocados, deve mostrar:

i) Quando a sua largura é inferior a 25 m, um farol de luz branca visível em todo o horizonte, colocado na extremidade de vante ou sua proximidade, e um outro na extremidade de ré ou sua proximidade, excepto para os «dracones», que não necessitam de mostrar um farol na extremidade de vante ou sua proximidade;

ii) Quando a sua largura é igual ou superior a 25 m, dois faróis suplementares de luz branca visível em todo o horizonte nas extremidades da sua largura ou suas proximidades;

iii) Quando o seu comprimento for superior a 100 m, faróis suplementares de luz branca visível em todo o horizonte entre os faróis prescritos nas alíneas *i*) e *ii*), de modo que a distância entre faróis não seja superior a 100 m;

iv) Um balão bicónico na extremidade ou o mais próximo da extremidade de ré do último navio ou objecto rebocado e, se o comprimento de reboque for superior a 200 m, um balão adicional bicónico no local o mais visível e o mais a vante possível.

16 — *Regra 24, parágrafo h):*

Designar o actual parágrafo *g*) por parágrafo *h*) e alterá-lo como segue:

h) Se, por uma razão justificada, um navio ou objecto rebocado está impossibilitado de mostrar os faróis ou balões prescritos nos parágrafos *e*) ou *g*) desta regra, deverão ser tomadas todas as medidas possíveis para iluminar o navio ou o objecto rebocado, ou pelo menos para indicar a sua presença.

17 — *Regra 24, parágrafo i):*

Inserir um novo parágrafo como segue:

i) Se, por uma razão adequada, um navio que normalmente não efectua operações de reboque está impossibilitado de mostrar os faróis prescritos nos parágrafos *a*) ou *c*) desta regra, está dispensado de as mostrar quando procede ao reboque de um outro navio em perigo ou necessitando de assistência por outras razões. Todas as medidas possíveis devem ser tomadas para indicar, de forma autorizada pela regra 36, a ligação entre o navio rebocador e o navio rebocado, particularmente iluminando o cabo de reboque.

18 — *Regra 25, parágrafo b):*

Alterar «12 m» para «20 m».

19 — *Regra 27, parágrafo b), preâmbulo:*

Alterar as palavras «dragagem de minas» para «limpeza de minas».

20 — *Regra 27, parágrafo b), alínea iii):*

Inserir as palavras «farol ou» antes das palavras «faróis de mastro».

21 — *Regra 27, parágrafo c):*

Alterar este parágrafo como segue:

c) Um navio de propulsão mecânica ocupado numa operação de reboque que restrinja seriamente ao navio rebocador e seu reboque a capacidade de alterar o rumo, além dos faróis ou balões prescritos na regra 24, *a*), deve mostrar os faróis ou balões prescritos nas alíneas *i*) e *ii*) do parágrafo *b*) desta regra.

22 — *Regra 27, parágrafo d):*

Alterar as palavras «no parágrafo *b*) desta regra» para «nas alíneas *i*), *ii*) e *iii*) do parágrafo *b*) desta regra».

Eliminar a actual alínea *iii*).

Renumerar a actual alínea *iv*) para *iii*) e alterá-la como segue:

iii) Quando está fundeado, deve mostrar, em vez dos faróis ou balões prescritos pela regra 30, os faróis ou balões prescritos neste parágrafo.

23 — *Regra 27, parágrafo e):*

Alterar este parágafo como segue:

e) Um navio participando em operações de mergulhadores que, por motivo das suas dimensões, não possa mostrar os balões prescritos no parágrafo *d*) desta regra deve mostrar:

i) Três faróis visíveis em todo o horizonte, dispostos na mesma linha vertical, onde melhor possam ser vistos. O superior e o inferior devem ser de luz vermelha e o do meio de luz branca:

ii) Uma réplica rígida, de altura não inferior a 1 m, da bandeira «A» do Código Internacional de Sinais.

Deve tomar medidas para que esta réplica seja visível em todo o horizonte.

24 — *Regra 27, parágrafo f*):

Alterar este parágrafo como segue:

f) Um navio executando operações de limpeza de minas, além dos faróis prescritos na regra 23 para os navios de propulsão mecânica ou os faróis e balões prescritos na regra 30 para os navios fundeados, consoante o caso, deve mostrar três faróis de luz verde, visíveis em todo o horizonte, ou três balões esféricos. Deve mostrar um destes faróis ou bálões próximo da parte superior do mastro de vante e os outros dois faróis ou balões um em cada lais de verga do mesmo mastro. Estes faróis ou balões indicam que é perigoso para outro navio aproximar-se a menos de 1000 m do navio que efectua a limpeza de minas.

25 — *Regra 27, parágrafo g*):

Alterar este parágrafo como segue:

g) Os navios de comprimento inferior a 12 m, excepto os navios ocupados em operações de mergulhadores, não são obrigados a mostrar os faróis e balões prescritos nesta regra.

26 — *Regra 29, parágrafo a), alínea iii*):

Alterar esta alínea como segue:

iii) Quando fundeado, em adição aos faróis prescritos na alínea *i*), o farol, faróis ou balões prescritos na regra 30 para navios fundeados.

27 — *Regra 30, parágrafo e*):

Eliminar as palavras «ou encalhado» e alterar as palavras «os faróis ou balões prescritos nos parágrafos *a*), *b*) ou *d*) desta regra.» para «os faróis ou balão prescritos nos parágrafos *a*) e *b*) desta regra.».

28 — *Regra 30, parágrafo f*):

Inserir nesta regra um novo parágrafo como segue:

f) Um navio de comprimento inferior a 12 m quando está encalhado não é obrigado a mostrar os faróis ou balões prescritos nas alíneas *i*) e *ii*) do parágrafo *d*) desta regra.

29 — *Regra 33, parágrafo a*):

Na última linha do texto inglês, alterar a palavra «required» para «prescribed».

30 — *Regra 34, parágrafo b), alínea iii*):

Inserir as palavras «deste Regulamento» depois das palavras «do anexo I».

31 — *Regra 35, parágrafo d*):

Inserir um novo parágrafo *d*) como segue:

d) Um navio em faina de pesca, quando está fundeado, e um navio com capacidade de manobra reduzida executando o seu trabalho, quando está fundeado, devem emitir, em lugar dos sinais prescritos no parágrafo *g*) desta regra, o sinal prescrito no parágrafo *c*) desta regra.

Renumerar os actuais parágrafos *d*), *e*), *f*), *g*), *h*) e *i*) para *e*), *f*), *g*), *h*), *i*) e *j*).

32 — *Regra 36:*

Adicionar ao texto actual o seguinte:

Qualquer luz destinada a chamar a atenção de outro navio não deve poder ser confundida com uma ajuda à navegação. Para os fins desta regra deve ser evitado o emprego de luzes intermitentes ou giratórias de alta intensidade como, por exemplo, as lanternas giroscópicas.

33 — *Regra 37:*

Alterar a palavra «prescritos» para «descritos».

34 — *Regra 38:*

Inserir as palavras «deste Regulamento» depois das palavras «do anexo I» no parágrafo *d*), alínea *i*), e parágrafos *e*) e *f*); no parágrafo *g*) inserir as palavras «deste Regulamento» depois das palavras «do anexo III».

35 — *Regra 38, parágrafo h*):

Inserir um novo parágrafo como segue:

h) Alteração da localização dos faróis visíveis em todo o horizonte, resultante das prescrições da secção 9, *b*), do anexo I deste Regulamento (Isenção permanente).

36 — *Anexo I, secção 1:*

Adicionar ao texto actual da definição a frase seguinte:

Esta altura deve ser medida na vertical a partir da posição do farol.

37 — *Anexo I, secção 2, parágrafo e*):

Alterar o texto como segue:

e) Um dos dois, ou três, faróis de mastro prescritos para um navio de propulsão mecânica que reboca ou empurra outro deve estar colocado no mesmo local do farol de mastro de vante ou de ré; quando colocados no mastro de ré o farol inferior de mastro de ré deve ficar, pelo menos, 4,5 m mais alto que o farol do mastro de vante.

38 — *Anexo* I, *secção 2, parágrafo f)*:
Alterar este parágrafo como segue:

f):

i) O farol ou faróis de mastro prescritos na regra 23, *a)*, devem estar colocados acima e desimpedidos em relação a todos os outros faróis e obstruções, com a excepção descrita na alínea *ii)*;

ii) Quando é impraticável colocar abaixo dos faróis de mastro os faróis de luz visível em todo o horizonte prescritos na regra 27. *b)*, *i)*, ou regra 28, devem ser colocados acima do farol ou faróis de mastro de ré ou, sobre um plano vertical, entre o farol ou faróis de mastro de vante e o farol ou faróis de mastro de ré, na condição de que, neste último caso, seja dado cumprimento às prescrições do parágrafo *c)* da secção 3 deste anexo.

39 — *Anexo* I, *secção 2, parágrafo i), alínea i)*:
Alterar as palavras «não deve ficar a uma altura inferior a 4 m acima da borda» para «deve ficar a uma altura não inferior a 4 m acima da borda».

40 — *Anexo* I, *secção 2, parágrafo i), alínea ii)*:
Alterar as palavras «não deve ficar a uma altura inferior a 2 m acima da borda» para «deve ficar a uma altura não inferior a 2 m acima da borda».

41 — *Anexo* I, *secção 2, parágrafo j)*:
Eliminar as palavras «de pesca» depois de «para um navio».

42 — *Anexo* I, *secção 2, parágrafo k)*:
Inserir as palavras «prescrito na regra 30, *a)*, *i)*» depois de «farol de fundeado mais a vante».

Na segunda frase alterar «não deve ficar a menos de 6 m acima da borda» para «deve ficar a uma altura não inferior a 6 m acima da borda».

43 — *Anexo* I, *secção 3, parágrafo b)*:
Na primeira linha alterar as palavras «A bordo de um navio» para «A bordo de um navio de propulsão mecânica».

44 — *Anexo* I, *secção 3, parágrafo c)*:
Inserir um novo parágrafo como segue:

c) Quando os faróis prescritos na regra 27, *b)*, *i)*, ou regra 28, são colocados verticalmente entre o farol ou faróis de mastro de vante e o farol ou faróis de mastro de ré, estes faróis de luz visível em todo o horizonte devem ser colocados a uma distância horizontal não inferior a 2 m do eixo longitudinal do navio, no sentido transversal.

45 — *Anexo* I, *secção 5:*
Na primeira linha inserir depois das palavras «Os faróis de borda» as palavras «dos navios de comprimento igual ou superior a 20 m».

No fim da primeira frase inserir a frase seguinte:

Nos navios de comprimento inferior a 20 m, os faróis de borda, se necessário para satisfazer as prescrições da secção 9 deste anexo, devem estar munidos, pelo lado de dentro do navio, de esbarros pintados de preto.

46 — *Anexo* I, *secção 8:*
Adicionar à seguinte frase a nota que figura no fim da secção:

Esta limitação da intensidade luminosa não deve ser obtida por intermédio de um comando variável.

47 — *Anexo* I, *secção 9, parágrafo a), alínea i)*:
No texto inglês alterar a palavra «must» para «shall».

48 — *Anexo* I, *secção 9, parágrafo a), alínea ii)*:
Na última linha do texto inglês alterar a palavra «limits» para «sectors».

49 — *Anexo* I, *secção 9, parágrafo b)*:
Inserir as palavras «prescritos na regra 30» depois das palavras «Com excepção dos faróis de navio fundeado».

50 — *Anexo* I, *secção 10, parágrafos a) e b)*:
Na primeira frase dos parágrafos *a)* e *b)* da secção 10 inserir as palavras «uma vez instalados» depois das palavras «faróis eléctricos».

51 — *Anexo* I, *secção 13:*
Alterar o texto como segue:

A construção de faróis e de balões e a instalação de faróis a bordo devem ser consideradas satisfatórias pela autoridade competente do Estado da bandeira arvorada pelo navio.

52 — *Anexo* III, *secção 1, parágrafo d)*:
Alterar a expressão «4 dB, ao nível de pressão acústica» para «4 dB, ao nível de pressão acústica prescrito».

Alterar a expressão «10 dB, ao nível da pressão acústica» para «10 dB, ao nível da pressão acústica prescrito».

53 — *Anexo* III, *secção 2, parágrafo a)*:
Alterar as palavras «de 1 m» para «de 1 m da fonte emissora».

54 — *Anexo* III, *secção 2, parágrafo b)*:
Alterar a segunda frase do texto como segue:

O diâmetro da boca do sino não deve ser inferior a 300 mm em navios de comprimento igual ou superior a 20 m e a 200 mm em navios de comprimento igual ou superior a 12 m mas inferior a 20 m.

55 — *Anexo* III, *secção 3:*
Alterar as palavras «do Estado onde o navio estiver registado» para «do Estado da bandeira arvorada pelo navio».

56 — *Regra 35, parágrafo b)*:
No texto francês inserir as palavras «à propulsion mécanique» entre as palavras «un navire» e «faisant route».

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 176/99
de 5 de Agosto

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estentida ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Protocolo Relativo a Uma Emenda à Alínea *a*) do Artigo 50.º da Convenção sobre Aviação Civil Internacional, adoptado em 26 de Outubro de 1990, aprovado pelo Decreto n.º 47/97, de 3 de Setembro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 3 de Setembro de 1997.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 28 de Julho de 1999.

Publique-se no *Boletim Oficial* de Macau, em conjunto com o referido decreto de aprovação e texto da Convenção.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 181, I Série-A, de 5 de Agosto de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 47/97
de 3 de Setembro

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

Artigo único

É aprovado, para ratificação, o Protocolo Relativo a Uma Emenda à Alínea *a*) do Artigo 50.º da Convenção sobre Aviação Civil Internacional, aprovada pelo Decreto-Lei n.º 36 158, de 17 de Fevereiro de 1947, adoptado em 26 de Outubro de 1990, em Montréal, cujo texto original em inglês e francês e respectiva tradução em português seguem em anexo ao presente diploma.

Visto e aprovado em Conselho de Ministros de 17 de Julho de 1997. — *António Manuel de Oliveira Guterres — Francisco Manuel Seixas da Costa — José Manuel da Costa Monteiro Consiglieri Pedroso.*

Ratificado em 11 de Agosto de 1997.

Publique-se.

O Presidente da República, JORGE SAMPAIO.

Referendado em 14 de Agosto de 1997.

O Primeiro-Ministro, *António Manuel de Oliveira Guterres.*

(D.R. n.º 203, I Série-A, de 3 de Setembro de 1997)

共和國總統府

共和國總統令 第176/99號
八月五日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九九零年十月二十六日通過之《關於國際民用航空公約第五十條第一款修正案的議定書》延伸至澳門地區，按照葡萄牙政府受該議定書約束之相同規定適用；該議定書係經九月三日第 47/97 號命令通過，且文本已公布於一九九七年九月三日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年七月二十八日簽署。

將本總統令連同上述通過議定書之命令及公約之文本公布於《澳門政府公報》。

共和國總統 沈拜奧

（一九九九年八月五日第 181 期《共和國公報》第一組-A）

外交部

政府命令 第47/97號
九月三日

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

獨一條

通過一九九零年十月二十六日在蒙特利爾通過之《關於國際民用航空公約第五十條第一款修正案的議定書》，以待批准；該議定書之英文本及法文本，以及葡文譯本附於本命令。

一九九七年七月十七日於部長會議批閱及通過——*António Manuel de Oliveira Guterres* —— *Francisco Manuel Seixas da Costa* —— *José Manuel da Costa Monteiro Consiglieri Pedroso*

一九九七年八月十一日批准。

命令公布。

共和國總統

JORGE SAMPAIO

一九九七年八月十四日副署。

總理

António Manuel de Oliveira Guterres

（一九九七年九月三日第 203 期《共和國公報》第一組-A）

PROTOCOL RELATING TO AN AMENDMENT TO ARTICLE 50, *a*), OF THE CONVENTION ON INTERNATIONAL CIVIL AVIATION SIGNED AT MONTREAL ON 26 OCTOBER 1990

The Assembly of the International Civil Aviation Organization:

Having met in its twenty-eighth Session (Extraordinary) at Montreal on 25 October 1990;

Having noted that it is the desire of a large number of Contracting States to enlarge the membership of the Council in order to ensure better balance by means of an increased representation of Contracting States;

Having considered it appropriate to increase the membership of that body from thirty-three to thirty-six;

Having considered it necessary to amend, for the purpose aforesaid, the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944:

1 — Approves, in accordance with the provisions of article 94, *a*), of the Convention aforesaid, the following proposed amendment to the said Convention:

«In article 50, *a*), of the Convention the second sentence shall be amended by replacing 'thirty-three' by 'thirty-six'»;

2 — Specifies, pursuant to the provisions of the said article 94, *a*), of the said Convention, one hundred and eight as the number of Contracting States upon whose ratification the proposed amendment aforesaid shall come into force;

3 — Resolves that the Secretary General of the International Civil Aviation Organization draw up a Protocol, in the English, French, Russian and Spanish languages, each of which shall be of equal authenticity, embodying the amendment above-mentioned and the matter hereinafter appearing:

a) The Protocol shall be signed by the President of the Assembly and its Secretary General;

b) The Protocol shall be open to ratification by any State which has ratified or adhered to the said Convention on International Civil Aviation;

c) The instruments of ratification shall be deposited with the International Civil Aviation Organization;

d) The Protocol shall come into force in respect of the States which have ratified it on the date on which the one hundred and eighth instrument of ratification is so deposited;

e) The Secretary General shall immediately notify all Contracting States of the date of deposit of each ratification of the Protocol;

f) The Secretary General shall immediately notify all States parties to the said Convention of the date on which the Protocol comes into force;

g) With respect to any Contracting State ratifying the Protocol after the date aforesaid, the Protocol shall come into force upon deposit of its instrument of ratification with the International Civil Aviation Organization.

Consequently, pursuant to the aforesaid action of the Assembly, this Protocol has been drawn up by the Secretary General of the Organization.

In witness whereof, the President and the Secretary General of the aforesaid twenty-eighth Session (Extraordinary) of the Assembly of the International Civil Aviation Organization, being authorized thereto by the Assembly, sign this Protocol.

Done at Montreal on the twenty-sixth day of October of the year one thousand nine hundred and ninety, in a single document in the English, French, Russian and Spanish languages, each text being equally authentic. This Protocol shall remain deposited in the archives of the International Civil Aviation Organization, and certified copies thereof shall be transmitted by the Secretary General of the Organization to all States parties to the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944.

Assad Kotaite, President of the Twenty-eighth Session (Extraordinary) of the Assembly.

S. S. Sidhu, Secretary General.

PROTOCOLE PORTANT AMENDEMENT DE L'ARTICLE 50, *a*), DE LA CONVENTION RELATIVE À L'AVIATION CIVILE INTERNATIONALE SIGNÉ À MONTRÉAL LE 26 OCTOBRE 1990

L'Assemblée de l'Organisation de l'aviation civile internationale:

S'étant réunie à Montréal le 25 octobre 1990, en sa vingt-huitième session (extraordinaire):

Ayant pris acte du désir d'un grand nombre d'États contractants d'augmenter le nombre des membres du Conseil afin d'assurer un meilleur équilibre au moyen d'une représentation plus large des États contractants;

Ayant jugé qu'il convenait de porter de trente-trois à trente-six le nombre des membres de cet organe;

Ayant jugé nécessaire d'amender à cette fin la Convention relative à l'aviation civile internationale faite à Chicago le septième jour de décembre 1944:

1 — Approuve, en vertu des dispositons de l'alinéa *a*) de l'article 94 de la Convention précitée, le projet suivant d'amendement de ladite Convention:

«Amender la deuxième phrase de l'alinéa *a*) de l'article 50 de la Convention en remplaçant les mots 'trente-trois' par 'trente-six'»;

2 — Fixe à cent huit le nombre d'Etats contractants dont la ratification est nécessaire à l'entrée en vigueur de l'amendement proposé, conformément aux dispositions de l'alinéa *a*) de l'article 94 de ladite Convention;

3 — Décide que le Secrétaire général de l'Organisation de l'avition civile internationale établira dans les langues française, anglaise, espagnole et russe, chacune faisant également foi, un protocole concernant l'amendement précité et comprenant les dispositions ci-dessous:

a) Le Protocole sera signé par le Président et par le Secrétaire général de l'Assemblée;

b) Il sera soumis à la ratification de tout État qui a ratifié la Convention relative à l'aviation civile internationale ou y a adhéré;

c) Les instruments de ratification seront déposés auprès de l'Organisation de l'aviation civile internationale;

d) Le Protocole entrera en vigueur le jour du dépôt du cent huitième instrument de ratification à l'égard des États qui l'auront ratifié;

e) Le Secrétaire général notifiera immédiatement à tous les États contractants la date du dépôt de chaque instrument de ratification du Procole;

f) Le Secrétaire général notifiera immédiatement à tous les États parties à ladite Convention la date à laquelle ledit Procotole entrera en vigueur;

g) Le Protocole entrera en vigueur, à l'égard de tout État contractant qui l'aura ratifié après la date précitée, dès que cet État aura déposé son instrument de ratification auprès de l'Organisation de l'aviation civile internationale.

En conséquence, conformément à la décision ci-dessus de l'Assemblée, le présent Protocole a été établi par le Secrétaire général de l'Organisation.

En foi de quoi, le Président et le Secrétaire général de la vingt-huitième session (extraordinaire) de l'Assemblée de l'Organisation de l'aviation civile internationale, dûment autorisés à cet effet par l'Assemblée, ont apposé leur signature au présent Protocole.

Fait à Montréal le vingt-sixième jour d'octobre de l'an mil neuf cent quatre-vingt-dix, en un seul document dans les langues française, anglaise, espagnole et russe, chacun des textes faisant également foi. Le présent Protocole sera déposé dans les archives de l'Organisation de l'aviation civile internationale et des copies certifiées conformes seront transmises par le Secrétaire général de l'Organisation à tous les États parties à la Convention relative à l'aviation civile internationale, faite à Chicago le septième jour de décembre 1944.

Assad Kotaite, Président de la vingt-huitième session (extraordinaire) de l'Assemblée.

S. S. Sidhu, Secrétaire général.

PROTOCOLO RELATIVO A UMA EMENDA AO ARTIGO 50.º, *A*), DA CONVENÇÃO SOBRE AVIAÇÃO CIVIL INTERNATIONAL, ASSINADO EM MONTRÉAL A 26 DE OUTUBRO DE 1990

A Assembleia da Organização da Aviação Civil Internacional:

Reunida na sua 28.ª Sessão (extraordinária), em Montréal, no dia 25 de Outubro de 1990;

Tendo em conta a vontade de um elevado número de Estados Contratantes de aumentar o número de membros do Conselho de forma a assegurar um maior equilíbrio, pelo aumento da representação de Estados Contratantes;

Considerando conveniente elevar de 33 para 36 o número de membros deste órgão;

Considerando que, para o efeito, é necessário modificar a Convenção sobre Aviação Civil Internacional, assinada em Chicago a 7 de Dezembro de 1944:

1 — Aprova, em conformidade com o disposto na alínea *a*) do artigo 94.º da referida Convenção, o seguinte projecto de emenda àquela Convenção:

«Modificar a segunda frase da alínea *a*) do artigo 50.º da Convenção, substituindo 'trinta e três' por 'trinta e seis'»;

2 — Fixa em 108 o número de Estados Contratantes cuja ratificação é necessária para a entrada em vigor da referida emenda, de acordo com o disposto na alínea *a*) do artigo 94.º daquela Convenção;

3 — Decide que o Secretário-Geral da Organização da Aviação Civil Internacional redija em inglês, francês, espanhol e russo, fazendo cada um dos idiomas igual fé, um protocolo relativo à emenda acima mencionada e compreendendo as seguintes disposições:

a) O Protocolo será assinado pelo Presidente e pelo Secretário-Geral da Assembleia;

b) O Protocolo ficará aberto para ratificação de qualquer Estado que tenha ratificado a referida Convenção sobre Aviação Civil Internacional ou a ela tenha aderido;

c) Os instrumentos de ratificação serão depositados junto da Organização da Aviação Civil Internacional;

d) O Protocolo entrará em vigor, em relação aos Estados que o tiverem ratificado, no dia do depósito do 108.º instrumento de ratificação;

e) O Secretário-Geral notificará imediatamente todos os Estados Contratantes da data de depósito de cada instrumento de ratificação do Protocolo;

f) O Secretário-Geral notificará imediatamente todos os Estados partes da referida Convenção da data de entrada em vigor do Protocolo;

g) O Protocolo entrará em vigor, em relação a qualquer Estado Contratante que o tiver ratificado após aquela data, a partir do momento em que tal Estado depositar o respectivo instrumento de ratificação junto da Organização da Aviação Civil Internacional.

Em consequência, de acordo com a referida decisão da Assembleia, o presente Protocolo foi redigido pelo Secretário-Geral da Organização.

Em fé do que o Presidente e o Secretário-Geral da 28.ª Sessão (extraordinária) da Assembleia da Organização da Aviação Civil Internacional, para o efeito autorizados pela Assembleia, assinam o presente Protocolo.

Feito em Montréal, a 26 de Outubro do ano de 1990, num só exemplar redigido em inglês, francês, espanhol e russo, fazendo cada idioma igual fé. O presente Protocolo ficará depositado nos arquivos da Organização da Aviação Civil Internacional e o Secretário-Geral da Organização enviará cópias autenticadas a todos os Estados Partes da Convenção sobre Aviação Civil Internacional, assinada em Chicago a 7 de Dezembro de 1944.

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

PRESIDÊNCIA DA REPÚBLICA

Decreto do Presidente da República n.º 206/99

de 9 de Novembro

O Presidente da República decreta, nos termos do artigo 292.º, n.º 1, da Constituição e dos artigos 3.º, n.ºs 2 e 3, 69.º e 70.º do Estatuto Orgânico de Macau, o seguinte:

É estendido ao território de Macau, nos mesmos termos em que a ele está vinculado o Estado Português, o Regulmaneto das Radiocomunicações da União Internacional das Telecomunicações, de 6 de Dezembro de 1979, aprovado pelo Decreto n.º 39-A/92, de 1 de Outubro, cujo texto foi publicado no *Diário da República*, 1.ª série, de 1 de Outubro de 1992.

Foram ouvidos os órgãos de governo próprios do território de Macau.

Assinado em 29 de Outubro de 1999.

Publique-se no *Boletim Oficial de Macau*, em conjunto com os referidos decreto de aprovação e texto do Regulamento.

O Presidente da República, JORGE SAMPAIO.

(D.R. n.º 261, I Série-A, de 9 de Novembro de 1999)

MINISTÉRIO DOS NEGÓCIOS ESTRANGEIROS

Decreto n.º 39-A

de 1 de Outubro de 1992

Considerando que o Regulamento das Radiocomunicações (RR) é um dos regulamentos administrativos previstos no artigo 83.º, n.º 643, da Convenção Internacional das Telecomunicações, dela fazendo parte integrante, sendo, simultaneamente, uma publicação do Secretariado-Geral da União Internacional das Telecomunicações (UIT), de que Portugal é membro activo de pleno direito, e contém os princípios orientadores fundamentais, técnicos e administrativos a que deve obedecer toda e qualquer utilização de uma radiocomunicação;

Considerando que a Conferência Administrativa Mundial das Radiocomunicações, realizada em Genebra de 24 de Setembro a 17 de Dezembro de 1979 (CAMR79), procedeu a uma profunda revisão do Regulamento das Radiocomunicações de 1959 e que a correspondente versão, incluída nos actos finais da CAMR79, encontra-se já internacionalmente em vigor desde 1 de Janeiro de 1981;

Considerando que esta versão do RR79 carece também de aprovação pelo Governo de cada Estado membro da UIT a fim de vigorar na sua ordem jurídica interna, ser imposta aos operadores nacionais de radiocomunicações e poder ser invocado na defesa dos seus interesses em matéria de radiocomunicações aquando das relações com as administrações dos outros Estados membros da UIT:

Assim:

Nos termos da alínea *c*) do n.º 1 do artigo 200.º da Constituição, o Governo decreta o seguinte:

共和國總統府

共和國總統令 第206/99號

十一月九日

共和國總統根據《憲法》第二百九十二條第一款及《澳門組織章程》第三條第二款及第三款、第六十九條及第七十條之規定，命令如下：

將一九七九年十二月六日《國際電訊聯盟無線電規則》延伸至澳門地區，按照葡萄牙政府受該公約約束之相同規定適用；該規則係經十月一日第 39-A/92 號命令通過，且文本已公布於一九九二年十月一日《共和國公報》第一組。

已聽取澳門地區本身管理機關之意見。

一九九九年十月二十九日簽署。

將本總統令連同上述通過規則之命令及規章之文本公布於《澳門政府公報》。

共和國總統

沈拜奧

（一九九九年十一月九日第261期《共和國公報》第一組-A）

外交部

命令 第39-A號

一九九二年十月一日

鑑於《無線電規則（RR）》爲《國際電訊公約》第八十三條第 643 號所規定之行政規則之一，並成爲該公約之組成部分；同時，該規則亦係國際電訊聯盟（UIT）秘書處之出版物，且載有對無線電通訊之一切或任何使用應遵守之基礎、技術及行政指導原則；葡萄牙爲該聯盟之全權現任會員；

鑑於一九七九年九月二十四日至十二月十七日在日內瓦舉行之世界無線電通訊行政會議（CAMR 79）對一九五九年《無線電規則》進行了深入檢討，而有關之載入一九七九年世界無線電通訊行政會議之最後決議內之文本已自一九八一年一月一日起在國際上生效；

鑑於《無線電通訊規則》之一九七九年文本須獲《國際電訊聯盟》每一成員國政府通過，以便該文本在本國法律秩序生效，並強制適用於本國無線電經營人，且在與《國際電訊聯盟》其他成員國之行政部門聯繫時，得要求維護本國在無線電事宜方面之利益；

基於此；

政府根據《憲法》第二百條第一款 c 項之規定，命令制定法規如下：

Artigo 1.º É aprovado o Regulamento das Radiocomunicações, assinado em Genebra em 16 de Dezembro de 1979, cuja versão original em francês e respectiva tradução em português seguem em anexo ao presente decreto.

Art. 2.º São revogados:

a) O Decreto n.º 45 205, de 21 de Agosto de 1963;
b) O Decreto n.º 46 425, de 3 de Julho de 1965;
c) O Decreto n.º 48 404, de 28 de Maio de 1968;
d) O Decreto n.º 434/71, de 15 de Outubro.

Art. 3.º O presente diploma em vigor no dia imediato ao da sua publicação.

Visto e aprovado em Conselho de Ministros de 6 de Dezembro de 1990. — *Aníbal António Cavaco Silva — João de Deus Rogado Salvador Pinheiro — Joaquim Martins Ferreira do Amaral.*

Assinado em 18 de Dezembro de 1990.

Publique-se.

O Presidente da República, *Mário Soares.*

Referenciado em 21 de Dezembro de 1990.

O Primeiro-Ministro, *Aníbal António Cavaco Silva.*

(D.R. n.º 227, I Série-A, de 1 de Outubro de 1992)

第一條 —— 通過一九七九年十二月十六日在日內瓦簽署之《無線電規則》；該規則之法文原文及葡文譯本附於本命令。

第二條 —— 廢止：

a) 一九六三年八月二十一日第 45205 號命令；

b) 一九六五年七月三日第 46425 號命令；

c) 一九六八年五月二十八日第 48404 號命令；

d) 十月十五日第 434/71 號命令。

第三條 —— 本法規於公布翌日開始生效。

一九九零年十二月六日於部長會議批閱及通過 —— *Aníbal António Cavaco Silva —— João de Deus Rogado Salvador Pinheiro —— Joaquim Martins Ferreira do Amaral*

一九九零年十二月十八日簽署。

命令公布。

共和國總統

Mário Soares

一九九零年十二月二十一日副署。

總理

Aníbal António Cavaco Silva

（一九九二年十月一日第 227 期《共和國公報》第一組 -A）

REGULAMENTO DAS RADIOCOMUNICAÇÕES DE 1979

Actos Finais da Conferência Administrativa Mundial das Radiocomunicações

(Genebra, 1979)

Na sua Resolução n.º 28, a Conferência de Plenipotenciários da União Internacional das Telecomunicações (Málaga, Terremolinos, 1973), considerando que diversas conferências administrativas mundiais das radiocomunicações reunidas desde 1959 trouxeram ao Regulamento das Radiocomunicações e ao Regulamento Adicional da Radiocomunicações emendas respeitantes a pontos especiais, mas não puderam harmonizar as suas decisões devido ao carácter limitado da agenda de cada uma delas, decidiu que seria convocada em 1979 uma conferência administrativa mundial das radiocomunicações com o objectivo de rever, conforme fosse necessário, esses Regulamentos e encarregou o Conselho de Administração de tomar as medidas preparatórias necessárias para a convocação dessa conferência.

Na sua 30.ª sessão (1975), o Conselho de Administração constituiu, pela sua Resolução n.º 768, um grupo de especialistas de administrações encarregado de estudar a reestruturação eventual do Regulamento das Radiocomunicações e do Regulamento Adicional das Radiocomunicações.

A reestruturação do Regulamento das Radiocomunicações proposta pelo grupo de especialistas foi aprovada em princípio pela Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Génebra, 1977), na sua Resolução SAT-10, a qual solicita instantemente aos países membros que utilizem o Regulamento das Radiocomunicações sob a forma reestruturada e o Regulamento Adicional das Radiocomunicações sob a forma actual para apresentar propostas à presente Conferência.

Na sua 32.ª sessão (1977), o Conselho de Administração decidiu, pela sua Resolução n.º 801, que a Conferência Administrativa Mundial das Radiocomunicações de 1979 seria convocada para Genebra em 24 de Setembro de 1979, com uma duração de 10 semanas, e adoptou a agenda dessa Conferência.

Em consequência, a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) foi convocada e, em conformidade com a sua agenda e na base da «reestruturação do Regulamento das Radiocomunicações» acima mencionada, bem como das propostas apresentadas pelas administrações, examinou, reestruturou e reviu parcialmente, quanto ao conteúdo, as disposições do Regulamento das Radiocomunicações. Na sequência desses trabalhos, adoptou o Regulamento das Radiocomunicações (Genebra, 1979), cujo texto figura no anexo aos presentes Actos Finais.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) autoriza o secretário-geral da União Internacional das Telecomunicações a proceder à numeração final apropriada dos capítulos, artigos, secções, subsecções, parágrafos e subparágrafos e à numeração marginal, à numeração final dos apêndices e à inserção das notas necessárias no que respeita ao Regulamento das Radiocomunicações (Genebra, 1979), de que enviará uma cópia certificada conforme aos Membros da União.

Os Membros da União devem informar o secretário-geral da sua aprovação do Regulamento das Radiocomunicações (Genebra, 1979), tal como foi adoptado pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), e o secretário-geral comunicará essas aprovações aos Membros, à medida que as for recebendo.

Os delegados dos Membros da União Internacional das Telecomunicações representados na Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), tendo assinado os presentes Actos Finais, declaram que, se uma administração formular reservas quanto à aplicação de uma ou de várias disposições do Regulamento das Radiocomunicações (Genebra, 1979), nenhuma outra administração é obrigada a observar essa ou essas disposições nas suas relações com a administração que formulou tais reservas.

Em firmeza do que os delegados dos Membros da União Internacional das Telecomunicações representados na Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) assinaram, em nome dos países respectivos, os presentes Actos Finais, cujo exemplar único ficará depositado nos arquivos da União Internacional das Telecomunicações e do qual será enviada uma cópia certificada conforme a cada um dos Membros da União.

Feito em Genebra aos 16 de Dezembro de 1979.

Seguem-se as assinaturas dos delegados dos seguintes países:

Pela República Democrática do Afeganistão:

Eng. M. Z. Tahiry.
A. Satar Tokhy.
K. D. Kamran.

Pela Argélia (República Argelina Democrática e Popular):

N. Bouhired.
M. Ali Belhadj.
Ali Hamza.
M. Harbi.
M. Kadi.

Pela República Federal da Alemanha:

Heinrich L. Venhaus.
K. Rudolf Binz.

Pela República Popular de Angola:

J. G. de Matos.

Pela Reino da Arábia Saudita:

Faisal Ahmed Zaidan.
Reda A. H. Jada'a.
A. M. Babtain.
Mohamed K. El Nahedh.
Abdullah M. Al-Sanie.

Pela República Argentina:

Roberto J. P. Severini.
Ricardo Saidman.
Ruben Pascual.
Jorge A. Taboada.
José Guerra.
Marcelo Otero Mosteirin.
Osvaldo Martin Beunza.

Pela Austrália:

E. J. Wilkinson.
P. D. Barnes.
E. R. Craig.

Pela República da Áustria:

Gerd Lettner.
Ernst Steiner.

Pelo Estado do Bahrein:

Moahamed Redha Amin.

Pela República Popular do Bangladesh:

A. B. M. Taher.
M. Habibullah.
Md. Ruhul Quddus.
Md. Sobhan Gani Molla.

Pelo Reino da Bélgica:

R. Tastenoy.
Gewillig M. R. V.

Pela República Popular do Benim:

Taofiqui Bouraïma.
Amoussou C. Evariste.
H. Vignon.
Julien Lokossi.
Ássa Vèdo Zinsou Gilbert.

Pela República Socialista da Bielo Rússia:

I. M. Gritsouk.

Pela República do Botswana:

D. P. T. Disele.
P. Makgekgenene.

Pela República Federativa do Brasil:

Romulo Villar Furtado.
Paulo Ricardo Hermano Balduino.

Pela República Popular da Bulgária:

I. I. Ignatov.

Pela República do Burundi:

Ruvuzakinono Bernard.

Pela República Unida dos Camarões:

Jean Jipguep.
Lt. Cel. Sing Joseph.
Kamdem-Kamga Emmanuel.
Yanze Emmanuel.
Essesse-Dikongue Jean.

Pelo Canadá:

Gabriel Warren.
Edward D. Ducharme.

Pela República de Cabo Verde:

António Pedro Borja Santos.
Benchimol de Sousa Lobo.
Hermano Marciano Almeida.

Pela República Centro-Africana:

M. Bedan.
M. Mbaye.

Pela República do Chile:

G. Echavarria M.
S. Angellotti C.
H. Hernandez L.
E. Claude F.

Pela República Popular da China:

Li Linchuan.
Liu Yuan.
J. Qian.
Zhang Cheng.
He Dazhong.

Pela República de Chipre:

R. Michaelides.
A. Michaelides.

Pelo Estado da Cidade do Vaticano:

Sabino Maffeo.
Giudici Pier Vincenzo.
Pacifici Costantino.

Pela República da Colômbia:

Hector Charry Samper.
O. Gallo Suarez.
Alfredo Rey Córdoba.
G. Prado Bravo.
R. Tarazona Alvarado.
D. Bermudez Zafra.
J. A. Saavedra Triana.
O. Rodriguez Cadena.
H. E. Rodriguez Vega.
G. Rodriguez Barato.
J. Acosta Duran.
G. Mesias Benavides.
Juan Barrero Cuervo.

Pela República Popular do Congo:

J. P. Okouo.
A. Ondongo-Kogo.

Pela República da Coreia:

Shinyong Lho.

Pela República da Costa Rica:

Liliana García de Davis.

Pela República da Costa do Marfim:

Kone Bangali.
Bancouli Yapi.
Nogbou Christophe.
Aka Bonny Léon.
Yao Blé Gaston.
Tiemele Kouandé Charles.
Gnonsoa Komongnan Jean.
Kouadio Koffi Théodore.
Yao Kouakou Jean-Baptiste.

Pela República de Cuba

Salvador Gutierrez.
Carlos Martinez.

Pelo Reino da Dinamarca:

Børge Nielsen.
P. V. Larsen.
Arne H. Lindblad.
H. N. Eskesen.
J. A. Heegaard.

Pela República Árabe do Egipto:

H. S. Abou Aly.
Aly A. Abu-Kandeel.
Ibraim Hassan Khattab.
Abd El Rahim.

Pela República de El Salvador:

R. E. Santos Mendez.
O. E. Rodriguez Turcios.
S. Vásquez González.
J. A. Peñate Salazar.

Pelos Emirados Árabes Unidos:

Mohamed Redha Amin.

Pela República do Equador:

Rodrigo Valdez Baquero.
Gonzalo Maldonado A.
José Ignacio Jijon Freile.
Marcelo Lasso G.
José Vivanco Arias.

Pela Espanha:

E. Dominguez Passier.
V. Quintas.
F. Molina-Negro.
N. Rey-Stolle.
S. Aguado Barbero.

Pelos Estados Unidos da América:

Glen O. Robinson.
Samuel E. Probst.

Pela Etiópia:

Girmaw I.
G. Abebe.
G. Abai.

Pelo Fidji:

E. Naqova.
P. Singh.

Pela República da Finlândia:

K. Teräsvuo.
T. I. Hahkio.
J. K. Karjalainen.

Pela República Francesa:

P. Dumas.
P. Bassole.
M. Thué.

Pela República Gabonesa:

Hella-Ondo.
Ntougou Gabriel.
N'Koghe N'Dong L.

Pela República do Ghana:

K. A. Buagbe.
J. B. Buah.

Pela República Helénica:

A. Chorafas.
G. Antoniou.
C. Hager.
A. Casmas.
E. Nicolaidis.
N. Benmayor.

Pela República da Guatemala:

R. Lemus.
J. O. Vásquez.
J. Alvarez.
J. C. Recinos Barro.

Pela República Popular Revolucionária da Guiné:

Linseni Bangoura.
Maurice Saadi.
Sidiki Toure.
Mamadouba Keita.
Mamadou Saliou Diallo.

Pela República da Guiana:

J. L. Philadelphia.
R. E. Case.
Barton Scotland.

Pela República do Haiti:

Antonio Rimpel.
Fritz Joassin.

Pela República do Alto Volta:

D. Nikiema.
Yousouf Kaba.
P. Claver Songré.

Pela República das Honduras:

A. Bustillo-Pon.

Pela República da Hungria:

Horn Dezsö.

Pela República da Índia:

T. V. Srirangan.
R. G. Deodhar.
N. N. Khanna.
O. P. Khushu.
P. R. Narasimhan.
P. N. Nataranjan.
Dr. B. S. Rao.
Dr. M. K. Rao.
Dr. C. K. Sane.
S. Singh.
Birg Surjit Singh.

Pela República da Indonésia:

R. Wikanto.
P. A. Martono.

Pela República Islâmica do Irão:

Noureddin Madani.

Pela República do Iraque:

Dr. Khidhir Alias Buni.
Sulman Ismail Issa.
A. M. H. Al-Shahwani.
Abdul-Wahid Al-Saad.
Dr. Hafid Taha Alhafid.
Bassim K. Mohammed Albaghdad.
Hisham M. A. Al Shaibani.
Ali M. A. Shaban.
A. Al-Rahmani.
Dhafer Abdul Hameed.
Zuhair Al Yawer.

Pela Irlanda:

P. L. Ó Réagáin.
T. É. Ó Dálaigh.
D. A. Victor-Byrne.

Pela República da Islândia:

Jón Skúlason.

Pela Estado de Israel:

M. Shakkéd.
J. Nitsan.

Pela República Italiana:

A. Petti.

Pela Jamaica:

K. G. Anthony Hill.
F. A. L. Subaran.
V. A. Panton.
P. D. Cross.
V. E. Betton.

Pelo Japão:

Akitane Kiuchi.
K. Kamo.
S. Tanaka.

Pelo Reino Hachemita da Jordânia:

Mohammad Shahid Ismail.
Akef H. Nasser.
Abu Sham Yousef Hilmi.

Pela República do Quénia:

Okudo Benjamin Otin.
Okundi Philip Okoth.

Odundo I. N.
Amira Charles Mbagaya.
Malumbe Stanley Akolo.
Arap Chemai S. K.
Thiong'o Kamau J. P.
Ngokonyo Francis W.
Jaling H. V. O.
Kiarie Samuel Ngigi.
Kariithi Duncan Ngunjiri.
Kilonzo William Musau.
Challo Stephen M.

Pelo Estado do Koweit:

A. M. Al-Sabej.
A. R. Al-Humaidah.
Saleh Al-Anbu'e.
Ali Z. Al-Dahmaly.
Abdullah Erhamah.

Pelo Reino do Lesotho:

F. M. Ramakoae.
P. L. Moepi.
L. Letele.
T. Khabele.

Pela República Libanesa:

Maurice Habib Ghazal.
Elias Emile Eid.
Fouad Semaan Ibrahim.

Pela República da Libéria:

Samuel H. Butler Sr.
Sewell T. Brewer.
George B. Cooper.
H. Walcott Benjamin.

Pela Líbia (Jamahiriya Árabe, Líbia Popular Socialista):

Mohamed Saleh Alsabey.

Pelo Principado do Listenstaina:

H. Blaser.
H. A. Kieffer.

Pelo Grão-Ducado do Luxemburgo:

Dondelinger Charles.

Pela República Democrática de Madagáscar:

B. Rabenoro.
L. Rakotondrainibe.
Randrianjafisolo A.
Rakotoarivelo Benjamin.
Rasamimanana Victorien.
Razainalitera Emma Claudine.

Pela Malásia:

Datuk Mohamed Nadzim.
K. P. Ramanathan Menon.
D. S. Variyan.
Tengku Ismail Mahmud.

Pela República do Malawi:

F. V. V. Watson.
E. S. Hiwa.
S. J. F. S. Mijiga.

Pela República do Mali:

Idrissa Samake.
Modibo Konaté.
Cdt. Ousmane Dao.
Oumar Sidibe.
B. Coulibaly.

Pela República de Malta:

E. V. Saliba.
J. F. Bartolo.

Pelo Reino de Marrocos:

Wakrim Mohamed.
Hassan A. Lebbadi.
Tanane M'Hamed Jamal Eddine.

Pela Maurícia:

Rambert J. M. H. Noël.

Pela República Islâmica da Mauritânia:

Mangassouba.

Pelos Estados Unidos Mexicanos:

José J. Hernandez-G.
Luís Valencia P.

Pelo Principado do Mónaco:

Biancheri.
Solamito César C. R.
Auvray.

Pela República Popular da Mongólia:

D. Garam-Otchir.
D. Gombosuren.

Pela Repúlbica Popular de Moçambique:

R. J. L. Feranandes.

Pelo Reino do Nepal:

Ishwari man Shrestha.
Prabhaker Adhikari.

Pela República da Nicarágua:

F. Zarrabe Iturraran.

Pela República do Níger:

I. Ibrahim.
Zoudi Issouf.

Pela República Federal da Nigéria:

Chief B. O. Oji.

R. C. O. Nwokedi.
A. H. A. Mebude.
A. B. Adebimpe.
N. A. Nze.
S. O. Ajani.
V. A. Kalejaiye.
F. A. Oaiya.
E. C. Nnama.
F. Ariwayo.
Commander M. P. Coccodia.
Flight Officer O. S. O. Ugya.
U. J. Odunide.
Capt. F. C. Kponu.
Major M. O. Odunlade.
Chief Supt. of Police M. S. A. Whyte.
Warrant Officer O. B. Ajayi.
C. O. Awani.

Pelo Reino da Noruega:

P. Mortensen.
L. Grimstveit.
Arne Bøe.
Thormod Bøe.

Pela Nova Zelândia:

P. L. Holloway.
A. Turpie.
J. P. Carter.
J. F. C. Johnson.
P. A. Lowe.

Pelo Sultanato de Omã:

Nassir Issa Al-Kindy.
Hamed Yahya Al-Kindy.
Hasan Murtaza Khan Shirwani.

Pela República do Uganda:

C. K. L. Okot.
P. Sseggujja.

Pela República Islâmica do Paquistão:

M. A. A. Chowdhri.
Colonel Syed Muhammad Aslam.
Irfan Ullah.
Mohammad Zubair.

Pela República do Panamá:

Nicolas D'Anello.
Embajador Octavio Ferrer Anguizola.

Pela Papuásia-Nova Guiné:

Evertius B. W. Romney.
G. H. Railton.
M. E. Edwards.
R. S. Hamlett.
G. T. A. Turapal.
D. J. F. Nickols.
S. Kulupi.

Pela República do Paraguai:

Miguel Horacio Gini E.
Sabino Ernesto Montanaro.

Pelo Reino dos Países Baixos:

B. J. Bakker.
H. K. de Zwart.

Pela República do Peru:

Felipe Valdivieso.
Alberto Galvez de Rivero.

Pela República das Filipinas:

C. S. Carreon.
Heraclio L. San Juan.
Sylvia I. Marcelo.
José Q. Borromeo.
Calixto V. Espejo.

Pela República Popular da Polónia:

K. Kozlowski.

Pela República Portuguesa:

Adriano de Carvalho.
Domingos Pires Franco.
Rogério Manuel Ferreira Simões Carneiro.
Maria Teresa Rodrigues Bandeira.
João Manuel Ortigão de Melo Sampaio.
Vito Ribeiro de Oliveira.
Frederico José de Figueiredo Serra.

Pelo Estado do Qatar:

Abdullih ali al Mannai.

Pela República Árabe Síria:

Ahmad M. Naffakh.
Abdul Halim Skati.

Pela República Democrática Alemã:

Dr. Calov.

Pela Repúlica Popular Democrática da Coreia:

Pak Yong Chah.

Pela República Socialista Soviética da Ucrânia:

V. A. Savantshuk.

Pela República Socialista da Roménia:

G. Airinei.
I. Petraru.
A. Dăghici.
A. Chirică.

Pelo Reino Unido da Grã-Bretanha e da Irlanda do Norte:

J. L. Bantock.
D. E. Baptiste.
W. H. Bellchambers.
M. P. Davies.

Pela República Ruandesa:

Gatabazi Hakizumwami Lievin.
Habiyambere Zacharie.
Barihima Jean Nepomucene.

Pela República de São Marinho:

Thomas D. E.
Pietro Giacomini.
Roberto Muccioli.

Pela República do Senegal:

Alioune Sene.
Parsine Crespin.
Mamadou Cisse.
Assane Gueye.
Mame Moussa Soumare.
Malick M'Baye.

Pela República de Singapura:

Lim Toon.
Ho Siaw Hong.
Sebastian Chiaw Hoch Tan.
Sim Choon Hin.
Lim Choon Sai.

Pela República Democrática da Somália:

Omar Sheik Osman.
Yasin H. Ismail.
Eng. Ahmed Mohamed Aden.

Pela República Democrática do Sudão:

Dr. I. Y. Ahmed.

Pela República Socialista Democrática do Sri-Lanka:

L. H. R. Wijetunga.
A. Maniccavasagar.
Reginald Ernest Henry Perera.

Pelo Reino da Suécia:

Carl-Gösta Asdal.
Gunnar Malmgren.
Krister Björnsjö.

Pela Confederação Suíça:

Steffen.
E. Schwarz.

Pela Reino da Suazilândia:

Cyprian S. Motsa.

Pela República Unida da Tanzânia:

Rogati Anael Kayani.
S. Odunga.
Martan Ngalomba.

Pela República do Chade:

Hadjero Barkaye.

Pela República Socialista da Checoslováquia:

J. Jíra.

Pelo Reino da Tailândia:

Police Major General Suchart P. Sakorn.
K. Pornsutee.
Kanes Schmarakkul.
Suwatt Jithavech.
Dr. Danai Lekhyananda.
Major Suwachit Pichitkul.
Pipope Chooncharoen.

Pela República do Togo:

Nenonene Kouma.
Andjo Tchamdja.
Gaba Agossou.
Mensah K. Kwessi.

Pela República da Trindade e Tobago:

Leo V. Mc Neill.

Pela República da Tunísia:

B. Khouadja.
R. Chkir.

Pela República da Turquia:

Uysal Kadri Berkan.

Pela União das Repúblicas Socialistas Soviéticas:

A. L. Badalov.

Pela República Oriental do Uruguai:

Gustavo Ferrand.
José R. Hegui.
Esau Pablo Prada.
Rosendo F. Hernández.
Benjamin Barreiro.
Pedro G. Retamoso.
Juan F. Romay.

Pela República da Venezuela:

Gustavo Chacín.
Carlos J. Martinez.
Jesus Marval Mora.
Eduardo Nucete.

Pela República Democrática Popular do Iémen:

Abdulwahab Algilani.
Omer Abdulla Yafai.

Pela República Socialista Federativa da Jugoslávia:

Avdo Zvonić.
Ljubomir Dulović.

Pela República do Zaire:

Numbi Muyumba.

Pela República da Zâmbia:

S. W. Munthali.
C. F. Mutale.

Regulamento das Radiocomunicações

(Genebra, 1979)

Preâmbulo

1 A aplicação das disposições do presente Regulamento pelos organismos permanentes da União Internacional das Telecomunicações não implica da parte da União qualquer tomada de posição quanto à soberania ou ao estatuto jurídico de qualquer país, território ou zona geográfica.

PARTE A

CAPÍTULO 1

Terminologia

ARTIGO 1

Termos e definições

Introdução

2 Para os fins do presente Regulamento, os termos seguintes têm o sentido dado pelas definições que os acompanham. Contudo, esses termos e definições não são necessariamente aplicáveis noutros casos. As definições idênticas às que figuram na Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973) são assinaladas pela indicação (Conv.).

Nota. — Se no texto de uma definição indicada abaixo figurar um termo em itálico, isso significa que esse termo é ele próprio definido no presente artigo.

SECÇÃO I

Termos gerais

3 1.1 — *Administração:* qualquer serviço ou departamento responsável pelas medidas a tomar para executar as obrigações da Convenção Internacional das Telecomunicações dos Regulamentos (Conv.).

4 1.2 — *Telecomunicação:* qualquer transmissão, *emissão* ou recepção de indicações, sinais, escritos, imagens, sons ou informações de qualquer natureza, por fios, radioelectricidade, óptica ou outros sistemas electromagnéticos (Conv.).

5 1.3 — *Rádio:* prefixo que se aplica ao emprego das *ondas radioeléctricas* (Conv.).

6 1.4 — *Ondas radioeléctricas* ou *ondas hertzianas:* ondas electromagnéticas cuja frequência é, por convenção, inferior a 3000 GHz e que se propagam no espaço sem guia artificial.

7 1.5 — *Radiocomunicação: telecomunicação* efectuada por meio de *ondas radioeléctricas* (Conv.).

8 1.6 — *Radiocomunicação de Terra:* qualquer *radiocomunicação* que não as *radiocomunicações espaciais* ou *radioastronomia.*

9 1.7 — *Radiocomunicação espacial:* qualquer *radiocomunicação* assegurada por meio de uma ou várias *estações espaciais* ou por meio de um ou vários *satélites reflectores* ou de outros objectos espaciais.

10 1.8 — *Radiodeterminação:* determinação da posição, da velocidade ou de outras características de um objecto ou obtenção de dados relativos a esses parâmetros, com o auxílio das propriedades de propagação das *ondas radioeléctricas.*

11 1.9 — *Radionavegação:* aplicação da *radiodeterminação* à navegação, incluindo a localização de objectos perturbadores.

12 1.10 — *Radiolocalização:* aplicação da *radiodeterminação* a outros fins que não a *radionavegação.*

13 1.11 — *Radiogoniometria:* radiodeterminação que utiliza a recepção das *ondas radioeléctricas* a fim de determinar a direcção de uma *estação* ou de um objecto.

14 1.12 — *Radioastronomia:* astronomia baseada na recepção das *ondas radioeléctricas* de origem cósmica.

15 1.13 — *Tempo universal coordenado (UTC):* escala de tempo fundada no segundo (SI), definida e recomendada pela CCIR e mantida pela Comissão Internacional da Hora (BIH) (1).

Para a maior parte das aplicações práticas associadas ao Regulamento das Radiocomunicações, o tempo UTC é equivalente ao tempo solar médio no meridiano de origem (0° de longitude), expresso anteriormente em TMG.

16 1.14 — *Utilizações industriais, científicas e médicas* (da energia radioeléctrica) *(ISM):* utilização de aparelhos ou de instalações concebidos para produzir e utilizar, num espaço reduzido de energia radioeléctrica para fins industriais, científicos, médicos, domésticos ou análogos, com exclusão de qualquer uso de *telecomunicações.*

15.1 (1) A definição completa figura no Parecer n.º 460-2 da CCIR.

SECÇÃO II

Termos específicos ligados à gestão das frequências

17 2.1 — *Atribuição* (de uma faixa de frequências): registo no Quadro de Atribuição das Faixas de Frequência de uma faixa de frequências determinada, tendo em vista a sua utilização por um ou vários *serviços de radiocomunicações* de Terra ou espacial, ou pelo *serviço de radioastronomia,* em condições especificadas. Este termo aplica-se igualmente à faixa de frequências considerada.

18 2.2 — *Adjudicação* (de uma frequência ou de um canal radioeléctrico): registo de um dado canal num plano adoptado por uma conferência competente, tendo em vista a sua utilização por uma ou várias administrações para um *serviço de radiocomunicação* de Terra ou espacial, num ou vários países ou zonas geográficas determinadas e segundo condições especificadas.

19 2.3 — *Consignação* (de uma frequência ou de um canal radioeléctrico): autorização dada por uma administração para a utilização por uma *estação* radioeléctrica de uma frequência ou de um canal radioeléctrico determinado segundo condições especificadas.

SECÇÃO III

Serviços radioeléctricos

20 3.1 — *Serviço de radiocomunicação:* serviço definido na presente secção que implique a transmissão, a *emissão* ou a recepção de *ondas radioeléctricas* com fins específicos de *telecomunicação.*

No presente Regulamento, salvo indicação em contrário, qualquer serviço de radiocomunicação refere-se às *radiocomunicações de Terra.*

21 3.2 — *Serviço fixo: serviço de radiocomunicação* entre pontos fixos determinados.

22 3.3 — *Serviço fixo por satélite: serviço de radiocomunicação* entre *estações terrenas* situadas em pontos fixos determinados utilizando um ou vários *satélites;* em certos casos, este serviço compreende ligações entre satélites, as quais podem igualmente ser asseguradas pelo serviço intersatélites; o serviço fixo por satélite pode, além disso, compreender *ligações de conexão* para outros serviços de *radiocomunicação espacial.*

23 3.4 — *Serviço fixo aeronáutico: serviço de radiocomunicação* entre pontos fixos determinados, previsto essencialmente para a segurança da navegação aérea e para assegurar a regularidade, a eficácia e a economia da exploração dos transportes aéreos.

24 3.5 — *Serviço intersatélites: serviço de radiocomunicação* assegurando as ligações entre *satélites* artificiais da Terra.

25 3.6 — *Serviço de exploração espacial: serviço de radiocomunicação* destinado exclusivamente à exploração de *engenhos espaciais,* particularmente à *perseguição espacial,* à *telemedida espacial* e ao *telecomando espacial.* Estas funções serão normalmente asseguradas pelo serviço no qual funciona a *estação espacial.*

26 3.7 — *Serviço móvel: serviço de radiocomunicação* entre *estações terrestres* ou entre *estações móveis* (Conv.).

27 3.8 — *Serviço móvel por satélite; serviço de radiocomunicação:*

Entre *estações terrenas móveis* e uma ou várias *estações espaciais,* ou entre *estações espaciais* utilizadas por este serviço; ou

Entre *estações terrenas móveis,* através de uma ou de *várias estações espaciais.*

Este serviço pode, além disso, compreender as *ligações de conexão* necessárias à sua exploração.

28 3.9 — *Serviço móvel terrestre: serviço móvel* entre *estações de base* e *estações móveis terrestres* ou entre *estações móveis terrestres.*

29 3.10 — *Serviço móvel terrestre por satélite: serviço móvel por satélite* no qual as *estações terrenas móveis* estão situadas na Terra.

30 3.11 — *Serviço móvel marítimo: serviço móvel* entre *estações costeiras* e *estações de navio,* ou entre *estações de navio,* ou entre *estações de comunicações* de bordo associadas. As *estações de engenho de salvamento* e as *estações de radiobaliza de localização de sinistros* podem igualmente participar neste serviço.

31 3.12 — *Serviço móvel marítimo por satélite: serviço móvel por satélite* no qual as *estações terrenas móveis* estão situadas a bordo de navios. As *estações de engenho de salvamento* e as *estações de radiobaliza de localização de sinistros* podem igualmente participar neste serviço.

32 3.13 — *Serviço de operações portuárias: serviço móvel marítimo* num porto ou na vizinhança de um porto entre *estações costeiras* e *estações de navio,* ou entre *estações de navio,* que tem por objectivo a transmissão de mensagens que tratem exclusivamente da manobra, do movimento e da segurança dos navios e, em caso de urgência, de salvaguarda das pessoas. Excluem-se deste serviço as mensagens que têm carácter de *correspondência pública.*

33 3.14 — *Serviço de movimento de navios: serviço de segurança* compreendido no *serviço móvel marítimo*, que não o *serviço de operações portuárias*, entre *estações costeiras* e *estações de navio*, ou entre *estações de navio*, que tem por objectivo a transmissão de mensagens que tratem exclusivamente do movimento dos navios.

Excluem-se deste serviço as mensagens que têm carácter de *correspondência pública*.

34 3.15 — *Serviço móvel aeronáutico: serviço móvel* entre *estações aeronáuticas* e *estções de aeronave* ou entre *estações de aeronave*, no qual podem também participar *estações de engenho de salvamento*. As *estações de radiobaliza de localização de sinistros* podem também participar neste serviço em frequência de perigo e de urgência estabelecidas.

35 3.16 — *Serviço móvel aeronáutico: serviço móvel por satélite* no qual as *estações terrenas móveis* estão situadas a bordo de aeronaves. As *estações de engenho de salvamento* e as *estações de radiobaliza de localização de sinistros* podem igualmente participar neste serviço.

36 3.17 — *Serviço de radiodifusão: serviço de radiocomunicação* cujas *emissões* se destinam a ser recebidas directamente pelo público em geral. Este serviço pode compreender *emissões* sonoras, *emissões de televisão* ou entre géneros de emissões (Conv.).

37 3.18 — *Serviço de radiodifusão por satélite: serviço de radiocomunicação* no qual os sinais emitidos ou retransmitidos por *estações espaciais* se destinam a ser recebidos directamente pelo público em geral.

No serviço de radiodifusão por satélite, a expressão «recebidos directamente» aplica-se simultaneamente à *recepção individual* e *à recepção comunitária*.

38 3.19 — *Serviço de radiodeterminação: serviço de radiocomunicação* para efeitos de *radiodeterminação*.

39 3.20 — *Serviço de radiodeterminação por satélite: serviço de radiocomunicação* para efeitos de *radiodeterminação* e envolvendo a utilização de uma ou várias *estações espaciais*.

40 3.21 — *Serviço de radionavegação: serviço de radiodeterminação* para efeitos de *radionavegação*.

41 3.22 — *Serviço de radionavegação por satélite: serviço de radiodeterminação por satélite* para efeitos de *radionavegação*.

Este serviço pode também compreender as ligações de conexão necessárias à sua exploração.

42 3.23 — *Serviço de radionavegação marítima: serviço de radionavegação* para as necessidades dos navios e a segurança da sua exploração.

43 3.24 — *Serviço de radionavegação marítima por satélite: serviço de radionavegação por satélite* no qual as *estações terrenas* estão situadas a bordo de navios.

44 3.25 — *Serviço de radionavegação aeronáutica: serviço de radionavegação* para as necessidades das aeronaves e a segurança da sua exploração.

45 3.26 — *Serviço de radionavegação aeronáutica por satélite: serviço de radionavegação por satélite* no qual as *estações terrenas* estão situadas a bordo de navios.

46 3.27 — *Serviço de radiolocalização: serviço de radiodeterminação* para efeitos de *radiolocalização*.

47 3.28 — *Serviço de auxiliares da meteorologia: serviço de radiocomunicação* destinado às observações e às sondagens utilizadas para a meteorologia, incluindo a hidrologia.

48 3.29 — *Serviço de exploração da Terra por satélite: serviço de radiocomunicação* entre *estações terrenas* e uma ou várias *estações espaciais*, que pode compreender ligações entre *estações espaciais*, e no qual:

São obtidas informações relativas às características da Terra e dos seus fenómenos naturais a partir de *detectores activos* ou de *detectores passivos* situados em *satélites* da Terra;

São recolhidas informações análogas a partir de plataformas aerotransportadas ou situadas sobre a Terra.

Estas informações podem ser distribuídas a *estações terrenas* pertencentes ao mesmo sistema.

As plataformas podem igualmente ser interrogadas.

Este serviço pode também compreender as *ligações de conexão* necessárias à sua exploração.

49 3.30 — *Serviço de meteorologia por satélite: serviço de exploração da Terra por satélite* para efeitos de meteorologia.

50 3.31 — *Serviço de frequências padrão e de sinais horários: serviço de radiocomunicação* que se assegura, para fins científicos, técnicos e outros, a emissão de frequências especificadas, de sinais horários ou de ambos ao mesmo tempo, de precisão elevada e dada, e destinada à recepção geral.

51 3.32 — *Serviço de frequência padrão e de sinais horários por satélite: serviço de radiocomunicação* utilizando *estações espaciais* situadas em *satélites* da Terra para os mesmos fins que o *serviço de frequências padrão e de sinais horários*.

Este serviço pode também incluir as *ligações de conexão* necessárias à sua exploração.

52 3.33 — *Serviço de pesquisa espacial: serviço de radiocomunicação* no qual se utilizam *engenhos espaciais* ou outros objectos espaciais para a pesquisa científica ou técnica.

53 3.34 — *Serviço de amador: serviço de radiocomunicação* destinado à instrução individual, à intercomunicação e aos estudos técnicos, efectuado por amadores, isto é, por pessoas devidamente autorizadas que se interessam pela técnica de radioelectricidade a título unicamente pessoal e sem interesse pecuniário.

54 3.35 — *Serviço de amador por satélite: serviço de radiocomunicação* utilizando *estações espaciais* situadas em *satélites* da Terra para os mesmos fins que o *serviço de amador*.

55 3.36 — *Serviço de radioastronomia:* serviço que envolve a utilização da *radioastronomia.*

56 3.37 — *Serviço de segurança:* qualquer serviço radioeléctrico explorado por forma permanente ou temporária para garantir a segurança da vida humana e a salvaguarda de bens (Conv.).

57 3.38 — *Serviço especial: serviço de radiocomunicação* não definido especificadamente na presente secção, efectuado exclusivamente para satisfazer necessidades determinadas de interesse geral e não aberto à *correspondência pública.*

SECÇÃO IV

Estações e sistemas radioeléctricos

58 4.1 — *Estação:* um ou vários emissores ou receptores ou um conjunto de emissores e receptores, incluindo os aparelhos acessórios, necessários para assegurar um *serviço de radiocomunicação* ou para o *serviço de radioastronomia,* num dado local.

Cada estação é classificada segundo o serviço em que participa de modo permanente ou temporário.

59 4.2 — *Estação de Terra: estação* que assegura uma *radiocomunicação de Terra.* No presente Regulamento, salvo indicação em contrário, todas as *estações* são *estações* de Terra.

60 4.3 — *Estação terrena: estação* situada quer na superfície da Terra quer na parte principal da atmosfera terrestre e destinada a comunicar:

Com uma ou várias *estações espaciais;* ou

Com uma ou várias *estações* da mesma natureza, com o auxílio de um ou de vários *satélites reflectores* ou de outros objectos espaciais.

61 4.4 — *Estação espacial: estação* situada sobre um objecto que se encontra, é destinado a ir, ou foi, além da parte principal da atmosfera terrestre.

62 4.5 — *Estação de engenho de salvamento: estação móvel* do *serviço móvel marítimo* ou do *serviço móvel aeronáutico* destinada unicamente às necessidades dos náufragos e colocada numa embarcação, jangada ou qualquer outro equipamento de salvamento.

63 4.6 — *Estação fixa: estação* do *serviço fixo.*

64 4.7 — *Estação fixa aeronáutica: estação* do *serviço fixo aeronáutico.*

65 4.8 — *Estação móvel: estação* do *serviço móvel* destinada a ser utilizada quando em movimento ou durante paragens em pontos não determinados.

66 4.9 — *Estação terrena móvel: estação terrena* do *serviço móvel por satélite* destinada a ser utilizada quando em movimento ou durante paragens em pontos não determinados.

67 4.10 — *Estação terrestre: estação* do *serviço móvel* não destinada a ser utilizada quando em movimento.

68 4.11 — *Estação base: estação terrestre* do *serviço móvel terrestre.*

69 4.12 — *Estação móvel terrestre: estação móvel* do *serviço móvel terrestre* susceptível de se deslocar em superfície, no interior dos limites geográficos de um país ou de um continente.

70 4.13 — *Estação costeira: estação terrestre* do *serviço móvel marítimo.*

71 4.14 — *Estação terrena costeira: estação terrena* do *serviço fixo por satélite,* ou, em certos casos, do *serviço móvel marítimo por satélite* situada num ponto determinado do solo e destinada a assegurar a *ligação de conexão* do *serviço móvel marítimo por satélite.*

72 4.15 — *Estação de navio: estação móvel* do *serviço móvel marítimo* colocada a bordo de um navio que não está permanentemente ancorado, distinta de uma *estação de engenho de salvamento.*

73 4.14 — *Estação terrena de navio: estação terrena móvel* do *serviço móvel marítimo por satélite,* instalada a bordo de um navio.

74 4.15 — *Estação de comunicação de bordo: estação móvel* de fraca potência do *serviço móvel marítimo* destinada às comunicações internas a bordo de um navio, ou às comunicações entre um navio e as suas embarcações e jangadas de salvamento no decurso de exercícios ou de operações de salvamento, ou às comunicações no seio de um grupo de navios rebocados ou impelidos, assim como às comunicações que dizem respeito às instruções relativas à manobra dos cabos e à amarração.

75 4.18 — *Estação portuária: estação costeira* do *serviço de operações portuárias.*

76 4.19 — *Estação aeronáutica: estação terrestre* do *serviço móvel aeronáutico.* Em certos casos, uma *estação aeronáutica* pode, por exemplo, estar colocada a bordo de um navio ou de uma plataforma no mar.

77 4.20 — *Estação terrena aeronáutica: estação terrena* do *serviço fixo por satélite,* ou em certos casos, do *serviço móvel aeronáutico por satélite,* situada num ponto determinado do solo e destinada a assegurar a *ligação de conexão* do *serviço móvel aeronáutico por satélite.*

78 4.21 — *Estação de aeronave: estação móvel* do *serviço móvel aeronáutico* instalada a bordo de uma aeronave, distinta de uma *estação de engenho de salvamento.*

79 4.22 — *Estação terrena de aeronave: estação terrena móvel* do *serviço móvel aeronáutico por satélite* instalada a bordo de uma aeronave.

80 4.23 — *Estação de radiodifusão: estação* do *serviço de radiodifusão.*

81 4.24 — *Estação de radiodeterminação: estação* do *serviço de radiodeterminação.*

82 4.25 — *Estação móvel de radionavegação: estação* do *serviço de radionavegação* destinada a ser utilizada quando em movimento ou durante paragens em pontos não determinados.

83 4.26 — *Estação terrestre de radionavegação: estação* do *serviço de radionavegação* não destinada a ser utilizada quando em movimento.

84 4.27 — *Estação móvel de radiolocalização: estação* do *serviço de radiolocalização* destinada a ser utilizada quando em movimento ou durante paragens em pontos não determinados.

85 4.28 — *Estação terrestre de radiolocalização: estação* do *serviço de radiolocalização* não destinada a ser utilizada quando em movimento.

86 4.29 — *Estação de radiogoniometria: estação de radiodeterminação* que utiliza a *radiogoniometria.*

87 4.30 — *Estação de radiofarol: estação* do *serviço de radionavegação* cujas emissões são destinadas a permitir a uma *estação móvel* determinar a sua posição ou a sua direcção em relação à *estação de radiofarol.*

88 4.31 — *Estação de radiobaliza de localização de sinistros: estação* do *serviço móvel* cujas *emissões* são destinadas a facilitar as operações de busca e salvamento.

89 4.32 — *Estação de frequências padrão e de sinais horários: estação* do *serviço de frequências padrão e de sinais horários.*

90 4.33 — *Estação de amador: estação* do *serviço de amador.*

91 4.34 — *Estação de radioastronomia: estação* do *serviço de radioastronomia.*

92 4.35 — *Estação experimental: estação* que utiliza as *ondas radioeléctricas* para experiências que interessam aos progressos da ciência ou da técnica.

Esta definição não inclui as *estações de amador.*

93 4.36 — *Emissor de socorro de navio:* emissor de navio para utilizar exclusivamente numa frequência de perigo, para fins de perigo, de urgência ou de segurança.

94 4.37 — *Radar:* sistema de *radiodeterminação* fundado na comparação entre sinais de referência e sinais radioeléctricos reflectidos ou retransmitidos a partir da posição a determinar.

95 4.38 — *Radar primário:* sistema de *radiodeterminação* fundado na comparação entre sinais de referência e sinais radioeléctricos reflectidos a partir da posição a determinar.

96 4.39 — *Radar secundário:* sistema de *radiodeterminação* fundado na comparação entre sinais de referência e sinais radioeléctricos retransmitidos a partir da posição a determinar.

97 4.40 — *Baliza-radar* «racon»: emissor-receptor associado a um ponto de referência fixo de navegação que, quando excitado por um *radar,* reenvia automaticamente um sinal distintivo, o qual poderá aparecer no *écran* do *radar* e fornecer indicações sobre a distância, azimute e identificação.

98 4.41 — *Sistema de aterragem por instrumentos* (ILS): sistema de *radionavegação* que fornece às aeronaves um guiamento horizontal e vertical imediatamente antes e durante a aterragem e que, em certos pontos fixos, dá indicação da distância ao ponto de aterragem de referência.

99 4.42 — *Radioalinhamento de pista:* sistema de guiamento horizontal incorporado no *sistema de aterragem por instrumentos, que* indica o afastamento horizontal da aeronave em relação à sua trajectória óptima de descida segundo o eixo da pista de aterragem.

100 4.43 — *Radioalinhamento de descida:* sistema de guiamento vertical incorporado no *sistema de aterragem por instrumentos, que* indica o afastamento vertical da aeronave em relação à sua trajectória óptima de descida.

101 4.44 — *Radiobaliza:* emissor do *serviço de radionavegação aeronáutica* que radia um feixe no sentido vertical para fornecer a uma aeronave uma indicação de posição.

102 4.45 — *Radioaltímetro:* aparelho de *radionavegação* instalado a bordo de uma aeronave ou de um *engenho espacial,* que permite determinar a altura dessa aeronave ou desse *engenho espacial* em relação à superfície da Terra ou a uma outra superfície.

103 4.46 — *Radiossonda:* emissor radioeléctrico automático do *serviço de meteorologia,* habitualmente transportado por uma aeronave, um balão livre, um pára-quedas ou um papagaio, e que transmite dados meteorológicos.

104 4.47 — *Sistema espacial:* qualquer conjunto de *estações terrenas,* de *estações espaciais* ou de *estações terrenas* e de *estações espaciais* cooperando para assegurar *radiocomunicações espaciais* para fins determinados.

105 4.48 — *Sistemas de satélites: sistema espacial* que utiliza um ou vários *satélites* artificiais da Terra.

106 4.49 — *Rede de satélite: sistema de satélites* ou parte de um *sistema de satélites,* composto por um só *satélite* e *estações terrenas* associadas.

107 4.50 — *Ligação por satélite:* ligação radioeléctrica entre uma *estação terrena* emissora e uma *estação terrena* receptora através de um *satélite.*

Uma ligação por satélite compreende uma ligação ascendente e uma ligação descendente.

108 4.51 — *Ligação multissatélite:* ligação radioeléctrica entre uma *estação terrena* emissora e uma *estação terrena* receptora através de, pelo menos, dois *satélites,* sem qualquer *estação terrena* intermédia.

Uma ligação multissatélite compreende uma ligação ascendente, uma ou várias ligações entre *satélites* e uma ligação descendente.

109 4.52 — *Ligação de conexão:* ligação radioeléctrica que vai de uma *estação terrena,* situada num ponto fixo determinado, a uma *estação espacial,* ou vice-versa, a fim de transmitir informações para uma *radiocomunicação espacial* de um serviço diferente do *serviço fixo por satélite.*

Secção V

Termos relativos à exploração

110 5.1 — *Correspondência pública:* qualquer *telecomunicação* que os serviços e *estações,* pelo facto de estarem à disposição do público, devem aceitar para transmissão (Conv.).

111 5.2 — *Telegrafia* (*): forma de *telecomunicação* que intervém em qualquer operação que assegure a transmissão e a reprodução à distância do conteúdo de qualquer documento, tal como um escrito, um impresso ou uma imagem fixa, ou a reprodução à distância de qualquer género de informação sob essa forma. Para os fins do Regulamento das Radiocomunicações, o termo «telegrafia» significa, salvo indicação em contrário, uma forma de *telecomunicação* que assegura a transmissão de escritos pela utilização de um código de sinais.

112 5.3 — *Telegrama* (*): escrito destinado a ser transmitido por *telegrafia* a fim de ser entregue ao destinatário. Salvo indicação em contrário, este termo inclui também o *radiotelegrama.*

Nesta definição, o termo «telegrafia» tem o sentido geral definido na Convenção.

113 5.4 — *Radiotelegrama: telegrama* originário quer de uma *estação móvel* quer de uma *estação terrena móvel,* ou que a qualquer delas se destine, transmitido, em todo ou parte do seu percurso, pelas vias de *radiocomunicação* do *serviço móvel* ou do *serviço móvel por satélite.*

114 5.5 — *Comunicação radiotelex:* comunicação por *telex* originária quer de uma *estação móvel* quer de uma *estação terrena móvel,* ou que a qualquer delas se destine, transmitida, em todo ou parte do seu percurso, pelas vias de *radiocomunicação* do *serviço móvel* ou do *serviço móvel por satélite.*

115 5.6 — *Telegrafia por variação de frequência: telagrafia* por modulação de frequência, na qual o sinal telegráfico varia a frequência da onda de suporte entre valores predeterminados.

116 5.7 — *Fac-símile:* forma de *telagrafia* que assegura a transmissão de imagens fixas, com ou sem meias-tintas, para a sua reprodução sob forma permanente.

Nesta definição, o termo «telegrafia» tem o sentido geral definido na Convenção.

117 5.8 — *Telefonia* (*): forma de *telecomunicação* estabelecida para a transmissão da palavra ou, em certos casos, de outros sons.

118 5.9 — *Conversação radiotelefónica:* conversação telefónica originária de uma *estação móvel* ou de uma *estação terrena móvel* ou a qualquer delas destinada, transmitida, em todo ou parte do seu percurso, pelas vias de *radiocomunicação* do *serviço móvel* ou do *serviço móvel por satélite.*

119 5.10 — *Exploração simplex:* modo de exploração pela qual a transmissão é possível alternadamente nos dois sentidos da via de *telecomunicação,* por exemplo, por meio de um sistema de comando manual (1).

120 5.11 — *Exploração dúplex:* modo de exploração pelo qual a transmissão é possível simultaneamente nos dois sentidos da via de *telecomunicação* (2).

121 5.12 — *Exploração semidúplex:* modo de *exploração simplex* num extremo da via de *telecomunicação* e de *exploração dúplex* no outro (2).

122 5.13 — *Televisão:* forma de *telecomunicação* que assegura a transmissão de imagens não permanentes de objectos fixos ou móveis.

123 5.14 — *Recepção individual* (serviço de radiodifusão por satélite): recepção das *emissões* de uma *estação espacial* do *serviço de radiodifusão por satélite* por meio de instalações domésticas simples e, nomeadamente, de instalações com antenas de pequenas dimensões.

124 5.15 — *Recepção comunitária* (no serviço de radiodifusão por satélite): recepção das *emissões* de uma *estação espacial* do *serviço de radiodifusão por satélite* por meio de instalações receptoras, podendo, em certos casos, ser complexas e ter antenas de maiores dimensões do que as utilizadas para a *recepção individual* e destinadas a ser utilizadas:

Por um grupo de público, em geral, num mesmo local; ou
Por meio de um sistema de distribuição servindo uma zona limitada.

125 5.16 — *Telemedida:* utilização das *telecomunicações* para indicar ou registar automaticamente medidas a uma certa distância do instrumento de medida.

126 5.17 — *Radiomedida: telemedida* efectuada por meio de *ondas radioeléctricas.*

127 5.18 — *Telemedida espacial: telemedida* utilizada para a transmissão, a partir de uma *estação espacial,* dos resultados das medidas efectuadas num *engenho espacial,* incluindo as que se referem ao funcionamento do *engenho espacial.*

128 5.19 — *Telecomando:* utilização das *telecomunicações* para a transmissão de sinais destinados a pôr em funcionamento, a modificar ou a parar à distância o funcionamento de um aparelho.

129 5.20 — *Telecomando espacial:* utilização das *rediocomunicações* para a transmissão de sinais radioeléctricos a uma *estação espacial* para pôr em funcionamento, modificar ou para o funcionamento de aparelhos situados no objecto espacial associado, incluindo a *estação espacial.*

130 5.21 — *Perseguição espacial:* determinação da órbita, da velocidade ou da posição instantânea de um objecto situado no espaço, pela utilização da *radiodeterminação,* com exclusão dos radares primários, a fim de seguir os deslocamentos deste objecto.

(*) V. a Resolução n.º 68.

119.1 (1) Em geral, o modo de *exploração simplex* pode ser realizado com uma ou duas frequências.

120.1 e 121 (2) Em geral, os modos de *exploração dúplex* e *exploração semidúplex* de uma via de *radiocomunicação* necessitam da utilização de duas frequências. O modo de *exploração simplex* pode utilizar uma ou duas frequências.

Secção VI

Características das emissões e dos materiais

131 6.1 — *Radiação* (radioeléctrica): fluxo de energia produzido sob a forma de *ondas radioeléctricas* a partir de uma fonte qualquer, ou nessa mesma energia.

132 6.2 — *Emissão: radiação* produzida, ou produção de *radiação*, a partir de uma *estação* radioeléctrica de emissão.

Por exemplo, a energia radiada pelo oscilador local de um receptor radioeléctrico não constitui uma comissão, mas uma *radiação*.

133 6.3 — *Classe de emissão* conjunto de características de uma *emissão*, tais como o tipo de modulação da portadora principal, a natureza do sinal de modulação, o género de informação a transmitir e, eventualmente, outras características. Cada classe é designada por um conjunto de símbolos normalizados.

134 6.4 — *Emissão de faixa lateral única: emissão* em modulação de amplitude contendo apenas uma das duas faixas laterais.

135 6.5 — *Emissão de faixa lateral única com portadora completa: emissão de faixa lateral única* sem redução da portadora.

136 6.6 — *Emissão de faixa lateral única com portadora reduzida: emissão de faixa lateral única* em que a portadora é reduzida a um nível que ainda permite reconstituí-la para ser usada na desmodulação.

137 6.7 — *Emissão de faixa lateral única com portadora suprimida: emissão de faixa lateral única* em que a portadora é virtualmente suprimida e não se destina a ser usada na desmodulação.

138 6.8 — *Emissão fora de faixa (*): emissão* numa frequência ou em frequências situadas fora da *largura de faixa necessária*, mas na sua vizinhança imediata, devida ao processo da modulação, com exclusão das *radiações não essenciais*.

139 6.9 — *Radiação não essencial (*): radiação* numa frequência ou em frequências fora da *largura de faixa necessária* e cujo nível pode ser reduzido sem afectar a correspondente transmissão da informação. Estas radiações compreendem as radiações harmónicas, as radiações parasitas e os produtos de intermodulação e de conversão de frequência, com exclusão das *emissões fora de faixa*.

140 6.10 — *Radiações não desejadas (*):* conjunto de *radiações não essenciais* e de *radiações* provenientes de *emissões fora de faixa*.

141 6.11 — *Faixa de frequências consignada:* faixa de frequências no interior da qual é autorizada a *emissão* de uma dada *estação*. A largura desta faixa é igual à *largura de faixa necessária* acrescida do dobro do valor absoluto da *tolerância de frequência*. No caso de *estações espaciais*, a faixa de frequência consignada inclui o dobro do desvio máximo devido ao efeito Doppler, que pode ocorrer em relação a qualquer ponto da superfície da Terra.

142 6.12 — *Frequência consignada:* centro da *faixa de frequências consignada* a uma *estação*.

143 6.13 — *Frequência característica:* frequência que se pode facilmente identificar e medir numa *emissão* dada.

Uma frequência portadora, por exemplo, pode ser designada como frequência característica.

144 6.14 — *Frequência de referência:* frequência que tem uma posição fixa e bem determinada em relação à frequência *consignada*. O afastamento dessa frequência em relação à *frequência consignada* é, em grandeza e sinal, o mesmo que o da *frequência característica* em relação ao centro da faixa de frequência ocupada pela *emissão*.

145 6.15 — *Tolerância de frequência:* afastamento máximo admissível entre a *frequência consignada* e a frequência situada no centro da faixa ocupada por uma *emissão*, ou entre a *frequência de referência* e a *frequência característica* de uma *emissão*.

A tolerância de frequência exprime-se em milionésimos ou em hertz.

146 6.16 — *Largura de faixa necessária:* para uma dada *classe de emissão*, o valor mínimo da largura de faixa ocupada suficiente para assegurar a transmissão da informação à velocidade e com a qualidade requeridas em condições dadas.

147 6.17 — *Largura de faixa ocupada:* largura da faixa de frequência tal que, abaixo da sua frequência limite inferior e acima da sua frequência limite superior, sejam radiadas *potências médias* iguais, cada uma, a uma percentagem especificada $\beta/2$ da *potência média* total de uma dada *emissão*.

Na falta de especificações da CCIR para a classe de emissão considerada, o valor $\beta/2$ deve ser igual a 0,5 %.

(*) Os termos associados às definições dadas nos n.os **138**, **139** e **140** devem ser expressos nas línguas de trabalho do seguinte modo:

Números	Em francês	Em inglês	Em espanhol	Em português
138 (6.8)	Emission hors bande.	Out-of-band emission.	Emisión fuera de banda.	Emissão fora de faixa.
139 (6.9)	Rayonnement non essentiel.	Spurious emission.	Emisión no esencial.	Radiação não essencial.
140 (6.10)	Rayonnements non désirés.	Unwanted emissions.	Emisiones no deseadas.	Radiações não desejadas.

148 6.18 — *Onda de polarização dextrogira* (sentido dos ponteiros do relógio): onda polarizada elíptica ou circularmente, cujo vector campo eléctrico gira, em função do tempo, no sentido dextrorso, isto é, no sentido dos ponteiros do relógio. O movimento do vector campo eléctrico será verificado, num plano fixo qualquer normal à direcção da propagação, por um observador que olhe no sentido em que a onda se propaga.

149 6.19 — *Onda de polarização levogira* (sentido contrário ao dos ponteiros do relógio): onda polarizada elíptica ou circularmente, cujo vector campo eléctrico gira, em função do tempo, no sentido contrário ao dos ponteiros do relógio. O movimento do vector campo eléctrico será verificado, num plano fixo qualquer normal à direcção da propagação, por um observador que olhe no sentido em que a onda se propaga.

150 6.20 — *Potência:* sempre que se indica a potência de um emissor radioeléctrico, etc., ela deve ser expressa por uma das formas seguintes, segundo a *classe de emissão*, utilizando os símbolos arbitrários indicados:

Potência de ponta (*PX* ou *pX*);
Potência média (*PY* ou *pY*);
Potência da portadora (*PZ* ou *pZ*).

Para as diferentes *classes de emissão*, as relações entre a *potência de ponta* a *potência média* e a *potência da portadora*, nas condições de funcionamento normal e na ausência de modulação, são indicadas em pareceres da CCIR, os quais podem ser utilizados como guia.

Nas fórmulas, o símbolo *p* indica a potência em watts e o símbolo *P* a potência em decibéis relativa a um nível de referência.

151 6.21 — *Potência de ponta* (de um emissor radioeléctrico): média da potência fornecida à linha de alimentação da antena por um emissor em funcionamento normal, durante um ciclo de radiofrequência correspondente à amplitude máxima da envolvente de modulação.

152 6.22 — *Potência média*(de um emissor radioeléctrico): média da potência fornecida à linha de alimentação da antena por um emissor em funcionamento normal, avaliada durante um intervalo de tempo relativamente longo em relação ao período da componente de mais baixa frequência da modulação.

153 6.23 — *Potência da portadora* (de um emissor radioeléctrico): média da potência fornecida à linha de alimentação da antena por um emissor durante um ciclo de radiofrequência, na ausência de modulação.

154 6.24 — *Ganho de uma antena*: relação, geralmente expressa em decibéis, entre a potência necessária à entrada de uma antena de referência sem perdas e a potência fornecida à entrada da antena dada, para que as duas antenas produzam, numa dada direcção, a mesma intensidade de campo ou a mesma densidade de fluxo de potência, à mesma distância. Na ausência de indicação em contrário, trata-se do ganho da antena na direcção do máximo de *radiação*. O ganho pode eventualmente ser considerado para uma polarização especificada.

Conforme a antena de referência escolhida, distingue-se:

a) *O ganho isotrópico* ou *absoluto* (G_i), quando a antena de referência é uma antena isotrópica, isolada no espaço;
b) O *ganho em relação a um dipolo de meia onda* (G_d), quando a antena de referência é um dipolo de meia onda, isolada no espaço, cujo plano equatorial contém a direcção dada;
c) O *ganho em relação a uma antena vertical* (G_v), quando a antena de referência é um condutor rectilíneo muito mais curto que o quarto do comprimento de onda, normal à superfície de um plano perfeitamente condutor que contém a direcção dada.

155 6.25 — *Potência isotrópica radiada equivalente* (p. i. r. e.): produto da potência fornecida à antena pelo seu ganho em relação a uma antena isotrópica, numa dada direcção (*ganho isotrópico* ou *absoluto*).

156 6.26 — *Potência aparente radiada* (p. a. r.) (numa dada direcção): produto da potência fornecida à antena pelo seu *ganho em relação a um dipolo de meia onda* numa dada direcção.

157 6.27 — *Potência aparente radiada em relação a uma antena vertical curta* (p. a. r. v.) (numa dada direcção): produto da potência fornecida à antena pelo seu *ganho em relação a uma antena vertical curta* numa dada direcção.

158 6.28 — *Difusão troposférica*: modo de propagação no qual as *ondas radioeléctricas* são difundidas por virtude de irregularidades ou descontinuidades nas propriedades físicas da troposfera.

159 6.29 — *Difusão ionosférica*: modo de propagação no qual as *ondas radioeléctricas* são difundidas por virtude de irregularidades ou descontinuidades na ionização da ionosfera.

Secção VII

Partilha de frequências

160 7.1 — *Interferência*: efeito provocado sobre a recepção, num sistema de *radiocomunicação*, por uma energia não desejada devida a qualquer *emissão*, *radiação* ou indução (ou a uma combinação dessas *emissões*,

radiações ou induções), e que se manifesta pela degradação da qualidade de transmissão, pela deformação ou pela perda da informação que poderia obter-se na ausência dessa energia não desejada.

161 7.2 — *Interferência admissível* (1): *interferência* observada ou prevista, que satisfaz os níveis de *interferência* e os critérios quantitativos de partilha fixados no presente Regulamento ou em pareceres da CCIR, ou ainda em acordos especiais cuja possibilidade é prevista no presente Regulamento.

162 7.3 — *Interferência aceite* (1): *interferência* superior à definida como admissível, que foi objecto de um acordo entre duas ou mais administrações sem causar prejuízo às outras administrações.

163 7.4 — *Interferência prejudicial* (2): *interferência* que compromete o funcionamento de um *serviço de radionavegação* ou de outros *serviços de segurança* ou que degrada seriamente, interrompe repetidamente ou impede o funcionamento de um *serviço de radiocomunicação* utilizado de acordo com o presente Regulamento.

164 7.5 — *Relação de protecção* (R. F.): valor mínimo, geralmente expresso em decibéis, da relação sinal útil/sinal indesejável à entrada de um receptor, determinado em condições especificadas, que permite obter uma dada qualidade de recepção do sinal útil à saída do receptor.

165 7.6 — *Zona de coordenação:* zona associada a uma *estação terrena* no exterior da qual uma *estação de Terra*, que partilha a mesma faixa de frequências, não pode provocar ou sofrer qualquer *interferência* superior à *interferência admissível*.

166 7.7 — *Contorno de coordenação:* linha que delimita a *zona de coordenação*.

167 7.8 — *Distância de coordenação:* num azimute dado, distância medida a partir da posição de uma *estação terrena*, para além da qual uma *estação de Terra*, que partilha a mesma faixa de frequências, não pode provocar ou sofrer qualquer *interferência* superior à *interferência admissível*.

168 7.9 — *Temperatura de ruído equivalente de uma ligação por satélite:* temperatura de ruído referida à saída da antena de recepção da *estação terrena* que corresponde à potência de ruído radioeléctrico que produz o ruído total observado na saída da ligação por *satélite*, não levando em conta o ruído devido às *interferências* causadas por *ligações por satélite* utilizando outros *satélites* e por sistemas de Terra.

Secção VIII

Termos técnicos relativos ao espaço

169 8.1 — *Espaço longínquo:* região do espaço situada a distâncias da Terra superiores ou aproximadamente iguais à distância entre a Terra e a Lua.

170 8.2 — *Engenho espacial:* engenho construído pelo homem e destinado a ir além da parte principal da atmosfera terrestre.

171 8.3 — *Satélite:* corpo que gira em volta de um outro corpo de massa preponderante e cujo movimento é principalmente determinado, de forma permanente, pela força de atracção deste último.

172 8.4 — *Satélite activo: satélite* que transporta uma *estação* destinada a emitir ou retransmitir sinais de *radiocomunicação*.

173 8.5 — *Satélite reflector: satélite* destinado a transmitir por reflexão sinais de *radiocomunicação*.

174 8.6 — *Detector activo:* instrumento de medida utilizado no *serviço de exploração da Terra por satélite* ou no *serviço de pesquisa espacial*, que permite obter informações por *emissão* e recepção de *ondas radioeléctricas*.

175 8.7 — *Detector passivo:* instrumento de medida utilizado no *serviço de exploração da Terra por satélite* ou no *serviço de pesquisa espacial*, que permite obter informações por recepção de *ondas radioeléctricas* de origem natural.

176 8.8 — *Órbita:* trajectória descrita, em relação a um dado sistema de referência, pelo centro de gravidade de um *satélite* ou de outro objecto espacial submetido de forma preponderante às forças naturais, essencialmente às forças de gravitação.

177 8.9 — *Inclinação de uma órbita* (de satélite da Terra): ângulo formado pelo plano que contém uma *órbita* e o plano do Equador terrestre.

178 8.10 — *Período* (de um satélite): intervalo de tempo compreendido entre duas passagens consecutivas de um *satélite* num ponto característico da sua *órbita*.

179 8.11 — *Altitude do apogeu ou do perigeu:* altitude do apogeu ou do perigeu acima de uma superfície de referência especificada servindo para representar a superfície da Terra.

180 8.12 — *Satélite geossíncrono: satélite* da Terra cujo período de revolução é igual ao período de rotação da Terra em torno do seu eixo.

181 8.13 — *Satélite geostacionário: satélite geossíncrono* cuja *órbita* circular e directa está situada no plano do Equador terrestre e que, por consequência, está fixo em relação à Terra. Por extensão, *satélite* que se mantém aproximadamente fixo em relação à Terra.

161.2 (1) Os termos «interferência admissível» e «interferência aceite» são utilizados na coordenação das consignações de frequência entre administrações.

(2) V. a Resolução n.º 68

182 8.14 — *Órbita de satélites geostacionários: órbita* em que deve ser colocado um *satélite* para que seja um *satélite geostacionário.*

183 a 207 *(Não atribuídos.)*

ARTIGO 2

Nomenclatura das faixas de frequências e dos comprimentos de onda em radiocomunicações

208 § 1. O espectro das frequências radioeléctricas subdivide-se em nove faixas de frequências, designadas por números inteiros consecutivos, de acordo com o quadro seguinte. Sendo a unidade de frequência o hertz (Hz), as frequências exprimem-se:

Em quilohertz (kHz), até 3000 kHz, inclusive;
Em megahertz (MHz), acima de 3 MHz e até 3000 MHz, inclusive;
Em gigahertz (GHz), acima de 3 GHz e até 3000 GHz, inclusive.

Para as faixas de frequências superiores a 3000 GHz, quer dizer, para as ondas centimilimétricas,n as ondas micrométricas e as ondas decimicrométricas, convém utilizar o terahertz (THz).

Todavia, nos casos em que a aplicação destas regras ocasionar sérias dificuldades, como, por exemplo, na notificação e registo das frequências, nas questões relativas às listas de frequências e nas questões conexas, podem aceitar-se afastamentos razoáveis.

Número da taxa	Símbolos (em inglês)	Faixas de frequências (limite inferior excluído, limite superior incluído)	Subdivisão métrica correspondente	Abreviações métricas para as faixas
4	VLF	3 a 30 kHz	Ondas miriamétricas	F. Mam.
5	LF	30 a 300 kHz	Ondas quilométricas	F. km.
6	MF	300 a 3000 kHz	Ondas hectométricas	F. hm.
7	HF	3 a 30 MHz	Ondas decamétricas	F. dam.
8	VHF	30 a 300 MHz	Ondas métricas	F. m.
9	UHF	300 a 3000 MHz	Ondas decimétricas	F. dm.
10	SHF	3 a 30 GHz	Ondas centimétricas	F. cm.
11	EHF	30 a 300 GHz	Ondas milimétricas	F. mm.
12	—	300 a 3000 GHz	Ondas decimilimétricas	—

Nota 1 — A «faixa N» (N = número da faixa) vai de $0{,}3 \times 10^N$ Hz a 3×10^N Hz.
Nota 2 — Prefixos: k = quilo (10^3); M = mega (10^6); G = giga (10^9); T = tera (10^{12}).

209 § 2. Nas relações entre as administrações e a UIT não deveriam ser utilizados nomes, símbolos ou abreviaturas para designar as faixas de frequência diferentes dos que figuram no n.º **208**.

210 a 234 *(Não atribuídos.)*

ARTIGO 3

Nomenclatura das datas e das horas empregadas em radiocomunicações

235 § 1. Qualquer data utilizada em relação com as radiocomunicações deve estar conforme com o calendário gregoriano.

236 § 2. Se, numa data, o mês não for indicado com todas as letras ou abreviadamente, deve ser indicado sob forma numérica segundo uma sequência determinada de algarismos, representando, dois a dois, o dia, o mês e o ano.

237 § 3. Cada vez que uma data for utilizada em relação com o tempo universal coordenado (UTC) essa data deve ser a do meridiano de origem no momento apropriado, correspondendo o meridiano de origem a uma longitude geográfica de 0°.

238 § 4. Salvo indicação em contrário, sempre que uma dada hora é utilizada em actividades internacionais de radiocomunicação, deve ser aplicado o tempo universal coordenado (UTC), e a hora deve ser apresentada sob a forma de um grupo de quatro algarismos (0000-2359). A abreviatura UTC deve ser utilizada em todas as línguas.

239 a 263 *(Não atribuídos.)*

ARTIGO 4

Designação das emissões

264 § 1. (1) As emissões são designadas segundo a sua largura de faixa necessária e a sua classe.

265 (2) Encontrar-se-ão na parte B do apêndice 6 exemplos de emissões designadas de acordo com o disposto no presente artigo. Poderão ser dados outros exemplos nos pareceres mais recentes da CCIR. Esses exemplos poderão também ser publicados no prefácio da Lista Internacional das Frequências.

Secção I

Largura de faixa necessária

266 § 2. (1) A largura de faixa necessária, tal como se encontra definida no n.º **146** e determinada na parte B do apêndice 6, deve ser expressa por três algarismos e uma letra. A letra ocupa a posição da vírgula e representa a unidade da largura de faixa. O primeiro carácter não deve ser nem o algarismo 0 nem uma das letras K, M ou G.

267 (2) A largura de faixa necessária ([1]):

Entre 0,001 e 999 Hz é expressa em Hz (letra H);
Entre 1,00 e 999 é expressa em kHz (letra K);
Entre 1,00 e 999 MHz é expressa em MHz (letra M);
Entre 1,00 e 999 GHz é expressa em GHz (letra G).

Secção II

Classes

268 § 3. A classe de emissão é o conjunto das características mencionadas no n.º **269**.

269 § 4. As emissões são classificadas e simbolizadas segundo as suas características fundamentais, tais como figuram no n.º **270**, e segundo todas as características adicionais facultativas descritas de acordo com a parte A do apêndice 6.

270 § 5. As características fundamentais são as seguintes (v. os n.ºs **271**, **272** e **273**):

(1) Primeiro símbolo — tipo de modulação da portadora principal;
(2) Segundo símbolo — natureza do sinal (ou dos sinais) que modula a portadora principal;
(3) Terceiro símbolo — tipo de informação a transmitir.

Quando a modulação é apenas empregada durante curtos intervalos de tempo e de forma ocasional (como, em muitos casos, para os sinais de identificação ou de chamada) pode não ser levada em conta, desde que a largura de faixa necessária indicada não seja com isso aumentada.

271 § 6. (1) Primeiro símbolo — tipo de modulação da portadora principal:

(1.1) Emissão de uma onda não modulada ..... N
(1.2) Emissão cuja onda portadora principal é modulada em amplitude (incluídos os casos em que há subportadoras moduladas em modulação angular):
(1.2.1) Faixa lateral dupla ..... A
(1.2.2) Faixa lateral única, onda portadora completa ..... H
(1.2.3) Faixa lateral única, onda portadora reduzida ou de nível variável ..... R
(1.2.4) Faixa lateral única, onda portadora suprimida ..... J
(1.2.5) Faixas laterais independentes ..... B
(1.2.6) Faixa lateral residual C
(1.3) Emissão de uma onda portadora principal é modulada em modulação angular:
(1.3.1) Modulação de frequência ..... F
(1.3.2) Modulação de fase ..... G
(1.4) Emissão de uma onda portadora principal é modulada em amplitude e em modulação angular, quer simultaneamente quer numa ordem previamente estabelecida ..... D
(1.5) Emissão de impulso ([2]):
(1.5.1) Sequências de impulsos não modulados ..... P

267.1 ([1]) Exemplos:

0,002 Hz = H002;	6 Hz = 6K00;	1,25 MHz = 1M25;
0,1 Hz = H100;	12,5 kHz = 12k5;	2 MHz = 2M00;
25,3 Hz = 25H3;	180,4 kHz = 180K;	10 MHz = 10M0;
400 kHz = 2K40;	180,5 kHz = 181K;	202 MHz = 202M;
	180,7 kHz = 181K;	5,65 GHz = 5G65.

271.1 ([2]) As emissões cuja portadora principal é modulada directamente por um sinal que foi codificada sob forma quantificada (por exemplo, modulação por impulsos e codificação) devem ser designadas de acordo com os pontos (1.2) ou (1.3).

(1.5.2) Sequências de impulsos:

(1.5.2.1) Modulados em amplitude ..... K
(1.5.1.2) Modulados em largura/duração L
(1.5.2.3) Modulados em posição/fase ..... M
(1.5.2.4) Nos quais a onda portadora é modulada em modulação angular durante o período do impulso ..... Q
(1.5.2.5) Consistindo numa combinação do precedente ou produzida por outros meios V

(1.6) Casos não cobertos acima, nos quais a emissão consiste na portadora principal modulada, quer simultaneamente quer numa ordem previamente estabelecida, segundo uma combinação de vários dos seguintes modos: em amplitude, em modulação angular ou por impulsos ..... W
(1.7) Outros casos X

272 (2) Segundo símbolo — natureza do sinal (ou dos sinais) que modula a portadora principal:

(2.1) Não existe sinal modulante 0
(2.2) Uma única via contendo informação quantificada ou numérica, sem emprego de uma subportadora modulante (1) 1
(2.3) Uma única via contendo informação quantificada ou numérica, com o emprego de uma subportadora modulante (1) 2
(2.4) Uma única via contendo informação analógica 3
(2.5) Duas vias ou mais contendo informação quantificada ou numérica 7
(2.6) Duas vias ou mais contendo informação analógica 8
(2.7) Sistema compósito com uma ou várias vias contendo informação quantificada ou numérica e uma ou várias vias contendo informação analógica 9
(2.8) Outros casos X

273 (3) Terceiro símbolo — tipo de informação a transmitir (2):

(3.1) Nenhuma informação ..... N
(3.2) Telegrafia — para recepção auditiva ..... A
(3.3) Telegrafia — para recepção automática ..... B
(3.4) Fac-símile C
(3.5) Transmissão de dados, telemedida, telecomando ..... D
(3.6) Telefonia (incluindo a radiodifusão sonora) ..... E
(3.7) Televisão (vídeo) ..... F
(3.8) Combinação dos casos acima ..... W
(3.9) Outros casos X

274 a 298 *(Não atribuídos.)*

CAPÍTULO II

ARTIGO 5

Características técnicas das estações

299 § 1. (1) A escolha e o funcionamento dos aparelhos destinados a ser utilizados nas estações, bem como todas as emissões destas, devem satisfazer o estipulado no presente Regulamento.

300 (2) Do mesmo modo, na medida compatível com as considerações práticas, a escolha dos aparelhos de emissão, de recepção e de medida deve basear-se nos mais recentes progressos da técnica, tais como são indicados especialmente nos pareceres da CCIR.

301 § 2. Na concepção dos equipamentos de emissão e de recepção destinados a ser utilizados numa dada parte do espectro das frequências procurar-se-á tomar em conta as características técnicas dos equipamentos de emissão e de recepção susceptíveis de serem utilizados nas regiões vizinhas dessa parte do espectro e noutra regiões do espectro, desde que tenham sido tomadas todas as medidas técnica e economicamente justificáveis para reduzir o nível das radiações não desejadas destes últimos equipamentos de emissão e para reduzir a sensibilidade às interferências destes últimos equipamentos de recepção.

272.1 (1) Isto exclui o multiplex por divisão no tempo.

273.1 (2) Neste contexto, o termo «informação» tem um sentido restrito, quer dizer, não se trata de uma informação de natureza permanente e invariável, como no caso de emissões de frequências padrão, de radares da onda contínua ou de impulsos, etc.

302 § 3. Na medida do possível, convém que os equipamentos a ser utilizados numa estação apliquem métodos de processamento dos sinais que permitam utilizar o espectro das frequências com o máximo de eficácia, de acordo, com os pareceres pertinentes da CCIR. Estes métodos compreendem, designadamente, certas técnicas de expansão da largura de faixa e, particularmente nos sistemas que funcionam em modulação de amplitude, a utilização da técnica da faixa lateral única.

303 § 4. (1) As estações de emissão devem satisfazer as tolerâncias de frequência fixadas no apêndice 7.

304 (2) As estações de emissão devem satisfazer as especificações do apêndice 8 no que se refere aos níveis de potência máximos tolerados de radiações não essenciais.

305 (3) As estações de emissão devem satisfazer as especificações fixadas no presente Regulamento para certos serviços e classes de emissão, por exemplo os apêndices 17 e 27 Aer2 (*), no que refere aos níveis de potência máximos tolerados para as emissões fora de faixa. Na ausência de tais especificações, as estações de emissão devem, tanto quanto possível, satisfazer as condições relativas à limitação das emissões fora de faixa especificadas nos mais recentes pareceres da CCIR.

306 (4) Além disso, devem ser feitos todos os esforços para manter as tolerâncias de frequência e o nível das radiações não desejadas nos valores mais baixos permitidos pelo estado da técnica e pela natureza do serviço a assegurar.

307 § 5. (1) As larguras de faixa das emissões devem igualmente permitir assegurar a utilização mais eficaz possível do espectro, o que significa em geral que as larguras de faixas devem ser mantidas nos valores mais baixos permitidos pelo estado da técnica e pela natureza do serviço a assegurar. O apêndice 6 constitui um guia para a determinação da largura de faixa necessária.

308 (2) Quando se utilizam técnicas de expansão de largura de faixa, deve ser empregada a densidade espectral de potência mínima compatível com a utilização eficaz do espectro.

309 § 6. (1) Sempre que pareça necessário para uma boa utilização do espectro, os receptores utilizados por qualquer serviço devem, tanto quanto possível, ter as mesmas tolerâncias de frequência que os emissores desse serviço, tendo em conta o efeito de Doppler nos casos em que este deva ser tomado em conta.

310 (2) As estações de recepção deveriam utilizar equipamento com características técnicas apropriadas à classe de emissão respectiva; em particular, a selectividade deveria ser apropriada tendo em conta o n.º **307** relativo às larguras de faixa das emissões.

311 (3) As características de funcionamento dos receptores deveriam ser tais que estes não fossem interferidos por emissores situados a distância razoável e funcionamento de acordo com as disposições do presente Regulamento.

312 § 7. A fim de assegurar o acatamento do presente Regulamento, as administrações procederão de modo que as emissões das estações colocadas sob a sua jurisdição sejam objecto de medições frequentes; para esse fim empregarão, se necessário, os meios definidos no artigo 20. A técnica a aplicar e os intervalos de medição a respeitar devem, dentro das possibilidades práticas, estar de acordo com os mais recentes pareceres da CCIR.

313 § 8. É proibido a qualquer estação funcionar em ondas amortecidas.

314 a 338 *(Não atribuídos.)*

CAPÍTULO III

Frequências

ARTIGO 6

Regras gerais de consignação e emprego das frequências

339 § 1. Os Membros esforçar-se-ão por limitar o número de frequências e a extensão do espectro utilizado ao mínimo indispensável para assegurar de forma satisfatória o funcionamento dos serviços necessários. Para esse fim, esforçar-se-ão por aplicar, no prazo mais curto possível, os últimos aperfeiçoamentos da técnica (1).

340 § 2. Os Membros comprometem-se a seguir as prescrições do quadro de atribuição das faixas de frequências, bem como as outras prescrições do presente Regulamento, para consignar frequências às estações que podem causar interferências aos serviços assegurados pelas estações dos outros países.

341 § 3. Qualquer nova consignação ou qualquer modificação da frequência ou de outra característica fundamental de uma consignação existente (v. o apêndice 1 ou o apêndice 3) deve ser efectuada de modo a evitar que cause interferências prejudiciais aos serviços assegurados por estações que utilizam frequências de acordo com o quadro de atribuição das faixas de frequências do presente capítulo e com as outras disposições do presente Regulamento, cujas características estão inscritas no ficheiro de referência internacional das frequências.

(*) Nota do Secretariado-Geral: v. o n.º 5189 e a Resolução n.º 400.

339.1 (1) N.º 130 da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973).

342 § 4. As administrações dos Membros não devem consignar a uma estação qualquer frequência em derrogação ao quadro de atribuição das faixas de frequências do presente capítulo ou às outras disposições do presente Regulamento, salvo com a condição expressa de que daí não resulte interferência prejudicial para um serviço assegurado por estações que trabalhem de acordo com as disposições da Convenção e do presente Regulamento.

343 § 5. A frequência consignada a uma estação de um serviço dado deve ficar suficientemente afastada dos limites da faixa atribuída a esse serviço de tal modo que, tendo em conta a faixa de frequências consignada à estação, se não causem interferências prejudiciais aos serviços a que estação atribuídas as faixas adjacentes.

344 § 6. Para a resolução de interferências prejudiciais, o serviço de radioastronomia é tratado como um serviço de radiocomunicação. Contudo, em relação às emissões dos serviços que funcionam nas outras faixas, ele beneficia de grau de protecção igual àquele de que beneficiam esses serviços, uns em relação aos outros.

345 § 7. Para a resolução de casos de interferências prejudiciais causadas por outros serviços funcionando noutras faixas o serviço de pesquisa espacial (passiva) e o serviço de exploração da Terra por satélite (passiva) beneficiam de grau de protecção igual àquele de que beneficiam esse diferentes serviços, uns em relação aos outros.

346 § 8. Quando em regiões ou sub-regiões diferentes uma faixa de frequências é atribuída a serviços diferentes da mesma categoria (v. as secções I e II do artigo 8), o funcionamento desses serviços baseia-se na igualdade de direitos. Por consequência, as estações de cada serviço, numa das regiões ou das sub-regiões, devem funcionar de tal modo que não causem interferência prejudicial aos serviços das outras regiões ou sub-regiões.

347 § 9. Nenhuma disposição do presente Regulamento poderá impedir o emprego, por uma estação em perigo, de todos os meios de radiocomunicação de que disponha para chamar a atenção, assinalar o seu estado e a sua posição e obter socorro.

348 § 10. Nenhuma disposição do presente Regulamento poderá impedir o emprego, por uma estação, nas circunstâncias excepcionais indicadas no n.º **347**, de todos os meios de radiocomunicação de que disponha para prestar assistência a uma estação em perigo.

349 a 373 *(Não atribuídos.)*

ARTIGO 7

Acordos especiais

374 § 1. Vários Membros podem, em virtude das disposições do artigo 31 da Convenção relativas a arranjos especiais, concluir acordos especiais respeitantes à sub-repartição das faixas de frequência entre os serviços interessados desses países.

375 § 2. Vários Membros podem, em virtude das disposições do artigo 31 da Convenção relativas a arranjos especiais e baseados nos resultados de uma conferência a que tenham sido convidados todos os Membros interessados, concluir acordos especiais par a consignação de frequência àquelas das suas estações que participam num ou vários serviços determinados, nas faixas de frequências atribuídas a esses serviços segundo o artigo 8, quer abaixo de 5060 kHz, mas não entre estes limites.

376 § 3. Os Membros podem, em virtude das disposições do artigo 31 da Convenção relativas a arranjos especiais, concluir, numa base mundial e como resultado de uma conferência para a qual tenham sido convidados todos os Membros, acordos especiais para a consignação de frequências àquelas das suas estações que participam num serviço determinado, com a condição de que essas consignações sejam feitas dentro dos limites das faixas de frequências atribuídas exclusivamente a esse serviço de acordo com o artigo 8.

377 § 4. A faculdade prevista nos n.os **374** a **376** de concluir acordos especiais não implica derrogação às disposições do presente Regulamento.

378 § 5. O secretário-geral deverá ser previamente informado da reunião de qualquer conferência convocada com o fim de concluir acordos especiais; será igualmente informado dos termos desses acordos; avisará os Membros da existência de tais acordos.

379 § 6. Em conformidade com as disposições do artigo 10, a Comissão Internacional do Registo de Frequências pode ser convidada a delegar representantes para participarem, a título consultivo, na preparação de acordos especiais e nos trabalhos das conferências. Reconhece-se que uma tal participação é desejável na maioria dos casos.

380 § 7. Se, para além das disposições que, nos termos do n.º **375**, têm a faculdade de adoptar, vários Membros coordenarem, em qualquer das faixas de frequências abrangidas pelo artigo 8, a utilização de frequências específicas antes de notificarem as correspondentes consignações de frequência, eles informarão desse facto a Comissão, nos casos apropriados.

381 a 390 *(Não atribuídos.)*

ARTIGO 8

Atribuições das faixas de frequência

Introdução

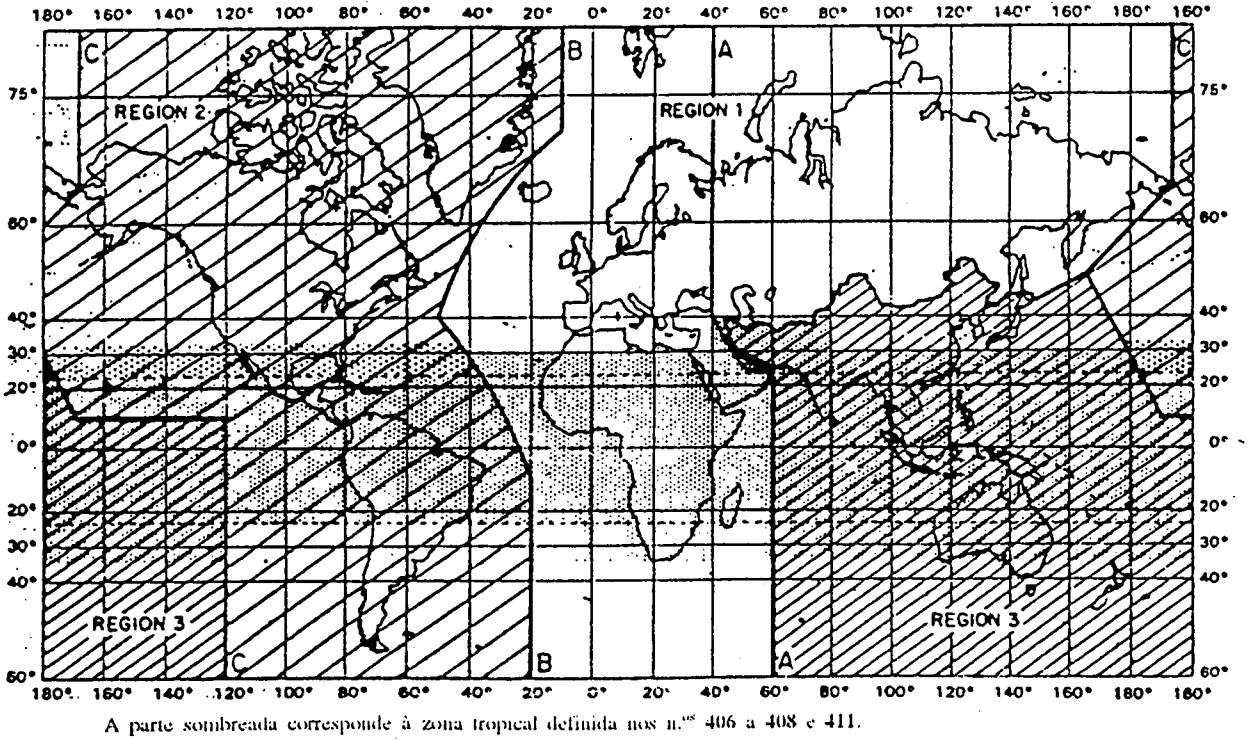
391 1. Em todos os documentos de União, nos casos em que sejam empregados nos termos «atribuição», «adjudicação» e «consignação», será dado o sentido definitivo nos n.os 17 a 19, com a correspondência indicada a seguir nas três línguas de trabalho:

Repartição das faixas de frequência entre	Em francês	Em inglês	Em espanhol	Termo adoptado na tradução portuguesa
Serviços	Attribution (Attribuer)	Allocation (To allocate)	Atribución (Atribuir)	Atribuição (Atribuir)
Zonas ou países	Allotissement (Allotir)	Allotment (To allot)	Adjudicación (Adjudicar)	Adjudicação (Adjudicar)
Estações	Assignation (Assigner)	Assignment (To assign)	Asignación (Asignar)	Consignação (Consignar)

Secção I

Regiões e zonas

392 § 2. Sob o ponto de vista da atribuição das faixas de frequências, o Mundo foi dividido em três Regiões (1), como se mostra no planisfério seguinte e nos n.os 393 a 399:



A parte sombreada corresponde à zona tropical definida nos n.os 406 a 408 e 411.

393 *Região 1:*

A Região 1 compreende a zona limitada a este pela linha A (v. a seguir a definição das linhas A, B e C) e a oeste pela linha B, com excepção dos territórios do Irão situados entre estes limites. Compreende também a parte dos territórios da Turquia e da União das Repúblicas Socialistas Soviéticas situada fora desses limites, bem como o território da República Popular da Mongólia e a zona ao norte da URSS, entre as linhas A e C.

392.1 (1) Convém notar que quando as palavras «região» e «regional» se empregam sem R maiúsculo no presente Regulamento, elas se não referem às três regiões aqui definidas para fins de atribuição das faixas de frequências.

394 *Região 2:*

A Região 2 compreende a zona limitada a este pela linha B e a oeste pela linha C.

395 *Região 3:*

A Região 3 compreende a zona limitada a este pela linha C e a oeste pela linha A, com excepção dos territórios da República Popular da Mongólia, da Turquia, da URSS e da zona ao norte da URSS. Compreende também a parte do território do Irão situadas fora daqueles limites.

396 As linhas A, B e C são definidas como segue:

397 *Linha A:*

A linha A parte do Pólo Norte, segue o meridiano 40° E. de Greenwich até ao paralelo 40° N., depois o arco de círculo máximo ao ponto de intersecção do meridiano 60° E. com o trópico de Câncer e daí o meridiano 60° E., até ao Pólo Sul.

398 *Linha B:*

A linha B parte do Pólo Norte, segue o meridiano 10° O. de Greenwich até à sua intersecção com o paralelo 72° N., daí o arco de círculo máximo até ao ponto de intersecção do meridiano 50° O. com o paralelo 40° N., de novo o arco de círculo máximo até ao ponto de intersecção do meridiano 20° O. com o paralelo 10° S. e, finalmente, o merediano 20° O., até ao Pólo Sul.

399 *Linha C:*

A linha C parte do Pólo Norte, segue o arco de meridiano até ao ponto de intersecção do paralelo 65° 30' N. com o limite internacional no estreito de Bering, daí o arco de círculo máximo até ao ponto de intersecção do meridiano 165° E. de Greenwich com o paralelo 50° N., em seguida o arco de círculo máximo até ao ponto de intersecção do meridiano 170° O. com o paralelo 10° N., daí segue o paralelo 10° N. até à sua intersecção com o meridiano 120° O. e, finalmente, o meridiano 120° O., até ao Pólo Sul.

400 § 3. Para a aplicação do presente Regulamento, a expressão «zona africana de radiodifusão» designa:

401 *a*) Os países, partes de país, territórios africanos situados entre os paralelos 40° S. e 30° N.;

402 *b*) As ilhas do oceano Índico a oeste do meridiano 60° E. de Greenwich, situadas entre o paralelo 40° S. e o arco de círculo máximo que une os pontos de coordenadas 45° E., 11° 30' N. e 60° E., 15° N.;

403 *c*) As ilhas do oceano Atlântico a este da linha B no n.º **398** do presente Regulamento, situadas entre os paralelos 40° S. e 30° N.

404 § 4. A «zona europeia de radiodifusão» é limitada: a oeste, pelos limites oeste da Região 1; a este, pelo meridiano 40° E. de Greenwich, e a sul, pelo paralelo 30° N., de maneira a englobar a parte ocidental da URSS, a parte setentrional da Arábia Saudita e a parte dos países banhados pelo Mediterrâneo compreendida nos ditos limites. Além disso, o Iraque e a Jordânia ficam englobados na zona europeia de radiodifusão.

405 § 5. A «zona marítima» é limitada: a norte, por uma linha que segue o paralelo 72° N., desde a sua intersecção com o meridiano 55° E. de Greenwich até à sua intersecção com o meridiano 5° O., daí, o meridiano 5° O. até à sua intersecção com o paralelo 67° N. e, finalmente, segue este paralelo 67° N. até à sua intersecção com o meridiano 30° O.; a oeste, por uma linha que segue o meridiano 30° O. até à sua intersecção com o paralelo 30° N.; ao sul, por uma linha que segue o paralelo 30° N. até à sua intersecção com o meridiano 43° E.; a este, por uma linha que segue o meridiano 43° E. até à sua intersecção com o paralelo 60° N. e daí esse paralelo 60° N. até à sua intersecção com o meridiano 55° E. e, finalmente, segue este meridiano 55° E. até à sua intersecção com o paralelo 72° N.

406 § 6. A «zona tropical» (v. o mapa do n.º **392**) é definida como segue:

407 *a*) Na Região 2, toda a zona compreendida entre os trópicos de Câncer e de Capricórnio;

408 *b*) No conjunto das Regiões 1 e 3, a zona compreendida entre os paralelos 30° N. e 35° S. e, além disso:

409 1) A zona compreendida entre os meridianos 40° E. e 80° E. de Greenwich e os paralelos 30° N. e 40° N.;

410 2) A parte da Líbia situada ao norte do paralelo 30° N.

411 (2) Na Região 2, a zona tropical pode ser alargada até ao paralelo 33° N. por acordos especiais concluídos entre os países interessados dessa Região (v. o artigo 7).

412 § 7. Uma Sub-Região é uma zona constituída por vários países de uma mesma Região.

SECÇÃO II

Categorias de serviços e de atribuições

413 *Serviços primários, permitidos e secundários:*

414 § 8. (1) Quando numa casa do quadro que figura na secção IV do presente artigo se indica uma faixa de frequências como atribuída a vários serviços, quer no mundo inteiro quer numa Região, enumeram-se esses serviços pela seguinte ordem:

415 *a*) Serviços cujo nome está impresso em «maiúsculas» (exemplo: FIXO); estes serviços denominam-se serviços «primários»;

416 *b*) Serviços cujo nome está impresso em «maiúsculas entre barras» (exemplo:/ RADIOLOCALIZAÇÃO/); estes serviços denominam-se serviços «permitidos» (v. o n.º **419**);

417 *c*) Serviços cujo nome está impresso em «caracteres normais» (exemplo: Móvel); estes serviços denominam-se serviços «secundários» (v. os n.os **420** a **423**.

418 (2) As observações complementares devem ser indicadas em caracteres normais (exemplo: MÓVEL, excepto móvel aeronáutico).

419 (3) Um serviço permitido e um serviço primário têm os mesmos direitos, excepto quando se trate da elaboração de planos de frequências, caso em que o serviço primário é o primeiro a escolher frequências em relação ao serviço permitido.

420 (4) As estações de um serviço secundário:

421 *a*) Não devem causar interferência prejudicial às estações de um serviço primário ou de um serviço permitido a que já tenham sido consignadas frequências anteriormente ou para as quais a consignação de frequências seja susceptível de se efectuar ulteriormente;

422 *b*) Não podem pretender protecção contra interferências prejudiciais causadas pelas estações de um serviço primário ou de um serviço permitido a que já tenham sido consignadas frequências anteriormente ou para as quais a consignação de frequências seja susceptível de se efectuar ulteriormente;

423 *c*) Têm, porém, direito à protecção contra interferências prejudiciais causadas pelas estações desse ou de outros serviços secundários para as quais a consignação de frequências seja susceptível de se efectuar ulteriormente.

424 (5) Quando numa nota ao quadro se indica uma faixa como atribuída a um serviço «a título secundário» numa zona menos extensa que uma Região ou num país determinado, trata-se de um serviço secundário (v. os n.os **420** a **423**).

425 (6) Quando numa nota ao quadro se indica uma faixa como atribuída a um serviço «a título primário» ou «a título permitido» numa zona menos extensa que uma Região ou num país determinado, trata-se de um serviço primário ou de um serviço permitido apenas nessa zona ou nesse país (v. o n.º **419**).

426 *Atribuições adicionais:*

427 § 9. (1) Quando numa nota ao quadro se indica uma faixa como «atribuída adicionalmente» a um serviço numa zona menos extensa que uma Região ou num país determinado, trata-se de uma atribuição «adicional», isto é, de uma atribuição que se adiciona nessa zona ou nesse país ao serviço ou serviços indicados no quadro (v. o n.º **428**).

428 (2) Se a nota não contiver qualquer restrição imposta ao serviço ou aos serviços em questão, além da obrigação de não funcionar senão numa zona ou num país determinados, as estações desse serviço ou desses serviços funcionam na base de igualdade de direitos com as estações do outro ou dos outros serviços primários indicados no quadro.

429 (3) Se se impuserem restrições a uma atribuição adicional, além da obrigação de não funcionar senão numa zona ou num país determinados, a nota do quadro indica o facto.

430 *Atribuições de substituição:*

431 § 10. (1) Quando numa nota ao quadro se indica uma faixa como «atribuída» a um serviço numa zona menos extensa que uma Região ou num país determinado, trata-se de uma atribuição «de substituição», isto é, de uma atribuição que substitui, nessa zona ou nesse país, a atribuição que está indicada no quadro (v. n.º **432**).

432 (2) Se a nota não contiver qualquer restrição imposta às estações do ou dos serviços nela mencionados, além da obrigação de não funcionarem senão numa zona ou num país determinados, as estações desse ou desses serviços funcionam na base de igualdade de direitos com as estações dos outros serviços primários indicados no quadro e aos quais a faixa de frequências está atribuída noutras zonas ou noutros países.

433 (3) Se se impuserem restrições às estações de um serviço que constitui uma atribuição de substituição, além da obrigação de não funcionarem senão numa zona ou num país determinados, a nota ao quadro indicará o facto.

434 *Disposições diversas:*

435 § 11. (1) Quando no presente Regulamento se indica que um serviço pode funcionar numa faixa de frequências com a condição de não causar interferência prejudicial, isso significa igualmente que esse serviço não pode pretender protecção contra interferências prejudiciais causadas pelos outros serviços a que a faixa é atribuída de acordo com o capítulo III do presente Regulamento.

436 (2) Excepto se uma nota dispuser de outro modo, o termo «serviço fixo», quando utilizado na secção IV do presente artigo, não inclui os sistemas que utilizam a propagação por difusão ionosférica.

SECÇÃO III

Disposição do quadro de atribuição das faixas de frequência

437 § 12. (1) O cabeçalho do quadro que figura na secção IV do presente artigo contém três colunas, que correspondem, cada uma, a uma das Regiões (v. o n.º **392**). Consoante uma atribuição ocupa a totalidade da largura do quadro ou apenas uma ou duas das três colunas, assim se trata, respectivamente, de uma atribuição mundial ou de uma atribuição regional.

438 (2) A faixa de frequências objecto de cada atribuição é indicada no ângulo superior esquerdo do rectângulo em causa.

439 (3) Em cada uma das categorias especificadas nos n.ºs **415** a **417**, os serviços são agrupados por ordem alfabética dos seus nomes em língua francesa. Essa ordem não implica qualquer prioridade relativa dentro de cada categoria.

440 (4) Quando se acrescenta uma restrição entre parênteses depois de uma atribuição no quadro, essa atribuição é limitada ao género de exploração designado dentro dos parênteses.

441 (5) Os números que figuram eventualmente na parte inferior de um rectângulo do quadro, por baixo dos nomes do ou dos serviços a que a faixa é atribuída, são referências a notas ao quadro colocadas ao fundo da página e relativas ao conjunto das atribuições em causa.

442 (6) Os nomes que figuram eventualmente à direita do nome de um serviço são referências a notas colocadas ao fundo da página e que apenas se referem a esse serviço.

443 (7) Em certos casos, os nomes de países que figuram nas notas ao quadro foram simplificados a fim de abreviar o texto.

SECÇÃO IV

Quadro de atribuição das faixas de frequências

(V. o n.º 208)

kHz

9–19,95

Atribuição aos serviços		
Região 1	Região 2	Região 3
Abaixo de **9**		
	(Não está atribuída)	
	444 445	
9-14		
	RADIONAVEGAÇÃO	
14-19,95		
	FIXO	
	MÓVEL MARÍTIMO 448	
	446 447	

444 As administrações que autorizam a utilização de frequências inferiores a 9 kHz devem assegurar-se de que daí não resulte interferência prejudicial aos serviços a que são atribuídas as faixas superiores a 9 kHz (v. o n.º **1816**).

445 Solicita-se instantemente às administrações, que efectuem pesquisas científicas em frequências inferiores a 9 kHz, que informem as outras administrações susceptíveis de afectar tais pesquisas, a fim de que essas pesquisas beneficiem de toda a protecção que na prática se possa conseguir contra interferências prejudiciais.

446 *Atribuição adicional:* na Bulgária, Hungria, Polónia, República Democrática Alemã, Checoslováquia e URSS a faixa 14-17 kHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação.

447 As estações dos serviços a que são atribuídas as faixas 14–19,95 kHz e, além disso, na Região 1, as faixas 72–84 kHz e 86–90 kHz podem emitir frequências padrão e sinais horários. Essas estações são protegidas contra interferências prejudiciais. Na Bulgária, Hungria, Mongólia, Polónia, Checoslováquia e URSS as frequências 25 kHz e 50 kHz serão utilizadas para esse fim nas mesmas condições.

kHz

19,95–90

Atribuição aos serviços		
Região 1	Região 2	Região 3
19,95-20,05	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (20 kHz)	
20,05-70	FIXO MÓVEL MARÍTIMO 448 447 449	
70-72 RADIONAVEGAÇÃO 451	**70-90** FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO MARÍTIMA 451 *Radiolocalização*	**70-72** RADIONAVEGAÇÃO 451 *Fixo* *Móvel marítimo* 448 450
72-84 FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO 451 447		**72-84** FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO 451
84-86 RADIONAVEGAÇÃO 451		**84-86** RADIONAVEGAÇÃO 451 *Fixo* *Móvel marítimo* 448 450
86-90 FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO 447	452	**86-90** FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO 451

448 A utilização das faixas 14–19,95 kHz, 70–90 kHz (72-84 kHz e 86–90 kHz na Região 1) e 90–110 kHz pelo serviço móvel marítimo é limitada às estações costeiras radiotelegráficas (A1A e F1B somente). Excepcionalmente, a utilização de emissões da classe J2B ou J7B é autorizada, na condição de que a largura de faixa necessária não ultrapasse a que corresponde normalmente às emissões das classes A1A ou F1B as faixas consideradas.

449 *Atribuição adicional:* na Bulgária, Hungria, Polónia, República Democrática Alemã, Checoslováquia e URSS a faixa 67–70 kHz é atribuída adicionalmente ao serviço de radionavegação a título permitido.

450 *Categoria de serviço diferente:* no Bangladesh, no Irão e no Paquistão a atribuição das faixas 70–72 kHz e 84-86 kHz aos serviços fixo e móvel marítimo é feita a título primário (v. o n.º 425).

451 A utilização das faixas 70–90 kHz (70–86 kHz na Região 1) e 110–130 kHz (112–130 kHz na Região 1) pelo serviço de radionavegação é limitada aos sistemas de ondas persistentes.

452 Na Região 2, as estações do serviço de radionavegação marítima não podem ser estabelecidas e funcionar nas faixas 70–90 kHz e 110–130 kHz, salvo mediante acordo obtido em conformidade com o procedimento previsto no artigo 14, com as administrações a cujos serviços essas faixas estão atribuídas e sejam susceptíveis de ser afectados. Contudo, as estações dos serviços fixo, móvel marítimo e de radiolocalização não deverão causar interferência prejudicial às estações do serviço de radionavegação marítima quando elas forem estabelecidas em seguimento a tais acordos.

kHz

90-110

Atribuição aos serviços		
Região 1	Região 2	Região 3
90-110	RADIONAVEGAÇÃO 453 *Fixo* *Móvel marítimo* 448 454	

453 Solicita-se instantemente às administrações que exploram estações do serviço de radionavegação na faixa 90-110 kHz que coordenem as características técnicas e de exploração de forma a evitar interferências prejudiciais aos serviços garantidos por essas estações.

454 As emissões das classes A1A ou F1B, A2C, A3C, F1C ou F3C são as únicas autorizadas para as estações do serviço fixo nas faixas atribuídas a este serviço entre 90 kHz e 160 kHz (148,5 kHz na Região) e para as estações do serviço móvel marítimo nas faixas atribuídas a este serviço entre 110 kHz e 160 kHz (148,5 kHz na Região 1). Excepcionalmente, as emissões da classe J2B ou J7B são igualmente autorizadas na faixa 110-160 kHz (148,5 kHz na Região 1) para as estações do serviço móvel marítimo.

kHz

110-130

Atribuição aos serviços		
Região 1	Região 2	Região 3
110-112 FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 454	**110-130** FIXO MÓVEL MARÍTIMO 448 RADIONAVEGAÇÃO MARÍTIMA 451 *Radiolocalização*	**110-112** FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 451 454
112-115 RADIONAVEGAÇÃO 451		**112-117,6** RADIONAVEGAÇÃO 451 *Fixo* *Móvel marítimo* 454 456
115-117,6 RADIONAVEGAÇÃO 451 *Fixo* *Móvel marítimo* 454 456		
117,6-126 FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 451 454		**117,6-126** FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 451 454
126-129 RADIONAVEGAÇÃO 451		**126-129** RADIONAVEGAÇÃO 451 *Fixo* *Móvel marítimo* 454 455

Atribuição aos serviços		
Região 1	Região 2	Região 3
129-130 FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 451 454	452 454	**129-130** FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 451 454

455 *Categoria de serviço diferente:* no Bangladesh, no Irão e no Paquistão a atribuição das faixas 112-117,6 kHz e 126-129 kHz aos serviços fixo e móvel marítimo é feita a título primário (v. o n.º 425).

456 *Categoria de serviço diferente:* na República Federal da Alemanha a atribuição da faixa 115-117,6 kHZ aos serviços fixo e móvel marítimo é feita a título primário (v. o n.º 425) e a atribuição ao serviço de radionavegação é feita a título secundário (v. o n.º 424).

kHz

130-285

Atribuição aos serviços		
Região 1	Região 2	Região 3
130-148,5 MÓVEL MARÍTIMO /FIXO/ 454 457 458	**130-160** FIXO MÓVEL MARÍTIMO 454	**130-160** FIXO MÓVEL MARÍTIMO RADIONAVEGAÇÃO 454
148,5-255 RADIODIFUSÃO	**160-190** FIXO 459	**160-190** FIXO *Radionavegação aeronáutica*
458 460 461 462	**190-200** RADIONAVEGAÇÃO AERONÁUTICA	
155-283,5 RADIODIFUSÃO /RADIONAVEGAÇÃO/AERONÁUTICA/ 463 458 462 464	**200-285** RADIONAVEGAÇÃO AERONÁUTICA *Móvel aeronáutico*	

457 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 130-148,5 kHz é atribuída adicionalmente, a título secundário, ao serviço de radionavegação. No interior desses países e entre eles esse serviço funciona em base de igualdade de direitos.

458 Na Região 1 a mudança dos limites de faixa de 150 kHz e 285 kHz para 148,5 kHz e 283,5 kHz verificar-se-á em 1 de Fevereiro de 1986 para o limite inferior e em 1 de Fevereiro de 1990 para o limite superior (v. a Resolução n.º 500).

459 Nas zonas polares da Região 2 (a norte de 60° N. e a sul de 60° S.) sujeita às perturbações devidas às auroras boreais, o serviço fixo aeronáutico é o serviço primário na faixa 160-190 kHz.

460 *Atribuição de distribuição:* em Angola, Botswana, Burundi, Congo, Malawi, Ruanda, República da África do Sul e Zaire a faixa 160-200 kHz é atribuída a título primário, ao serviço fixo.

461 *Atribuição adicional:* na Somália a faixa 200-255 kHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

462 *Atribuição de sushstituição:* em Angola, Botswana, Burundi, Camarões, República Centro-Africana, Congo, Etiópia, Quénia, Lesotho, Mdagáscar, Malawi, Moçambique, Namíbia, Nigéria, Omã, Ruanda, República da África do Sul, Suazilândia, Tanzânia, Chade, Zaire, Zâmbia e Zimbabwe a faixa 200-283,5 kHz é atribuída, a título primário, ao serviço de radionavegação aeronáutica.

463 *Categoria de serviço diferente:* no Sudão e no Iémene (RDP do) a atribuição da faixa 255-283,5 kHz ao serviço de radionavegação aeronáutica é feita a título primário (v. o n.º 425).

464 *Atribuição de substituição:* na Tunísia a faixa 255-283,5 kHz é atribuída, a título primário, ao serviço de radiodifusão.

kHz

283,5-405

Atribuição aos serviços

Região 1	Região 2	Região 3
283,5-315 RADIONAVEGAÇÃO MARÍTIMA (radiofaróis) 466 /RADIONAVEGAÇÃO AERONÁUTICA 458 465	**285-315** RADIONAVEGAÇÃO MARÍTIMA (radiofaróis) 466 RADIONAVEGAÇÃO AERONÁUTICA	
315-325 RADIONAVEGAÇÃO AERONÁUTICA *Radionavegação marítima (radiofaróis)* 466 465 467	**315-325** RADIONAVEGAÇÃO MARÍTIMA (radiofaróis) 466 *Radionavegação aeronáutica*	**315-325** RADIONAVEGAÇÃO AERONÁUTICA RADIONAVEGAÇÃO MARÍTIMA (radiofaróis) 466
325-405 RADIONAVEGAÇÃO AERONÁUTICA 465	**325-335** RADIONAVEGAÇÃO AERONÁUTICA *Móvel aeronáutico* *Radionavegação marítima (radiofaróis)* **335-405** RADIONAVEGAÇÃO AERONÁUTICA *Móvel aeronáutico*	**325-405** RADIONAVEGAÇÃO AERONÁUTICA *Móvel aeronáutico*

465 As estações norueguesas do serviço fixo situadas nas zonas setentrionais (ao norte de 60° N.) sujeitas às perturbações devidas às auroras boreais são autorizadas a continuar a funcionar utilizando quatro frequências nas faixas 283,5-490 kHz e 510-526,5 kHz.

466 Nas faixas 283-325 kHz (283,5-325 kHz na Região 1), no serviço de radionavegação marítima, as estações de radiofarol podem também transmitir informações suplementares úteis à navegação utilizando técnicas de faixa estreita, desde que não afectem de modo significativo a função principal do radiofarol.

467 *Categoria de serviço diferente:* na URSS e nas zonas búlgara, romena e turca do mar Negro a atribuição da faixa 315-325 kHz ao serviço de radionavegação marítima é feita, a título primário (v. o n.º 425, nas seguintes condições:

a) Nas zonas do mar Negro e do mar Branco, o serviço de radionavegação marítima é o serviço primário e o serviço de radionavegação aeronáutica é o serviço permitido;

b) Na zona do mar Báltico, a consignação de frequências desta faixa a novas estações de radionavegação marítima ou aeronáutica deverá ser precedida de consulta entre as administrações interessadas.

kHz

405-415

Atribuição aos serviços

Região 1	Região 2	Região 3
405-415 RADIONAVEGAÇÃO 468 465	**405-415** RADIONAVEGAÇÃO 468 *Móvel aeronáutico*	

468 A frequência 410 kHz é reservada à radiogoniometria no serviço de radionavegação marítima. Os outros serviços de radionavegação aos quais é atribuída a faixa 405-415 kHz não devem causar interferência prejudicial à radiogoniometria na faixa 406,5-413,5 kHz.

kHz

415-1606,5

Atribuição aos serviços

Região 1	Região 2	Região 3
415-435 RADIONAVEGAÇÃO AERONÁUTICA /MÓVEL MARÍTIMO/ 470 465	**415-495** MÓVEL MARÍTIMO 470	
435-495 MÓVEL MARÍTIMO 470 *Radionavegação aeronáutica* 465 471	496 471	
495-505 MÓVEL (perigo e chamada) 472		
505-526,5 MÓVEL MARÍTIMO 470 /RADIONAVEGAÇÃO AERONÁUTICA/ 473 465 471 474 475 476	**505-510** MÓVEL MARÍTIMO 470 471	**505-526,5** MÓVEL MARÍTIMO 470 /RADIONAVEGAÇÃO AERONÁUTICA/ *Móvel aeronáutico* *Móvel terrestre* 471
	510-525 MÓVEL RADIONAVEGAÇÃO AERONÁUTICA	
526,5-1606,5 RADIODIFUSÃO 478	**525-535** RADIODIFUSÃO 477 RADIONAVEGAÇÃO AERONÁUTICA	**526,5-535** RADIODIFUSÃO *Móvel* 479
	535-1605 RADIODIFUSÃO	**535-1606,5** RADIODIFUSÃO

469 *Atribuição adicional:* no Afeganistão, Austrália, China, territórios franceses do ultramar da Região 3, Índia, Japão e Papuásia-Nova Guiné a faixa 415-495 kHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica.

470 A utilização das faixas 415-495 kHz e 505-526,5 kHz (505-510 kHz na Região 2) pelo serviço móvel marítimo é limitada à radiotelegrafia.

471 As faixas 490-495 kHz e 505-510 kHz estão sujeitas às disposições do n.º 3018 até que sejam postas em vigor as disposições da Recomendação n.º 200.

472 A frequência 500 kHz é a frequência internacional de chamada e de perigo em radiotelegrafia. As condições de utilização desta frequência estão fixadas no artigo 38.

473 Na Região 1, na faixa 505-526,5 kHz, as administrações que exploram estações do serviço de radionavegação aeronáutica devem tomar as medidas técnicas necessárias para evitar interferências prejudiciais ao serviço móvel marítimo.

474 Na República Federal da Alemanha, Bélgica, Espanha, França, Islândia, Itália, Noruega, Países Baixos, Reino Unido, Suécia e Jugoslávia a frequência 518 kHz é utilizada, a título experimental, para emissão pelas estações costeiras, com destino aos navios, de boletins meteorológicos e de avisos à navegação por telegrafia com impressão directa de faixa estreita.

475 Na faixa 515,5-526,5 kHz, a Áustria pode continuar a explorar unicamente as estações de radiodifusão mencionadas no Protocolo adicional III aos Actos Finais da Conferência Administrativa de Radiodifusão em Ondas Quilométricas e Hectométricas (Regiões 1 e 3) (Genebra, 1975). Esta exploração continua autorizada até à entrada em vigor de uma revisão do Plano de Genebra de 1975 e desde que daí não resulte interferência prejudicial para o serviço marítimo e para o serviço de radionavegação aeronáutica.

476 *Atribuição adicional:* no Reino Unido a faixa 519,5-526,5 kHz é atribuída adicionalmente, à título secundário, ao serviço de radiodifusão, para a transmissão de informações de utilidade pública.

477 Na Região 2, na faixa 525-535 kHz, a potência da portadora das estações de radiodifusão não deve ir além de 1 kW durante o dia e de 250 W durante a noite.

478 *Atribuição adicional:* em Angola, Botswana, Lesotho, Malawi, Moçambique, Namíbia, República da África do Sul, Suazilândia, Zâmbia e Zimbabwe a faixa 526,5-535 kHz é atribuída adicionalmente, a título secundário, ao serviço móvel.

479 *Atribuição adicional:* na China a faixa 526,5-535 kHz é atribuída adicionalmente, a título secundário, ao serviço de radionavegação aeronáutica.

kHz

1605-1800

Atribuição aos serviços		
Região 1	Região 2	Região 3
1606,5-1625 MÓVEL MARÍTIMO FIXO /MÓVEL TERRESTRE/ 483 484	**1605-1625** RADIOFUSÃO 480 481	**1606,5-1800** FIXO MÓVEL RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO
1625-1635 RADIOLOCALIZAÇÃO 487 485 486	**1625-1635** RADIONAVEGAÇÃO 451 /FIXO/ /MÓVEL/ *Radiolocalização* 481	
1635-1800 MÓVEL MARÍTIMO /FIXO/ /MÓVEL TERRESTRE/ 454 484 488	**1705-1800** FIXO MÓVEL RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO AERONÁUTICA	482

480 Na Região 2 a utilização da faixa 1605-1705 kHz pelas estações do serviço de radiodifusão está dependente da elaboração de um plano que deverá ser estabelecido por uma conferência administrativa regional das radiocomunicações (v. a Recomendação n.º 504).

481 Na Região 2, até às datas fixadas pela conferência administrativa regional das radiocomunicações mencionada no n.º **480**, a faixa 1605-1705 kHz é atribuída, a título primário, aos serviços fixo, móvel e de radionavegação aeronáutica e, a título secundário, ao serviço de radiolocalização (v. a Recomendação n.º 504).

482 *Atribuição adicional:* na Austrália, Indonésia, Nova Zelândia, Singapura, Filipinas, Sri Lanka e Tailândia a faixa 1606,5-1705 kHz é atribuída adicionalmente, a título secundário, ao serviço de radiodifusão.

483 *Categoria de serviço diferente:* na Bulgária, Hungria, Mongólia, Nigéria, Polónia, República Democrática Alemã, Chade, Checoslováquia e URSS nas faixas 1606,5-1625 kHz, 1635-1800 kHz e 2107-2160 kHz, a atribuição aos serviços fixo e móvel terrestre é feita a título primário (v. o n.º **425**).

484 Há países da Região 1 que utilizam sistemas de radiodeterminação nas faixas 1606,5-1625 kHz, 1635-1800 kHz, 1850-2160 kHz, 2194-2300 kHz, 2502-2850 kHz e 3500-3800 kHz. O estabelecimento e a exploração de tais sistemas estão sujeitos a um acordo obtido em conformidade com o procedimento previsto no artigo 14. A potência média radiada dessas estações não deverá ultrapassar 50 W.

485 *Atribuição adicional:* em Angola, Bulgária, Hungria, Mongólia, Nigéria, Polónia, República Democrática Alemã, Chade, Checoslováquia e URSS as faixas 1625-1635 kHz, 1800-1810 kHz e 2160-2170 kHz são atribuídas adicionalmente aos serviços fixo e móvel terrestre, a título primário, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

486 Na Região 1, nas faixas 1625-1635 kHz, 1800-1810 kHz e 2160-2170 kHz (excepto nos países mencionados no n.º **485** e nos países mencionados no n.º **499** no que respeita à faixa 2160-2170 kHz), as anotações existentes dos serviços fixo e móvel, com excepção do móvel aeronáutico [bem como as estações do serviço móvel aeronáutico (OR) na faixa 260-2170 kHz], podem continuar a trabalhar a título primário até que tenham sido encontradas e postas ao serviço consignações de substituição satisfatórias, em conformidade com as disposições da Resolução n.º 38.

487 Na Região 1 o estabelecimento e a exploração de estações do serviço de radiolocalização nas faixas 1625-1635 kHz, 1800-1810 kHz e 2160-2170 kHz devem ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14 (v. também o n.º 486). A potência média radiada dessas estações de radiolocalização não deve ultrapassar 50 W. São proibidos os sistemas de impulso.

488 Na República Federal da Alemanha, Dinamarca, Finlândia, Hungria, Irlanda, Israel, Jordânia, Malta, Noruega, Polónia, República Democrática Alemã, Reino Unido, Suécia, Checoslováquia e URSS as administrações podem atribuir até 200 kHz ao seu serviço amador nas faixas 1715-1800 kHz e 1850-2000 kHz. Todavia, ao proceder a essas atribuições nestas faixas, deverão, após consulta prévia às administrações dos países vizinhos, tomar as medidas eventualmente necessárias para impedir que o seu serviço de amador cause interferências prejudiciais aos serviços fixo e móvel de outros países. A potência média de qualquer estação de amador não deve ultrapassar 10 W.

kHz

1800-2000

Atribuição aos serviços		
Região 1	Região 2	Região 3
1800-1810 RADIOLOCALIZAÇÃO 487 485 486	**1800-1850** AMADOR	**1800-2000** AMADOR FIXO MÓVEL, excepto móvel aeronáutico RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO *Radiolocalização*
1810-1850 AMADOR 490 491 492 493	489	
1850-2000 FIXO MÓVEL, excepto móvel aeronáutico 484 488 495	**1850-2000** AMADOR FIXO MÓVEL, excepto móvel aeronáutico RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO 489 494	489

489 Na Região 2 as estações do sistema Loran que funcionam na faixa 1800-2000 kHz deixarão de ser exploradas o mais tardar até 31 de Dezembro de 1982. Na região 3, a frequência de trabalho do sistema Loran é 1850 kHz ou 1950 kHz; as faixas ocupadas são respectivamente 1825-1875 kHz e 1925-1975 kHz. Os outros serviços a que é atribuída a faixa 1800-2000 kHz podem utilizar qualquer frequência desta faixa, desde que não causem interferências prejudiciais ao sistema Loran que funcione nas frequências 1850 kHz ou 1950 kHz.

490 *Atribuição de substituição:* na República Federal da Alemanha, Angola, Áustria, Bélgica, Bulgária, Camarões, Congo, Dinamarca, Egipto, Espanha, Etiópia, França, Grécia, Itália, Líbano, Luxemburgo, Malawi, Países Baixos, Portugal, Síria, República Democrática Alemã, Somália, Tanzânia, Tunísia, Turquia e URSS a faixa 1810-1830 kHz é atribuída a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

491 *Atribuição adicional:* na Arábia Saudita, Iraque, Líbia, Polónia, Roménia, Chade, Checoslováquia, Togo e Jugoslávia a faixa 1810-1830 kHz é atribuída adicionalmente, a título primário aos serviços, fixo e móvel, excepto móvel aeronáutico.

492 Na Região 1 a faixa 1810-1850 kHz é utilizada pelo serviço de amador na condição de terem sido encontradas e posta em serviço, de acordo com o disposto na Resolução n.º 38, consignações de substituição satisfatórias para as frequências de todas as estações existentes dos serviços fixo e móvel, excepto móvel aeronáutico, que funcionam nesta faixa (salvo as estações dos países mencionados nos n.os **490, 491** e **493**). Após o termo de uma transferência satisfatória, nos países situados em todo ou em parte a norte do paralelo 40° N. a autorização de utilizar a faixa 1810-1830 kHz não será dada ao serviço de amador senão após consulta aos países mencionados nos n.os **490** e **491**, a fim de definir as medidas a tomar para evitar interferências prejudiciais entre as estações de amador e as estações dos outros serviços que funcionam em conformidade com as notas **490** e **491**.

493 *Atribuição de substituição:* no Burundi e Lesotho a faixa 1810-1850 kHz é atribuída, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

494 *Atribuição de substituição:* na Argentina, Bolívia, Chile, México, Paraguai, Peru, Uruguai e Venezuela, a faixa 1850-2000 kHz é atribuída, a título primário, aos serviços fixo, móvel, excepto aeronáutico, de radiolocalização e de radionavegação.

495 Na Região 1, ao fazerem consignações às estações dos serviços fixo e móvel nas faixas 1850-2045 kHz, 2502-2625 kHz e 2650-2850 kHz, as administrações devem ter em conta as necessidades particulares do serviço móvel marítimo.

kHz

2000-2170

Atribuição aos serviços		
Região 1	Região 2	Região 3
2000-2025 FIXO MÓVEL, excepto móvel aeronáutico (R) 484 495	**2000-2065** FIXO MÓVEL	

Atribuição aos serviços		
Região 1	Região 2	Região 3
2025-2045 FIXO MÓVEL, excepto móvel aeronáutico (R) *Auxiliares da meteorologia* 496 484 495		
2045-2160 MÓVEL MARÍTIMO /FIXO/ /MÓVEL TERRESTRE/ 483 484	**2065-2107** MÓVEL MARÍTIMO 497 498	
2160-2170 RADIOLOCALIZAÇÃO 487 485 486 499	**2107-2170** FIXO MÓVEL	

496 Na Região 1 a utilização da faixa 2025-2045 kHz pelo serviço de auxiliares da meteorologia é limitada às estações de bóias oceanográficas.

497 Na Região 2, excepto na Gronelândia, as estações costeiras e as estações de navio que utilizam a radiotelefonia na faixa 2065-2107 kHz deverão ser limitadas às emissões de classe R3E ou J3E e a sua potência de ponta não deverá ultrapassar 1 kW. Convém que essas estações utilizem, de preferência, as frequências portadoras seguintes: 2065 kHz, 2079 kHz, 2082,5 kHz, 2086 kHz, 2093 kHz, 2096,5 kHz, 2100 kHz e 2103,5 kHz. Na Argentina, no Brasil e no Uruguai utilizam-se também com esse fim as frequências portadoras 2068,5 kHz e 2075,5 kHz, sendo as frequências compreendidas na faixa 2072-2075,5 kHz utilizadas em conformidade com o n.º 4245.

498 Nas Regiões 2 e 3, com a condição de não causarem interferência prejudicial ao serviço móvel marítimo, as frequências compreendidas entre 2065 kHz e 2107 kHz podem ser utilizadas pelas estações do serviço fixo comunicando unicamente no interior das fronteiras nacionais A potência média dessas estações não deve ultrapassar 50 W. Quando da notificação dessas frequências, convirá chamar a atenção da Comissão Internacional do Registo de Frequências para estas disposições.

499 *Atribuição adicional:* na Arábia Saudita, Botswana, Etiópia, Iraque, Lesotho, Líbia, Malawi, Somália, Suazilândia e Zâmbia a faixa 2160-2170 kHz é também atribuída, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico (R). As estações desses serviços não devem utilizar uma potência média que ultrapasse 50 W.

kHz

2170-2194

Atribuição aos serviços		
Região 1	Região 2	Região 3
2170-2173,5 MÓVEL MARÍTIMO		
2173,5-2190,5 MÓVEL (perigo e chamada) 500 501		
2190,5-2194 MÓVEL MARÍTIMO		

500 A frequência 2182 kHz é a frequência internacional de perigo e de chamada em radiotelefonia. As condições de utilização da faixa 2173,5 kHz estão fixadas nos artigos 38 e 60.

501 As frequências 2182 kHz, 3023 kHz, 5680 kHz, 8364 kHz, 121,5 MHz e 156,8 MHz podem, adicionalmente, ser utilizadas, em conformidade com os procedimentos em vigor, para os serviços de radiocomunicação de Terra, nas operações de busca e salvamento de veículos espaciais habitados.

O mesmo se aplica às frequências 10 003 kHz, 14 993 kHz e 19 993 kHz, mas para cada uma destas, as emissões devem ficar limitadas a uma faixa de 3 kHz para cada um dos lados da frequência.

kHz

2194-2502

Atribuição aos serviços		
Região 1	Região 2	Região 3
2194-2300 FIXO MÓVEL, excepto móvel aeronáutico (R) 484 495 502	**2194-2300** FIXO MÓVEL 502	
2300-2498 FIXO MÓVEL, excepto móvel aeronáutico (R) RADIOFUSÃO 503 495	**2300-2495** FIXO MÓVEL RADIODIFUSÃO 502	
2498-2501 FREQUÊNCIA PADRÃO E SINAIS HORÁRIOS (2500 kHz) MÓVEL, excepto móvel aeronáutico	**2194-2300** FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (2500 kHz)	
2501-2502 FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS *Pesquisa espacial*		

502 *Atribuição de substituição:* na Bélgica, Chipre, Dinamarca, Espanha, França, Grécia, Islândia, Itália, Malta, Noruega, Países **Baixos**, Portugal, Reino Unido, Singapura, Sri Lanka, Suécia, Turquia e Jugoslávia a faixa 2194-2300 kHz é atribuída, a título primário, ao **serviço** móvel marítimo e, a título permitido, aos serviços fixo e móvel terrestre.

503 Para as condições de utilização das faixas 2300-2495 kHz (2498 kHz na Região 1), 3200-3400 kHz, 4750-4995 kHz e **5005-5060** kHz pelo serviço de radiodifusão (v. os n.^{os} **406** a **410**, **411** e **2666** a **2673**).

kHz

2502-2850

Atribuição aos serviços		
Região 1	Região 2	Região 3
2502-2625 FIXO MÓVEL, excepto móvel aeronáutico (R) 484 495 504	**2502-2505** FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS	
2625-2650 MÓVEL MARÍTIMO RADIONAVEGAÇÃO MARÍTIMA 484	**2505-2850** FIXO MÓVEL	
2650-2850 FIXO MÓVEL, excepto móvel aeronáutico (R) 484		

504 *Atribuição de substituição:* na Bélgica, Chipre, Dinamarca, Espanha, França, Grécia, Iraque, Itália, Malta, Noruega, Países Baixos, Portugal, Reino Unido, Suécia, Turquia e Jugoslávia a faixa 2502-2625 kHz é atribuída, a título primário, ao serviço móvel marítimo e, a título permitido, aos serviços fixo e móvel terrestre.

kHz

2850-3230

Atribuição aos serviços		
Região 1	Região 2	Região 3
2850–3025	MÓVEL AERONÁUTICO (R) 501 505	
3025–3155	MÓVEL AERONÁUTICO (OR)	
3155–3200	FIXO MÓVEL, excepto móvel aeronáutico (R) 506 507	
3200–3230	FIXO MÓVEL, excepto móvel aeronáutico (R) RADIODIFUSÃO 503 503	

505 As frequências portadoras (frequências de referência) 3023 kHz e 5680 kHz podem também ser utilizadas pelas estações do serviço móvel marítimo que participem em operações de busca e de salvamento coordenadas, nas condições especificadas nos n.os **2980** e **2984**, respectivamente.

506 Solicita-se instantemente às administrações que autorizem a utilização da faixa 3155-3195 kHz para proporcionar uma via mundial comum destinadas aos aparelhos de correcção auditiva sem fio de fraca potência. Elas poderão consignar para esses mesmos aparelhos vias suplementares nas faixas compreendidas entre 3155 kHz e 3400 kHz, para prover às necessidades locais.

Convém notar que as frequências da faixa compreendida entre 3000 kHz e 4000 kHz convêm aos aparelhos de correcção auditiva destinados a funcionar a curtas distâncias dentro do campo de indução.

507 *Atribuição de substituição:* na Bélgica, Camarões, Chipre, Costa do Marfim, Dinamarca, Egipto, Espanha, França, Grécia, Islândia, Itália, Libéria, Malta, Noruega, Países Baixos, Reino Unido, Singapura, Sri Lanka, Suécia, Togo, Turquia e Jugoslávia a faixa 3155-3200 kHz é atribuída, a título primário, ao serviço móvel marítimo e, a título permitido, aos serviços fixo e móvel terrestre.

kHz

3230-4000

Atribuição aos serviços		
Região 1	Região 2	Região 3
3230-3400	FIXO MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO 503 506 508	
3400-3500	MÓVEL AERONÁUTICO (R)	

Atribuição aos serviços		
Região 1	Região 2	Região 3
3500-3800 AMADOR 510 FIXO MÓVEL, excepto móvel aeronáutico 484	**3500-3750** AMADOR 510 509 511	**3500-3900** AMADOR 510 FIXO MÓVEL
3800-3900 FIXO MÓVEL AERONÁUTICO (OR) MÓVEL TERRESTRE	**3750-4000** AMADOR 510 FIXO MÓVEL, excepto móvel aeronáutico (R)	
3900-3950 MÓVEL AERONÁUTICO (OR) 513		**3900-3950** MÓVEL AERONÁUTICO RADIODIFUSÃO
3950-4000 FIXO RADIODIFUSÃO		**3950-4000** FIXO RADIODIFUSÃO
	511 512 514 515	516

508 *Atribuição adicional:* na Austrália, Brasil, Canadá, Estados Unidos da América, Japão, México, Nova Zelândia, Peru e Uruguai a faixa 3230-3400 kHz é atribuída adicionalmente, a título secundário, ao serviço de radiolocalização.

509 *Atribuição adicional:* nas Honduras, México, Peru e Venezuela a faixa 3500-3750 kHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

510 A Resolução n.º 640 rege a utilização, em caso de catástrofe natural, das faixas atribuídas ao serviço de amador nas frequências 3,5 MHz, 7 MHz, 10,1 MHz, 14 MHz, 18,086 MHz, 21 MHz, 24,89 MHz e 144 MHz.

511 *Atribuição adicional:* no Brasil, a faixa 3700-4000 kHz é atribuída adicionalmente, a título primário, ao serviço de radiolocalização.

512 *Atribuição de substituição:* na Argentina, Bolívia, Chile, Equador, Paraguai, Peru e Uruguai a faixa 3750-4000 kHz é atribuída, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

513 *Atribuição de substituição:* no Botswana, Lesotho, Malawi, Moçambique, Namíbia, República da África do Sul, Suazilândia, Zâmbia e Zimbabwe a faixa 3900-3950 kHz é atribuída, a título primário, ao serviço de radiodifusão. A utilização desta faixa pelo serviço de radiodifusão depende de um acordo feito com os países vizinhos cujos serviços funcionem em conformidade com o quadro, aplicando o procedimento previsto no artigo 14.

514 *Atribuição adicional:* no Canadá a faixa 3950-4000 kHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão. A potência das estações de radiodifusão exploradas nesta faixa não deve ultrapassar o valor necessário para assegurar um serviço adicional no interior das fronteiras deste país e não deve causar interferências prejudiciais aos outros serviços explorados em conformidade com o quadro.

515 *Atribuição adicional:* na Gronelândia a faixa 3950-4000 kHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão. A potência das estações de radiodifusão exploradas nesta faixa não deve ultrapassar o valor necessário para assegurar um serviço nacional e nunca deve ser superior a 5 kW.

516 Na Região 3 as estações dos serviços aos quais é atribuída a faixa 3995-4005 kHz podem emitir frequências padrão e sinais horários.

kHz

4000-4650

Atribuição aos serviços		
Região 1	Região 2	Região 3
4000-4063 FIXO MÓVEL MARÍTIMO 517 516		

kHz

4000-4650

Atribuição aos serviços		
Região 1	Região 2	Região 3
4063-4438		
MÓVEL MARÍTIMO 520		
518 519		
4438-4650		**4438-4650**
FIXO		FIXO
MÓVEL, excepto móvel aeronáutico (R)		MÓVEL, excepto móvel aeronáutico

517 A utilização da faixa 4000-4063 kHz pelo serviço móvel marítimo é limitada às estações de navio funcionando em radiotelefonia (v. o n.º **4373**).

518 No Afeganistão, Argentina, Austrália, Botswana, China, Índia, Suazilândia, Chade e URSS, nas faixas 4063-4123 kHz, 4130-4133 kHz e 4408-4438 kHz, as estações de serviço fixo de potência limitada e situações a mais de 600 km das costas são autorizadas a funcionar desde que não causem interferência prejudicial ao serviço móvel marítimo.

519 Com a condição de que não seja causada qualquer interferência prejudicial ao serviço móvel marítimo, as frequências das faixas 4063-4123 kHz e 4130-4438 kHz podem ser utilizadas excepcionalmente por estações do serviço fixo, de potência média que não ultrapasse 50 W, para comunicarem apenas no interior das fronteiras nacionais.

520 Para a utilização da frequência portadora 4125 kHz nas zonas das Regiões 1 e 2 situadas ao sul do paralelo 15° N. incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N. (v. o n.º **2982**).

kHz

4650-5005

Atribuição aos serviços		
Região 1	Região 2	Região 3
4650-4700		
	MÓVEL AERONÁUTICO (R)	
4700-4750		
	MÓVEL AERONÁUTICO (OR)	
4750-4850	**4750-4850**	**4750-4850**
FIXO	FIXO	FIXO
MÓVEL AERONÁUTICO (OR)	MÓVEL, excepto móvel aeronáutico (R)	RADIODIFUSÃO 503
MÓVEL TERRESTRE	RADIODIFUSÃO 503	MÓVEL TERRESTRE
RADIODIFUSÃO 503		
4850-4995		
	FIXO	
	MÓVEL TERRESTRE	
	RADIODIFUSÃO 503	
4995-5003		
	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (5000 kHz)	
5003-5005		
	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS	
	Pesquisa espacial	

kHz

5005-5480

Atribuição aos serviços		
Região 1	Região 2	Região 3
5005-5060		
	FIXO	
	RADIODIFUSÃO 503	
5060-5250		
	Fixo	
	MÓVEL, excepto móvel aeronáutico	
	521	
5250-5450		
	FIXO	
	MÓVEL, excepto móvel aeronáutico	
5450-5480	**5450-5480**	**5450-5480**
FIXO	MÓVEL AERONÁUTICO (R)	FIXO
MÓVEL AERONÁUTICO (OR)		MÓVEL AERONÁUTICO (OR)
MÓVEL TERRESTRE		MÓVEL TERRESTRE

521 *Categoria de serviço diferente:* na URSS a atribuição da faixa 5130-5250 kHz ao serviço móvel, excepto móvel aeronáutico, é feita a título primário (v. o n.º 425).

kHz

5480-6765

Atribuição aos serviços		
Região 1	Região 2	Região 3
5480-5680		
	MÓVEL AERONÁUTICO (R)	
	501 505	
5680-5730		
	MÓVEL AERONÁUTICO (OR)	
	501 505	
5730-5950	**5730-5950**	**5730-5950**
FIXO	FIXO	FIXO
MÓVEL TERRESTRE	MÓVEL, excepto móvel aeronáutico (R)	MÓVEL, excepto móvel aeronáutico (R)
5950-6200		
	RADIODIFUSÃO	
6200-6525		
	MÓVEL MARÍTIMO 523	
	522	

Atribuição aos serviços		
Região 1	Região 2	Região 3
6525-6685	MÓVEL AERONÁUTICO (R)	
6685-6765	MÓVEL AERONÁUTICO (OR)	

522 Com a condição de que não seja causada qualquer interferência prejudicial ao serviço móvel marítimo, as faixas 6200-6213,5 kHz e 6220,5-6525 kHz podem ser utilizadas excepcionalmente por estações de serviço fixo, de potência média que não ultrapasse 50 W, para comunicar apenas no interior das fronteiras nacionais. Quando da notificação dessas frequências, chamar-se-á a atenção da Comissão Internacional do Registo de Frequências para estas disposições.

523 Para a utilização da frequência portadora 6215,5 kHz na zona da Região 3 situada ao sul do paralelo 25° N. (v. o n.º **2986**).

kHz

6765-7300

Atribuição aos serviços		
Região 1	Região 2	Região 3
6765-7000	FIXO *Móvel terrestre* 525 524	
7000-7100	AMADOR AMADOR POR SATÉLITE 526 527	
7100-7300 RADIODIFUSÃO	**7100-7300** AMADOR 510 528	**7100-7300** RADIODIFUSÃO

524 A faixa 6765-6795 kHz (frequência central 6780 kHz) é utilizável em aplicações industriais, científicas e médicas (ISM). A utilização desta faixa de frequências em aplicações ISM depende de uma autorização especial concedida pela administração responsável, de acordo com as outras administrações cujos serviços de radiocomunicação possam ser afectados. Para a aplicação desta disposição, as administrações reportar-se-ão aos mais recentes pareceres da CCIR sobre o assunto.

525 *Categoria de serviço diferente:* na Mongólia e na URSS a atribuição da faixa 6765-7000 kHz ao serviço móvel terrestre é feita a título primário (v. o n.º **425**).

526 *Atribuição adicional:* em Angola, Iraque, Quénia, Ruanda, Somália e Togo a faixa 7000-7050 kHz é atribuída adicionalmente, a título primário, ao serviço fixo.

527 *Atribuição de substituição:* no Egipto, Etiópia, Guiné, Líbia, Madagáscar, Malawi e Tanzânia a faixa 7000-7050 kHz é atribuída, a título primário, ao serviço fixo.

528 A utilização da faixa 7100-7300 kHz pelo serviço de amador na Região 2 não impor limitações ao serviço de radiodifusão, cujo emprego é previsto na Região 1 e na Região 3.

kHz

7300-9995

Atribuição aos serviços		
Região 1	Região 2	Região 3
7300-8100	FIXO *Móvel terrestre* 529	
8100-8195	FIXO MÓVEL MARÍTIMO	
8195-8815	MÓVEL MARÍTIMO 501	
8815-8965	MÓVEL AERONÁUTICO (R)	
8965-9040	MÓVEL AERONÁUTICO (OR)	
9040-9500	FIXO	
9500-9900	RADIODIFUSÃO 530 531	
9900-9995	FIXO	

529 Na Região 3 as estações dos serviços a que é atribuída a faixa 7995-8005 kHz podem emitir frequências padrão e sinais horários.

530 Com a condição de que não seja causada interferência prejudicial ao serviço de radiodifusão, as frequências das faixas 9775-9900 kHz, 11 650-11 700 kHz e 11 975-12 050 kHz podem ser utilizadas por estações de serviço fixo, que comuniquem apenas no interior das fronteiras nacionais, não devendo a potência total radiada de cada estação ultrapassar 24 dBW.

531 As faixas 9775-9900 kHz, 11 650-11 700 kHz, 11 975-12 050 kHz, 13 600-13 800 kHz, 15 450-15 600 kHz, 17 550-17 700 kHz e 21 750-21 850 kHz são atribuídas, a título primário, ao serviço fixo, com a condição de ser observado o procedimento descrito na Resolução n.º 8. A utilização destas faixas pelo serviço de radiodifusão reger-se-á por disposições a adoptar pela conferência administrativa mundial das radiocomunicações para a planificação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão (v. a Resolução n.º 508). Nestas faixas, a data em que poderão começar as emissões do serviço de radiodifusão num canal planificado não deverá ser anterior à data em que seja concluída satisfatoriamente, em conformidade com os procedimentos descritos na Resolução n.º 8, a transferência de todas as consignações de frequência às estações do serviço fixo que funcionam em conformidade com o quadro e com as outras disposições do Regulamento das Radiocomunicações, que estão inscritas no ficheiro de referência e que são susceptíveis de ser afectadas pelas emissões de radiodifusão nesse canal.

kHz

9995-13 200

Atribuição aos serviços		
Região 1	Região 2	Região 3
9995-10 003	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (10 000 kHz) 501	

Atribuição aos serviços		
Região 1	Região 2	Região 3
10 003-10 005	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS *Pesquisa espacial* 501	
10 005-10 100	MÓVEL AERONÁUTICO (R) 501	
10 100-10 150	FIXO *Amador* 510	
10 150-11 175	FIXO *Móvel*, excepto móvel aeronáutico (R)	
11 175-11 275	MÓVEL AERONÁUTICO (OR)	
11 275-11 400	MÓVEL AERONÁUTICO (R)	
11 400-11 650	FIXO	
11 650-12 050	RADIODIFUSÃO 530 531	
12 050-12 230	FIXO	
12 230-13 200	MÓVEL MARÍTIMO 532	

532 As faixas 12 230-12 330 kHz, 16 360-16 460 kHz, 17 360-17 410 kHz, 18 780-18 900 kHz, 19 680-19 800 kHz e 22 720-22 855 kHz são atribuídas, a título primário, ao serviço fixo, com a condição de ser observado o procedimento descrito na Resolução n.º 8. A utilização destas faixas pelo serviço móvel marítimo reger-se-á pelas disposições que deverá adoptar uma conferência administrativa mundial das radiocomunicações competente. A data em que o serviço marítimo poderá começar a utilizar uma frequência em conformidade com as disposições acima mencionadas não deverá ser anterior à data em que seja concluída satisfatoriamente, em conformidade com o procedimento descrito na Resolução n.º 8, a transferência de todas as consignações de frequência às estações de serviço fixo que funcionam em conformidade com o quadro e com as outras disposições do Regulamento das Radiocomunicações que estão inscritas no ficheiro de referência e que são susceptíveis de ser afectadas pelas emissões do serviço móvel marítimo nessa frequência.

kHz

13 200-14 990

Atribuição aos serviços		
Região 1	Região 2	Região 3
13 200-13 260	MÓVEL AERONÁUTICO (OR)	
13 260-13 360	MÓVEL AERONÁUTICO (R)	
13 360-13 410	FIXO RADIOASTRONOMIA 533	

Atribuição aos serviços		
Região 1	Região 2	Região 3
13 410-13 600	FIXO *Móvel*, excepto móvel aeronáutico (R) 534	
13 600-13 800	RADIODIFUSÃO 531	
13 800-14 000	FIXO *Móvel*, excepto móvel aeronáutico (R)	
14 000-14 250	AMADOR 510 AMADOR POR SATÉLITE	
14 250-14 350	AMADOR 510 535	
14 350-14 990	FIXO *Móvel*, excepto móvel aeronáutico (R)	

533 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 13 360-13 410 kHz é atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radiotronomia (v. os n.^{os} **343** e **344** e o artigo 36).

534 A faixa 13 553-13 567 kHz (frequência central 13 560 kHz) é utilizável em aplicações, científicas e medidas (ISM). Os serviços de radiocomunicação que funcionam nesta faixa devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que funcionam nesta faixa estão sujeitos às disposições do n.º **1815**.

535 *Atribuição adicional:* no Afeganistão, China, Costa do Marfim, Irão e URSS a faixa 14 250-14 350 kHz é atribuída adicionalmente, a título primário, ao serviço fixo. A potência radiada das estações do serviço fixo não deve ultrapassar 24 dBW.

kHz

14 990-18 030

Atribuição aos serviços		
Região 1	Região 2	Região 3
14 900-15 005	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (15 000 kHz) 501	
15 005-15 010	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS *Pesquisa espacial*	
15 010-15 100	MÓVEL AERONÁUTICO (OR)	
15 100-15 600	RADIODIFUSÃO 531	

Atribuição aos serviços		
Região 1	Região 2	Região 3
15 600-16 360	FIXO 536	
16 360-17 410	MÓVEL MARÍTIMO 532	
17 410-17 550	FIXO	
17 550-17 900	RADIODIFUSÃO 531	
17 900-17 970	MÓVEL AERONÁUTICO (R)	
17 970-18 030	MÓVEL AERONÁUTICO (OR)	

536 Na Região 3 as estações dos serviços a que é atribuída a faixa 15 995-16 005 kHz podem emitir frequências padrão e sinais horários.

kHz

18 030-19 990

Atribuição aos serviços		
Região 1	Região 2	Região 3
18 030-18 052	FIXO	
18 052-18 068	FIXO *Pesquisa espacial*	
18 068-18 168	AMADOR 510 AMADOR POR SATÉLITE 537 538	
18 168-18 780	FIXO	
18 780-18 900	MÓVEL MARÍTIMO 532	
18 900-19 680	FIXO	
19 680-19 800	MÓVEL MARÍTIMO 532	
19 800-19 990	FIXO	

537 A faixa 18 068-18 168 kHz é atribuída, a título primário, ao serviço fixo, com a condição de ser observado o procedimento descrito na Resolução n.º 8. A utilização desta faixa pelos serviços de amador e de amador por satélite não poderá ser autorizada senão após a transferência satisfatória de todas as consignações às estações do serviço fixo que funcionam nesta faixa e inscritas no ficheiro de referência, em conformidade com o procedimento descrito na Resolução n.º 8.

538 *Atribuição adicional:* na URSS a faixa 18 068-18 168 kHz é atribuída adicionalmente, a título primário, ao serviço fixo, para utilização no interior das fronteiras da URSS, com uma potência de ponta que não ultrapasse 1 kW.

kHz

19 990-23 350

Atribuição aos serviços		
Região 1	Região 2	Região 3
19 990-19 995	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS *Pesquisa espacial* 501	
19 995-20 010	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (20 000 kHz) 501	
20 010-21 000	FIXO *Móvel*	
21 000-21 450	AMADOR 510 AMADOR POR SATÉLITE	
21 450-21 850	RADIODIFUSÃO 531	
21 850-21 870	FIXO 539	
21 870-21 924	FIXO AERONÁUTICO	
21 924-22 000	MÓVEL AERONÁUTICO (R)	
22 000-22 855	MÓVEL MARÍTIMO 532 540	
22 855-23 000	FIXO 540	
23 000-23 200	FIXO *Móvel*, excepto móvel aeronáutico (R) 540	
23 200-23 350	FIXO AERONÁUTICO MÓVEL AERONÁUTICO (OR)	

539 *Atribuição de substituição:* na Bulgária, Hungria, Mongólia, Polónia, Checoslováquia e URSS a faixa 21 850-21 870 kHz é atribuída, a título primário, aos serviços fixo aeronáutico e móvel aeronáutico (R).

540 *Atribuição adicional:* na Nigéria a faixa 22 720-23 200 kHz é atribuída adicionalmente, a título primário, ao serviço dos auxiliares da meteorologia (radiossondas).

kHz

23 350-25 070

Atribuição aos serviços		
Região 1	Região 2	Região 3
23 350-24 000	FIXO MÓVEL, excepto móvel aeronáutico 541 542	
24 000-24 890	FIXO MÓVEL TERRESTRE 542	
24 890-24 990	AMADOR 510 AMADOR POR SATÉLITE 542 543	
24 990-25 005	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS (25 000 kHz)	
25 005-25 010	FREQUÊNCIAS PADRÃO E SINAIS HORÁRIOS *Pesquisa espacial*	
25 010-25 070	FIXO MÓVEL, excepto móvel aeronáutico	

541 A utilização da faixa 23 350-24 000 kHz pelo serviço móvel marítimo é limitada à radiotelegrafia de navio para navio.

542 *Atribuição adicional:* no Quénia a faixa 23 600-24 900 kHz é atribuída adicionalmente, a título primário, ao serviço dos auxiliares da meteorologia (radiossondas).

543 A faixa 24 890-24 990 kHz é atribuída, a título primário, aos serviços fixo e móvel terrestre, com a condição de ser observado o procedimento descrito na Resolução n.º 8. A utilização desta faixa pelos serviços de amador e de amador por satélite só poderá ser autorizada depois da transferência satisfatória de todas as consignações às estações dos serviços fixo e móvel terrestre que funcionam nesta faixa e estão inscritas no ficheiro de referência, em conformidade com o procedimento descrito na Resolução n.º 8.

kHz

25 070-27 500

Atribuição aos serviços		
Região 1	Região 2	Região 3
25 070-25 210	MÓVEL MARÍTIMO 544	
25 210-25 550	FIXO MÓVEL, excepto móvel aeronáutico	

Atribuição aos serviços		
Região 1	Região 2	Região 3
25 550-25 670		
	RADIOASTRONOMIA	
	545	
25 670-26 100		
	RADIODIFUSÃO	
26 100-26 175		
	MÓVEL MARÍTIMO	
	544	
26 175-27 500		
	FIXO	
	MÓVEL, excepto móvel aeronáutico	
	546	

544 As faixas 25 110-25 210 kHz e 26 100-26 175 kHz são também atribuídas, a título primário, aos serviços fixo e móvel terrestre, com a condição de ser observado o procedimento descrito na Resolução n.º 8. A utilização, a título exclusivo, destas faixas pelo serviço móvel marítimo reger-se-á pelas disposições que venham a ser estabelecidas por uma conferência administrativa mundial de radiocomunicações competente. A data em que poderá começar a utilização de uma frequência pelo serviço móvel marítimo em conformidade com as disposições acima mencionadas não deverá ser anterior à data em que seja concluída satisfatoriamente, em conformidade com o procedimento descrito na Resolução n.º 8, a transferência de todas as consignações às estações dos serviços fixo e móvel terrestre que funcionam em conformidade com o quadro e com as outras disposições do Regulamento das Radiocomunicações que estão inscritas no ficheiro de referência e que são susceptíveis de ser afectadas pela utilização dessa frequência pelo serviço móvel marítimo.

545 A faixa 25 550-25 600 kHz é atribuída, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico, com a condição de que seja observado o procedimento descrito na Resolução n.º 8. A utilização desta faixa pelo serviço de radioastronomia só poderá ser autorizada depois da transferência satisfatória de todas as consignações às estações dos serviços fixo e móvel, excepto móvel aeronáutico, que funcionam nesta faixa e estão inscritas no ficheiro de referência, em conformidade com o procedimento descrito na Resolução n.º 8. A faixa 25 600-25 670 kHz é atribuída, a título primário, ao serviço de radiodifusão, com a condição de que sejam observadas as disposições que venham a ser adoptadas pela conferência administrativa mundial das radiocomunicações para a planificação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão (v. Resolução n.º 508). Após a aplicação de todas as disposições mencionadas serão evitadas todas as emissões susceptíveis de causar interferências prejudiciais ao serviço de radioastronomia na faixa 25 550-25 670 kHz. Será também autorizada a utilização de detectores passivos por outros serviços.

546 A faixa 26 957-27 283 kHz (frequência central 27 120 kHz) é utilizável em aplicações industriais, científicas e médicas (ISM).

Os serviços de radiocomunicações que trabalham nesta faixa devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que trabalham nesta faixa estão sujeitos às disposições do n.º 1815.

MHz

27,5-38,25

Atribuição aos serviços		
Região 1	Região 2	Região 3
27,5-28		
	AUXILIARES DA METEOROLOGIA	
	FIXO	
	MÓVEL	
28-29,7		
	AMADOR	
	AMADOR POR SATÉLITE	
29,7-30,005		
	FIXO	
	MÓVEL	
30,005-30,01		
	EXPLORAÇÃO ESPACIAL (identificação de satélites)	
	FIXO	
	MÓVEL	
	PESQUISA ESPECIAL	

MHz

27,5-38,25

Atribuição aos serviços		
Região 1	Região 2	Região 3
30,01-37,5	FIXO MÓVEL	
37,5-38,25	FIXO MÓVEL *Radioastronomia* 547	

547 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 37,5-38,25 MHz é atribuída, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radiostronomia (v. os n.^{os} **343** e **344** e o artigo 36).

MHz

38,25-47

Atribuição aos serviços		
Região 1	Região 2	Região 3
38,25-39,986	FIXO MÓVEL	
39,986-40,02	FIXO MÓVEL *Pesquisa espacial*	
40,02-40,98	FIXO MÓVEL 548	
40,98-41,015	FIXO MÓVEL *Pesquisa espacial* 549 550 551	
41,015-44	FIXO MÓVEL 549 550 551	
44-47	FIXO MÓVEL 551 552	

548 A faixa 40,66-40,70 MHz (frequência central 40,68 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação que trabalham nesta faixa devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que trabalham nesta faixa estão sujeitos às disposições do n.º **1815**.

549 *Atribuição adicional:* no Botswana, Burundi, Lesotho, Malawi, Namíbia, Ruanda, República da África do Sul, Suazilândia, Zaire, Zâmbia e Zimbabwe a faixa 41-44 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

550 *Atribuição adicional:* no Irão e no Japão a faixa 41-44 MHz é atribuída adicionalmente, a título secundário, ao serviço de radiolocalização.

551 *Atribuição adicional:* em França e no Mónaco a faixa 41-47 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão até 1 de Janeiro de 1986 e, no Reino Unido, até 1 de Janeiro de 1987.

552 *Atribuição adicional:* na Austrália e na Nova Zelândia a faixa 44-47 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão.

MHz

47-68

Atribuição aos serviços

Região 1	Região 2	Região 3
47-68 RADIODIFUSÃO	**47-50** FIXO MÓVEL	**47-50** FIXO MÓVEL RADIODIFUSÃO
	50-54 AMADOR 556 557 558 560	
	54-68 RADIODIFUSÃO *Fixo* *Móvel*	**54-68** FIXO MÓVEL RADIODIFUSÃO
553 554 555 559 561	562	

553 *Atribuição adicional:* na Hungria, Quénia, Mongólia, Checolováquia e URSS as faixas 47-48,5 MHz e 56,5-58 MHz são atribuídas adicionalmente, a título secundário, ao serviço fixo e ao serviço móvel terrestre.

554 *Atribuição adicional:* na Albânia, República Federal da Alemanha, Áustria, Bélgica, Bulgária, Dinamarca, Finlândia, França, Gabão, Grécia, Israel, Itália, Líbano, Listenstaina, Luxemburgo, Mali, Malta, Marrocos, Nigéria, Noruega, Países Baixos, Polónia, República Democrática Alemã, Reino Unido, Senegal, Suécia, Suíça, Tunísia, Turquia e Jugoslávia a faixa 47-68 MHz e, na Roménia, a faixa 47-58 MHz são atribuídas adicionalmente, a título permitido, ao serviço móvel terrestre.

Contudo, as estações do serviço móvel terrestre dos países mencionados para cada faixa indicada na presente nota não devem causar interferência prejudicial às estações de radiodifusão, existentes ou em projecto, de países que não sejam os mencionados para essa mesma faixa, nem pedir para serem protegidos em relação a estas.

555 *Atribuição adicional:* em Angola, Camarões, Congo, Madagáscar, Moçambique, Somália, Sudão, Tanzânia, Chade e Iémene (RDP do) a faixa 47-68 MHz é atribuída adicionalmente, a título permitido, aos serviços fixo e móvel, excepto móvel aeronáutico.

556 *Atribuição de substituição:* na Nova Zelândia a faixa 50-51 MHz é atribuída, a título primário, aos serviços fixo, móvel e de radiodifusão; a faixa 53-54 MHz é atribuída, a título primário, aos serviços fixo e móvel.

557 *Atribuição de substituição:* no Afeganistão, Bangladesh, Brunei, Índia, Indonésia, Irão, Malásia, Paquistão, Singapura e Tailândia a faixa 50-54 MHz é atribuída, a título primário, aos serviços fixo, móvel e de radiodifusão.

558 *Atribuição adicional:* na Austrália, China e República Popular Democrática da Coreia a faixa 50-54 MHz é atribuída adicionalmente a título primário, ao serviço de radiodifusão.

559 *Atribuição de substituição:* no Botswana, Burundi, Lesotho, Malawi, Namíbia, Ruanda, República da África do Sul, Suazilândia, Zaire, Zâmbia e Zimbabwe a faixa 50-54 MHz é atribuída, a título primário, ao serviço de amador.

560 *Atribuição adicional:* na Nova Zelândia a faixa 51-53 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

561 *Atribuição adicional:* no Botswana, Burundi, Lesotho, Malawi, Mali, Namíbia, Ruanda, República da África do Sul, Suazilândia, Zaire, Zâmbia e Zimbabwe e faixa 54-68 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

562 *Categoria de serviço diferente:* nos departamentos franceses do ultramar da Região 2, Guiana, Jamaica e México a atribuição da faixa 54-68 MHz aos serviços fixo e móvel é feita a título primário (v. o n.º 425).

MHz

68-75,2

Atribuição aos serviços

Região 1	Região 2	Região 3
68-74,8 FIXO MÓVEL, excepto móvel aeronáutico	**68-72** RADIODIFUSÃO *Fixo* *Móvel* 563	**68-74,8** FIXO MÓVEL

Atribuição aos serviços		
Região 1	Região 2	Região 3
	72-73 FIXO MÓVEL	
	73-74,6 RADIOASTRONOMIA 569 570	
	74,6-74,8 FIXO MÓVEL	
564 565 567 568 571 572	572	566 568 571 572
74,8-75,2	RADIONAVEGAÇÃO AERONÁUTICA 572	

563 *Categoria de serviço diferente:* em Cuba, nos departamentos franceses do ultramar da Região 2, Guiana, Jamaica e México a atribuição da faixa 68-72 MHz aos serviços fixo e móvel é feita a título primário (v. o n.º 425).

564 *Atribuição de substituição:* na Bulgária, Hungria, Polónia, Roménia e Checoslováquia a faixa 68-73 MHz é atribuída, a título primário, ao serviço de radiodifusão e utilizada em conformidade com as disposições dos Actos Finais da Conferência Regional Especial (Genebra, 1960).

565 *Atribuição de substituição:* na Mongólia e URSS as faixas 68-73 MHz e 76-87,5 MHz são atribuídas, a título primário, ao serviço de radiodifusão. Os serviços a que estas faixas são atribuídas nos outros países e o serviço de radiodifusão na Mongólia e na URSS devem ser objecto de acordos com os países vizinhos interessados

566 *Atribuição adicional:* na Austrália, China, República da Coreia, Filipinas, República Democrática da Coreia e Samoa Ocidental a faixa 68-74 MHz é atribuída adicionalmente a título primário, ao serviço de radiodifusão.

567 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, Checoslováquia e URSS a faixa 73-74 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão. A utilização desta faixa pelo serviço de radiodifusão na Bulgária, Hungria, Mongólia, Polónia, Checoslováquia e URSS deverá ser objecto de acordos obtidos em conformidade com o procedimento previsto no artigo 14.

568 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que é atribuída a faixa 73-74,6 MHz, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferência prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.ºs **343** e **344** e o artigo 36).

569 Na Região 2 os serviços fixo, móvel e de radiodifusão precedentemente autorizados na faixa 73-74,6 MHz poderão continuar a funcionar até 31 de Dezembro de 1985, desde que não causem interferências prejudiciais ao serviço de radioastronomia.

570 *Atribuição adicional:* na Colômbia, Costa Rica, Cuba, El Salvador, Guatemala, Guiana, Honduras e Nicarágua a faixa 73-74,6 MHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel.

571 *Atribuição adicional:* na Bulgária, China, Hungria, Mongólia, Polónia, Checoslováquia e URSS as faixas 74,6-74,8 MHz e 75,2-75,4 MHz são atribuídas adicionalmente, a título primário, ao serviço de radionavegação aeronáutica, unicamente para os emissores no solo.

572 A frequência 75 MHz é consignada às radiobalizas. As administrações devem evitar consignar frequências vizinhas dos limites da faixa de guarda a estações de outros serviços que, devido à sua potência ou à sua posição geográfica, possam causar interferências prejudiciais às radiobalizas ou impor-lhes outros condicionamentos.

Até 31 de Dezembro de 1989 as administrações das Regiões 2 e 3 deverão evitar consignar frequências a estações de outros serviços nas faixas 74,6-74,8 MHz e 75,2-75,4 MHz.

No futuro deverão ser feitos todos os esforços para melhorar ainda mais as características dos receptores de bordo e para limitar a potência das estações que emitem em frequências próximas dos limites 74,8 MHz e 75,2 MHz.

MHz

75,2-88

Atribuição aos serviços		
Região 1	Região 2	Região 3
72,2-87,5 FIXO MÓVEL, excepto móvel aeronáutico	**75,2-75,4** FIXO MÓVEL 571 572	

Atribuição aos serviços		
Região 1	Região 2	Região 3
	75,4-76 FIXO MÓVEL	**75,4-87** FIXO MÓVEL
	76-88 RADIODIFUSÃO FIXO MÓVEL	
565 571 572 575 578	576	573 574 577 579

573 *Atribuição adicional:* na Samoa Ocidental a faixa 75,4-87 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão.

574 *Atribuição adicional:* China, República da Coreia, Japão, Filipinas e República Popular Democrática da Coreia a faixa 76-87 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão.

575 *Atribuição adicional:* na Bulgária, Hungria, Polónia, Roménia e Checoslováquia a faixa 76-87,5 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão e utilizada em conformidade com as decisões contidas nos Actos Finais da Conferência Regional Especial (Genebra, 1960).

576 *Categoria de serviço diferente:* nos Estados Unidos, departamentos franceses do ultramar situados na Região 2, Guiana, Jamaica, México e Paraguai a atribuição da faixa 76-88 MHz aos serviços fixo e móvel é feita a título primário (v. o n.º 425).

577 Na Região 3 (excepto na República da Coreia, Índia, Japão, Malásia, Filipinas, Singapura e Tailândia) a faixa 79, 75-80,25 MHz é também atribuída, a título primário, ao serviço de radioastronomia. Solicita-se instantemente às administrações que, ao consignarem frequência às estações dos outros serviços a que esta faixa é atribuída, tomem todas as medidas dentro das possibilidades práticas para protegerem o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.ºs 343 e 344 e o artigo 36).

578 *Atribuição de substituição:* na Albânia a faixa 81-87,5 MHz é atribuída, a título primário, ao serviço de radiodifusão e utilizada em conformidade com as decisões contidas nos Actos Finais da Conferência Regional Especial (Genebra, 1960).

579 *Atribuição adicional:* no Afeganistão e Austrália a faixa 85-87 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão. A introdução do serviço de radiodifusão nestes países deve ser objecto de acordos especiais entre as administrações interessadas.

MHz

87-108

Atribuição aos serviços		
Região 1	Região 2	Região 3
		87-100 FIXO MÓVEL RADIODIFUSÃO
87,5-100 RADIODIFUSÃO 581 582	**88-100** RADIODIFUSÃO	580
100-108	RADIODIFUSÃO 582 583 584 585 586 587 588 589 590	

580 *Atribuição de substituição:* na Nova Zelândia a faixa 87-88 MHz é atribuída, a título primário, ao serviço móvel terrestre.

581 *Atribuição adicional:* na República Federal da Alemanha, Espanha, França, Irlanda, Itália, Listenstaina, Mónico, Reino Unido, Suíça e Iémene (RDP do) a faixa 87,5-88 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel terrestre, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

582 *Atribuição adicional:* no Reino Unido a faixa 97,6-102,1 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel terrestre até 31 de Dezembro de 1989. A utilização desta faixa pelo serviço móvel terrestre é limitada às estações em serviço em 1 de Janeiro de 1980. A cessação do serviço das estações móveis terrestres será organizada em consulta com as administrações interessadas.

583 Na Região 1 os sistemas existentes nos serviços fixo e móvel, excepto móvel aeronáutico (R), podem continuar a utilizar a faixa 100-104 MHz a título primário até à primeira das seguintes datas: a data da entrada em vigor do novo acordo regional de radiodifusão mencionado na Resolução n.º 510 ou 1 de Janeiro de 1985.

584 Na Região 1 as estações de radiodifusão funcionando na faixa 100-108 MHz deverão ser instaladas e exploradas em conformidade com um acordo e com o plano associado relativo à faixa 87,5-108 MHz, que devem ser elaborados por uma conferência regional da radiodifusão (v. a Resolução n.º 510). Antes da data da entrada em vigor desse acordo poderão ser postas em serviço estações de radiodifusão

por acordo entre as administrações interessadas, entendendo-se que a exploração dessas estações não poderá, em caso algum, constituir direito adquirido no momento em que o plano seja estabelecido.

585 *Atribuição adicional:* na China, República da Coreia, Filipinas e Singapura a faixa 100-108 MHz é atribuída adicionalmente, a título permitido, aos serviços fixo e móvel.

586 *Atribuição de substituição:* na Nova Zelândia a faixa 100-108 MHz é atribuída ao serviço móvel terrestre a título primário e ao serviço de radiodifusão a título secundário.

587 *Atribuição adicional:* na Áustria, Bulgária, Hungria, Israel, Quénia, Mongólia, Polónia, Síria, República Democrática Alemã, Reino Unido, Somália, Checoslováquia e URSS a faixa 104-108 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel, excepto móvel aeronáutico (R), até 31 de Dezembro de 1995 e, a título secundário, depois dessa data.

588 *Atribuição adicional:* na Finlândia e Jugoslávia a faixa 104-108 MHz é atribuída adicionalmente, a título permitido, ao serviço fixo até 31 de Dezembro de 1995. A potência efectiva radiada de qualquer estação não deve ultrapassar 25 W.

589 *Atribuição adicional:* em França, Roménia, Suécia, Turquia e Jugoslávia a faixa 104-108 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel, excepto móvel aeronáutico (R), até 31 de Dezembro de 1995.

590 *Atribuição adicional:* na Itália, a faixa 104-108 MHz é atribuída adicionalmente, a título primário, ao serviço móvel terrestre até à primeira das seguintes datas: a data da entrada em vigor do novo acordo regional de radiodifusão mencionado na Resolução n.º 510 ou 1 de Janeiro de 1985.

MHz

108-138

Atribuição aos serviços		
Região 1	Região 2	Região 3
108-117,975	RADIONAVEGAÇÃO AERONÁUTICA	
117,975-136	MÓVEL AERONÁUTICO (R) 501 591 592 593 594	
136-137	MÓVEL AERONÁUTICO (R) FIXO *Móvel,* excepto móvel aeronáutico (R) 591 595	
137-138	EXPLORAÇÃO ESPACIAL (espaço para Terra) METEOROLOGIA POR SATÉLITE (espaço para Terra) PESQUISA ESPACIAL (espaço para Terra) FIXO *Móvel,* excepto móvel aeronáutico (R) 596 597 598 599	

591 A faixa 117,975-137 MHz é também atribuída, a título secundário, ao serviço móvel aeronáutico por satélite (R), com a condição de que não cause interferência prejudicial ao serviço móvel aeronáutico (R) e sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

592 As faixas 121,45-121,55 MHz e 242,95-243,05 MHz são também atribuídas ao serviço móvel por satélite para a recepção, a bordo dos satélites, de emissões provenientes de radiobalizas de localização de sinistros trabalhando em 121,5 MHz e 243 MHz.

593 Na faixa 117,975-136 MHz a frequência 121,5 MHz é a frequência aeronáutica de urgência e, se necessário, a frequência 123,1 MHz é a frequência aeronáutica auxiliar de 121,5 MHz.

As estações móveis do serviço móvel marítimo podem comunicar nestas frequências, para fins de segurança, com as estações do serviço móvel aeronáutico.

594 *Atribuição adicional:* em Angola, Bulgária, Hungria, Irão, Iraque, Japão, Mongólia, Moçambique, Papuásia-Nova Guiné, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 132-136 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel aeronáutico (OR).

595 Até 1 de Janeiro de 1990 a faixa 136-137 MHz é também atribuída, a título primário, ao serviço de exploração espacial (espaço para Terra), ao serviço de meteorologia por satélite (espaço para Terra) e ao serviço de pesquisa espacial (espaço para Terra). A introdução de estações do serviço móvel aeronáutico (R) só pode efectuar-se depois dessa data e deverá processar-se em conformidade com os planos aprovados internacionalmente para esse serviço. Depois de 1 de Janeiro de 1990 a faixa 136-137 MHz será também atribuída, a título secundário, aos serviços de radiocomunicação espaciais mencionados acima (v. a Recomendação n.º 404).

596 *Categoria de serviço diferente:* no Afeganistão, Arábia Saudita, Bahrein, Brunei, China, Emirados Árabes Unidos, Índia, Indonésia, Irão, Iraque, Koweit, Malásia, Omã, Paquistão, Qatar, Singapura, Tailândia, Iémene (RA) e Iémene (RDP do) a atribuição da faixa 137-138 MHz aos serviços fixo e móvel, excepto móvel aeronáutico (R), é feita a título primário (v. o n.º **425**).

597 *Categoria de serviço diferente:* em Israel, Jordânia e Síria a atribuição da faixa 137-138 MHz aos serviços fixo e móvel, excepto móvel aeronáutico, é feita a título primário (v. o n.º **425**).

598 *Categoria de serviço diferente:* na Áustria, Bulgária, Egipto, Finlândia, Grécia, Hungria, Líbano, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia, URSS e Jugoslávia a atribuição da faixa 137-138 MHz ao serviço móvel aeronáutico (OR) é feita a título primário (v. o n.º **425**).

599 *Atribuição adicional:* na Austrália a faixa 137-144 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão, até que este serviço possa ser incluído no quadro das atribuições regionais para a radiodifusão.

MHz

138-144

Atribuição aos serviços		
Região 1	Região 2	Região 3
138-143,6	**138-143,6**	**138-143,6**
MÓVEL AERONÁUTICO (OR)	FIXO	FIXO
	MÓVEL	MÓVEL
	/RADIOLOCALIZAÇÃO/	*Pesquisa espacial* (espaço para Terra)
600 601 602 604	*Pesquisa espacial* (espaço para Terra)	599 603
143,6-143,65	**143,6-143,65**	**143,6-143,65**
MÓVEL AERONÁUTICO (OR)	FIXO	FIXO
	MÓVEL	MÓVEL
PESQUISA ESPACIAL (espaço para Terra)	PESQUISA ESPACIAL (espaço para Terra)	PESQUISA ESPACIAL (espaço para Terra)
	/RADIOLOCALIZAÇÃO/	
601 602 604		599 603
143,65-144	**143,65-144**	**143,65-144**
MÓVEL AERONÁUTICO (OR)	FIXO	FIXO
	MÓVEL	MÓVEL
	/RADIOLOCALIZAÇÃO/	*Pesquisa espacial* (espaço para Terra)
600 601 602 604	*Pesquisa espacial* (espaço para Terra)	599 603

600 *Atribuição adicional:* na República Federal da Alemanha, Áustria, Bélgica, França, Israel, Itália, Listenstaina, Luxemburgo, Reino Unido, Suécia, Suíça e Checoslováquia as faixas 138-143,6 MHz e 143,65-144 MHz são atribuídas adicionalmente, a título secundário, ao serviço de pesquisa espacial (espaço para Terra).

601 *Atribuição adicional:* na República Federal da Alemanha, Arábia Saudita, Áustria, Bahrein, Bélgica, Dinamarca, Emirados Árabes Unidos, Espanha, Finlândia, Grécia, Irlanda, Israel, Quénia, Koweit, Litenstaina, Luxemburgo, Mali, Malta, Noruega, Países Baixos, Qatar, Reino Unido, Suécia, Suíça Somália, Tanzânia, Tunísia, Turquia e Jugoslávia a faixa 138-144 MHz é atribuída adicionalmente, a título primário, aos serviços móveis marítimo e terrestre.

602 *Atribuição de substituição:* em Angola, Botswana, Burundi, Camarões, República Centro-Africana, Congo, Gabão, Gâmbia, Gana, Guiné, Iraque, Jordânia, Lesotho, Libéria, Líbia, Malawi, Moçambique, Namíbia, Nigéria, Omã, Ruanda, Serra Leoa, República da África do Sul, Suazilândia, Chade, Togo, Zaire, Zâmbia e Zimbabwe a faixa 138-144 MHz é atribuída, a título primário, aos serviços fixo e móvel.

603 *Atribuição adicional:* na China a faixa 138-144 MHz é também atribuída, a título primário, ao serviço de radiolocalização.

604 *Atribuição adicional:* na Etiópia, Finlândia, Quénia, Malta, Somália, Sudão, Tanzânia, Iémene (RA) e Jugoslávia a faixa 138-144 MHz é atribuída adicionalmente, a título primário, ao serviço fixo.

MHz

144-150,05

Atribuição aos serviços		
Região 1	Região 2	Região 3
144-146	AMADOR 510	
	AMADOR POR SATÉLITE	
	605 606	
146-149,9	**146-148**	**146-148**
FIXO	AMADOR	AMADOR
MÓVEL, excepto móvel aeronáutico (R)		FIXO
		MÓVEL
	607	607

Atribuição aos serviços		
Região 1	Região 2	Região 3
	143-149,9	
	FIXO	
	MÓVEL	
608	608	
149,9-150,05		
	RADIONAVEGAÇÃO POR SATÉLITE	
	609	

605 *Atribuição adicional:* em Singapura a faixa 144-145 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel. Esta utilização limita-se aos sistemas postos ao serviço antes de 1 de Janeiro de 1980, os quais deverão cessar o seu funcionamento o mais tardar até 31 de Dezembro de 1995.

606 *Atribuição adicional:* na China a faixa 144-146 MHz é atribuída adicionalmente, a título secundário, ao serviço móvel aeronáutico (OR).

607 *Atribuição de substituição:* no Afeganistão, Bangladesh, Cuba, Guiana e Índia a faixa 146-148 MHz é também atribuída, a título primário, aos serviços fixo e móvel.

608 Sob reserva de acordo em conformidade com o procedimento previsto no artigo 14, a faixa 148-149,9 MHz pode ser utilizada para o serviço de exploração espacial (Terra para espaço).

A largura de faixa de uma emissão não deverá exceder ± 25 kHz.

609 As emissões do serviço de radionavegação por satélite nas faixas 149-150,05 MHz e 399,9-400,05 MHz podem também ser utilizadas pelas estações terrenas de recepção do serviço de pesquisa espacial.

MHz

150,05-174

Atribuição aos serviços		
Região 1	Região 2	Região 3
150,05-153	**150,05-156,7625**	
FIXO	FIXO	
MÓVEL, excepto móvel aeronáutico	MÓVEL	
RADIOASTRONOMIA		
610 612		
153-154		
FIXO		
MÓVEL, excepto móvel aeronáutico (R)		
Auxiliares da meteorologia		
154-156,7625		
FIXO		
MÓVEL, excepto móvel aeronáutico (R)		
613	611 613	
156,7625-156,8375		
	MÓVEL MARÍTIMO (perigo e chamada)	
	501 613	
156,8375-174	**156,8375-174**	
FIXO	FIXO	
MÓVEL, excepto móvel aeronáutico	MÓVEL	
613 614 615	613 616 617 618	

610 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 150,05-153 MHz é atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os **343** e **344** e o artigo 36).

611 *Atribuição adicional:* na Austrália e na Índia a faixa 150,05-153 MHz é atribuída adicionalmente, a título primário, ao serviço de radioastronomia.

612 *Atribuição adicional:* na Suécia e na Suíça a faixa 150,05-153 MHz é atribuída adicionalmente, a título secundário, ao serviço móvel aeronáutico (OR).

613 A frequência 156,8 MHz é a frequência internacional utilizada para o perigo, a segurança e a chamada pelo serviço móvel marítimo radiotelefónico em ondas métricas. As condições de utilização desta frequência estão fixadas no artigo 38.

No que respeita às faixas 156-156,7625 MHz, 156,8375-157,45 MHz, 160,6-160,975 MHz e 161,475-162,05 MHz, as administrações devem dar prioridade ao serviço móvel marítimo efectuado unicamente nas frequências destas faixas consignadas por essas administrações às estações do serviço marítimo (v. o artigo 60).

Convém evitar que os outros serviços a que está atribuída esta faixa utilizem frequências de uma qualquer das faixas acima mencionadas em qualquer região em que essa utilização poderia causar interferências às radiocomunicações do serviço móvel marítimo em ondas métricas.

Contudo, a frequência 156,8 MHz e as faixas de frequências em que é dada prioridade ao serviço móvel marítimo podem ser utilizadas para as radiocomunicações nas vias de água interiores, sob reserva de acordos entre as administrações interessadas e aquelas cujos serviços a que a faixa está atribuída possam ser afectados, tendo em conta a utilização corrente das frequências e os acordos existentes.

614 *Atribuição de substituição:* em França e no Mónaco a faixa 162-174 MHz é atribuída, a título primário, ao serviço de radiodifusão até 1 de Janeiro de 1985.

615 *Atribuição de substituição:* em Marrocos a faixa 162-174 MHz é atribuída, a título primário, ao serviço de radiodifusão. Esta utilização será objecto de acordo com as administrações cujos serviços que funcionam ou estão previstos em conformidade com o quadro possam ser afectados.

As estações existentes em 1 de Janeiro de 1981, com as suas características técnicas nessa data, não são afectadas por esse acordo.

616 *Atribuição adicional:* na China a faixa 163-167 MHz é atribuída adicionalmente a título primário, ao serviço de exploração espacial (espaço para Terra), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

617 *Atribuição adicional:* no Afeganistão, na China e no Paquistão a faixa 167-174 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão. A introdução do serviço de radiodifusão nesta faixa deverá ser objecto de acordos com os países vizinhos da Região 3 cujos serviços possam ser afectados.

618 *Atribuição adicional:* no Japão a faixa 170-174 MHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão.

MHz

174-235

Atribuição aos serviços

Região 1	Região 2	Região 3
174-223 RADIODIFUSÃO 621 623 628 629	**174-216** RADIODIFUSÃO *Fixo* *Móvel* 620 **216-220** FIXO MÓVEL MARÍTIMO *Radiolocalização* 627 **220-225** AMADOR FIXO MÓVEL *Radiolocalização* 627 **225-235** FIXO MÓVEL	**174-223** FIXO MÓVEL RADIODIFUSÃO 619 624 625 626 630
223-230 RADIODIFUSÃO *FIXO* *MÓVEL* 622 628 629 631 632 633 634 635		**223-230** FIXO MÓVEL RADIODIFUSÃO RADIONAVEGAÇÃO AERONÁUTICA *Radiolocalização* 636 637
230-235 FIXO MÓVEL 629 632 633 634 635 638 639		**230-235** FIXO MÓVEL RADIONAVEGAÇÃO AERONÁUTICA 637

619 *Atribuição adicional:* na China a faixa 174-184 MHz é atribuída adicionalmente, aos serviços de pesquisa espacial (espaço para Terra) e de exploração espacial (espaço para Terra), sob reserva de acordo obtido em conformidade com o procedimento descrito no artigo 14. Esses serviços não deverão causar interferência prejudicial a estações de radiodifusão existentes ou em projecto, nem pedir para serem protegidos em relação a estas.

620 *Categoria de serviço diferente:* no México, na faixa 174-216 MGz, a atribuição aos serviços fixo e móvel é feita a título primário (v. o n.º **425**).

621 *Atribuição adicional:* na Áustria, República Federal da Alemanha, Bélgica, Dinamarca, Finlândia, França, Itália, Listenstaina, Mónaco, Noruega, Países Baixos, Reino Unido, Suécia, Suíça e Iémene (RDP do) a faixa 174-223 MHz é atribuída adicionalmente, a título permitido, ao serviço móvel terrestre. Contudo, as estações do serviço móvel terrestre não deverão causar interferência prejudicial às estações de radiodifusão existentes, ou em projecto, de países que não sejam os mencionados na presente nota, nem pedir para serem protegidas em relação a estas.

622 *Categoria de serviço diferente:* na Áustria, República Federal da Alemanha, Bélgica, Dinamarca, Espanha, Finlândia, França, Israel, Itália, Listenstaina, Luxemburgo, Noruega, Países Baixos, Portugal, Reino Unido, Suécia, Suíça e Iémene (RDP do) a faixa 223-230 MHz é atribuída, a título permitido, ao serviço móvel terrestre (v. o n.º **425**). Contudo, as estações do serviço móvel terrestre não deverão causar interferência prejudicial às estações de radiodifusão existentes, ou em projecto, de países que não sejam os mencionados na presente nota, em pedir para serem protegidas em relação a estas.

623 *Atribuição adicional:* no Congo, Etiópia, Gâmbia, Guiné, Quénia, Líbia, Malawi, Mali, Uganda, Senegal, Serra Leoa, Somália, Tanzânia e Zimbabwe a faixa 174-223 MHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel.

624 *Atribuição adicional:* no Bangladesh, na Índia, no Paquistão e nas Filipinas a faixa 200-216 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

625 *Atribuição adicional:* na Austrália e na Papuásia-Nova Guiné as faixas 204-208 MHz e 222-223 MHz são atribuídas adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

626 *Atribuição adicional:* na China, na Índia e na Tailândia a faixa 216-223 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação e, a título secundário, ao serviço de radiolocalização.

627 Na Região 2 a faixa 216-225 MHz é atribuída, a título primário, ao serviço de radiolocalizado até 1 de Janeiro de 1990, A partir dessa data não será autorizada nenhuma estação deste serviço. As estações antes de 1 de Janeiro de 1990 poderão continuar a trabalhar a título secundário.

628 Atribuição adicional: na Somália a faixa 216-225 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica, com a condição de que não cause interferência prejudicial às estações de radiodifusão existentes ou previstas nos outros países.

629 *Atribuição adicional:* em Omã, no Reino Unido e na Turquia a faixa 216-235 MHz é atribuída adicionalmente, a título secundário, ao serviço de radiolocalização.

630 *Atribuição adicional:* no Japão a faixa 222-223 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica e, a título secundário, ao serviço de radiolocalização.

631 *Categoria de serviço diferente:* em Espanha e em Portugal a faixa 223-230 MHz é atribuída, a título permitido, ao serviço fixo (v. o n.º **425**). As estações deste serviço não devem causar interferência prejudicial às estações de radiodifusão existentes ou em projecto nos outros países e que trabalhem em conformidade com o quadro nem pedir para serem protegidas em relação a estas.

632 *Atribuição adicional:* na Arábia Saudita, Bahrein, Emiratos Árabes Unidos, Israel, Jordânia, Omã, Qatar e Síria a faixa 223-235 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica.

633 *Atribuição adicional:* em Espanha e em Portugal a faixa 223-235 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica até 1 de Janeiro de 1990, com a condição de que não cause interferência prejudicial às estações de radiodifusão existentes ou em projecto noutros países.

634 *Atribuição adicional:* na Suécia a faixa 223-235 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica até 1 de Janeiro de 1990, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14 e com a condição de não causar interferência prejudicial às estações de radiodifusão existentes ou em projecto noutros países.

635 *Atribuição de substituição:* no Botswana, Lesotho, Namíbia, República da África do Sul, Suazilândia e Zâmbia as faixas 223-238 MHz e 246-254 MHz são atribuídas, a título primário, ao serviço de radiodifusão, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

636 *Atribuição de substituição:* na Nova Zelândia, na Samoa Ocidental e nas ilhas Niue e Cook a faixa 225-230 MHz é atribuída, a título primário, aos serviços fixo, móvel e de radionavegação aeronáutica.

637 *Atribuição adicional:* na China a faixa 225-235 MHz é atribuída adicionalmente, a título secundário, ao serviço de radioastronomia.

638 *Atribuição adicional:* na Nigéria a faixa 230-235 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica, sob reserva de acordo obtido em conformidades com o procedimento previsto no artigo 14.

639 *Atribuição adicional:* na Jugoslávia a faixa 230-235 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica até 1 de Janeiro de 1995. A utilização desta faixa pelo serviço de radionavegação aeronáutica na Jugoslávia é limitadas às estações em serviço em 1 de Janeiro de 1980.

MHz

235-335,4

Atribuição aos serviços		
Região 1	Região 2	Região 3
235-267	FIXO MÓVEL 501 592 635 640 641 642	
267-272	FIXO MÓVEL *Exploração espacial* (espaço para Terra) 641 643	

Atribuição aos serviços		
Região 1	Região 2	Região 3
272-273	EXPLORAÇÃO ESPACIAL (espaço para Terra) FIXO MÓVEL 641	
273-322	FIXO MÓVEL 641	
322-328,6	FIXO MÓVEL RADIOASTRONOMIA 644	
328,6-335,4	RADIONAVEGAÇÃO AERONÁUTICA 645	

640 *Atribuição adicional:* na Nova Zelândia a faixa 235-239,5 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

641 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, as faixas 235-322 MHz e 335,4-399,9 MHz podem ser utilizadas pelo serviço móvel por satélite, com a condição de que as estações deste serviço não causem interferência prejudicial às estações dos outros serviços existentes, ou em projecto, funcionando em conformidade com o quadro.

642 A frequência 243 MHz é a frequência a utilizar nesta faixa pelos engenhos de salvamento e pelos dispositivos utilizados para fins de salvamento.

643 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 267-272 MHz pode ser utilizada, a título primário, pelas administrações para a telemedida espacial no seu próprio país.

644 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 322-328,6 MHz é atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastrononia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastrononia (v. os n.^{os} **343** e **344** e o artigo 36).

645 Limitado aos sistemas de aterragem por instrumentos (alinhamento de descida).

MHz

335,4-401

Atribuição aos serviços		
Região 1	Região 2	Região 3
335,4-399,9	FIXO MÓVEL 641	
399,9-400,05	RADIONAVEGAÇÃO POR SATÉLITE 609	
400,05-400,15	FREQUÊNCIA PADRÃO E SINAIS HORÁRIOS POR SATÉLITE (400,1 MHz) 646 647	
400,15-401	AUXILIARES DA METEOLOGIA METEROLOGIA POR SATÉLITE (espaço para Terra) PESQUISA ESPACIAL (espaço para Terra) *Exploração espacial* (espaço para Terra) 647	

646 As emissões deverão limitar-se a uma faixa de 25 kHz para cada um dos lados da frequência padrão 400,1 MHz.

647 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bulgária, Colômbia, Costa Rica, Cuba, Egipto, Emiratos Árabes Unidos, Equador, Hungria, Indonésia, Irão, Iraque, Koweit, Libéria, Malásia, Nigéria, Omã, Paquistão, Filipinas, Polónia, Qatar, Síria, República Democrática Alemã, Roménia, Singapura, Somália, Sri Lanka, Checoslováquia, Tailândia, URSS e Jugoslávia a faixa 400,05-401 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

MHz

401-420

Atribuição aos serviços		
Região 1	Região 2	Região 3
401-402		
	AUXILIARES DA METEOROLOGIA	
	EXPLORAÇÃO ESPACIAL (espaço para Terra)	
	Exploração da Terra por satélite (Terra para espaço)	
	Fixo	
	Meteorologia por satélite (Terra para espaço)	
	Móvel, excepto móvel aeronáutico	
402-403		
	AUXILIARES DA METEOROLOGIA	
	Exploração da Terra por satélite (Terra para espaço)	
	Fixo	
	Meteorologia por satélite (Terra para espaço)	
	Móvel, excepto móvel aeronáutico	
403-406		
	AUXILIARES DA METEOROLOGIA	
	Fixo	
	Móvel, excepto móvel aeronáutico	
	648	
406-406,1		
	MÓVEL POR SATÉLITE (Terra para espaço)	
	649	
406,1-410		
	FIXO	
	MÓVEL, excepto móvel aeronáutico	
	RADIOASTRONOMIA	
	648 650	
410-420		
	FIXO	
	MÓVEL, excepto móvel aeronáutico	

648 *Atribuição adicional:* no Canadá as faixas 405,5-406 MHz e 406,1-410 MHz são atribuídas adicionalmente, a título primário, ao serviço móvel por satélite (Terra para espaço), excepto móvel aeronáutico por satélite, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

649 A faixa 406-406,1 MHz está reservada unicamente para utilização e desenvolvimento de sistemas de radiobalizas de localização de sinistros de pequena potência (não superior a 5 W) utilizando técnicas espaciais.

650 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros países a que a faixa 406,1-410 MHz é atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os 343 e 344, bem como o artigo 36).

MHz

420-470

Atribuição aos serviços		
Região 1	**Região 2**	**Região 3**
420-430	FIXO MÓVEL, excepto móvel aeronáutico *Radiolocalização* 651 652 653	
430-440 AMADOR RADIOLOCALIZAÇÃO 653 654 655 656 657 658 659 661 662 663 664 665	**430-440** RADIOLOCALIZAÇÃO *Amador* 653 658 659 660 663 664	
440-450	FIXO MÓVEL, excepto móvel aeronáutico *Radiolocalização* 651 652 653 666 667 668	
450-460	FIXO MÓVEL 653 668 669 670	
460-470	FIXO MÓVEL *Meteorologia por satélite* (espaço para Terra) 669 670 671 672	

651 *Categoria de serviço diferente:* na Austrália, nos Estados Unidos, na Índia, no Japão e no Reino Unido, nas faixas 420-430 MHz e 440-450 MHz, a atribuição ao serviço de radiolocalização é feita a título primário (v. o n.º 425).

652 *Atribuição adicional:* na Austrália, Estados Unidos, Jamaica e Filipinas as faixas 420-430 MHz e 440-450 MHz são atribuídas adicionalmente, a título secundário, ao serviço de amador.

653 *Atribuição adicional:* na China, Índia, República Democrática Alemã, Reino Unido e URSS a faixa 420-460 MHz é atribuída adicionalmente, a título secundário, ao serviço de radionavegação aeronáutica (radioaltímetros).

654 *Categoria de serviço diferente:* na França, na faixa 430-434 MHz, a atribuição ao serviço de amador é feita a título secundário (v. o n.º 424).

655 *Categoria de serviço diferente:* na Dinamarca, na Líbia, na Noruega e na Suécia, nas faixas 430-432 MHz e 438-440 MHz, a atribuição ao serviço de radiolocalização é feita a título secundário (v. o n.º 424).

656 *Atribuição de substituição:* na Dinamarca, na Noruega e na Suécia as faixas 430-432 MHz e 438-432 MHz são atribuídas, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

657 *Atribuição adicional:* na Finlândia, na Líbia e na Jugoslávia as faixas 430-432 MHz e 438-440 MHz são atribuídas adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

658 *Atribuição adicional:* no Afeganistão, Argélia, Arábia Saudita, Bahrein, Bangladesh, Brunei, Burundi, Egipto, Emiratos Árabes Unidos, Equador, Etiópia, Grécia, Guiné, Índia, Indonésia, Irão, Iraque, Israel, Itália, Jordânia, Quénia, Koweit, Líbano, Listenstaina, Líbia, Malásia, Malta, Nigéria, Omã, Paquistão, Filipinas, Qatar, Síria, Singapura, Somália, Suíça, Tanzânia, Tailândia e Togo a faixa 430-440 MHz é também atribuída, a título primário, ao serviço fixo, e as faixas 430-435 MHz e 438-440 MHz são também atribuídas, a título primário, ao serviço móvel, excepto móvel aeronáutico.

659 *Atribuição adicional:* em Angola, Bulgária, Camarões, Congo, Gabão, Hungria, Mali, Mongólia, Níger, Polónia, República Democrática Alemã, Roménia, Ruanda, Chade, Checoslováquia e URSS a faixa 430-440 MHz é atribuída adicionalmente, a título primário, ao serviço fixo.

660 *Categoria de serviço diferente:* na Argentina, Colômbia, Costa Rica, Cuba, Guiana, Honduras, Panamá e Venezuela, na faixa 430-440 MHz, a atribuição ao serviço amador é feita a título primário (v. o n.º 425).

661 Na Região 1, excepto nos países mencionados no n.º 662, a faixa 433,05-434,79 MHz (frequência central 433,92 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). A utilização desta faixa de frequências em aplicações ISM depende um autorização especial concedida pela administração responsável, de acordo com as outras administrações cujos serviços de radiocomunicação possam ser afectados. Para a aplicação desta disposição, as administrações reportar-se-ão aos mais recentes pareceres da CCIR sobre o assunto.

662 Na República Federal da Alemanha, na Áustria, no Listenstaina, em Portugal, na Suíça e na Jugoslávia a faixa 433,05-434,79 MHz (frequência central 433,92 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação destes

países, que trabalham nesta faixa, devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que trabalham nesta faixa estarão sujeitos às disposições do n.º 1815.

663 *Atribuição adicional:* no Brasil, em França e nos departamentos do ultramar situados na Região 2 e na Índia, a faixa 433,75-434,25 MHz é atribuída adicionalmente, a título primário, ao serviço de exploração espacial (Terra para espaço) até 1 de Janeiro de 1990, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14. Depois de 1 de Janeiro de 1990 e nos mesmos países a faixa 433,75-434,25 MHz será atribuída ao mesmo serviço a título secundário.

664 O serviço de amador por satélite pode trabalhar nas faixas 435-438 MHz, 1260-1270 MHz, 2440-2450 MHz, 3400-3410 MHz (somente nas Regiões 2 e 3) e 5650-5670 MHz, com a condição de não resultar daí interferência prejudicial aos outros serviços que trabalham em conformidade com o quadro (v. o n.º 435). As administrações que autorizarem essa utilização deverão proceder de modo que seja imediatamente eliminada qualquer interferência prejudicial causada pelas emissões de uma estação do serviço de amador por satélite, em conformidade com as disposições do n.º 2741. A utilização das faixas 1260-1270 MHz e 5650-5670 MHz pelo serviço de amadora por satélite é limitada ao sentido Terra para espaço.

665 *Atribuição adicional:* na Áustria, a faixa 438-440 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

666 *Atribuição adicional:* no Canadá, na Nova Zelândia e na Papuásia-Nova Guiné, a faixa 440-450 MHz é atribuída adicionalmente, a título secundário, ao serviço de amador.

667 *Categoria de serviço diferente:* no Canadá, na faixa 440-450 MHz, a atribuição ao serviço de radiolocalização é feita a título primário (v. o n.º 425).

668 Sob reserva de acordo obtido em conformidade com o procedimento no artigo 14, a faixa 449,75-450,25 MHz pode ser utilizada no serviço de exploração espacial (Terra para espaço) e no serviço de pesquisa espacial (Terra para espaço).

669 No serviço móvel marítimo as frequências 457,525 MHz, 457,550 MHz, 457,575 MHz, 467,525 MHz, 467,550 MHz e 467,575 Mhz podem ser utilizadas pelas estações de comunicações de bordo. Essa utilização pode ser sujeita á regulamentação nacional da administração responsável quando estas frequências são utilizadas nas águas territoriais do seu país. As características dos aparelhos utilizados deverão estar em conformidade com as especificações do apêndice 20.

670 Nas águas territoriais do Canadá, dos Estados Unidos e das Filipinas as frequências a utilizar de preferência pelas estações de comunicações de bordo são 457,525 MHz, 457,550 MHz 457,575 MHz e 457,600 Mhz. Estas frequências são emparelhadas com as frequências 467,750 MHz, 467,775 MHz, 467,800 MHz e 467,825 Mhz, respectivamente. As características dos aparelhos utilizados devem estar em conformidade com as especificações do apêndice 20.

671 As faixas 460-470 MHz e 1690-1710 Mhz podem também ser utilizadas nas aplicações do serviço de exploração da Terra por satélite distintas das do serviço de meteorologia por satélite, nas transmissões espaço para Terra, com a condição de que não causem interferência prejudicial às estações que funcionem em conformidade com o quadro.

672 *Categoria de serviço diferente:* no Afeganistão, Bulgária, China, Cuba, Hungria, Japão, Mongólia, Polónia, Checoslováquia e URSS, na faixa 460-470 MHz, a atribuição ao serviço de meteorologia por satélite (espaço para Terra) é feita a título primário (v. o n.º 425) e sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

MHz

470-890

Atribuição aos serviços

Região 1	Região 2	Região 3
470-490 RADIODIFUSÃO 676 680 681 682 683 684 685 686 687 689 693 694	**470-512** RADIODIFUSÃO *Fixo* *Móvel* 674 675	**470-585** FIXO MÓVEL RADIODIFUSÃO 673 677 679
	512-608 RADIODIFUSÃO 678	**585-610** FIXO MÓVEL RADIODIFUSÃO RADIONAVEGAÇÃO 688 689 690
	608-614 RADIOASTRONOMIA *Móvel por satélite*, excepto móvel aeronáutico por satélite (Terra para espaço)	
790-862 FIXO RADIODIFUSÃO 694 695 696 697 698 699 702	**614-806** RADIODIFUSÃO *Fixo* *Móvel* 675 692 693	**610-890** FIXO MÓVEL RADIODIFUSÃO
862-890 FIXO MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO 703 699 704	**806-890** FIXO MÓVEL RADIODIFUSÃO 700	677 688 689 690 691 693 701

673 *Atribuição adicional:* na China a faixa 470-485 MHz é atribuída adicioalmente, a título primário, ao serviço de pesquisa espacial (espaço para Terra) e ao serviço de exploração espacial (espaço para Terra) e ao serviço de exploração espacial (espaço para Terra), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14 e com a condição de que não cause interferência prejudicial às estações de radiodifusão existentes ou previstas.

674 *Categoria de serviço diferente:* no México e na Venezuela, na faixa 470-512 MHz, a atribuição aos serviços fixo e móvel é feita a título primário (v. o n.º **425**), sob reserva de acordo obtido em conformidade como o procedimento previsto no artigo 14.

675 *Categoria de serviço diferente:* no Chile, na Colômbia, no Equador, nos Estados Unidos, na Guiana e na Jamaica, nas faixas 470-512 MHz e 614-806 MHz, a atribuição aos serviços fixo e móvel é feita a título primário (v. o n.º **425**), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

676 *Atribuição adicional:* no Burundi, Camarões, Congo, Etiópia, Israel, Quénia, Líbia, Senegal, Sudão, Síria e Iémene (RDP do) a faixa 470-582 MHz é atribuída adicionalmente, a título secundário, ao serviço fixo.

677 *Atribuição de substituição:* no Paquistão as faixas 470-582 MHz e 610-890 MHz são atribuídas, a título primário, ao serviço de radiodifusão.

678 *Atribuição adicional:* na Costa Rica, El Salvador, Equador, Estados Unidos, Guatemala, Guiana, Honduras, Jamaica e Venezuela a faixa 512-608 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

679 *Atribuição adicional:* na Índia a faixa 549,75-550,25 MHz é atribuída adicionalmente, a título secundário, ao serviço de exploração espacial (espaço para Terra).

680 *Atribuição adicional:* no Reino Unido as seguintes faixas são atribuídas adicionalmente, a título primário, ao serviço de radionavegação aeronáutica: 582-590 MHz até 31 de Dezembro de 1987 e 598-606 MHz até 31 de Dezembro de 1994. Todas as novas consignações ás estações do serviço de radionavegação aeronáutica nestas faixas são efectuadas sob reserva de acordo entre as administrações da República Federal da Alemanha, Bélgica, Dinamarca, Espanha, França, Irlanda, Luxemburgo, Marrocos, Noruega e Países Baixos.

681 *Atribuição adicional:* na Bélgica a faixa 582-606 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação até 31 de Dezembro de 1984.

682 *Atribuição adicional:* na França e na Itália a faixa 582-606 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação até 31 de Janeiro de 1990.

683 *Atribuição adicional:* em Omã a faixa 582-606 MHz é atribuída adicionalmente, a título secundário, ao serviço de radionavegação.

684 *Atribuição adicional:* em Israel, na Líbia, na Síria e no Sudão a faixa 582-790 MHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel, excepto móvel aeronáutico.

685 *Atribuição adicional:* na Dinamarca e no Koweit a faixa 590-598 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica até 31 de Janeiro de 1995.

686 *Atribuição adicional:* no Reino Unido a faixa 590-598 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica. Todas as novas consignações às estações do serviço de radionavegação aeronáutica, incluindo as consignações transferidas das faixas adjacentes, deverá ser objecto de coordenação com as administrações da República Federal da Alemanha, Bélgica, Dinamarca, Espanha, França, Irlanda, Luxemburgo, Marrocos, Noruega e Países Baixos.

687 *Atribuição adicional:* na zona africana de radiodifusão (v. os n.ºs **400** a **403** a faixa 606-614 MHz é atribuída adicionalmente, a título permitido, ao serviço de radioastronomia.

688 *Atribuição adicional:* na China a faixa 606-614 MHz é atribuída adicionalmente, a título primário, ao serviço de radioastronomia.

689 Na Região 1, com excepção da zona africana de radiodifusão (v. os n.ºs **400** a **403**), e na Região 3 a faixa 608-614 MHz é também atribuída, a título secundário, ao serviço de radioastronomia. Solicita-se instantemente às administrações que, ao fazerem consignações às estações dos outros serviços a que esta faixa está atribuída, tomem medidas, dentro das possibilidades práticas, para proteger o serviço de radioastrononia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem construir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.ºs **343** e **344** e o artigo 36).

690 *Atribuição adicional:* na Índia a faixa 608-614 Mhz é atribuída adicionalmente, a título primário, ao serviço radioastronomia.

691 *Atribuição adicional:* na Nova Zelândia a faixa 610-620 MHz é atribuída adicionalmente, a título secundário, ao serviço de amador.

692 *Categoria de serviço diferente:* na costa Rica, em El Salvador e nas Honduras, na faixa 614-806 MHz, a atribuição ao serviço fixo é feita, a título primário (v. o n.º **425**), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

693 Certas frequências compreendidas na faixa 620-790 Mhz podem ser consignadas a estações de televisão de modulação de frequência do serviço de radiodifusão por satélite, sob reserva de acordo entre as administrações interessadas e aquelas cujos serviços, funcionando em conformidades com o presente quadro, sejam susceptíveis de ser afectados (v. as Resoluções n.ºs 33 e 507). Tais estações não deverão produzir uma densidade de fluxo de potência superior a — 129 dB (W/m^2) para os ângulos de chegada inferiores a 20° (v. a Recomendação n.º 705) no interior dos territórios dos outros países sem o consentimento das administrações destes.

694 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 645-862 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica.

695 *Atribuição de substituição:* em Espanha e em França a faixa 790-830 MHz é atribuída ao serviço de radiodifusão a título primário.

696 *Atribuição de substituição:* na Grécia, na Itália, em Marrocos e na Tunísia a faixa 790-838 MHz é atribuída ao serviço de radiodifusão a título primário.

697 *Atribuição adicional:* na República Federal da Alemanha, Dinamarca, Finlândia, Israel, Listenstaina, Noruega, Países Baixos, Suécia, Suíça e Jugoslávia a faixa 790-830 MHz e, nestes mesmos países, bem como em Espanha e em França, a faixa 830-862 MHz são atribuídas adicionalmente, a título primário, ao serviço móvel, excepto móvel aeronáutico. Contudo, as estações do serviço móvel dos países mencionados para cada faixa indicada na presente nota não deverão causar interferência prejudicial às estações dos serviços que trabalham em conformidades com o quadro e pertencem a países que não sejam os mencionados para essa mesma faixa nem pedir para serem protegidas em relação a estas.

698 *Atribuição adicional:* na Áustria a faixa 790-862 MHz é atribuída adicionalmente, a título secundário, ao serviço móvel, excepto móvel aeronáutico.

699 *Atribuição adicional:* na Noruega e na Suécia as faixas 806-890 MHz e 942-960 MHz são atribuídas adicionalmente, a título primário, ao serviço móvel por satélite, excepto móvel aeronáutico por satélite. Este serviço deverá trabalhar no interior das fronteiras nacionais, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14. Este serviço não deverá causar interferência prejudicial aos serviços que trabalham em conformidade com o quadro.

700 *Atribuição adicional:* na Região 2 a faixa 806-890 MHz é atribuída adicionalmente, a título primário, ao serviço móvel por satélite, excepto móvel aeronáutico por satélite. Este serviço deverá funcionar no interior das fronteiras nacionais, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

701 *Atribuição adicional:* na Região 3 as faixas 806-890 MHz e 942-960 MHz são atribuídas adicionalmente, a título primário, ao serviço móvel por satélite, excepto móvel aeronáutico por satélite. Este serviço deverá funcionar no interior das fronteiras nacionais, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14. Este serviço não deverá causar interferência prejudicial aos serviços que trabalham em conformidade com o quadro.

702 *Atribuição de substituição:* na Itália a faixa 838-854 MHz é atribuída, a título primário, ao serviço de radiodifusão, a partir de 1 de Janeiro de 1995.

703 Na Região 1, na faixa 862-960 MHz, as estações do serviço de radiodifusão devem funcionar unicamente na zona africana de radiodifusão (v. os n.os 400 a 403), excluindo desta a Argélia, o Egipto, a Líbia e Marrocos. Esse funcionamento deverá estar em conformidade com os Actos Finais da Conferência Africana de Radiodifusão em Ondas Métricas e Decimétricas (Genebra, 1963).

704 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 862-960 MHz é atribuída adicionalmente, a título permitido, ao serviço de radionavegação aeronáutica, até 1 de Janeiro de 1998. Até essa data o serviço de radionavegação aeronáutica pode utilizar a faixa sob reserva de acordo obtido em conformidade com as disposições do artigo 14. Depois dessa data o serviço de radionavegação aeronáutica pode continuar a funcionar a título secundário.

MHz

890-960

Atribuição aos serviços		
Região 1	Região 2	Região 3
890-942 FIXO MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO 703 *Radiolocalização* 704	**890-902** FIXO MÓVEL, excepto móvel aeronáutico *Radiolocalização* 705	**890-942** FIXO MÓVEL RADIODIFUSÃO *Radiolocalização* 706
	902-928 FIXO *Amador* *Móvel*, excepto móvel aeronáutico *Radiolocalização* 705 707	
	928-942 FIXO MÓVEL, excepto móvel aeronáutico *Radiolocalização* 705	
942-960 FIXO MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO 703 699 704	**942-960** FIXO *Móvel* 708	**942-960** FIXO MÓVEL RADIODIFUSÃO 701

705 *Categoria de serviço diferente:* nos Estados Unidos a atribuição da faixa 890-942 MHz ao serviço de radiolocalização é feita, a título primário (v. o n.º 425), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

706 *Categoria de serviço diferente:* na Austrália a atribuição da faixa 890-942 MHz ao serviço de radiolocalização é feita a título primário (v. o n.º 425).

707 Na Região 2 a faixa 902-928 MHz (frequência central 915 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação que funcionam nesta faixa devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que trabalham nesta faixa estão sujeitos às disposições do n.º 1815.

708 *Categoria de serviço diferente:* nos Estados Unidos a atribuição das faixas 942-947 MHz e 952-960 MHz ao serviço móvel é feita, a título primário (v. o n.º 425), sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

MHz

960-1215

Atribuição aos serviços		
Região 1	Região 2	Região 3
960-1215 RADIONAVEGAÇÃO AERONÁUTICA 709		

709 A faixa 960-1215 MHz é reservada, no mundo inteiro, para a utilização e desenvolvimento de ajudas electrónicas à navegação aeronáutica instaladas a bordo de aeronaves, bem como às instalações no solo que lhes estão directamente associadas.

MHz

1215-1240

Atribuição aos serviços		
Região 1	Região 2	Região 3
1215-1240	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO POR SATÉLITE (espaço para Terra) 710 711 712 713	

710 A faixa 1215-1260 MHz pode ser utilizada pelo serviço de radionavegação por satélite, com a condição de que não cause interferência prejudicial ao serviço de radionavegação autorizado ao abrigo do n.º 712.

711 *Atribuição adicional:* no Afeganistão, Angola, Arábia Saudita, Bahrein, Bangladesh, Camarões, China, Emirados Árabes Unidos, Etiópia, Guiné, Guiana, Índia, Indonésia, Irão, Iraque, Israel, Japão, Jordânia, Koweit, Líbano, Líbia, Malawi, Marrocos, Moçambique, Nepal, Nigéria, Omã, Paquistão, Filipinas, Qatar, Síria, Somália, Sri Lanka, Chade, Tailândia, Togo e Iémene (RDP do) a faixa 1215-1300 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

712 *Atribuição adicional:* na Argélia, República Federal da Alemanha, Áustria, Bahrein, Bélgica, Benin, Burundi, Camarões, China, Dinamarca, Emirados Árabes Unidos, França, Grécia, Índia, Irão, Iraque, Quénia, Listentaina, Luxemburgo, Mali, Mauritânia, Noruega, Omã, Paquistão, Países Baixos, Portugal, Qatar, Senegal, Somália, Sudão, Sri-Lanka, Suécia, Suíça, Tanzânia, Turquia e Jugoslávia a faixa 1215-1300 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação.

713 Nas faixas 1215-1300 MHz, 3100-3300 MHz, 5250-5350 MHz, 8550-8650 MHz, 9500-9800 MHz e 13,4-14 GHz as estações de radiolocalização instaladas a bordo de engenhos espaciais podem também ser utilizadas, a título secundário, pelos serviços de pesquisa espacial e de exploração da Terra por satélite.

MHz

1240-1300

Atribuição aos serviços		
Região 1	Região 2	Região 3
1240-1260	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO POR SATÉLITE (espaço para Terra) 710 *Amador* 711 712 713 714	
1260-1300	RADIOLOCALIZAÇÃO *Amador* 664 711 712 713 714	

714 *Atribuição adicional:* no Canadá e nos Estados Unidos as faixas 1240-1300 MHz e 1350-1370 MHz são atribuídas adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

MHz

1300-1350

Atribuição aos serviços		
Região 1	Região 2	Região 3
1300-1350	RADIONAVEGAÇÃO AERONÁUTICA 717 *Radiolocalização* 715 716 718	

715 *Atribuição adicional:* na Indonésia a faixa 1300-1350 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

716 *Atribuição de substituição:* na Irlanda e no Reino Unido a faixa 1300-1350 MHz é atribuída ao serviço de radiolocalização a título primário.

717 A utilização das faixas 1300-1350 MHz, 2700-2900 MHz e 9000-9200 MHz pelo serviço de radionavegação aeronáutica é limitada aos radares no solo e aos equipamentos de resposta aerotransportados que lhes estão associados e que emitem apenas em frequências destas faixas, e unicamente quando accionadas pelos radares funcionando na mesma faixa.

718 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas, dentro das possibilidades práticas, para proteger contra interferências prejudiciais as observações sobre as riscas do espectro feitas pelo serviço de radioastronomia na faixa 1330-1400 MHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} 343 a 344), bem como o artigo 36).

MHz

1350-1427

Atribuição aos serviços		
Região 1	Região 2	Região 3
1350-1400	**1350-1400**	
FIXO	RADIOLOCALIZAÇÃO	
MÓVEL		
RADIOLOCALIZAÇÃO		
718 719 720	714 718 720	
1400-1427	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva)	
	RADIOASTRONOMIA	
	PESQUISA ESPACIAL (passiva)	
	721 722	

719 Na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS as instalações existentes do serviço de radionavegação podem continuar a funcionar na faixa 1350-1400 MHz.

720 As faixas 1370-1400 MHz, 2640-2655 MHz, 4950-4990 MHz e 15,2-13,35 GHz são também atribuídas, a título secundário, aos serviços de pesquisa espacial (passiva) e de exploração da Terra por satélite (passiva).

721 São proibidas todas as emissões na faixa 1400-1427 MHz.

722 Nas faixas 1400-1727 MHz, 101-120 GHz e 197-220 GHz certos países procedem a pesquisas passivas no quadro de um programa de pesquisa de emissões intencionais de origem extraterrestre.

MHz

1427-1525

Atribuição aos serviços		
Região 1	Região 2	Região 3
1427-1429	EXPLORAÇÃO ESPACIAL (Terra para espaço)	
	FIXO	
	MÓVEL, excepto móvel aeronáutico	
	722	
1429-1525	**1429-1525**	
FIXO	FIXO	
MÓVEL, excepto móvel aeronáutico	MÓVEL 723	
722	722	

723 Na Região 2, na Austrália e na Papuásia-Nova Guiné a utilização da faixa 1435-1535 MHz pelo serviço móvel aeronáutico para a telemedida beneficia de prioridade em relação às outras utilizações do serviço móvel.

MHz

1525-1530

Atribuição aos serviços		
Região 1	Região 2	Região 3
1525-1530	**1525-1530**	**1525-1530**
EXPLORAÇÃO ESPACIAL (espaço para Terra)	EXPLORAÇÃO ESPACIAL (espaço para Terra)	EXPLORAÇÃO ESPACIAL (espaço para Terra)

Atribuição aos serviços		
Região 1	Região 2	Região 3
FIXO *Exploração da Terra por satélite* *Móvel*, excepto móvel aeronáutico 724 722 725	*Exploração da Terra por satélite* *Fixo* *Móvel* 723 722	FIXO *Exploração da Terra por satélite* *Móvel* 723 724 722

724 *Categoria de serviço diferente:* no Afeganistão, Arábia Saudita, Bahrein, Camarões, Egipto, Emirados Árabes Unidos, França, Hungria, Irão, Iraque, Israel, Koweit, Líbano, Marrocos, Omã, Polónia, Qatar, Síria, República Democrática Alemã, Roménia, Checoslováquia, URSS, Iémene (RDP do) e Jugoslávia, na faixa 1525-1530 MHz, a atribuição ao serviço móvel, excepto móvel aeronáutico, é feita a título primário (v. o n.º **425**).

725 *Atribuição adicional:* na URSS a faixa 1525-1530 MHz é atribuída adicionalmente, a título primário, ao serviço móvel aeronáutico.

MHz

1530-1535

Atribuição aos serviços		
Região 1	Região 2	Região 3
1530-1535 EXPLORAÇÃO ESPACIAL (espaço para Terra) MÓVEL MARÍTIMO POR SATÉLITE (espaço para Terra) *Exploração da Terra por satélite* *Fixo* *Móvel*, excepto móvel aeronáutico 722 726	**1530-1535** EXPLORAÇÃO ESPACIAL (espaço para Terra) MÓVEL MARÍTIMO POR SATÉLITE (espaço para Terra) *Exploração da Terra por satélite* *Fixo* *Móvel* 723 722 726	

726 A atribuição ao serviço móvel marítimo por satélite na faixa 1530-1535 MHz será efectiva a partir de 1 de Janeiro de 1990. Até essa data a atribuição ao serviço fixo será feita a título primário nas Regiões 1 e 3.

MHz

1535-1559

Atribuição aos serviços		
Região 1	Região 2	Região 3
1535-1544	MÓVEL MARÍTIMO POR SATÉLITE (espaço para Terra) 722 727	
1544-1545	MÓVEL POR SATÉLITE (espaço para Terra) 722 727 728	
1545-1559	MÓVEL AERONÁUTICO POR SATÉLITE (R) (espaço para Terra) 722 727 729 730	

727 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bangladesh, Congo, Egipto, Emirados Árabes Unidos, Etiópia, Irão, Iraque, Israel, Jordânia, Koweit, Líbano, Malta, Marrocos, Níger, Omã, Paquistão, Qatar, Sudão, Sri Lanka, Síria, Somália, Chade, Tailândia, Togo, Iémene (RDP do) e Zâmbia as faixas 1540-1645,5 MHz e 1646,5-1660 MHz são atribuídas adicionalmente, a título secundário, ao serviço fixo.

728 A utilização das faixas 1544-1545 MHz (espaço para Terra) e 1645,5-1646,5 MHz (Terra para espaço) pelo serviço móvel por satélite está limitada às emissões de perigo e de segurança.

729 Na faixa 1545-1559 MHz as transmissões directas de estações aeronáuticas de Terra para estações de aeronave ou entre estações de aeronave do serviço móvel aeronáutico (R) são também autorizadas desde que sirvam para ampliar ou completar as ligações estabelecidas de estações de satélite para estações de aeronave.

730 *Atribuição adicional:* na República Federal da Alemanha, Áustria, Bulgária, Camarões, Guiné, Hungria, Indonésia, Líbia, Mali, Mongólia, Nigéria, Polónia, República Democrática Alemã, Roménia, Senegal, Checoslováquia e URSS as faixas 1550-1645,5 MHz e 1645,5-1660 MHz são atribuídas adicionalmente, a título primário, ao serviço fixo.

MHz

1559-1626,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
1559-1610	RADIONAVEGAÇÃO AERONÁUTICA RADIONAVEGAÇÃO POR SATÉLITE (espaço para Terra) 722 727 730 731	
1610-1626,5	RADIONAVEGAÇÃO AERONÁUTICA 722 727 730 732 733 734	

731 *Atribuição de substituição:* na Suécia a faixa 1590-1610 MHz é atribuída ao serviço de radionavegação aeronáutica a título primário.

732 A faixa 1610-1626,5 MHz é reservada, no mundo inteiro, para a utilização e o desenvolvimento de ajudas electrónicas à navegação aeronáutica instaladas a bordo de aeronaves, bem como às instalações no solo ou a bordo de satélites que lhes estão directamente associadas. Esta utilização de satélites deve ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14.

733 As faixas 1610-1626,5 MHz, 5000-5250 MHz e 15,4-15,7 GHz são também atribuídas, a título primário, ao serviço móvel aeronáutico por satélite (R). Esta utilização deverá ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14.

734 A faixa 1610,6-1613,8 MHz é atribuída, a título secundário, ao serviço de radioastronomia para as observações sobre as riscas do espectro. Solicita-se instantemente às administrações que, ao consignarem frequências às estações de outros serviços a que esta faixa está atribuída, tomem as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os **343** e **344**, bem como o artigo 36).

MHz

1626,5-1660,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
1626,5-1645,5	MÓVEL MARÍTIMO POR SATÉLITE (Terra para espaço) 722 727 730	
1645,5-1646,5	MÓVEL POR SATÉLITE (Terra para espaço) 722 728	
1646,5-1660	MÓVEL AERONÁUTICO POR SATÉLITE (R) (Terra para espaço) 722 727 730 735	
1660-1660,5	MÓVEL AERONÁUTICO POR SATÉLITE (Terra para espaço) RADIOASTRONOMIA 722 735 736	

735 Na faixa 1646,5-1660,5 MHz, as transmissões directas de estações de aeronave do serviço móvel aeronáutico (R) para estações aeronáuticas de Terra ou entre estações de aeronave são também autorizadas desde que sirvam para ampliar ou completar as ligações estabelecidas de estações de aeronave para estações de satélite.

736 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 1660-1670 MHz está atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra

interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fonte de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

MHz

1660,5-1670

Atribuição aos serviços		
Região 1	Região 2	Região 3
1660,5-1668,4	RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) *Fixo* *Móvel*, excepto móvel aeronáutico 722 736 737 738 739	
1668,4-1670	AUXILIARES DA METEOROLOGIA FIXO MÓVEL, excepto móvel aeronáutico RADIOASTRONOMIA 722 736	

737 *Categoria de serviço diferente:* no Afeganistão, Arábia Saudita, Bahrein, Benin, Bulgária, Camarões, República Centro-Africana, Congo, Cuba, Egipto, Emirados Árabes Unidos, Etiópia, Hungria, Índia, Indonésia, Irão, Israel, Quénia, Líbano, Malásia, Mongólia, Omã, Uganda, Paquistão, Polónia, Qatar, Síria, República Democrática Alemã, Singapura, Somália, Sri Lanka, Chade, Tailândia, Checoslováquia, Tunísia, URSS, Iémene (RA), Iémene (RDP do) e Jugoslávia, na faixa 1660,5-1668,4 MHz, a atribuição ao serviço fixo e ao serviço móvel, excepto móvel aeronáutico, é feita, a título primário, até 1 de Janeiro de 1990 (v. o n.º **425**).

738 *Atribuição adicional:* no Bangladesh, Índia, Indonésia, Nigéria, Paquistão, Sri Lanka e Tailândia a faixa 1660,5-1668,4 MHz é atribuída adicionalmente, a título secundário, aos serviços auxiliares de meteorologia.

739 Devido aos êxitos obtidos pelos radioastrónomos na observação de duas riscas do espectro do oxidrilo na vizinhança das frequências 1665 MHz e 1667 MHz, solicita-se instantemente às administrações que, dentro das possibilidades práticas, dêem toda a protecção na faixa 1660,5-1668,4 MHz, com vista a futuras pesquisas de radioastrononia, particularmente eliminando, logo que possível, as emissões ar-solo do serviço dos auxiliares da meteorologia feitas na faixa 1664,4-1668,4 MHz.

MHz

1670-1690

Atribuição aos serviços		
Região 1	Região 2	Região 3
1670-1690	AUXILIARES DA METEOROLGIA FIXO METEROLOGIA POR SATÉLITE (espaço para Terra) MÓVEL, excepto móvel aeronáutico 722	

MHz

1690-1700

Atribuição aos serviços		
Região 1	Região 2	Região 3
1690-1700 AUXILIARES DA METEOROLOGIA METEREOLOGIA POR SATÉLITE (espaço para Terra) *Fixo* *Móvel*, excepto móvel aeronáutico 671 722 741	**1690-1700** AUXILIARES DA METEOROLGIA METEROLOGIA POR SATÉLITE (espaço para Terra) 671 722 740 742	

740 *Atribuição adicional:* no Afeganistão, Costa Rica, Cuba, Índia, Irão, Malásia, Paquistão, Singapura, Sri Lanka e Tailândia a faixa 1690-1700 MHz é atribuída adicionalmente, a título primário, ao serviço fixo e ao serviço móvel, excepto móvel aeronáutico.

741 *Categoria de serviço diferente:* na Arábia Saudita, Áustria, Bahrein, Bulgária, Congo, Egipto, Emirados Árabes Unidos, Etiópia, Guiné, Hungria, Iraque, Israel, Jordânia, Quénia, Koweit, Líbano, Mauritânia, Mongólia, Omã, Polónia, Qatar, Síria, República Democrática Alemã, Roménia, Somália, Tanzânia, Checoslováquia, URSS, Iémene (RA), Iémene (RDP do) e Jugoslávia, na faixa 1690-1700 MHz, a atribuição ao serviço fixo e ao serviço móvel, excepto móvel aeronáutico, é feita a título primário (v. o n.º **425**).

742 *Atribuição adicional:* na Austrália e na Indonésia a faixa 1690-1700 MHz é atribuída adicionalmente, a título secundário, ao serviço móvel, excepto móvel aeronáutico.

MHz

1700-1710

Atribuição aos serviços		
Região 1	Região 2	Região 3
1690-1710 FIXO METEREOLOGIA POR SATÉLITE (espaço para Terra) *Móvel*, excepto móvel aeronáutico 671 722	**1700-1710** FIXO METEROLOGIA POR SATÉLITE (espaço para Terra) MÓVEL, excepto móvel aeronáutico 671 722 743	

743 *Atribuição adicional:* na Índia, na Indonésia, no Japão e na Tailândia a faixa 1700-1710 MHz é atribuída adicionalmente, a título primário, ao serviço de pesquisa espacial (espaço para Terra).

MHz

1710-2290

Atribuição aos serviços		
Região 1	Região 2	Região 3
1710-2290 FIXO *Móvel* 722 744 746 747 748 750	**1710-2290** FIXO MÓVEL 722 744 745 746 747 748 749 750	

744 A faixa 1718,8-1722,2 MHz é também atribuída, a título secundário, ao serviço de radioastronomia para as observações sobre as riscas do espectro. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa é atribuída, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra as interferências prejudiciais.

As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.ºs **343** a **344** e o artigo 36).

745 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, e no que respeita, em particular, aos sistemas de difusão troposférica, a faixa 1750-1850 MHz pode também ser utilizada pelo serviço de exploração espacial (Terra para espaço) e pelo serviço de pesquisa espacial (Terra para espaço) na Região 2, no Afeganistão, na Austrália, na Índia, na Indonésia, no Japão e na Tailândia.

746 *Atribuição adicional:* na Bulgária, Cuba, Hungria, Mali, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 1770-1790 MHz é atribuída adicionalmente, a título primário, ao serviço de meteorologia por satélite, sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14.

747 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2025-2110 MHz pode também ser utilizada para emissões Terra para espaço e espaço para espaço nos serviços de pesquisa espacial, de exploração espacial e de exploração da Terra por satélite. Os serviços que utilizem emissões espaço para espaço devem trabalhar em conformidade com as disposições dos n.ºs **2557** a **2560** e não deverão causar interferência aos outros serviços espaciais.

748 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2110-2120 MHz pode também ser utilizada para as emissões Terra para espaço do serviço de pesquisa espacial (espaço longínquo).

749 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2110-2120 MHz pode também ser utilizada no Japão pelos serviços de pesquisa espacial (Terra para espaço) e de exploração espacial (Terra para espaço) até 31 de Dezembro de 1990.

750 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2200-2290 MHz pode também ser utilizada para as emissões espaço para Terra e espaço para espaço nos serviços de pesquisa espacial, de exploração espacial e de exploração da Terra por satélite. Estes serviços deverão trabalhar em conformidade com as disposições dos n.ºs **2557** a **2560**, não devendo as emissões espaço para espaço causar interferência prejudicial aos outros serviços espaciais.

MHz

2290-2450

Atribuição aos serviços		
Região 1	Região 2	Região 3
2290-2300 FIXO PESQUISA ESPACIAL (espaço longínquo) (espaço para Terra) *Móvel*, excepto móvel aeronáutico	**2290-2300** FIXO MÓVEL, excepto móvel aeronáutico PESQUISA ESPACIAL (espaço longínquo) (espaço para Terra)	
2300-2450 FIXO *Amador* *Móvel* *Radiolocalização* 664 752	**2300-2450** FIXO MÓVEL RADIOLOCALIZAÇÃO *Amador* 664 751 752	

751 Na Austrália, nos Estados Unidos e na Papuásia-Nova Guiné a utilização da faixa 2310-2390 MHz pelo serviço móvel aeronáutico para a telemedida beneficia de prioridade em relação às outras utilizações do serviço móvel.

752 A faixa 2400-2500 MHz (frequência central 2450 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação que funcionam nesta faixa devem aceitar as interferências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que funcionam nesta faixa estão sujeitos às disposições do n.º 1815.

MHz

2450-2500

Atribuição aos serviços		
Região 1	Região 2	Região 3
2450-2500 FIXO MÓVEL *Radiolocalização* 752 753	**2450-2500** FIXO MÓVEL RADIOLOCALIZAÇÃO 752	

753 Em França a faixa 2450-2550 MHz é atribuída, a título primário, ao serviço de radiolocalização e, a título secundário, aos serviços fixo e móvel (v. os n.os 424 e 425).

Esta utilização é objecto de um acordo com as administrações cujos serviços que funcionem ou estejam projectados para funcionar em conformidade com o presente quadro sejam susceptíveis de ser afectados.

MHz

2500-2655

Atribuição aos serviços		
Região 1	Região 2	Região 3
2500-2655 FIXO 762 763 764 MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO POR SATÉLITE 757 760 720 753 756 758 759	**2500-2655** FIXO 762 764 FIXO POR SATÉLITE (espaço para Terra) 761 MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO POR SATÉLITE 757 760 720 755	**2500-2535** FIXO 762 764 FIXO POR SATÉLITE (espaço para Terra) 761 MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO POR SATÉLITE 757 760 754 **2535-2655** FIXO 762 764 MÓVEL, excepto móvel aeronáutico RADIODIFUSÃO POR SATÉLITE 757 760 720

754 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2500-2535 MHz pode também ser utilizada na Região 3 pelo serviço móvel por satélite (espaço para Terra), excepto móvel aeronáutico por satélite, para a exploração limitada ao interior das fronteiras nacionais.

755 *Atribuição adicional:* no Canadá a faixa 2500-2550 MHz é atribuída adicionalmente, a título primário, ao serviço de radiolocalização.

756 *Atribuição adicional:* no Reino Unido a faixa 2500-2600 MHz é atribuída adicionalmente, a título secundário, ao serviço de radiolocalização.

757 A utilização da faixa 2500-2690 MHz pelo serviço de radiodifusão por satélite é limitada aos sistemas nacionais e regionais para a recepção comunitária. Esta utilização deverá ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14. A densidade do fluxo de potência à superfície da Terra não deverá ultrapassar os valores especificados nos n.os 2561 a 2564).

758 *Atribuição de substituição:* na República Federal da Alemanha e na Grécia a faixa 2500-2690 MHz é atribuída ao serviço fixo a título primário.

759 *Atribuição de substituição:* na Bulgária e na URSS a faixa 2500-2690 MHz é atribuída, a título primário, ao serviço fixo e ao serviço móvel, excepto móvel aeronáutico.

760 Solicita-se instantemente às administrações que, na concepção de sistemas de radiodifusão por satélite nas faixas situadas entre 2500 MHz e 2690 MHz, tomem todas as medidas necessárias para proteger o serviço de radioastronomia na faixa 2690-2700 MHz.

761 A utilização da faixa 2500-2690 MHz na Região 2 e das faixas 2500-2535 MHz e 2655-2690 MHz na Região 3 pelo serviço fixo por satélite é limitada aos sistemas nacionais e regionais. Esta utilização deverá ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14, tendo particularmente em conta o serviço de radiodifusão por satélite na Região 1. No sentido espaço para Terra, a densidade de fluxo de potência à superfície da Terra não deve ultrapassar os valores especificados nos n.os 2561 a 2564).

762 As administrações devem fazer todos os esforços, dentro das possibilidades práticas, para evitar o desenvolvimento de novos sistemas de difusão troposférica na faixa 2500-2690 MHz.

763 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2500-2690 MHz pode ser utilizada pelos sistemas de difusão troposférica na Região 1.

764 Na planificação de novos feixes hertzianos que utilizem a difusão troposférica na faixa 2500-2690 MHz serão tomadas todas as medidas possíveis para evitar que as antenas sejam dirigidas na direcção da órbita dos satélites geostacionários.

MHz

2655-2690

Atribuição aos serviços

Região 1	Região 2	Região 3
2655-2690	**2655-2690**	**2655-2690**
FIXO 762 763 764	FIXO 762 764	FIXO 762 764
MÓVEL, excepto móvel aeronáutico	FIXO POR SATÉLITE (Terra para espaço) (espaço para Terra) 761	FIXO POR SATÉLITE (Terra para espaço) 761
RADIODIFUSÃO POR SATÉLITE 757 760	MÓVEL, excepto móvel aeronáutico	MÓVEL, excepto móvel aeronáutico
Exploração da Terra por satélite (passiva)	RADIODIFUSÃO POR SATÉLITE 757 760	RADIODIFUSÃO POR SATÉLITE 757 760
Radioastronomia	*Exploração da Terra por satélite* (passiva)	*Exploração da Terra por satélite* (passiva)
Pesquisa espacial (passiva)	*Radioastronomia*	*Radioastronomia*
	Pesquisa espacial (passiva)	*Pesquisa espacial* (passiva)
758 759 765	765	765 766

765 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais na faixa 2655-2690 MHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os 343 e 344, bem como o artigo 36).

766 Sob reserva de acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 2655-2690 MHz pode também ser utilizada na Região 3 pelo serviço móvel por satélite (Terra para espaço), excepto móvel aeronáutico por satélite, para uma exploração limitada ao interior das fronteiras nacionais.

MHz

2690-2700

Atribuição aos serviços

Região 1	Região 2	Região 3
2690-2700	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva)	
	RADIOASTRONOMIA	
	PESQUISA ESPACIAL (passiva)	
	767 768 769	

767 *Atribuição adicional:* na República Federal da Alemanha e na Áustria a faixa 2690-2695 MHz é atribuída adicionalmente, a título primário, ao serviço fixo. A utilização desta faixa é limitada aos equipamentos em funcionamento em 1 de Janeiro de 1985.

768 São proibidas todas as emissões na faixa 2690-2700 MHz, com excepção das previstas ao abrigo dos n.os 767 e 769.

769 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bulgária, Camarões, República Centro-Africana, Congo, Costa do Marfim, Cuba, Egipto, Emirados Árabes Unidos, Etiópia, Gabão, Guiné, Guiné-Bissau, Hungria, Irão, Iraque, Israel, Líbano, Malásia, Malawi, Mali, Marrocos, Mauritânia, Mongólia, Nigéria, Omã, Paquistão, Filipinas, Polónia, Qatar, Síria, República Democrática Alemã, Roménia, Singapura, Somália, Sri Lanka, Checoslováquia, Tailândia, Tunísia, URSS, Iémene (RA), Iémene (RDP do), Jugoslávia, Zaire e Zâmbia a faixa 2690-2700 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico. A utilização desta faixa é limitada aos equipamentos em funcionamento em 1 de Janeiro de 1985.

MHz

2700-3100

Atribuição aos serviços		
Região 1	Região 2	Região 3
2700-2900	RADIONAVEGAÇÃO AERONÁUTICA 717 *Radiolocalização* 770 771	
2900-3100	RADIONAVEGAÇÃO 773 774 775 *Radiolocalização* 772	

770 Os radares no solo utilizados na faixa 2700-2900 MHz para as necessidades da meteorologia são autorizados a funcionar em base de igualdade com as estações do serviço de radionavegação aeronáutica.

771 *Atribuição adicional:* no Canadá a faixa 2850-2900 MHz é também atribuída, a título primário, ao serviço de radionavegação marítima para os radares costeiros.

772 Nas faixas 2900-3100 MHz, 5470-5650 MHz e 9200-9300 MHz a utilização de sistemas com equipamentos de resposta a bordo de navios é limitada às subfaixas 2930-2950 MHz, 5470-5480 MHz e 9280-9300 MHz.

773 A utilização da faixa 2900-3100 MHz pelo serviço de radionavegação aeronáutica é limitada aos radares no solo.

774 Nas faixas 2900-2920 MHz e 9300-9320 MHz, no serviço de radionavegação marítima, só é autorizada a utilização dos radares de bordo existentes à data de 1 de Janeiro de 1976.

775 Nas faixas 2920-3100 MHz e 9320-9500 MHz, no serviço de radionavegação marítima, não é autorizada a utilização, em terra firme ou no mar, de balizas-radar *(racons)* de frequência fixa.

MHz

3100-3300

Atribuição aos serviços		
Região 1	Região 2	Região 3
3100-3300	RADIOLOCALIZAÇÃO 713 776 777 778	

776 Na faixa 3100-300 MHz as balizas-radar *(racons)* e os radares a bordo de navios mercantes são autorizados a funcionar no interior da faixa 3100-3266 MHz.

777 *Atribuição adicional:* na Bulgária, Canadá, Cuba, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 3100-3300 MHz é também atribuída, a título primário, ao serviço de radionavegação.

778 Solicita-se instantemente às administrações que, ao consignarem frequências a estações dos outros serviços, tomem todas as medidas, dentro das possibilidades práticas, para proteger as observações das riscas do espectro pelo serviço de radioastronomia contra interferências prejudiciais nas faixas 3260-3267 MHz, 3332-3339 MHz, 3345,8-3352,5 MHz e 4825-4835 MHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os 343 e 344, bem como o artigo 36).

MHz

3300-3400

Atribuição aos serviços		
Região 1	Região 2	Região 3
3300-3400 RADIOLOCALIZAÇÃO 778 779 780	**3300-3400** RADIOLOCALIZAÇÃO *Amador* *Fixo* *Móvel* 778 780	**3300-3400** RADIOLOCALIZAÇÃO *Amador* 778 779

779 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bangladesh, China, Congo, Emirados Árabes Unidos, Índia, Indonésia, Irão, Iraque, Israel, Japão, Koweit, Líbano, Malásia, Omã, Paquistão, Qatar, Síria, Singapura, Sri Lanka e Tailândia a faixa 3300-3400 MHz é também atribuída, a título primário, aos serviços fixo e móvel. Os países ribeirinhos do Mediterrâneo não podem pretender que os seus serviços fixo e móvel sejam protegidos em relação ao serviço de radiolocalização.

780 *Atribuição adicional:* na Bulgária, Cuba, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 3300-3400 MHz é também atribuída, a título primário, ao serviço de radionavegação.

MHz

3400-4200

Atribuição aos serviços		
Região 1	Região 2	Região 3
3400-3600 FIXO FIXO POR SATÉLITE (espaço para Terra) *Móvel* *Radiolocalização* 781 782 785	**3400-3500** FIXO FIXO POR SATÉLITE (espaço para Terra) *Amador* *Móvel* *Radiolocalização* 784 664 783	
	3500-3700 FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL, excepto móvel aeronáutico *Radiolocalização* 784 786	
3600-4200 FIXO FIXO POR SATÉLITE (espaço para Terra) *Móvel*	**3700-4200** FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL, excepto móvel aeronáutico 787	

781 *Atribuição adicional:* na República Federal da Alemanha, em Israel, na Nigéria e no Reino Unido a faixa 3400-3475 MHz é atribuída adicionalmente, a título secundário, ao serviço de amador.

782 *Categoria de serviço diferente:* na Áustria, na faixa 3400-3500 MHz, a atribuição ao serviço de radiolocalização é feita a título primário (v. o n.º **425**), sob reserva do acordo das administrações da Hungria, Itália, República Democrática Alemã, Checoslováquia e Jugoslávia. Esta utilização é limitada às estações no solo. Todavia, pede-se instantemente à administração austríaca que cesse essa exploração o mais tardar em 1985. Depois de 1985 ela deverá tomar todas as medidas, dentro das possibilidades práticas, para proteger o serviço fixo por satélite e não poderá ser imposta qualquer exigência de coordenação ao serviço fixo por satélite.

783 *Categoria de serviço diferente:* na Indonésia, no Japão, no Paquistão e na Tailândia a faixa 3400-3500 MHz é atribuída, a título primário, ao serviço móvel, excepto serviço móvel aeronáutico (v. o n.º **425**).

784 Nas Regiões 2 e 3, na faixa 3400-3600 MHz, a atribuição ao serviço de radiolocalização é feita a título primário. No entanto, solicita-se instantemente a todas as administrações que exploram sistemas de radiolocalização nesta faixa que cessem essa exploração antes de 1985. Daí em diante, as administrações deverão tomar todas as medidas, dentro das possibilidades práticas, para proteger o serviço fixo por satélite e proceder de modo que não sejam impostas necessidades de coordenação ao serviço fixo por satélite.

785 Na Dinamarca, na Noruega e no Reino Unido, os serviços fixo, de radiolocalização e fixo por satélite são explorados em base de igualdade de direitos na faixa 3400-3600 MHz. No entanto, solicita-se instantemente às administrações dos países que exploram sistemas de radiolocalização nesta faixa que cessem essa exploração o mais tardar em 1985. Depois de 1985 as administrações deverão tomar todas as medidas, dentro das possibilidades práticas, para proteger o serviço fixo por satélite e não deverá ser imposta qualquer exigência de coordenação ao serviço fixo por satélite.

786 No Japão, na faixa 3620-3700 MHz, está excluído o serviço de radiolocalização.

787 *Atribuição adicional:* na Nova Zelândia a faixa 3700-3770 MHz é atribuída adicionalmente, a título secundário, ao serviço de radiolocalização.

MHz

4200-4400

Atribuição aos serviços		
Região 1	Região 2	Região 3
4200-4400	RADIONAVEGAÇÃO AERONÁUTICA 789 788 790 791	

788 *Atribuição adicional:* na República Federal da Alemanha, na Dinamarca, na Noruega e na Suécia a faixa 4200-42100 MHz é atribuída adicionalmente, a título secundário, ao serviço fixo.

789 A utilização da faixa 4200-4400 MHz pelo serviço de radionavegação aeronáutica é reservada exclusivamente aos radioaltímetros instalados a bordo de aeronaves, bem como aos equipamentos de resposta associados que se encontram instalados no solo. Contudo, a detecção passiva dos serviços de exploração da Terra por satélite e de pesquisa espacial pode ser autorizada nesta faixa, a título secundário (não lhe sendo assegurada qualquer protecção pelos radioaltímetros).

790 *Atribuição adicional:* na China, no Irão, na Líbia, nas Filipinas e no Sri Lanka a faixa 4200-4400 MHz é atribuída adicionalmente, a título secundário, ao serviço fixo.

791 O serviço de frequências padrão e de sinais horários por satélite pode ser autorizado a utilizar a frequência 4202 MHz para emissões no sentido espaço Terra e a frequência 6427 MHz para emissões no sentido Terra para espaço. Essas emissões devem estar contidas nos limites que se situam a ± 2 MHz destas frequências e devem ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14.

MHz

4400-4990

Atribuição aos serviços		
Região 1	Região 2	Região 3
4400-4500	FIXO MÓVEL	
4500-4800	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL 792	
4800-4990	FIXO MÓVEL 793 *Radioastronomia* 720 778 794	

792 *Atribuição de substituição:* na Bélgica, Noruega, Países Baixos e Reino Unido a faixa 4500-4800 MHz é atribuída, a título primário, aos serviços fixo e móvel. Tal utilização não deverá impor ao serviço fixo por satélite limites de densidade de fluxo de potência mais restritos do que os previstos no n.º 2566.

793 Nas faixas 4825-4835 MHz e 4950-4990 MHz a atribuição ao serviço móvel é limitada ao serviço móvel, excepto móvel aeronáutico.

794 *Categoria de serviço diferente:* na Argentina, na Austrália e no Canadá a atribuição das faixas 4825-4835 MHz e 4950-4990 MHz ao serviço de radioastronomia é feita a título primário (v. o n.º 425). Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que estas faixas estão atribuídas, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.ºs 343 e 344, bem como o artigo 36).

MHz

4990-5000

Atribuição aos serviços		
Região 1	Região 2	Região 3
4990-5000	FIXO MÓVEL, excepto móvel aeronáutico RADIOASTRONOMIA *Pesquisa espacial* (passiva) 795	

795 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que está atribuída a faixa 4990-5000 MHz, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra

interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastrononia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

MHz

5000-5470

Atribuição aos serviços		
Região 1	Região 2	Região 3
5000-5250	RADIONAVEGAÇÃO AERONÁUTICA 733 796 797	
5250-5255	RADIOLOCALIZAÇÃO *Pesquisa espacial* 713 798	
5255-5350	RADIOLOCALIZAÇÃO 713 798	
5350-5460	RADIONAVEGAÇÃO AERONÁUTICA 799 *Radiolocalização*	
5460-5470	RADIONAVEGAÇÃO 799 *Radiolocalização*	

796 A faixa 5000-5250 MHz é utilizável na exploração do sistema internacional normalizado (sistema de aterragem por hiperfrequências) para a aproximação e a aterragem de precisão. As necessidades deste sistema têm prioridade sobre as outras utilizações.

797 As faixas 5000-5250 MHz e 15,4-15,7 GHz são também atribuídas ao serviço fixo por satélite e ao serviço intersatélites para a ligação entre uma ou várias estações terrenas situadas em pontos fixos determinados da terra e estações espaciais, quando estes serviços são utilizados conjuntamente com o serviço de radionavegação aeronáutica e ou o serviço móvel aeronáutico (R). Esta utilização faz-se sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14.

798 *Atribuição adicional:* na Áustria, Bulgária, Hungria, Líbia, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 5250-5350 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação.

799 A utilização da faixa 5350-5470 MHz pelo serviço de radionavegação aeronáutica é limitada ao uso dos radares aerotransportados e das radiobalizas de bordo associadas.

MHz

5470-5650

Atribuição aos serviços		
Região 1	Região 2	Região 3
5470-5650	RADIONAVEGAÇÃO MARÍTIMA 772 *Radiolocalização* 800 801 802	

800 *Atribuição adicional:* no Afeganistão, Áustria, Bulgária, Hungria, Irão, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 5470-5650 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação aeronáutica.

801 *Atribuição adicional:* no Reino Unido a faixa 5470-5850 MHz é atribuída adicionalmente, a título secundário, ao serviço móvel terrestre. Devem ser aplicados na faixa 5725-5850 MHz os limites de potência indicados nos n.^{os} **2502, 2505, 2506** e **2507**.

802 Os radares no solo utilizados na faixa 5600-5650 MHz para as necessidades da meteorologia são autorizados a funcionar em base de igualdade com as estações do serviço de radionavegação marítima.

MHz

5650-5725

Atribuição aos serviços		
Região 1	Região 2	Região 3
5650-5725		
	RADIOLOCALIZAÇÃO	
	Amador	
	Pesquisa espacial (espaço longínquo)	
	664 801 803 804 805	

803 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bangladesh, Camarões, República Centro-Africana, China, Congo, República da Coreia, Egipto, Emirados Árabes Unidos, Gabão, Guiné, Índia, Indonésia, Irão, Iraque, Israel, Japão, Jordânia, Koweit, Líbano, Líbia, Madagáscar, Malásia, Malawi, Malta, Níger, Nigéria, Paquistão, Filipinas, Qatar, Síria, Singapura, Sri Lanka, Tanzânia, Chade, Tailândia e Iémene (RDP do) a faixa 5650-5850 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

804 *Categoria de serviço diferente:* na Bulgária, Cuba, Hungria, Mongólia, Polónia, República Democrática Alemã, Checoslováquia e URSS, na faixa 5670-5725 MHz, a atribuição ao serviço de pesquisa espacial é feita a título primário (v. o n.º 425).

805 *Atribuição adicional:* na Bulgária, Cuba, Hungria, Mongólia, Polónia, República Democrática Alemã, Checoslováquia e URSS a faixa 5670-5850 MHz é atribuída adicionalmente, a título primário, ao serviço fixo.

MHz

5725-5925

Atribuição aos serviços		
Região 1	Região 2	Região 3
5725-5850	**5725-5850**	
FIXO POR SATÉLITE (Terra para espaço)	RADIOLOCALIZAÇÃO	
RADIOLOCALIZAÇÃO	*Amador*	
Amador		
801 803 805 806 807 808	803 805 806 808	
5850-5925	**5850-5925**	**5850-5925**
FIXO	FIXO	FIXO
FIXO POR SATÉLITE (Terra para espaço)	FIXO POR SATÉLITE (Terra para espaço)	FIXO POR SATÉLITE (Terra para espaço)
MÓVEL	MÓVEL	MÓVEL
	Amador	*Radiolocalização*
	Radiolocalização	
806	806	806

806 A faixa 5725-5875 MHz (frequência central 5800 MHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação que funcionam nesta faixa devem aceitar as interferências prejudiciais que podem produzir-se em virtude daquelas aplicações. Os aparelhos ISM que funcionam nesta faixa estão sujeitos às disposições do n.º 1815.

807 *Atribuição adicional:* na República Federal da Alemanha e Camarões a faixa 5755-5850 MHz é atribuída adicionalmente, a um título primário, ao serviço fixo.

808 A faixa 5830-5850 MHz é também atribuída, a título secundário, ao serviço de amador por satélite (espaço para Terra).

MHz

5925-7250

Atribuição aos serviços		
Região 1	Região 2	Região 3
5925-7075		
	FIXO	
	FIXO POR SATÉLITE (Terra para espaço)	
	MÓVEL	
	791 809	

Atribuição aos serviços		
Região 1	Região 2	Região 3
7075-7250		
	FIXO	
	MÓVEL	
	809 810 811	

809 Na faixa 6425-7075 MHz são efectuadas medidas sobre os oceanos utilizando detectores passivos de hiperfrequências. Na faixa 7075-7250 MHz são efectuadas medidas utilizando detectores passivos de hiperfrequências. Convém que, ao planificarem a utilização futura desta faixa, as administrações não esqueçam as necessidades do serviço de exploração da Terra por satélite (passiva) e do serviço de pesquisa espacial (passiva).

810 Na Região 2, sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 7125-7155 MHz pode ser utilizada no serviço de exploração espacial para emissões no sentido Terra para espaço.

811 Sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 7145-7235 MHz pode ser utilizada no serviço de pesquisa espacial para as emissões no sentido Terra para espaço. A utilização da faixa 7145-7190 MHz é limitada ao espaço longínquo. Não deverá ser efectuada qualquer emissão para o espaço longínquo na faixa 7190-7235 MHz.

MHz

7250-7550

Atribuição aos serviços		
Região 1	Região 2	Região 3
7250-7300		
	FIXO	
	FIXO POR SATÉLITE (espaço para Terra)	
	MÓVEL	
	812	
7300-7450		
	FIXO	
	FIXO POR SATÉLITE (espaço para Terra)	
	MÓVEL, excepto móvel aeronáutico	
	812	
7450-7550		
	FIXO	
	FIXO POR SATÉLITE (espaço para Terra)	
	METEOROLOGIA POR SATÉLITE (espaço para Terra)	
	MÓVEL, excepto móvel aeronáutico	

812 As faixas 7250-7375 MHz (espaço para Terra) e 7990-8025 MHz (Terra para espaço) podem também ser utilizadas pelo serviço móvel por satélite. A utilização destas faixas por este serviço deverá ser objecto de um acordo obtido em conformidade com o procedimento previsto no artigo 14.

MHz

7550-8025

Atribuição aos serviços		
Região 1	Região 2	Região 3
7550-7750		
	FIXO	
	FIXO POR SATÉLITE (espaço para Terra)	
	MÓVEL, excepto móvel aeronáutico	

Atribuição aos serviços		
Região 1	Região 2	Região 3
7750-7900		
	FIXO	
	MÓVEL, excepto móvel aeronáutico	
7900-7975		
	FIXO	
	FIXO POR SATÉLITE (Terra para espaço)	
	MÓVEL	
	812	
7975-8025		
	FIXO	
	FIXO POR SATÉLITE (Terra para espaço)	
	MÓVEL	
	812	

MHz

8025-8175

Atribuição aos serviços		
Região 1	Região 2	Região 3
8025-8175	**8025-8175**	**8025-8175**
FIXO	EXPLORAÇÃO DA TERRA POR SATÉLITE (espaço para Terra)	FIXO
FIXO POR SATÉLITE (Terra para espaço)	FIXO	FIXO POR SATÉLITE (Terra para espaço)
MÓVEL	FIXO POR SATÉLITE (Terra para espaço)	MÓVEL
Exploração da Terra por satélite (espaço para Terra)	MÓVEL 814	*Exploração da Terra por satélite* (espaço para Terra)
813 815		813 815

813 Na faixa 8025-8400 MHz os limites de densidade de fluxo de potência no n.º **2570** aplicam-se nas Regiões 1 e 3 ao serviço de exploração da Terra por satélite.

814 Na Região 2 as estações de aeronave não estão autorizadas a emitir na faixa 8025-8400 MHz.

815 Sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 8025-8400 MHz pode ser utilizada, a título primário, pelo serviço de exploração da Terra por satélite (espaço para Terra) no Bangladesh, Benim, Camarões, China, República Centro-Africana, Costa do Marfim, Egipto, França, Guiné, Alto Volta, Índia, Irão, Israel, Itália, Japão, Quénia, Líbia, Mali, Níger, Paquistão, Senegal, Somália, Sudão, Suécia, Tanzânia, Zaire e Zâmbia.

MHz

8175-8400

Atribuição aos serviços		
Região 1	Região 2	Região 3
8175-8215	**8175-8215**	**8175-8215**
FIXO	EXPLORAÇÃO DA TERRA POR SATÉLITE (espaço para Terra)	FIXO
FIXO POR SATÉLITE (Terra para espaço)	FIXO	FIXO POR SATÉLITE (Terra para espaço)
METEOROLOGIA POR SATÉLITE (Terra para espaço)	FIXO POR SATÉLITE (Terra para espaço)	METEOROLOGIA POR SATÉLITE (Terra para espaço)
MÓVEL	METEOROLOGIA POR SATÉLITE (Terra para espaço)	MÓVEL
Exploração da Terra por satélite (espaço para Terra)	MÓVEL 814	*Exploração da Terra por satélite* (espaço para Terra)
813 815		813 815

Atribuição aos serviços		
Região 1	Região 2	Região 3
8215-8400	**8215-8400**	**8215-8400**
FIXO	EXPLORAÇÃO DA TERRA POR SATÉLITE (espaço para Terra)	FIXO
FIXO POR SATÉLITE (Terra para espaço)	FIXO	FIXO POR SATÉLITE (Terra para espaço)
MÓVEL	FIXO POR SATÉLITE (Terra para espaço)	MÓVEL
Exploração da Terra por satélite (espaço para Terra)	MÓVEL 814	*Exploração da Terra por satélite* (espaço para Terra)
813 815		813 815

MHz

8400-8500

Atribuição aos serviços		
Região 1	Região 2	Região 3
8400-8500	FIXO MÓVEL, excepto móvel aeronáutico PESQUISA ESPACIAL (espaço para Terra) 816 817 818	

816 No serviço de pesquisa espacial a utilização da faixa 8400-8450 MHz é limitada ao espaço longínquo.

817 *Categoria de serviço diferente:* na Bélgica, Israel, Luxemburgo, Malásia, Singapura e Sri Lanka a atribuição ao serviço de pesquisa espacial na faixa 8400-8500 MHz é feita a título secundário (v. o n.º **424**).

818 *Atribuição de substituição:* no Reino Unido a faixa 8400-8500 MHz é atribuída, a título primário, aos serviços de radiolocalização e de pesquisa espacial.

MHz

8500-8850

Atribuição aos serviços		
Região 1	Região 2	Região 3
8500-8750	RADIOLOCALIZAÇÃO 713 819 820	
8750-8850	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO AERONÁUTICA 821 822	

819 *Atribuição adicional:* na Arábia Saudita, Bahrein, Bangladesh, Burundi, Camarões, China, Congo, Costa Rica, Egipto, Emirados Árabes Unidos, Gabão, Guiné, Guiana, Indonésia, Irão, Iraque, Israel, Jamaica, Koweit, Líbia, Malásia, Mali, Marrocos, Mauritânia, Nepal, Níger, Nigéria, Omã, Paquistão, Síria, Senegal, Singapura, Somália, Sri Lanka, Tanzânia, Chade, Tailândia, Togo e Tunísia a faixa 8500-8750 MHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

820 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 8500-8750 MHz é atribuída adicionalmente, a título primário, aos serviços móvel terrestre e de radionavegação.

821 A utilização da faixa 8750-8850 MHz pelo serviço de radionavegação aeronáutica é limitada às ajudas à navegação a bordo de aeronaves que utilizam o efeito Doppler numa frequência central de 8800 MHz.

822 *Atribuição adicional:* na Argélia, República Federal da Alemanha, Bahrein, Bélgica, China, Emirados Árabes Unidos, França, Grécia, Indonésia, Irão, Líbia, Países Baixos, Qatar, Sudão e Tailândia as faixas 8825-8850 MHz e 9000-9200 MHz são atribuídas adicionalmente, a título primário, ao serviço de radionavegação marítima somente para os radares costeiros.

MHz

8850-9300

Atribuição aos serviços		
Região 1	Região 2	Região 3
8850-9000	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO MARÍTIMA 823 824	
9000-9200	RADIONAVEGAÇÃO AERONÁUTICA 717 *Radiolocalização* 822	
9200-9300	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO MARÍTIMA 772 823 824	

823 Nas faixas 8850-9000 MHz e 9200-9225 MHz o serviço de radionavegação marítima é limitado aos radares costeiros.

824 *Atribuição adicional:* na Áustria, Bulgária, Cuba, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS as faixas 8850-9000 MHz e 9200-9300 MHz são atribuídas adicionalmente, a título primário, ao serviço de radionavegação.

MHz

9300-10 000

Atribuição aos serviços		
Região 1	Região 2	Região 3
9300-9500	RADIONAVEGAÇÃO 774 775 *Radiolocalização* 825	
9500-9800	RADIOLOCALIZAÇÃO RADIONAVEGAÇÃO 713	
9800-10 000	RADIOLOCALIZAÇÃO FIXO 826 827 828	

825 Na faixa 9300-9500 MHz o serviço de radionavegação aeronáutica é limitado aos radares meteorológicos de aeronaves e aos radares no solo. As balizas-radar no solo do serviço de radionavegação são também autorizadas na faixa 9300-9320 MHz, desde que não provoquem qualquer interferência prejudicial ao serviço de radionavegação marítima. Na faixa 9300-9500 MHz os radares no solo utilizados para as necessidades da meteorologia têm prioridade sobre os outros dispositivos de radiolocalização.

826 *Categoria de serviço diferente:* no Afeganistão, Argélia, Arábia Saudita, Áustria, Bahrein, Bangladesh, Camarões, República da Coreia, Egipto, Emirados Árabes Unidos, Etiópia, Guiana, Índia, Indonésia, Irão, Iraque, Israel, Jamaica, Japão, Jordânia, Koweit, Líbano, Libéria, Malásia, Nigéria, Paquistão, Qatar, Singapura, Somália, Sudão, Sri Lanka, Suécia, Tailândia, Trindade e Tobago e Iémene (RDP do), na faixa 9800-10 000 MHz, a atribuição ao serviço fixo é feita a título primário (v. o n.º 425).

827 *Atribuição adicional:* na Bulgária, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS a faixa 9800-10 000 MHz é atribuída adicionalmente, a título primário, ao serviço de radionavegação.

828 A faixa 9975-10 025 MHz é também atribuída, a título secundário, ao serviço de meteorologia por satélite para ser utilizada pelos radares meteorológicos.

GHz

10-10,6

Atribuição aos serviços		
Região 1	Região 2	Região 3
10-10,45 FIXO MÓVEL RADIOLOCALIZAÇÃO *Amador* 828	**10-10,45** RADIOLOCALIZAÇÃO *Amador* 828 829	**10-10,45** FIXO MÓVEL RADIOLOCALIZAÇÃO *Amador* 828
10,45-10,5	RADIOLOCALIZAÇÃO *Amador* *Amador por satélite* 830	
10,5-10,55 FIXO MÓVEL *Radiolocalização*	**10,5-10,55** FIXO MÓVEL RADIOLOCALIZAÇÃO	
10,55-10,6	Fixo MÓVEL, excepto móvel aeronáutico *Radiolocalização*	

829 *Atribuição adicional:* na Costa Rica, no Equador, na Guatemala e nas Honduras a faixa 10-10,45 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

830 *Atribuição adicional:* na República Federal da Alemanha, Angola, China, Equador, Espanha, Japão, Quénia, Marrocos, Nigéria, Suécia, Tanzânia e Tailândia a faixa 10,45-10,5 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

GHz

10,6-10,7

Atribuição aos serviços		
Região 1	Região 2	Região 3
10,6-10,68	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL, excepto móvel aeronáutico RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) *Radiolocalização* 831 832	
10,68-10,7	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 833 834	

831 Na faixa 10,6-10,68 GHz, a P. I. R. E. máxima das estações dos serviços fixo e móvel, excepto móvel aeronáutico, deve ser limitada a 40 dBW e a potência de alimentação da antena não deve ultrapassar — 3 dBW. Estes limites podem ser ultrapassados sob reserva de um acordo obtido era conformidade com o procedimento previsto no artigo 14. Contudo, as restrições impostas aos serviços fixo e móvel, excepto móvel aeronáutico, não são aplicáveis no Afeganistão, Arábia Saudita, Bahrein, Bangladesh, China, Emirados Árabes Unidos, Finlândia, Índia, Indonésia, Irão, Iraque, Japão, Koweit, Líbano, Nigéria, Paquistão, Filipinas, Qatar, Suécia, Síria e URSS.

832 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que está atribuída a faixa 10,6-10,68 GHz, tomem todas as medidas, dentro das possibilidades práticas, para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

833 Na faixa 10,68-10,7 GHz são proibidas todas as emissões, excepto aqueles a que se aplicam as disposições do n.º **834**.

834 *Atribuição adicional:* na Arábia Saudita, Bahrein, Bulgária, Camarões, China, Colômbia, República da Coreia, Costa Rica, Cuba, Egipto, Emirados Árabes Unidos, Equador, Hungria, Irão, Iraque, Israel, Japão, Koweit, Líbano, Mongólia, Paquistão, Polónia, Qatar, República Democrática Alemã, Roménia, Checoslováquia, URSS e Jugoslávia a faixa 10,68-10,7 GHz é atribuída adicionalmente, a título primário aos serviços fixo e móvel, excepto móvel aeronáutico. Tal utilização é limitada aos equipamentos em funcionamento em 1 de Janeiro de 1985.

GHz

10,7-11,7

Atribuição aos serviços		
Região 1	Região 2	Região 3
10,7-11,7	**10,7-11,7**	
FIXO	FIXO	
FIXO POR SATÉLITE (espaço para Terra) (Terra para espaço) 835	FIXO POR SATÉLITE (espaço para Terra)	
MÓVEL, excepto móvel aeronáutico	MÓVEL, excepto móvel aeronáutico	

835 Na Região 1 a utilização da faixa 10,7-11,7 GHz pelo serviço fixo por satélite (Terra para espaço) é limitada às ligações de conexão para o serviço de radiodifusão por satélite.

GHz

11,7-12,75

Atribuição aos serviços		
Região 1	Região 2	Região 3
11,7-12,5	**11,7-12,1**	**11,7-12,2**
FIXO	FIXO 837	FIXO
RADIODIFUSÃO	FIXO POR SATÉLITE (espaço para Terra)	MÓVEL, excepto móvel aeronáutico
RADIODIFUSÃO POR SATÉLITE	MÓVEL, excepto móvel aeronáutico	RADIODIFUSÃO
MÓVEL, excepto móvel aeronáutico	836 839 840	RADIODIFUSÃO POR SATÉLITE
		838 840
	12,1-12,3	**12,2-12,5**
	FIXO	FIXO
	FIXO POR SATÉLITE (espaço para Terra)	MÓVEL, excepto móvel aeronáutico
	MÓVEL, excepto móvel aeronáutico	RADIODIFUSÃO
	RADIODIFUSÃO	
	RADIODIFUSÃO POR SATÉLITE	
	839 840 841 842 843 844	
	12,3-12,7	
838 840	FIXO 837	838 840 845
	MÓVEL, excepto móvel aeronáutico	
12,5-12,75	RADIODIFUSÃO	**12,5-12,75**
FIXO POR SATÉLITE (espaço para Terra) (Terra para espaço)	RADIODIFUSÃO POR SATÉLITE	FIXO
	839 840 843 844 846	FIXO POR SATÉLITE (espaço para Terra)
		MÓVEL, excepto móvel aeronáutico
	12,7-12,75	RADIODIFUSÃO POR SATÉLITE 847
	FIXO	
	FIXO POR SATÉLITE (espaço para Terra)	
	MÓVEL, excepto móvel aeronáutico	
840 848 849 850	840	840

836 Na Região 2, na faixa 11,7-12,1 GHz, repetidores instalados a bordo de estações do serviço fixo por satélite podem também ser utilizados para transmissões do serviço de radiodifusão por satélite, desde que a P. I. R. E. desses repetidores não ultrapasse 53 dBW por canal de televisão e desde que não provoquem mais interferências nem exijam mais protecção do que o que resultaria de consignações de frequência coordenadas do serviço fixo por satélite. No que respeita aos serviços de radiocomunicação espacial, esta faixa deverá ser utilizada principalmente no serviço fixo por satélite. O limite superior desta faixa será modificado em conformidade com as decisões da Conferência Administrativa Regional das Radiocomunicações de 1983 para a Região 2 (v. o n.º 841).

837 *Categoria de serviço diferente:* no Canadá, no México e nos Estados Unidos a atribuição ao serviço fixo na faixa 11,7-12,2 GHz é feita a título secundário (v. o n.º 424).

838 Na faixa 11,7-12,5 GHz, nas Regiões 1 e 3, os serviços fixo, fixo por satélite, móvel, excepto móvel aeronáutico, e de radiodifusão, segundo as suas atribuições respectivas, não devem provocar interferência prejudicial às estações de radiodifusão por satélite que funcionam de acordo com as disposições do apêndice 30.

839 A utilização da faixa 11,7-12,7 GHz, na Região 2, pelos serviços de radiodifusão por satélite e fixo por satélite é limitada aos sistemas nacionais e sub-regionais e deve ser objecto de acordo prévio entre as administrações interessadas e aquelas cujos serviços, funcionando ou estando previstos para funcionar de acordo com o presente quadro, sejam susceptíveis de ser afectados (v. os artigos 11, 13 e 14 e a Resolução n.º 33).

840 Para a utilização da faixa 11,7-12,75 GHz nas Regiões 1, 2 e 3 v. as Resoluções n.ºs 31, 34, 504, 700 e 701.

841 A Conferência Administrativa Regional das Radiocomunicações de 1983 para a Região 2 dividirá a faixa 12,1-12,3 GHz em duas subfaixas e atribuirá a subfaixa inferior ao serviço fixo por satélite e a subfaixa superior aos serviços de radiodifusão por satélite, de radiodifusão, móvel, excepto móvel aeronáutico, e fixo, sendo a atribuição a todos esses serviços feita a título primário.

842 *Atribuição adicional:* no Brasil e no Peru a faixa 12,1-12,3 GHz e nos Estados Unidos a faixa 12,2-12,3 GHz são atribuídas adicionalmente, a título primário, ao serviço fixo.

843 Na Região 2, na faixa 12,1-12,7 GHz, os serviços de radiocomunicação espacial existentes, ou em projecto, antes da Conferência Administrativa Regional das Radiocomunicações de 1983 para a Região 2 não deverão impor restrições à elaboração do plano de radiodifusão por satélite na Região 2 e deverão funcionar nas condições a determinar pela referida Conferência.

844 Na Região 2, na faixa 12,1-12,7 GHz os serviços de radiocomunicações de Terra existentes ou futuros não deverão causar interferência prejudicial aos serviços de radiocomunicações espacial funcionando de acordo com o plano de radiodifusão por satélite que será estabelecido pela Conferência Administrativa Regional das Radiocomunicações de 1983 para a Região 2 e não deverão impor restrições à elaboração desse plano. O limite inferior desta faixa será modificado em conformidade com as decisões da referida Conferência (v. o n.º 841).

845 Na Região 3 a faixa 12,2-12,5 GHz é também atribuída ao serviço fixo por satélite (espaço para Terra), limitado a sistemas nacionais e sub-regionais. Os limites de densidade de fluxo de potência especificados no n.º 2574 aplicam-se a esta faixa de frequências. A introdução deste serviço deverá ser feita em conformidade com os procedimentos especificados no artigo 7 do apêndice 30, sob o ponto de vista das suas relações com o serviço de radiodifusão por satélite na Região 1, sendo a faixa de frequências aplicável alargada para 12,2-12,5 GHz.

846 Na Região 2, na faixa 12,3-12,7 GHz, as consignações às estações do serviço de radiodifusão por satélite de que se disporá de acordo com o plano a estabelecer pela Conferência Administrativa Regional das Radiocomunicações de 1983 para a Região 2 poderão também ser utilizadas para transmissões do serviço fixo por satélite (espaço para Terra), desde que essas transmissões não causem mais interferência ou não necessitem de mais protecção contra as interferências que as transmissões do serviço de radiodifusão por satélite funcionando em conformidade como plano correspondente. No que respeita aos serviços de radiocomunicação espacial, esta faixa deverá ser utilizada principalmente pelo serviço de radiodifusão por satélite. O limite inferior desta faixa será modificado em conformidade com as decisões da referida Conferência (v. o n.º 841).

847 Na Região 3, na faixa 12,5-12,75 GHz, o serviço de radiodifusão por satélite é limitado à recepção comunitária com uma densidade de fluxo de potência que não ultrapasse — 111 dB (W/m^2), segundo a definição dada no anexo 8 do apêndice 30.

848 *Atribuição adicional:* na Argélia, Angola, Arábia Saudita, Bahrein, Camarões, República Centro-Africana, Congo, Costa do Marfim, Egipto, Emirados Árabes Unidos, Etiópia, Gabão, Gana, Guiné, Iraque, Israel, Jordânia, Quénia, Koweit, Líbano, Líbia, Madagáscar, Mali, Marrocos, Mongólia, Níger, Nigéria, Qatar, Síria, Senegal, Somália, Sudão, Chade, Togo, Iémene (RDP do) e Zaire a faixa 12,5-12,75 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico.

849 *Atribuição adicional:* na República Federal da Alemanha, Bélgica, Dinamarca, Espanha, Finlândia, França, Grécia, Listenstaina, Luxemburgo, Mónaco, Noruega, Uganda, Países Baixos, Portugal, Roménia, Suécia, Suíça, Tanzânia, Tunísia e Jugoslávia a faixa 12,5-12,75 GHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel, excepto móvel aeronáutico.

850 *Atribuição adicional:* na Áustria, Bulgária, Hungria, Polónia, República Democrática Alemã, Checoslováquia e URSS a faixa 12,5-12,75 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel, excepto móvel aeronáutico. Contudo, as estações destes serviços não deverão causar interferência prejudicial às estações terrenas do serviço fixo por satélite de países da Região 1 que não sejam os mencionados na presente nota. Não é exigida qualquer coordenação destas estações terrenas com as estações dos serviços fixo e móvel dos países mencionados na presente nota. Os limites de densidade de fluxo de potência na superfície da Terra prescritos no n.º 2574 para o serviço fixo por satélite deverão aplicar-se no território dos países mencionados na presente nota.

GHz

12,75-13,25

Atribuição aos serviços		
Região 1	Região 2	Região 3
12,75-13,25	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL *Pesquisa espacial* (espaço longínquo) (espaço para Terra)	

GHz

13,25-14

Atribuição aos serviços		
Região 1	Região 2	Região 3
13,25-13,4	RADIONAVEGAÇÃO AERONÁUTICA 851 852 853	
13,4-14	RADIOLOCALIZAÇÃO *Frequências padrão e sinais horários por satélite* (Terra para espaço) *Pesquisa espacial* 713 853 854 855	

851 Na faixa 13,25-13,4 GHz o serviço de radionavegação aeronáutica é limitado às ajudas à navegação que utilizam o efeito Doppler.

852 Sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 13,25-13,4 GHz pode também ser utilizada, a título secundário, pelo serviço de pesquisa espacial (Terra para espaço).

853 *Atribuição adicional:* no Bangladesh, na Índia, e no Paquistão a faixa 13,25-14 GHz é atribuída adicionalmente, a título primário, ao serviço fixo.

854 *Atribuição adicional:* no Afeganistão, Argélia, Angola, Arábia Saudita, Bahrein, Camarões, República da Coreia, Egipto, Emirados Árabes Unidos, Finlândia, Gabão, Guiné, Indonésia, Irão, Iraque, Israel, Jordânia, Koweit, Líbano, Madagáscar, Malásia, Malawi, Mali, Malta, Marrocos, Mauritânia, Níger, Nigéria, Paquistão, Qatar, Síria, Senegal, Singapura, Sri Lanka, Sudão, Suécia, Chade, Tailândia e Tunísia a faixa 13,4-14 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

855 *Atribuição adicional:* na Áustria, Bulgária, Hungria, Japão, Mongólia, Polónia, República Democrática Alemã, Roménia, Reino Unido, Checoslováquia e URSS a faixa 13,4-14 GHz é também atribuída, a título primário, ao serviço de radionavegação.

GHz

14-14,25

Atribuição aos serviços		
Região 1	Região 2	Região 3
14-14,25	FIXO POR SATÉLITE (Terra para espaço) 858 RADIONAVEGAÇÃO 856 *Pesquisa espacial* 857 859	

856 A utilização da faixa 14-14,3 GHz pelo serviço de radionavegação far-se-á de forma que seja assegurada protecção suficiente às estações espaciais do serviço fixo por satélite (v. a Recomendação n.º 708).

857 *Atribuição adicional:* no Afeganistão, Argélia, Angola, Arábia Saudita, Austrália, Bahrein, Bangladesh, Botswana, Camarões, China, República da Coreia, Egipto, Emirados Árabes Unidos, Gabão, Guatemala, Guiné, Índia, Indonésia, Irão, Iraque, Israel, Japão, Quénia, Koweit, Lesotho, Líbano, Malásia, Malawi, Mali, Malta, Marrocos, Níger, Paquistão, Filipinas, Qatar, Síria, Senegal, Singapura, Somália, Sudão, Sri Lanka, Suazilândia, Tanzânia, Chade, Tailândia e Iémene (RDP do) a faixa 14-14,3 GHz é atribuída adicionalmente, a título primário, ao serviço fixo.

858 A faixa 14,14,5 GHz pode ser utilizada, dentro de serviço fixo por satélite (Terra para espaço), para as ligações de conexão destinadas ao serviço de radiodifusão por satélite, sob reserva de que esta utilização seja coordenada com as outras redes do serviço fixo por satélite. A utilização dessas ligações de conexão é reservada aos países situados fora da Europa e a Malta.

859 A faixa 14-14,5 GHz é também atribuída, a título secundário, ao serviço móvel terrestre por satélite (Terra para espaço).

GHz

14,25-14,3

Atribuição aos serviços		
Região 1	Região 2	Região 3
14,25-14,3	FIXO POR SATÉLITE (Terra para espaço) 858 RADIONAVEGAÇÃO 856 *Pesquisa espacial* 857 859 860 861	

860 *Atribuição adicional:* na República Federal da Alemanha, Áustria, Bélgica, Dinamarca, Espanha, Finlândia, França, Grécia, Irlanda, Islândia, Itália, Jordânia, Líbia, Listenstaina, Luxemburgo, Noruega, Países Baixos, Portugal, Reino Unido, Suécia, Suíça, Turquia e Jugoslávia a faixa 14,25-14,3 GHz é atribuída adicionalmente, a título primário, ao serviço fixo.

861 *Atribuição adicional:* no Japão, Paquistão, Reino Unido e Tailândia a faixa 14,25-14,3 GHz é atribuída adicionalmente, a título primário, ao serviço móvel, excepto móvel aeronáutico.

GHz

14,3-14,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
14,3-14,4 FIXO FIXO POR SATÉLITE (Terra para espaço) 858 MÓVEL, excepto móvel aeronáutico *Radionavegação por satélite* 859	**14,3-14,4** FIXO POR SATÉLITE (Terra para espaço) 858 *Radionavegação por satélite* 859	**14,3-14,4** FIXO FIXO POR SATÉLITE (Terra para espaço) 858 MÓVEL, excepto móvel aeronáutico *Radionavegação por satélite* 859
14,4-14,47 FIXO FIXO POR SATÉLITE (Terra para espaço) 858 *MÓVEL, excepto móvel aeronáutico* *Pesquisa espacial* (espaço por Terra) 859		
14,47-14,5 FIXO FIXO POR SATÉLITE (Terra para espaço) 858 MÓVEL, excepto móvel aeronáutico *Radioastronomia* 859 862		

862 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que é atribuída a faixa 14,47-14,5 GHz, tomem todas as medidas dentro das possibilidades práticas para proteger contra interferências prejudiciais as observações das riscas do espectro efectadas pelo serviço de radioastronomia. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

14,5-15,35

Atribuição aos serviços		
Região 1	Região 2	Região 3
14,5-14,8 FIXO FIXO POR SATÉLITE (Terra para espaço) 863 MÓVEL *Pesquisa espacial*		
14,8-15,35 FIXO MÓVEL *Pesquisa espacial* 720		

863 A utilização da faixa 14,5-14,8 GHz pelo serviço fixo por satélite (Terra para espaço) é limitada às ligações de conexão para o serviço de radiodifusão por satélite. Esta utilização aos países situados fora da Europa e a Malta.

GHz

15,35-15,7

Atribuição aos serviços		
Região 1	Região 2	Região 3
15,35-15,4	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 864 865	
15,4-15,7	RADIONAVEGAÇÃO AERONÁUTICA 733 797	

864 Na faixa 15,35-15,4 GHz são proibidas todas as emissões, com excepção das previstas no n.º 865.

865 Atribuição adicional: no Afeganistão, Arábia Saudita, Bahrein, Camarões, Egipto, Emirados Árabes Unidos, Guiné, Irão, Iraque, Israel, Koweit, Líbano, Líbia, Paquistão, Qatar, Síria, Somália e Jugoslávia a faixa 15,35-15,4 GHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel.

GHz

15,7-17,7

Atribuição aos serviços		
Região 1	Região 2	Região 3
15,7-16,6	RADIOLOCALIZAÇÃO 866 867	
16,6-17,1	RADIOLOCALIZAÇÃO *Pesquisa espacial* (espaço longínquo) (Terra para espaço) 866 867	
17,1-17,2	RADIOLOCALIZAÇÃO 866 867	
17,2-17,3	RADIOLOCALIZAÇÃO *Exploração da Terra por satélite* (activa) *Pesquisa espacial* (activa) 866 867	
17,3-17,7	FIXO POR SATÉLITE (Terra para espaço) 869 *Radiolocalização* 868	

866 *Atribuição adicional:* no Afeganistão, Argélia, Angola, Arábia Saudita, Áustria, Bahrein, Bangladesh, Camarões, Costa Rica, Egipto, El Salvador, Emirados Árabes Unidos, Finlândia, Guatemala, Índia, Indonésia, Irão, Koweit, Líbia, Malásia, Malawi, Malta, Marrocos, Moçambique, Nepal, Nicarágua, Omã, Paquistão, Qatar, Singapura, Somália, Sudão, Sri Lanka, Suécia, Tanzânia, Chade, Tailândia, Iémene (RDP do) e Jugoslávia a faixa 15,7-17,3 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

867 *Atribuição adicional:* em Israel a faixa 15,7-17,3 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel. Os serviços explorados por força da presente nota não devem considerar-se com direito a qualquer protecção contra interferências prejudiciais

causadas pelos serviços que funcionam em conformidade com o quadro em países não mencionados no n.º **866** nem causar interferências prejudiciais a tais serviços.

868 *Atribuição adicional:* no Afeganistão, Argélia, República Federal da Alemanha, Angola, Arábia Saudita, Áustria, Bahrein, Bangladesh, Camarões, Costa Rica, El Salvador, Emirados Árabes Unidos, Finlândia, Guatemala, Honduras, Índia, Indonésia, Irão, Iraque, Israel, Japão, Koweit, Líbia, Nepal, Nicarágua, Paquistão, Qatar, Sri Lanka, Suécia, Tailândia e Jugoslávia a faixa 17,3-17,7 GHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel. Deverão ser aplicados provisoriamente os limites de potência indicados nos n.os **2505** e **2508** (v. a Resolução n.º 101).

869 A utilização da faixa 17,3-18,1 GHz pelos serviço fixo por satélite (Terra para espaço) é limitada às ligações de conexão para o serviço de radiodifusão por satélite.

GHz

17,7-19,7

Atribuição aos serviços		
Região 1	Região 2	Região 3
17,7-18,1	FIXO FIXO POR SATÉLITE (espaço para Terra) (Terra para espaço) 869 MÓVEL	
18,1-18,6	FIXO FIXO POR SATÉLITE (espaço para Terra MÓVEL 870	
18,6-18,8 FIXO FIXO POR SATÉLITE (espaço para Terra) 572 MÓVEL, excepto móvel aeronáutico *Exploração da Terra por satélite* (passiva) *Pesquisa espacial* (passiva) 871	**18,6-18,8** EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO FIXO POR SATÉLITE (espaço para Terra) 872 MÓVEL, excepto móvel aeronáutico PESQUISA ESPACIAL (passiva) 871	**18,6-18,8** FIXO FIXO POR SATÉLITE (espaço para Terra) 872 MÓVEL, excepto móvel aeronáutico *Exploração da Terra por satélite* (passiva) *Pesquisa espacial* (passiva) 871

870 A faixa 18,1-18,3 GHz é também atribuída, a título primário, ao serviço de meteorologia por satélite (espaço para Terra). A sua utilização é reservada aos satélites geostacionários e deverá estar de acordo com as disposições do n.º **2578**.

871 Ao consignarem frequências às estações dos serviços fixo e móvel, as administrações são convidadas a ter em conta os detectores passivos dos serviços de exploração da Terra por satélite e de pesquisa espacial funcionando na faixa 18,6-18,8 GHz. Especialmente nesta faixa, as administrações deveriam esforçar-se tanto quanto possível por limitar simultaneamente a potência fornecida pelo emissor à antena e a p. i. r. e. a fim de reduzir rigorosamente ao mínimo os riscos de interferência aos detectores passivos.

872 Solicita-se às administrações que, ao consignarem frequências às estações do serviço fixo por satélite no sentido espaço para Terra, limitem, na medida do possível, a densidade de fluxo de potência produzida à superfície da Terra na faixa 18,6-18,8 GHz, a fim de serem reduzidos os riscos de interferência aos detectores passivos dos serviços de exploração da Terra por satélite e de pesquisa espacial.

GHz

19,7-22

Atribuição aos serviços		
Região 1	Região 2	Região 3
19,7-20,2	FIXO POR SATÉLITE (espaço para Terra) *Móvel por satélite* (espaço para Terra) 873	
20,2-21,2	FIXO POR SATÉLITE (espaço para Terra) MÓVEL POR SATÉLITE (espaço para Terra) *Frequências padrão e sinais horários por satélite* (espaço para Terra) 873	

Atribuição aos serviços		
Região 1	Região 2	Região 3
21,2-21,4	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL PESQUISA ESPACIAL (passiva)	
21,4-22	FIXO MÓVEL	

873 *Atribuição adicional:* no Afeganistão, Argélia, Angola, Arábia Saudita, Bahrein, Bangladesh, Brasil, Camarões, China, Congo, República da Coreia, Costa Rica, Egipto, Emirados Árabes Unidos, Gabão, Guatemala, Guiné, Índia, Indonésia, Irão, Iraque, Israel, Japão, Quénia, Koweit, Malásia, Mali, Marrocos, Mauritânia, Nepal, Níger, Nigéria, Paquistão, Filipinas, Qatar, Síria, Singapura, Somália, Sudão, Sri Lanka, Tanzânia, Chade, Tailândia, Togo, Tunísia e Zaire a faixa 19,7-21,2 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel. Esta utilização adicional não deve impor limitação de densidade de fluxo de potência ás estações espaciais do serviço fixo por satélite.

GHz

22-22,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
22-22,21	FIXO MÓVEL, excepto móvel aeronáutico 874	
22,21-22,5	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL, excepto móvel aeronáutico RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 875 876	

874 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas dentro das possibilidades práticas para proteger contra interferências prejudiciais as observações das riscas do espectro efectuadas pelo serviço de radioastronomia na faixa 22,01-22,21 GHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronómia (v. os n.^{os} **343** e **344** e o artigo 36).

875 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais na faixa 22,21-22,5 GHz.

As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

876 A utilização da faixa 22,21-22,5 GHz pelos serviços de exploração por satélite (passiva) e de pesquisa espacial (passiva) não deverá impor condicionamentos aos serviços fixo e móvel, excepto móvel aeronáutico.

GHz

22,5-23,6

Atribuição aos serviços		
Região 1	Região 2	Região 3
22,5-22,55 FIXO MÓVEL	**22,5-22,55** FIXO MÓVEL RADIODIFUSÃO POR SATÉLITE 877 878	

Atribuição aos serviços		
Região 1	Região 2	Região 3
22,55-23	**22,55-23**	
FIXO	FIXO	
INTERSATÉLITES	INTERSATÉLITES	
MÓVEL	MÓVEL	
	RADIODIFUSÃO POR SATÉLITE 877	
879	878 879	
23-23,55	FIXO INTERSATÉLITES MÓVEL 879	
23,55-23,6	FIXO MÓVEL	

877 Nas Regiões 2 e 3 o serviço de radiodifusão por satélite é autorizado na faixa 22,5-23 GHz, sob reserva de um acordo em conformidade com o procedimento previsto no artigo 14.

878 *Atribuição adicional:* no Japão a faixa 22,5-23 GHz é atribuída adicionalmente, a título primário, ao serviço de radiodifusão.

879 Solicita-se instantemente às administrações que, ao consignarem com frequência às estações dos outros países, tomem todas as medidas dentro das possibilidades práticas para proteger contra interferências prejudiciais as observações das riscas do espectro efectuadas pelo serviço de radioastronomia nas faixas 22,81-22,86 GHz e 23,07-23,12 GHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

23,6-24,25

Atribuição aos serviços		
Região 1	Região 2	Região 3
23,6-24	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 880	
24-24,05	AMADOR AMADOR POR SATÉLITE 881	
24,05-24,25	RADIOLOCALIZAÇÃO *Amador* *Exploração da Terra por satélite* (activa) 881	

880 São proibidas todas as emissões na faixa 23,6-24 GHz.

881 A faixa 24-24,25 (frequência central 24,125 GHz) é utilizável em aplicações industriais, científicas e médicas (ISM). Os serviços de radiocomunicação que funcionam nesta faixa devem aceitar as intergerências prejudiciais que possam produzir-se em virtude daquelas aplicações. Os aparelhos ISM que funcionam nesta faixa estão sujeitos às disposições do n.º 1815.

GHz

24,25-27,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
24,25-25,25	RADIONAVEGAÇÃO	
25,25-27	FIXO MÓVEL *Exploração da Terra por satélite* (espaço-espaço) *Frequências padrão e sinais horários por satélite* (Terra para espaço)	
27-27,5 FIXO MÓVEL *Exploração da Terra por satélite* (espaço-espaço)	**27-27,5** FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL *Exploração da Terra por satélite* (espaço-espaço)	

GHz

27,5-31

Atribuição aos serviços		
Região 1	Região 2	Região 3
27,5-29,5	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL	
29,5-30	FIXO POR SATÉLITE (Terra para espaço) MÓVEL POR SATÉLITE (Terra para espaço) 882 883	
30-31	FIXO POR SATÉLITE (Terra para espaço) MÓVEL POR SATÉLITE (Terra para espaço) *Frequências padrão e sinais horários por satélite* (espaço para Terra) 883	

882 A faixa 29,95-30 GHz pode ser utilizada, a título secundário, pelas ligações espaço para espaço do serviço de exploração da Terra por satélite para fins de telemedida, de perseguição e de telecomando.

883 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Camarões, China, República da Coreia, Emirados Árabes Unidos, Etiópia, Índia, Indonésia, Irão, Iraque, Israel, Japão, Quénia, Koweit, Líbano, Malásia, Mali, Marrocos, Mauritânia, Nepal, Paquistão, Qatar, Síria, Singapura, Somália, Sudão, Sri Lanka, Chade e Tailândia a faixa 29,5-31 GHz é atribuída adicionalmente, a título secundário, aos serviços fixo e móvel. Aplicam-se a esta faixa os limites de potência especificados nos n.ºs 2505 e 2508.

GHz

31-31,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
31-31,3	FIXO MÓVEL *Frequências padrão e sinais horários por satélite* (espaço para Terra) *Pesquisa espacial* 884 885 886	
31,3-31,5	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 887	

884 Na faixa 31-31,3 GHz, os limites da densidade de fluxo de potência indicados no n.º 2542 aplicam-se ao serviço de pesquisa espacial.

885 *Categoria de serviço diferente:* na Bulgária, Cuba, Hungria, Mongólia, República Democrática Alemã, Checoslováquia e URSS, na faixa 31-31,3 GHz, a atribuição ao serviço de pesquisa espacial é feita a título primário (v. o n.º 425).

886 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais na faixa 31,2-31,3 GHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os 343 e 344, bem como o artigo 36).

887 São proibidas toda as emissões na faixa 31,3-31,5 GHz.

GHz

31,5-31,8

Atribuição aos serviços		
Região 1	Região 2	Região 3
31,5-31,8 EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) *Fixo* *Móvel,* excepto móvel aeronáutico 888 889	**31,5-31,8** EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 888	**31,5-31,8** EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) *Fixo* *Móvel,* excepto móvel aeronáutico 888

888 Nas Regiões 1 e 3, solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 31,5-31,8 GHz é atribuída, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os 343 e 344, bem como o artigo 36).

889 *Categoria de serviço diferente:* na Bulgária, Egipto, Hungria, Mongólia, Polónia, República Democrática Alemã, Roménia, Checoslováquia e URSS, na faixa 31,5-31,8 GHz, a atribuição aos serviços fixo e móvel, excepto móvel aeronáutico, é feita a título primário (v. o n.º 425).

GHz

31,8-33

Atribuição aos serviços		
Região 1	Região 2	Região 3
31,8-32	RADIONAVEGAÇÃO *Pesquisa espacial* 890 891 892	

Atribuição aos serviços		
Região 1	Região 2	Região 3
32-32,3	INTERSATÉLITES RADIONAVEGAÇÃO *Pesquisa espacial* 890 891 892 893	
32,3-33	INTERSATÉLITES RADIONAVEGAÇÃO 892 893	

890 *Categoria de serviço diferente:* na Austrália, Espanha e Estados Unidos da América, na faixa 31,8-32,3 GHz, a atribuição ao serviço de pesquisa espacial (espaço longínquo) no sentido espaço para Terra é feita a título primário (v. o n.º **425**). Esta utilização não deverá impor limites de densidade de fluxo de potência aos sistemas do serviço intersatélites na faixa 32-32,3 GHz.

891 *Categoria de serviço diferente:* na Bulgária, Cuba, Mongólia, Polónia, República Democrática Alemã, Checoslováquia e URSS, na faixa 31,8-32,3 GHz, a atribuição ao serviço de pesquisa espacial é feita a título primário (v. o n.º **425**).

892 Sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 31,8-33,8 GHz pode também ser utilizada no Japão para emissões no sentido espaço para Terra do serviço fixo por satélite até 31 de Dezembro de 1990.

893 Ao conceberem sistemas do serviço intersatélites e do serviço de radionavegação funcionando na faixa 32-33 GHz, as administrações deverão tomar toda as medidas necessárias para evitar interferências prejudiciais entre esses dois serviços, tendo em conta o aspectro da segurança do serviço de radionavegação (v. a Recomendação n.º 707).

GHz

33-34,2

Atribuição aos serviços		
Região 1	Região 2	Região 3
33-33,4	RADIONAVEGAÇÃO 892	
33,4-34,2	RADIOLOCALIZAÇÃO 892 894	

894 *Atribuição adicional:* no Afeganistão, Arábia Saudita, Bahrein, Bangladesh, Egipto, Emirados Árabes Unidos, Espanha, Finlândia, Gabão, Guiné, Indonésia, Irão, Iraque, Israel, Quénia, Koweit, Líbano, Líbia, Malásia, Malawi, Mali, Malta, Marrocos, Mauritânia, Nepal, Níger, Nigéria, Omã, Paquistão, Filipinas, Qatar, Síria, Senegal, Singapura, Somália, Sudão, Sri Lanka, Suécia, Tanzânia, Tailândia, Togo, Tunísia, Iémene (RA) e Zaire a faixa 33,4-36 GHz é adicionalmente atribuída, a título primário, aos serviços fixo e móvel.

GHz

34,2-36

Atribuição aos serviços		
Região 1	Região 2	Região 3
34,2-35,2	RADIOLOCALIZAÇÃO *Pesquisa espacial* 895 896 894	
35,2-36	AUXILIARES DA METEOROLOGIA RADIOLOCALIZAÇÃO 894 897	

895 *Categoria de serviço diferente:* na Austrália, Espanha e Estados Unidos da América, na faixa 34,2-34,7 GHz, a atribuição ao serviço de pesquisa espacial (espaço longínquo) (Terra para espaço) é feita a título primário (v. o n.º 425).

896 *Categoria de serviço diferente:* na Bulgária, Cuba, Hungria, Polónia, Mongólia, República Democrática Alemã, Checoslováquia e URSS, na faixa 34,2-35,2 GHz, a atribuição ao serviço de pesquisa espacial é feita a título primário (v. o n.º 425).

897 Os sistemas de radiodetecção (radares) instalados a bordo de um engenho espacial podem ser utilizados, a título primário, na faixa 35,5-35,6 GHz.

GHz

36-40,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
36-37	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL PESQUISA ESPACIAL (passiva) 898	
37-37,5	FIXO MÓVEL 899	
37,5-39,5	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL 899	
39,5-40,5	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL MÓVEL POR SATÉLITE (espaço para Terra)	

898 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, tomem todas as medidas dentro das possibilidades práticas para proteger contra interferências prejudiciais as observações das riscas do espectro efectuadas pelo serviço de radioastronomia na faixa 36,43-36,5 GHz. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} 343 e 344, bem como o artigo 36).

899 Sob reserva de um acordo obtido em conformidade com o procedimento previsto no artigo 14, a faixa 37-39 GHz pode também ser utilizada no Japão, para as transmissões no sentido Terra para espaço do serviço fixo por satélite, até 31 de Dezembro de 1990.

GHz

40,5-43,5

Atribuição aos serviços		
Região 1	Região 2	Região 3
40,5-42,5	RADIODIFUSÃO POR SATÉLITE RADIODIFUSÃO *Fixo* *Móvel*	
42,5-43,5	FIXO FIXO POR SATÉLITE (Terra para espaço) 901 MÓVEL, excepto móvel aeronáutico RADIOASTRONOMIA 900	

900 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços, a que a faixa 42,5-43,5 GHz está atribuída, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais, especialmente nas faixas 42,77-42,87 GHz, 43,07-43,17 GHz e 43,37-43,47 GHz que são utilizadas para as observações das riscas do espectro do monóxido de silício. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os **343** e **344**, bem como o artigo 36).

901 A parte do espectro atribuída, nas faixas 42,5-43,5 GHz e 47,2-50,2 GHz, ao serviço fixo por satélite para transmissões no sentido Terra para espaço é mais larga que a atribuída na faixa 37,5-39,5 GHz às emissões no sentido espaço para Terra. Isto permite acomodar ligações de conexão para os satélites de radiodifusão. Solicita-se instantemente às administrações que tomem todas as medidas dentro das possibilidades práticas para reservar a faixa 47,2-49,2 GHz às ligações de conexão para o serviço de radiodifusão por satélite que funcionam na faixa 40,5-42,5 GHz.

GHz

43,5-50,2

Atribuição aos serviços		
Região 1	Região 2	Região 3
43,5-47	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE 903	
47-47,2	AMADOR AMADOR POR SATÉLITE	
47,2-50,2	FIXO FIXO POR SATÉLITE (Terra para espaço) 901 MÓVEL 905 904	

902 Nas faixas 43,5-47 GHz, 66-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 GHz e 252-265 GHz as estações do serviço móvel terrestre podem funcionar desde que não causem interferência prejudicial aos serviços de radiocomunicações espacial a que estas faixas estão atribuídas (v. o n.º 435).

903 Nas faixas 43,5-47 GHz, 66-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 GHz e 252-265 GHz são também autorizadas as ligações por satélite entre estações terrestres situadas em pontos fixos especificados, quando essas ligações funcionam em conjugação com o serviço móvel por satélite ou com o serviço de radionavegação por satélite.

904 As faixas 48,94-49,04 GHz e 97,88-98,08 GHz são também atribuídas, a título primário, ao serviço de radioastronomia, para as observações das riscas do espectro. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que estas faixas estão atribuídas, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.os **343** e **344** e o artigo 36).

905 Na faixa 48,94-49,04 GHz são proibidas todas as emissões de estações aerotransportadas.

GHz

50,2-59

Atribuição aos serviços		
Região 1	Região 2	Região 3
50,2-50,4	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL PESQUISA ESPACIAL (passiva)	
50,4-51,4	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL *Móvel por satélite* (Terra para espaço)	

Atribuição aos serviços		
Região 1	Região 2	Região 3
51,4-54,25	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) PESQUISA ESPACIAL (passiva) 906 907	
54,25-58,2	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO INTERSATÉLITES MÓVEL 909 PESQUISA ESPACIAL (passiva) 908	
58,2-59	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) PESQUISA ESPACIAL (passiva) 906 907	

906 Nos termos de arranjos nacionais, podem ser efectuadas observações de radioastronomia nas faixas 51,4-54,25 GHz, 58,2-59 GHz, 64-65 GHz e 72,77-72,91 GHz. Solicita-se instantemente às administrações que tomem todas as medidas, dentro das possibilidades práticas, para proteger contra interferências prejudiciais as observações de radioastronomia feitas nestas faixas.

907 Nas faixas 51,4-54,25 GHz, 58,2-59 GHz, 64-65 GHz, 86-92 GHz, 105-116 GHz e 217-231 GHz são proibidas todas as emissões.

908 *Atribuição adicional:* na República Federal da Alemanha, Japão e Reino Unido a faixa 54,25-58,2 GHz é adicionalmente atribuída, a título primário, ao serviço de radiolocalização.

909 Nas faixas 54,25-58,2 GHz, 59-64 GHz, 116-134 GHz, 170-182 GHz e 185-190 GHz as estações do serviço móvel aeronáutico podem funcionar desde que não causem interferência prejudicial ao serviço intersatélites (v. o n.º 435).

GHz

59-66

Atribuição aos serviços		
Região 1	Região 2	Região 3
59-64	FIXO INTERSATÉLITES MÓVEL 909 RADIOLOCALIZAÇÃO 910 911	
64-65	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) PESQUISA ESPACIAL (passiva) 906 907	
65-66	EXPLORAÇÃO DA TERRA POR SATÉLITE PESQUISA ESPACIAL *Fixo* *Móvel*	

910 Nas faixas 59-64 GHz e 126-134 GHz os radares aerotransportados do serviço de radiolocalização podem funcionar desde que não causem interferência prejudicial ao serviço intersatélites (v. o n.º 435).

911 A faixa 61-61,5 GHz (frequência central 61,25 GHz) é utilizável em aplicações industriais, científicas e médicas (ISM). A utilização desta faixa em aplicações ISM depende de uma autorização especial concedida caso por caso pela administração responsável, de acordo

com as outras administrações cujos serviços de radiocomunicação possam ser afectados. Para a aplicação desta disposição as administrações reportar-se-ão aos mais recentes pareceres da CCIR sobre o assunto.

GHz

66-76

Atribuição aos serviços		
Região 1	Região 2	Região 3
66-71	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE 903	
71-74	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL MÓVEL POR SATÉLITE (Terra para espaço) 906	
74-75,5	Fixo FIXO POR SATÉLITE (Terra para espaço) MÓVEL	
75,5-76	AMADOR AMADOR POR SATÉLITE	

GHz

76-86

Atribuição aos serviços		
Região 1	Região 2	Região 3
76-81	RADIOLOCALIZAÇÃO *Amador* *Amador por satélite* 912	
81-84	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL MÓVEL POR SATÉLITE (espaço para Terra)	
84-86	FIXO MÓVEL RADIODIFUSÃO RADIODIFUSÃO POR SATÉLITE 913	

912 Na faixa 78-79 GHz os radares instalados a bordo de estações espaciais podem funcionar, a título primário, no serviço de exploração da Terra por satélite e no serviço de pesquisa espacial.

913 Na faixa 84-86 GHz as estações dos serviços fixo, móvel e de radiodifusão não deverão causar interferências prejudiciais às estações de radiodifusão por satélite funcionando em conformidades com as decisões da conferência que será encarregada da planificação das consignações de frequências para o serviço de radiodifusão por satélite.

GHz

86-95

Atribuição aos serviços		
Região 1	Região 2	Região 3
86-92	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 907	
92-95	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL RADIOLOCALIZAÇÃO 914	

914 A faixa 93,07-93,27 GHz é também utilizada pelo serviço de radioastronomia para as observações das riscas do espectro. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que esta faixa está atribuída, tomem todas as medidas dentro das possibilidades práticas para proteger as observações de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

95-116

Atribuição aos serviços		
Região 1	Região 2	Região 3
95-100	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE *Radiolocalização* 903 904	
100-102	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL PESQUISA ESPACIAL (passiva) 722	

Atribuição aos serviços		
Região 1	Região 2	Região 3
102-105	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL 722	
105-116	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) Radioastronomia PESQUISA ESPACIAL (passiva) 722 907	

GHz

116-142

Atribuição aos serviços		
Região 1	Região 2	Região 3
116-126	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO INTERSATÉLITES MÓVEL 909 PESQUISA ESPACIAL (passiva) 722 915 916	
126-134	FIXO INTERSATÉLITES MÓVEL 909 RADIOLOCALIZAÇÃO 910	
134-142	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE *Radiolocalização* 903 917 918	

915 A faixa 119,98-120,02 GHz é também atribuída, a título secundário, ao serviço de amador.

916 A faixa 122-123 GHz (frequência central 122,5 GHz) é utilizável em aplicações industriais, científicas e médicas (ISM). A utilização desta faixa em aplicações ISM está sujeita a uma autorização especial, concedida caso por caso pela administração responsável, de acordo com as outras administrações cujos serviços de radiocomunicação possam ser afectados. Para a aplicação desta disposição, as administrações reportar-se-ão aos mais recentes pareceres da CCIR sobre o assunto.

917 Na faixa 140,69-140,98 GHz são proibidas todas as emissões provenientes de estações de aeronaves e de estações espaciais no sentido espaço para Terra.

918 As faixas 140,69-140,98 GHz, 144,68-144,98 GHz, 145,45-145,75 GHz e 146,82-147,12 GHz são também atribuídas, a título primário, ao serviço de radioastronomia para as observações das riscas do espectro.

Solicita-se instantemente às administrações que, ao fazerem consignações às estações dos outros serviços a que estas faixas estão atribuídas, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

142-151

Atribuição aos serviços		
Região 1	Região 2	Região 3
142-144	AMADOR AMADOR POR SATÉLITE	
144-149	RADIOLOCALIZAÇÃO *Amador* *Amador por satélite* 918	
149-150	FIXO FIXO POR SATÉLITE MÓVEL	
150-151	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL PESQUISA ESPACIAL (passiva) 919	

919 As faixas 150-151 GHz, 174,42-175,02 GHz, 177-177,4 GHz, 178,2-178,6 GHz, 181-181,46 GHz e 186,2-186,6 GHz são também atribuídas, a título secundário, ao serviço de radioastronomia para as observações das riscas do espectro. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que estas faixas estão atribuídas, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

151-182

Atribuição aos serviços		
Região 1	Região 2	Região 3
151-164	FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL	
164-168	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva)	
168-170	FIXO MÓVEL	

Atribuição aos serviços		
Região 1	Região 2	Região 3
170-174,5	FIXO INTERSATÉLITES MÓVEL 909 919	
174,5-176,5	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO INTERSATÉLITES MÓVEL 909 PESQUISA ESPACIAL (passiva) 919	
176,5-182	FIXO INTERSATÉLITES MÓVEL 909 919	

GHz

182-217

Atribuição aos serviços		
Região 1	Região 2	Região 3
182-185	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 920 921	
185-190	FIXO INTERSATÉLITES MÓVEL 909 919	
190-200	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE 722 903	
200-202	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO MÓVEL PESQUISA ESPACIAL (passiva) 722	
202-217	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL 722	

920 *Atribuição adicional*: no Reino Unido a faixa 182-185 GHz é atribuída adicionalmente, a título primário, aos serviços fixo e móvel.

921 Na faixa 182-185 GHz são proibidas todas as emissões, com excepção das previstas no n.º 920.

GHz

217-248

Atribuição aos serviços		
Região 1	Região 2	Região 3
217-231	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) RADIOASTRONOMIA PESQUISA ESPACIAL (passiva) 722 907	
231-235	FIXO FIXO POR SATÉLITES (espaço para Terra) MÓVEL *Radiolocalização*	
235-238	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) FIXO FIXO POR SATÉLITE (espaço para Terra) MÓVEL PESQUISA ESPACIAL (passiva)	
238-241	FIXO FIXO POR SATÉLITES (espaço para Terra) MÓVEL *Radiolocalização*	
241-248	RADIOLOCALIZAÇÃO *Amador* *Amador por satélite* 922	

922 A faixa 244-246 GHz (frequência central 245 GHz) é utilizável em aplicações industriais, científicas e médicas (ISM).

A utilização desta faixa em aplicações ISM depende de uma autorização especial, concedida caso por caso pela administração responsável, de acordo com as outras administrações cujos serviços de radiocomunicação possam ser afectados. Para a aplicação desta disposição, as administrações reportar-se-ão aos mais recentes pareceres da CCIR sobre o assunto.

GHz

248-265

Atribuição aos serviços		
Região 1	Região 2	Região 3
248-250	AMADOR AMADOR POR SATÉLITE	
250-252	EXPLORAÇÃO DA TERRA POR SATÉLITE (passiva) PESQUISA ESPACIAL (passiva) 923	

Atribuição aos serviços		
Região 1	Região 2	Região 3
252-265	MÓVEL 902 MÓVEL POR SATÉLITE RADIONAVEGAÇÃO RADIONAVEGAÇÃO POR SATÉLITE 903 923 924 925	

923 As faixas 250-251 GHz e 262,24-262,76 GHz são também atribuídas, a título primário, ao serviço de radioastronomia para as observações das riscas do espectro. Solicita-se instantemente às administrações que, ao fazerem consignações às estações dos outros serviços a que estas faixas são atribuídas, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferências particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

924 A faixa 257,5-258 GHz é também atribuída, a título secundário, ao serviço de radioastrononia para as observações das riscas do espectro. Solicita-se instantemente às administrações que, ao fazerem consignações às estações dos outros serviços a que estas faixas estão atribuídas, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais. As emissões provenientes de estações de bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferência particularmente importantes para o serviço de radioastrononia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

925 Na República Federal da Alemanha, Argentina, Espanha, Finlândia, França, Índia, Itália, Países Baixos e Suécia a faixa 261-265 GHz é também atribuída, a título primário, ao serviço de radioastrononia. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que esta faixa está atribuída, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastrononia contra interferências prejudiciais. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferências particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

GHz

265-400

Atribuição aos serviços		
Região 1	Região 2	Região 3
265-275	FIXO FIXO POR SATÉLITE (Terra para espaço) MÓVEL RADIOASTRONOMIA 926	
275-400	*(Sem atribuição)* 927	

926 Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços a que a faixa 265-275 GHz é atribuída, tomem todas as medidas dentro das possibilidade práticas para proteger o serviço de radioastronomia contra interferências prejudiciais, especialmente nas faixas 265,64-266,16 GHz, 267,34-267,86 GHz e 271,74-272,26 GHz, que são utilizadas para as observações das riscas do espectro. As emissões provenientes de estações a bordo de engenhos espaciais ou de aeronaves podem constituir fontes de interferências particularmente importantes para o serviço de radioastronomia (v. os n.^{os} **343** e **344**, bem como o artigo 36).

927 A faixa 275-400 GHz pode ser utilizada pelas administrações para fins de experiência e de desenvolvimento de diversos serviços activos ou passivos. Nesta faixa foi reconhecida a necessidade de efectuar medidas sobre as riscas do espectro nos seguintes serviços passivos:

Serviço de radioastronomia: 278-280 GHz e 343-348 GHz;
Serviço de exploração da Terra por satélite (passiva) e de pesquisa espacial (passiva): 275-277 GHz, 300-302 GHz, 324-326 GHz, 345-347 GHz, 363-365 GHz e 379-381 GHz.

Nesta parte do espectro, ainda pouco explorada, os futuros trabalhos de pesquisa poderiam permitir a descoberta de novas riscas do espectro e de faixas do *continuum* que interessam aos serviços passivos. Solicita-se instantemente ás administrações que tomem todas as medidas dentro das possibilidades práticas para proteger estes serviços passivos contra interferências prejudiciais até à próxima conferência administrativa mundial das radiocomunicações competente.

928 a 952 *(Não atribuídos.)*

ARTIGO 9

Disposições especiais relativas à consignação e ao emprego das frequências

953 § 1. Os Membros reconhecem que o serviço de radionavegação e os outros serviços de segurança, pelo papel que desempenham em matéria de segurança, necessitam de disposições especiais que os coloquem ao abrigo de interferências prejudiciais. É, portanto, necessário ter este factor em conta na consignação e na utilização das frequências.

954 § 2. (1) Os Membros reconhecem que, entre as frequências susceptíveis de se propagar a grande distância, as das faixas compreendidas entre 5 MHz e 30 MHz são especialmente úteis para as comunicações a grande distância; concordam em se esforçar por reservar estas faixas para tais comunicações. Quando sejam utilizadas frequências destas faixas para comunicações a pequena ou média distância, as emissões devem ser efectuadas com o mínimo necessário de potência.

955 (2) A fim de reduzir as necessidades em frequências nas faixas compreendidas entre 5 MHz e 30 MHz e de, consequentemente, evitar as interferências prejudiciais entre as comunicações a grande distância, recomenda-se às administrações a utilização, sempre que isso seja possível na prática, de qualquer outro meio de comunicação.

956 § 3. (1) Se uma administração se encontrar colocada em circunstâncias que tornem indispensável para ela a aplicação dos métodos de trabalho enumerados em baixo, pode recorrer a eles, com condição expressa de que as características das estações se mantenham conformes às que estão inscritas no ficheiro de referência internacional das frequências:

957 *a)* Uma estação do serviço fixo ou uma estação terrena do serviço fixo por satélite pode fazer, nas suas frequências normais e nas condições prescritas nos n.os **420** a **423**, emissões destinadas a estações móveis;

958 *b)* Uma estação terrestre pode, nas condições prescritas nos n.os **420** a **423**, comunicar com estações fixas do serviço fixo ou estações terrenas do serviço fixo por satélite, ou com outras estações terrestres da mesma categoria.

959 (2) Todavia, nos casos em que está em jogo a segurança da vida humana ou a de um navio ou de uma aeronave, uma estação terrestre pode comunicar com estações fixas ou estações terrestres de uma outra categoria.

960 § 4. Qualquer administração pode consignar uma frequência escolhida numa faixa atribuída ao serviço fixo ou ao serviço fixo por satélite, a uma estação autorizada a emitir unilateralmente de um ponto fixo determinado para um ou vários pontos fixos determinados, desde que tais emissões não sejam destinadas a ser recebidas directamente pelo público em geral.

961 § 5. Qualquer estação móvel cuja emissão satisfaça a tolerância de frequência exigida para a estação costeira com a qual comunica pode emitir na mesma frequência que a estação costeira, desde que esta estação lhe peça uma tal emissão e que as outras estações não sofram qualquer interferência prejudicial daí resultante.

962 § 6. Em certos casos previstos nos artigos 38 e 59, as estações de aeronave são autorizadas a utilizar as frequências das faixas atribuídas ao serviço móvel marítimo para entrar em comunicação com as estações deste serviço (v. o n.º **4148**).

963 § 7. As estações terrenas de aeronave são autorizadas a utilizar as frequências das faixas atribuídas ao serviço móvel marítimo por satélite para entrar em comunicação, através de estações desse serviço, com as redes telegráficas e telefónicas públicas.

964 § 8. É proibida qualquer emissão susceptível de produzir interferências prejudiciais às comunicações de perigo, alarme, urgência ou segurança nas frequências internacionais de perigo e de urgência designadas para este fim pelo presente Regulamento. Convém que as frequências suplementares de perigo, disponíveis numa base geográfica mais restrita que a base mundial, beneficiem de protecção apropriada.

965 a 989 *(Não atribuídos.)*

CAPÍTULO IV

Coordenação, notificação e registo das frequências. Comissão internacional do Registo de Frequências

ARTIGO 10

Comissão Internacional do Registo de Frequências

SECÇÃO I

Funções da Comissão

990 § 1. A Constituição e as atribuições essenciais da Comissão Internacional do Registo de Frequências estão definidas na Convenção.

991 § 2. São funções da Comissão:

992 *a*) Tratar as fichas de notificação das consignações de frequência recebidas das administrações, incluindo também informações sobre qualquer posição orbital de satélite geostacionário associada a essas consignações, a fim de as inscrever no ficheiro de referências internacional das frequências;

993 *b*) Tratar as informações recebidas das administrações em aplicação dos procedimentos de publicação antecipada, de coordenação e outros procedimentos especificados no Regulamento das Radiocomunicações e nos actos finais das conferências administrativas das radiocomunicações; dar assistências neste domínio às administrações que a peçam;

994 *c*) Tratar e coordenar os horários periódicos de radiodifusão em ondas decamétricas, a fim de satisfazer as necessidades de todas as administrações neste domínio;

995 *d*) Elaborar, para fins de publicação pelo secretário-geral, sob forma apropriada e a intervalos convenientes, as listas de frequências que traduzam os dados contidos no ficheiro de referência internacional das frequências, bem como outros documentos relativos à consignação e utilização das frequências;

996 *e*) Rever as inscrições contidas no ficheiro de referência internacional das frequências, a fim de modificar ou eliminar, consoante o caso, as inscrições que não traduzam a utilização real do espectro das frequências, de acordo com as administrações que notificaram as consignações correspondentes:

997 *f*) Estudar, a longo prazo, a utilização do espectro das frequências radioeléctricas, a fim de formular recomendações tendentes a torná-la mais eficaz;

998 *g*) Inquirir, a pedido de uma ou de várias das administrações interessadas, os casos de interferências prejudiciais e formular as recomendações necessárias;

999 *h*) Dar às administrações assistência no domínio da utilização do espectro das frequências radioeléctricas, particularmente às administrações que tenham necessidade de assistência especial, e formular com destino às administrações, quando para tal houver lugar, recomendações tendentes à reestruturação das suas consignações de frequência, a fim de obter uma melhor utilização do espectro das frequências radioeléctricas;

1000 *i*) Reunir os resultados das observações feitas durante a fiscalização das emissões que as administrações ou os organismos de fiscalização lhe possam fornecer e tomar todas as disposições úteis, por intermédio do secretário-geral, para a sua publicidade sob forma apropriada;

1001 *j*) Elaborar normas técnicas [1] em conformidade com os n.os **1454** e **1582** do presente Regulamento, e regras [1] de procedimento destinadas ao uso interno da Comissão no exercício das suas funções;

1002 *k*) Formular e enviar à CCIR todas as questões técnicas de ordem geral encontradas pela Comissão durante o exame das consignações de frequência;

1003 *l*) Prestar a sua ajuda técnica à preparação e à organização das conferências de radiocomunicações, consultando, consoante o caso, os outros organismos permanentes da União e tomando em conta qualquer directiva do Conselho de Administração em conformidade com a Convenção:

1004 *m*) Participar, a título consultivo, a convite das organizações ou dos países interessados, nas conferências e reuniões em que se discutem questões relativas à consignação e à utilização das frequências;

1005 *n*) Contribuir para a formação de quadros das administrações que lho peçam, especialmente daqueles países que mais carência têm de quadros, no domínio da gestão e da utilização do espectro das frequências;

1006 *o*) Desempenhar as outras funções especificadas no Regulamento das Radiocomunicações e nos actos finais das conferências administrativas das radiocomunicações.

1007 § 3. O secretariado especializado da Comissão trabalha sob a direcção imediata da Comissão para lhe permitir desempenhar-se das atribuições e funções que lhe são confiadas.

Secção II

Métodos de trabalho da Comissão

1008 § 4. A comissão reúne-se tão frequentemente quanto necessário para desempenhar rapidamente as suas funções e, normalmente, pelo menos uma vez por semana.

1009 § 5. (1) Em conformidade com a Convenção, os membros da Comissão elegem entre si um presidente e um vice-presidente, os quais desempenham as suas funções pelo período de um ano. Em seguida, o vice-presidente sucede cada ano ao presidente e é eleito um novo vice-presidente.

1001.1 [1] As normas técnicas e as regras de procedimento da IFRB são comunicadas a todos os Membros da União e podem ser objecto de comentários da parte de qualquer administração. Caso subsista um desacordo que não possa ser resolvido, o procedimento a seguir vem indicado na Resolução n.º 35.

1010 (2) No caso de ausência inevitável do presidente e do vice-presidente, os membros da Comissão elegem para o caso um presidente temporário escolhido entre eles.

1011 § 6. (1) Cada membro da Comissão, incluindo o presidente, dispõe de um voto. É interdito o voto por procuração ou por correspondência.

1012 (2) As actas indicarão se uma decisão foi tomada por unanimidade ou por maioria.

1013 (3) O quórum necessário para que a Comissão possa deliberar validamente é igual a metade do número dos seus membros. Todavia, se numa reunião, na qual o número de membros presentes não ultrapassa o quórum, se não puder obter unanimidade sobre o assunto, a decisão é adiada para reunião ulterior em que estejam presentes, pelo menos, dois terços dos membros. Se o cálculo da metade ou dos dois terços dos membros conduzir a um número fraccionário, arrendondar-se-á para o número inteiro imediatamente superior.

1014 (4) A Comissão deve esforçar-se por tomar as suas decisões por acordo unânime. Se o não conseguir deve tomar a decisão por voto na base da maioria de dois terços dos membros presentes e votando a favor ou contra.

1015 § 7. A Comissão pode adoptar, para a sua orientação própria e para o desempenho eficaz das suas atribuições, as disposições internas que considere necessárias, em conformidade com a Convenção e com o Regulamento das Radiocomunicações.

1016 § 8. Os documentos da Comissão, que compreendem os arquivos completos de todos os seus actos oficiais e as actas de todas as suas reuniões, são mantidos em dia pela Comissão nas línguas de trabalho da União, tais como definidas na Convenção; para esse fim, bem como para as reuniões da Comissão, o secretário-geral fornece o pessoal linguístico e todos os outros meios materiais necessários. É mantido à disposição do público, nos escritórios da Comissão, um exemplar de todos os documentos da Comissão, para fins de consulta.

1017 a 1040 *(Não atribuídos.)*

ARTIGO 11

Coordenação das consignações de frequência às estações de um serviço de radiocomunicação espacial, com excepção das estações de serviço de radiodifusão por satélite, e às estações de Terra apropriadas (1)

SECÇÃO I

Procedimentos para a publicação antecipada de informações relativas às redes de satélite em projecto (2)

1041 *Publicação de informações:*

1042 § 1. (1) Qualquer administração (ou qualquer administração agindo em nome de um grupo de administrações expressamente nomeadas) que se proponha estabelecer um sistema de satélites enviará à Comissão Internacional do Registo de Frequências, antes de iniciar, se for caso disso, o procedimento de coordenação descrito n.º **1060**, o mais cedo 5 anos, e, de preferência, o mais tarde 2 anos antes da data de entrada em serviço de cada rede de satélite do sistema em projecto, as informações indicadas no apêndice 4.

1043 (2) Qualquer modificação das informações comunicadas conforme as disposições do n.º **1042** relativas a um sistema de satélites em projecto será igualmente comunicada à Comissão a partir do momento em que esteja disponível.

1044 (3) A Comissão publicará as informações a que ser referem os n.os **1042** e **1043** numa secção especial da sua circular semanal, e quando a circular semanal contiver informações desta natureza, avisará as administrações por telegrama-circular. Esse telegrama-circular indicará as faixas de frequências a utilizar e, no caso de um satélite geostacionário, a posição orbital da estação espacial.

1045 (4) Se as informações comunicadas forem consideradas incompletas, a Comissão publicá-las-á em conformidade com as disposições do n.º **1044** e solicitará imediatamente à administração responsável todos os esclarecimentos necessários e todas as informações que não foram fornecidas. Em tais, casos o período de 4 meses especificados no n.º **1047** será contado a partir da data da publicação, nos termos do n.º **1044**, das informações completas.

1046 *Observações sobre as informações publicadas:*

1047 § 2. Se, após ter estudado as informações publicadas nos termos no n.º **1044**, qualquer administração for de parecer que poderão ser causadas interferências prejudiciais aos seus serviços de radiocomunicação espacial, existentes ou em projecto, comunicará as suas observações à administração responsável no prazo de 4 meses a partir da data da circular semanal em que foi publicada a totalidade das informações enumeradas no apêndice 4. Enviará igualmente á Comissão uma cópia dessas observações. Se a administração responsável não receber de uma outra administração qualquer observação desta natureza durante o período acima mencionado, poderá admitir que esta última não tem objecção de maior a formular contra a ou as redes de satélite em projecto do sistema relativamente às quais foram publicadas informações.

A.11.1 (1) Para a coordenação das consignações de frequência às estações do serviço de radiodifusão por satélite e aos outros serviços nas faixas de frequências 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1) (v. também o artigo 15).

A.11.2 (2) Estes procedimentos podem ser aplicáveis às estações de bordo de engenhos lançadores de satélites.

1048 *Resolução das dificuldades:*

1049 § 3. (1) Uma administração que receba observações formuladas nos termos do n.º **1047** tentará resolver as dificuldades de qualquer natureza que possam apresentar-se e fornecerá todas as informações suplementares de que disponha.

1050 (2) Caso se apresentem dificuldades quando uma qualquer das redes de satélite em projecto de um sistema se destina a utilizar a órbita de satélites geostacionários:

1051 *a*) A administração responsável pelo sistema em projecto procurará, em primeiro lugar, todos os meios possíveis para fazer face às suas necessidades, tendo em conta as características das redes de satélite geostacionário que fazem parte de outros sistemas e sem considerar a possibilidade de serem feitos reajustamentos em sistemas dependentes de outras administrações. Se não dispuser de tais meios, a administração interessada poderá então dirigir-se às outras administrações em causa a fim de resolver essas dificuldades;

1052 *b*) Uma administração que receba um pedido nos termos do n.º **1051** procurará, de acordo com a administração requerente, todos os meios possíveis para fazer face às necessidades desta última, alterando, por exemplo, a localização de uma ou de várias das suas próprias estações espaciais geostacionárias em causa ou modificando as emissões, a utilização das frequências (incluindo mudanças de faixa de frequências) ou outras características técnicas ou de exploração;

1053 *c*) Se, após aplicação do procedimento descrito nos n.ºs **1051** e **1052**, existirem ainda dificuldades por resolver, as administrações em causa tentam, de comum acordo e por todos os meios possíveis, resolver essas dificuldades através de reajustamentos aceitáveis para as duas partes, modificando, por exemplo, a localização de estações espaciais geostacionárias ou outras características dos sistemas em causa, a fim de permitir o funcionamento normal tanto do sistema em projecto como dos sistemas existentes.

1054 (3) As administrações podem pedir o auxílio da Comissão nas suas tentativas para resolver as dificuldades acima mencionadas.

1055 *Resultados da publicação antecipada:*

1056 § 4. Qualquer administração em nome da qual tenham sido publicadas informações sobre as redes de satélite em projecto, de acordo com as disposições dos n.ºs **1042** a **1044**, comunicará à Comissão, ao expirar o período de 4 meses especificado no n.º **1047**, se recebeu ou não as observações referidas no n.º **1047** e informá-la-á sobre os progressos obtidos no que respeita à regularização de eventuais dificuldades. A intervalos que não ultrapassem 6 meses antes do início da coordenação ou antes do envio à Comissão das fichas de notificação, deverão ser enviadas à Comissão informações suplementares sobre os progressos alcançados no que respeita à resolução dessas dificuldades. A Comissão publicará essas informações numa secção especial da sua circular semanal e, quando a circular semanal contiver informações dessa natureza, avisará disso as administrações por telegrama-circular.

1057 *Início dos procedimentos de coordenação ou de notificação:*

1058 § 1. De acordo com as disposições dos n.ºs **1049** a **1054**, uma administração responsável por um sistema de satélite adiará, se necessário, o início do procedimento de coordenação ou, se este não for aplicável, o envio das suas fichas de notificação à Comissão para uma data de 6 meses posterior à data da circular semanal que contém as informações indicadas no apêndice 4 relativas à rede de satélite pertinente. Contudo, em relação às administrações com as quais foram resolvidas as dificuldades ou que responderam favoravelmente, o procedimento de coordenação pode, se for caso disso, ser iniciado antes de expirar o prazo de 6 meses acima referido.

Secção II

Coordenação das consignações de frequência a uma estação espacial a bordo de um satélite geostacionário ou a uma estação terrena que comunique com tal estação espacial, em relação às estações que pertencem a outras redes de satélite geostacionário

1059 *Condições que regem a coordenação:*

1060 § 6. (1) Antes de notificar à Comissão ou de pôr em serviço uma consignação de frequência a uma estação espacial instalada a bordo de um satélite geostacionário ou a uma estação terrena destinada a comunicar com uma tal estação espacial, qualquer administração (ou, no caso de uma estação espacial, qualquer administração agindo em nome de um grupo de administrações expressamente nomeadas) coordenará, salvo nos casos fixados nos n.ºs **1066** a **1071**, a utilização dessa consignação de frequência com qualquer outra administração da qual possa ser afectada uma consignação de frequência relativa a uma estação espacial instalada a bordo de um satélite geostacionário ou a uma estação terrena que comunique com uma tal estação espacial.

1061 (2) As consignações de frequência a que se aplicam as disposições do n.º **1060** são:

1062 *a*) As situadas na mesma faixa de frequências da consignação em projecto e em conformidade com as disposições do n.º **1503**; e

1063 *b*) Quer as inscritas no ficheiro de referência ou quer tenham sido objecto da coordenação prevista na presente secção;

1064 *c*) Ou as que se devem tomar em consideração para a coordenação a partir da data da recepção pela Comissão, em conformidade com as disposições do n.º **1074**, das informações pertinentes, tais como são especificadas no apêndice 3;

1065 *d*) Ou as notificadas à Comissão sem qualquer coordenação, nos casos em que se aplicam as disposições dos n.os **1066** a **1071**.

1066 (3) Não é necessária qualquer coordenação nos termos no n.º **1060**:

1067 *a*) Quando, devido à utilização de uma nova consignação de frequência, a temperatura de ruído do receptor de qualquer estação espacial ou terrena dependente de uma outra administração ou a temperatura equivalente de ruído de qualquer ligação por satélite, também dependente de outra administração, consoante o caso, sofrer um aumento que, calculado pelo método descrito no apêndice 29, não ultrapasse o valor de limiar definido nesse método;

1068 *b*) Quando a interferência resultante da modificação de uma consignação de frequência, já coordenada anteriormente, não exceder o valor convencionado no decorrer na coordenação;

1069 *c*) Quando uma administração se propõe notificar ou pôr em serviço uma nova estação terrena no interior de uma zona de serviço de uma rede de satélite existente, desde que a nova estação terrena não cause interferência de nível superior ao que seria causado por uma estação terrena pertencente à mesma rede de satélite e cujas características tivessem sido publicadas conforme as disposições do n.º **1078**, ao mesmo tempo que as informações sobre a estação espacial;

1070 *d*) Quando, para uma nova consignação de frequência a uma estação de recepção, a administração notificante declare que aceita a interferência resultante das consignações de frequência citadas nos n.os **1061** a **1065**;

1071 *e*) Entre estações terrenas que utilizem consignações de frequência no mesmo sentido (quer Terra para espaço, quer espaço para Terra).

1072 *Dados relativos à coordenação:*

1073 § 7. (1) A fim de efectuar a coordenação, a administração que procura a coordenação envia a qualquer outra administração visada no n.º **1060** todas as informações indicadas no apêndice 3 e necessárias à coordenação. O pedido de coordenação relativo a uma estação espacial ou a uma estação terrena associada pode compreender todas ou algumas das consignações de frequência que ela prevê vir a utilizar nessa estação espacial, mas em seguida cada consignação é tratada separadamente.

1074 (2) Quando uma administração inicia o procedimento de coordenação, envia à Comissão uma cópia do pedido de coordenação, acompanhada de todas as informações indicadas no apêndice 3 necessárias à coordenação, bem como do nome da ou das administrações junto das quais ela procura a coordenação. Uma administração que seja de parecer que se devem aplicar à sua consignação em projecto as disposições dos n.os **1066** a **1071** pode enviar à Comissão as informações pertinentes indicadas no apêndice 3, quer nos termos da presente disposição quer em conformidade com as disposições dos n.os **1488** a **1491**. Neste último caso, a Comissão avisará disso imediatamente todas as administrações por telegrama-circular.

1075 § 8. Ao receber as informações a que se refere o n.º **1074**, a Comissão:

1076 *a*) Examina imediatamente essas informações sob o ponto de vista da sua conformidade com as disposições do n.º **1503** e envia o mais rapidamente possível um telegrama a todas as administrações, indicando a identidade da rede de satélite, as conclusões a que chegou relativamente ao n.º **1503** e a data da recepção das informações. Esta data é tomada em conta como a data a partir da qual a consignação é tida em consideração para a coordenação;

1077 *b*) Examina as informações recebidas a fim de identificar as administrações cujos serviços possam ser afectados nos termos das disposições do n.º **1060** e informa por telegrama as administrações interessadas;

1078 *c*) Publica numa secção especial da sua circular semanal as informações recebidas em aplicação do n.º **1074** e o resultado efectuado em conformidade com os n.os **1076** e **1077**, bem como uma referência à circular semanal em que foram publicadas, nos termos da secção I do presente artigo, as informações relativas à rede de satélite. Quando a circular semanal contiver informações desta natureza, a Comissão avisa disso todas as administrações por telegrama-circular.

1079 *Pedidos de participação no procedimento de coordenação:*

1080 § 9. Qualquer administração que considere que deveria ser incluída no procedimento de coordenação a que se refere o n.º **1060** tem o direito de pedir para participar no procedimento de coordenação. Este pedido é enviado à administração que iniciou o procedimento de coordenação, com uma cópia para a Comissão, o mais rapidamente possível.

1081 *Avisos de recepção dos dados relativos à coordenação:*

1082 § 10. Qualquer administração junto da qual se procura a coordenação, nos termos do n.º **1060,** acusará imediatamente a recepção, por telegrama, dos dados relativos à coordenação. Se a administração que procura a coordenação não recebe aviso de recepção num prazo de 30 dias a contar da data da circular semanal em que foram publicadas, conforme as disposições do n.º **1078,** as informações pertinentes, enviará um telegrama a pedir o aviso de recepção, devendo a administração à qual o telegrama for dirigido responder num novo prazo de 15 dias.

1083 *Exame dos dados relativos à coordenação e acordo entre as administrações:*

1084 § 11. (1) Ao receber as informações relativas à coordenação, a administração junto da qual se procura a coordenação estuda rapidamente a questão, do ponto de vista das interferências (1) que seriam causadas ao serviço assegurado por aquelas suas estações para as quais se procura a coordenação nos termos do n.º **1060** ou causadas por estas estações. Ao fazer isto, tomará em consideração a data prevista da entrada ao serviço da consignação para a qual é procurada a coordenação. Em seguida, num prazo de 4 meses a contar da data da circular semanal pertinente, comunicará o seu acordo à administração que procura a coordenação. Se a administração junto da qual se procura a coordenação não comunicar o seu acordo, enviará, no mesmo prazo, à administração que procura a coordenação informações técnicas indicando as razões que motivam o seu desacordo, incluindo as características pertinentes contidas no apêndice 3 que não foram anteriormente notificadas à Comissão, e se for caso disso, apresentará as sugestões que possa fazer para se obter uma solução satisfatória do problema. É enviada também uma cópia dessas observações à Comissão.

1085 (2) A administração que procura a coordenação ou qualquer administração junto da qual se procura a coordenação pode pedir as informações suplementares que considere ter necessidade para avaliar a interferência causada aos serviços interessados.

1086 *Resultados da coordenação:*

1087 § 12. Qualquer administração que tenha iniciado um procedimento de coordenação em conformidade com as disposições dos n.os **1060** a **1074** comunicará à Comissão, no final do prazo de 4 meses a partir da data da circular semanal pertinente mencionada no n.º **1078,** os nomes das administrações com as quais tenha sido obtido um acordo, bem como as modificações das características das suas consignações de frequência. Comunicará igualmente à Comissão os progressos obtidos com as outras administrações, no que respeita à regularização da coordenação ou as dificuldades eventuais. Tal comunicação é feita à Comissão todos os 6 meses após o prazo acima mencionado. A Comissão publicará essas informações numa secção especial da sua circular semanal e, quando esta contiver tais informações sobre as modificações às características publicadas, avisará disso as administrações por telegrama-circular.

1088 *Assistência pedida à IFRB para efectuar a coordenação:*

1089 § 13. (1) A administração que procura efectuar a coordenação pode pedir à Comissão que tente efectuar essa coordenação nos seguintes casos:

1090 *a*) Uma administração junto da qual se procura a coordenação nos termos do n.º **1060** não envia aviso de recepção, nos termos do n.º **1082,** num prazo de 45 dias a contar da data da circular semanal em que foram publicadas as informações relativas ao pedido de coordenação;

1091 *b*) Uma administração envia um aviso de recepção nos termos do n.º **1082,** mas não comunica a sua decisão num prazo de 4 meses a contar da data da circular semanal pertinente;

1092 *c*) A administração que procura a coordenação e a administração junto da qual se procura a coordenação estão em desacordo no que respeita à interferência aceitável;

1093 *d*) Ou, ainda, a coordenação não é possível por qualquer outra razão.

1094 (2) Ao apresentar o seu pedido à Comissão, a administração interessada comunicar-lhe-á as informações necessárias que lhe permitam tentar efectuar a coordenação.

1095 *Medidas a tomar pela IFRB:*

1096 § 14. (1) Quando a Comissão receber um pedido nos termos do n.º **1090,** enviará sem demora um telegrama à administração interessada, pedindo-lhe que acuse a recepção imediatamente.

1097 (2) Quando a Comissão receber um aviso de recepção em consequência da medida que tomou nos termos do n.º **1096,** ou quando receber um pedido nos termos do n.º **1091,** enviará imediatamente um telegrama à administração interessada, pedindo-lhe que tome rapidamente uma decisão sobre o assunto.

1084.1 (1) Os métodos de cálculo e os critérios a utilizar para avaliar a interferência deveriam basear-se nos pareceres da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outro modo.

No caso de desacordo sobre um parecer da CCIR ou na ausência de tais pareceres, os métodos e os critérios constituirão objecto de acordos entre as administrações interessadas.

Tais acordos deverão ser obtidos sem causar prejuízo às outras administrações.

1098 (3) Quando a Comissão receber um pedido nos termos do n.º **1093**, tentará efectuar a coordenação, em conformidade com as disposições do n.º **1060**. A Comissão tomará igualmente as medidas previstas nos n.os **1075** a **1078**. Quando a Comissão não receber aviso de recepção do seu pedido de coordenação no prazo especificado no n.º **1082**, agirá em conformidade com disposições do n.º **1096**.

1099 (4) Quando para tal houver lugar, a Comissão avaliará, em conformidade com o procedimento especificado nos n.os **1089** a **1094**, o nível de interferência. Em qualquer caso, comunicará às administrações interessadas os resultados obtidos.

1100 (5) A Comissão poderá pedir informações suplementares de que julgue ter necessidade para avaliar a interferência causada aos serviços interessados.

1101 (6) Quando uma administração não responder num prazo de 30 dias, a contar da data de envio do telegrama da Comissão nos termos do n.º **1096** pedindo-lhe que acuse a recepção, ou quando essa administração não comunicar a sua decisão sobre o assunto num prazo de 30 dias, a contar da data de envio do telegrama da Comissão nos termos do n.º **1097**, considera-se que a administração junto da qual se procurou a coordenação se obriga:

1102 *a*) A não formular queixa relativa às interferências prejudiciais que possam ser causadas ao serviço assegurado pelas suas estações de radiocomunicação espacial pela utilização da consignação de frequência para a qual se procurou a coordenação;

1103 *b*) A tomar as medidas necessárias para que as suas estações de radiocomunicação espacial não causem interferências à utilização da consignação de frequência para a qual se procurou a coordenação.

1104 *Notificação das consignações de frequência em caso de desacordo persistente:*

1105 § 15. Em caso de desacordo persistente entre a administração que procura a coordenação e a administração junto da qual se procurou a coordenação, a administração que procura a coordenação adiará por 6 meses, excepto nos casos em que tenha sido pedida a assistência da Comissão, o envio à Comissão da sua ficha de notificação relativa à consignação em projecto, sendo esse adiamento de 6 meses a contar da data de publicação do pedido de coordenação nos termos do n.º **1078**, em consideração as disposições do n.º **1496**.

SECÇÃO III

Coordenação das consignações de frequência a uma estação terrena em relação às estações de Terra

1106 *Condições que regem a coordenação:*

1107 § 16. (1) Antes de notificar à Comissão ou de pôr em serviço uma consignação de uma frequência de emissão ou de recepção a uma estação terrena numa faixa determinada, atribuída com igualdade de direitos a serviços de radiocomunicação espacial e a serviços de radiocomunicação de Terra na faixa de frequências situadas acima de 1 Ghz, qualquer administração coordena, excepto nos casos indicados nos n.os **1108** a **1111**, a utilização dessa consignação com a administração de qualquer país cujo território esteja situado total ou parcialmente no interior da zona de coordenação (1) da estação terrena em projecto. O pedido de coordenação relativo a uma estação terrena pode compreender todas ou algumas das consignações de frequência à estação espacial associada, mas, em seguida, cada consignação é tratada separadamente.

1108 (2) Não é necessária qualquer coordenação nos termos do n.º **1107** quando uma administração se propõe:

1109 *a*) Pôr em serviço uma estação terrena cuja zona de coordenação esteja inteiramente fora do território de qualquer outro país;

1110 *b*) Modificar as características de uma consignação existente de modo que tal não fique aumentado o nível de interferências causadas a ou por estações de radiocomunicação de Terra de outras administrações;

1111 *c*) Pôr em funcionamento uma estação terrena móvel. Todavia, se a zona de coordenação ligada ao funcionamento da tal estação terrena móvel numa das faixas de frequências referidas no n.º **1107** cobrir total ou parcialmente o território de um outro país, o funcionamento dessa estação será objecto de um acordo de coordenação entre as administrações interessadas. Esse acordo incide sobre as características da ou das estações terrenas móveis ou sobre as características de uma estação terrena móvel tipo e é feito para uma dada zona de serviço. Salvo disposições em contrário previstas no Acordo, este aplica-se a qualquer estação terrena móvel que se desloque na zona de serviço considerada, com a condição de que o nível de interferências causadas por ela não seja o mais elevado que no caso da estação terrena tipo cujas características técnicas figuram na ficha de notificação ou cuja notificação foi feita ou está em curso nos termos do n.º **1494**.

1107.1 (1) O apêndice 28, que é utilizado para calcular a zona de coordenação, contém os critérios relativos unicamente à coordenação entre as estações terrenas e as estações do serviço fixo ou do serviço móvel. Os critérios relativos aos outros serviços de radiocomunicação de Terra deveriam basear-se nos pareceres pertinentes da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outras disposições.

No caso de desacordo sobre um parecer da CCIR ou, na ausência de tais pareceres, os métodos e critérios a utilizar serão objecto de acordos entre as administrações interessadas. Tais acordos deverão ser obtidos sem que seja causado prejuízo às outras administrações.

1112 *Dados relativos à coordenação:*

1113 § 17. A administração que procura a coordenação envia para isso, a cada uma das administrações interessadas, nos termos das disposições do n.º **1107**, uma cópia de um mapa feito em escala conveniente e que indique, para a emissão e para a recepção, a localização da estação terrena e das suas zonas associadas de coordenação, ou a zona de coordenação correspondente à zona de serviço em que se prevê que venha a ser explorada a estação terrena móvel, bem como os parâmetros que serviram de base ao cálculo dessas zonas, e todas as informações pertinentes relativas à consignação de frequência em projecto, tal como são indicadas no apêndice 3, e uma indicação da data aproximada em que se prevê que a estação começará a funcionar. Enviará também à Comissão, para informação desta, uma cópia de tais informações, juntamente com a data de expedição do pedido de coordenação.

1114 *Aviso de recepção dos dados relativos à coordenação:*

1115 § 18. Qualquer administração junto da qual se procura a coordenação, nos termos do n.º **1107**, acusará imediatamente a excepção, por telegrama, dos dados relativos à coordenação. Se a administração que procura a coordenação não receber aviso de recepção num prazo de 30 dias a contar da data do envio dos dados relativos à coordenação, enviará um telegrama a pedir esse aviso de recepção, devendo a administração à qual esse telegrama é dirigido responder num novo prazo de 15 dias.

1116 *Exame dos dados relativos à coordenação e acordo entre as administrações:*

1117 § 19. (1) Ao receber os dados relativos à coordenação, a administração junto da qual se procura a coordenação estudará rapidamente a questão, tendo em conta a data prevista de entrada em serviço da consignação para a qual a coordenação é rara, em vez do ponto de vista:

1118 *a*) Das interferências (1) que seriam causadas ao serviço assegurado pelas suas estações de radiocomunicação de Terra que funcionam de acordo com as disposições da Convenção e do presente Regulamento, ou destinadas a funcionar assim antes da data prevista de entrada em serviço de consignação à estação terrena, ou ainda nos três anos seguintes; seguindo aquela dessas datas que for a mais tardia; e

1119 *b*) Das interferências (1) que seriam causadas, na recepção, à estação terrena pelo serviço assegurado pelas suas estações de radiocomunicação de Terra que funcionam de acordo com as disposições da Convenção e do presente Regulamento, ou destinadas a funcionar assim antes da data prevista de entrada em serviço da consignação à estação terrena, ou ainda nos 3 anos seguintes, segundo aquela dessas datas que for a mais tardia.

1120 (2) Os períodos a que se referem os n.os **1118** e **1119** podem ser prolongados por acordo entre as administrações interessadas a fim de tomar em conta redes de Terra planificadas.

1121 (3) Em seguida num prazo de 4 meses a contar da data de envio dos dados relativos à coordenação, a administração junto da qual se procura a coordenação comunicará à administração que procura a coordenação:

1122 *a*) Ou o seu acordo sobre a coordenação, com cópia à Comissão, indicando, se tanto for o caso, a parte da faixa de frequências atribuída que compreende as consignações de frequência coordenadas;

1123 *b*) Ou um pedido tendente a incluir na coordenação as suas estações de radiocomunicação de Terra visadas os n.os **1118** e **1119**;

1124 *c*) Ou o seu desacordo.

1125 (4) No caso dos n.os **1123** e **1124**, a administração junto da qual se procura a coordenação enviará à administração que procura a coordenação um mapa em escala conveniente indicando a localização das suas estações de radiocomunicação de Terra que estão ou estarão no interior da zona de coordenação da estação terrena de emissão ou de recepção, consoante o caso, bem como todas as outras características fundamentais pertinentes, e apresentar-lhe-á as sugestões que possa fazer, se tanto for o caso, a fim de se obter uma solução satisfatória do problema.

1126 (5) Quando a administração junto da qual se procura a coordenação enviar à administração que procura a coordenação as informações mencionadas no n.º **1124**, enviará também uma cópia dessas informações á Comissão. Esta considerará como notificações nos termos da secção I do artigo 12 somente aquelas informações que digam respeito a consignações a estações de radiocomunicação de Terra existentes ou que serão postas em serviço nos 3 meses seguintes.

1118.1 (1) Os métodos de cálculo e os critérios a utilizar para avaliar a interferência deveriam basear-se nos pareceres pertinentes da
1191.1 CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outras disposições. No caso de desacordo sobre um parecer da CCIR ou na ausência de tais pareceres, os métodos e os critérios serão objecto de acordos entre as administrações interessadas. Tais acordos deverão ser obtidos sem causar prejuízo às outras administrações.

1127 (6) Quando for obtido um acordo sobre a coordenação em aplicação dos n.os **1121** a **1125**, a administração responsável pelas estações de Terra poderá enviar à Comissão as informações relativas às suas estações de Terra abrangidas pelo acordo e que deseje notificar nos termos da secção I do artigo 12. A Comissão considerará como notificações nos termos da citada secção somente as informações que digam respeito a consignações a estações de radiocomunicação de Terra existentes ou que serão postas em serviço nos 3 anos seguintes.

1128 (7) A administração que procura a coordenação, ou qualquer administração junto da qual se procura a coordenação, poderá pedir as informações suplementares de que julgue ter necessidade para avaliar a interferência causada aos serviços respectivos.

1129 *Assistência pedida à IFRB a fim de efectuar a coordenação:*

1130 § 20. (1) A administração que procura a coordenação pode pedir à Comissão que tente efectuar essa coordenação nas seguintes circunstâncias:

1131 *a*) Uma administração junto da qual se procura a coordenação nos termos do n.º **1107** não envia o aviso de recepção, nos termos do n.º **1115**, num prazo de 45 dias a contar da data de envio dos dados relativos à coordenação;

1132 *b*) Uma administração enviou um aviso de recepção nos termos do n.º **1115**, mas não comunicou a sua decisão num prazo de 4 meses a contar da data de envio dos dados relativos à coordenação nos termos do n.º **1113**;

1133 *c*) A administração que procura a coordenação e a administração junto da qual a coordenação é procurada estão em desacordo no que respeita à interferência aceitável;

1134 *d*) Ou, ainda, a coordenação não é possível por qualquer outra razão.

1135 (2) Ao apresentar o seu pedido à Comissão, a administração interessada enviar-lhe-á as informações necessárias para lhe permitir tentar a coordenação.

1136 *Medidas a tomar pela IFRB:*

1137 § 21. (1) Quando a Comissão receber um pedido nos termos do n.º **1131**, enviará sem demora um telegrama à administração interessada, pedindo-lhe que acuse a recepção imediatamente.

1138 (2) Quando a Comissão receber um aviso de recepção em consequência da medida que tomou nos termos do n.º **1137** ou quando receber um pedido nos termos do n.º **1132**, enviará imediatamente um telegrama à administração interessada, pedindo-lhe que tome rapidamente uma decisão sobre o assunto.

1139 (3) Quando a Comissão receber um pedido nos termos do n.º **1134**, tentará efectuar a coordenação, em conformidade com as disposições do n.º **1107**. Quando a Comissão não receber aviso de recepção do seu pedido de coordenação no prazo especificado no n.º **1115**, agirá em conformidade com as disposições do n.º **1137**.

1140 (4) Quando para tal houver lugar, a Comissão avaliará, em conformidade com o procedimento especificado nos n.os **1130** a **1135**, o nível de interferência. Em qualquer caso, comunicará às administrações interessadas os resultados obtidos.

1141 (5) A Comissão poderá pedir as informações suplementares que considere necessárias para avaliar a interferência causada aos serviços interessados.

1142 (6) Quando uma administração não responder num prazo de 30 dias, a contar da data de envio do telegrama que a Comissão lhe enviou nos termos do n.º **1137**, pedindo-lhe que acuse a recepção, ou quando essa administração não comunicar a sua decisão sobre o assunto num prazo de 30 dias, a contar da data de envio do telegrama da Comissão nos termos do n.º **1138**, considera-se que a administração junto da qual se procurou a coordenação se obriga:

1143 *a*) A não formular queixa relativa às interferências prejudiciais que possam ser causadas ao serviço assegurado pelas suas estações de radiocomunicação de Terra pela utilização de consignação de frequência para a qual se procurou a coordenação;

1144 *b*) A tomar as medidas necessárias para que as suas estações de radiocomunicação de Terra não causem interferências prejudiciais à utilização da consignação de frequência para a qual se procurou a coordenação.

1145 *Notificação das consignações de frequência em caso de desacordo persistente:*

1146 § 22. Em caso de desacordo persistente entre a administração que procura a coordenação e a administração junto da qual se procurou a coordenação, a administração que procura a coordenação adiará por 6 meses, excepto nos casos em que tenha sido pedida a assistência da Comissão, o envio à Comissão da sua ficha de notificação relativa à consignação em projecto, sendo esse adiamento de 6 meses a contar da data do pedido de coordenação, tendo em consideração as disposições do n.º **1496**.

Secção IV

Coordenação das consignações de frequência a uma estação de Terra emissora em relação a uma estação terrena

1147 *Condições que regem a coordenação:*

1148 § 23. (1) Antes de notificar à Comissão ou de pôr em serviço uma consignação de frequência a uma estação de Terra situada no interior da zona de coordenação (1) de uma estação terrena, numa faixa de frequências acima de 1 GHz, atribuída com igualdade de direitos aos serviços de radiocomunicação de Terra e aos serviços de radiocomunicação espacial (espaço para Terra), com excepção do serviço de radiodifusão por satélite, qualquer administração coordenará, excepto nos casos abrangidos pelos n.os **1155 a 1158,** a consignação em projecto com a administração responsável pela estação terrena no que respeita às consignações de frequência que:

1149 *a*) Estejam conforme as disposições do n.º **1503;**

1150 *b*) Ou estejam coordenadas nos termos do n.º **1107;**

1151 *c*) Ou sejam de tomar em consideração para a coordenação a contar da data de comunicação das informações a que se refere o n.º **1107;**

1152 *d*) Ou estejam inscritas no ficheiro de referência com uma conclusão favorável relativamente ao n.º **1505;**

1153 *e*) Ou estejam inscritas no ficheiro de referência com uma conclusão desfavorável relativamente ao n.º **1505** e uma conclusão relativamente ao n.º **1509;**

1154 *f*) Ou estejam inscritas no ficheiro de referência com uma conclusão desfavorável relativamente aos n.os **1505** e **1509** e que a administração notificadora tenha declarado que aceitou a interferência resultante das estações de Terra existentes, localizadas no interior da zona de coordenação terrena à data da sua inscrição.

1155 (2) Não é necessária qualquer coordenação nos termos dos n.os **1148** a **1154** quando uma administração se propõe:

1156 *a*) Pôr em serviço uma estação de Terra situada fora da zona de coordenação de uma estação terrena;

1157 *b*) Modificar as características de uma consignação existente de tal modo que daí não resulte aumento das interferências causadas a estações terrenas de outras administrações;

1158 *c*) Pôr em serviço uma estação Terra no interior da zona de coordenação de uma estação terrena, desde que a consignação projectada para a estação de Terra se encontre no exterior de qualquer parte de uma faixa de frequências que tenha sido objecto de uma coordenação em aplicação das disposições do n.º **1122** para a recepção por esta estação terrena.

1159 *Dados relativos à coordenação:*

1160 § 24. Para efectuar essa coordenação, a administração que a procura enviará a cada uma das administrações abrangidas pelos n.os **1148** a **1154,** pelo meio mais rápido possível, um mapa em escala conveniente, no qual indique a localização da estação de Terra, e comunicar-lhe-á todos os outros pormenores pertinentes respeitantes à consignação de frequência em projecto, bem como uma indicação da data aproximada prevista para a entrada em serviço da estação. O pedido de coordenação pode compreender todas ou algumas consignações de frequência cuja utilização pelas estações de uma rede de Terra, situadas total ou parcialmente no interior da zona de coordenação de uma estação terrena, está prevista para os três anos seguintes. Este período pode ser prolongado por acordo entre as administrações interessadas. Em seguida, cada consignação é tratada separadamente.

1161 *Aviso de recepção dos dados relativos à coordenação:*

1162 § 25. Qualquer administração junto da qual se procura a coordenação, nos termos dos n.os **1148** a **1154,** acusará imediatamente a recepção, por telegrama, dos dados relativos à coordenação. Se a administração que procura a coordenação não receber aviso de recepção num prazo de 30 dias a contar da data de envio dos dados relativos à coordenação, poderá enviar um telegrama a pedir esse aviso, devendo a administração à qual o telegrama foi dirigido responder num novo prazo de 15 dias.

1148.1 (1) O apêndice 28, que é utilizado para calcular a zona de coordenação, contém os critérios relativos unicamente à coordenação entre as estações terrenas e as estações do serviço fixo ou do serviço móvel. Os critérios relativos aos outros serviços de radiocomunicação de Terra deveriam basear-se nos pareceres da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outras disposições.

No caso de desacordo sobre um parecer da CCIR, ou na ausência de tais pareceres, os métodos e critérios a utilizar serão objecto de acordos entre as administrações interessadas. Tais acordos deverão ser obtidos sem que seja causado prejuízo às outras administrações.

1163 *Exame dos dados relativos à coordenação e acordo entre as administrações:*

1164 § 26. (1) Ao receber as informações relativas à coordenação, a administração junto da qual se procura a coordenação estudará rapidamente a questão, do ponto de vista das interferências (1) que seriam causadas ao serviço assegurado pelas suas estações terrenas abrangidas pelos n.os **1148** a **1154** que funcionam ou se destinam a funcionar nos três anos seguintes.

1165 (2) Nesse estudo, a administração pode tomar em consideração qualquer consignação de frequência que lhe seja comunicada com uma antecipação de mais de três anos relativamente à sua utilização.

1166 (3) Num prazo total de quatro meses (2) a contar da data de envio dos dados à coordenação, a administração junto da qual se procura a coordenação ou comunicará o seu acordo sobre a consignação em projecto à administração que procura a coordenação ou então, no caso de impossibilidade, indicar-lhe-á os motivos do seu desacordo e, se for caso disso, apresentar-lhe-á as sugestões que possa fazer a fim de se obter uma solução satisfatória do problema.

1167 § 27. A administração que procura a coordenação ou qualquer administração junto da qual seja procurada a coordenação poderá pedir as informações suplementares que considere necessárias para avaliar o nível de interferência causada aos serviços interessados.

1168 *Assistência pedida à IFRB a fim de efectuar a coordenação:*

1169 § 28. (1) A administração que procura a coordenação pode pedir à Comissão que tente efectuar essa coordenação nas circunstâncias seguintes:

1170 *a*) Uma administração junto da qual se procura a coordenação nos termos dos n.os **1148** a **1154** não envia aviso de recepção, nos termos do n.º **1162**, num prazo de 30 dias a contar da data de envio, dos dados relativos à coordenação;

1171 *b*) Uma administração enviou um aviso de recepção de acordo com as disposições do n.º **1162**, mas não comunica a sua decisão num prazo de quatro meses a contar da data do envio dos dados relativos à coordenação;

1172 *c*) A administração que procura a coordenação e uma administração junto da qual se procura a coordenação estão em desacordo no que respeita à interferência aceitável;

1173 *d*) Ou, ainda, a coordenação não é possível por qualquer outra razão.

1174 (2) Ao apresentar o seu pedido à Comissão, a administração interessada comunicar-lhe-á as informações necessárias para lhe permitir tentar efectuar a coordenação.

1175 *Medidas a tomar pela IFRB:*

1176 § 29. (1) Quando a Comissão receber um pedido nos termos do n.º **1170**, enviará logo um telegrama à administração interessada pedindo-lhe que acuse a recepção imediatamente.

1177 (2) Quando a Comissão receber um aviso de recepção em consequência da medida que tomou nos termos do n.º **1176** ou quando a Comissão receber um pedido nos termos do n.º **1171**, enviará imediatamente um telegrama à administração interessada pedindo-lhe que tome rapidamente uma decisão sobre a questão.

1178 (3) Quando a Comissão receber um pedido nos termos do n.º **1173**, tentará efectuar a coordenação em conformidade com as disposições dos n.os **1148** a **1154**. Quando a Comissão não receber aviso de recepção do seu pedido de coordenação no prazo especificado no n.º **1162**, agirá de acordo com as disposições do n.º **1176**.

1179 (4) Se para tal houver lugar, a Comissão avaliará, em conformidade com o procedimento especificado nos n.os **1169** a **1174**, o nível de interferência. Em qualquer caso comunicará às administrações interessadas os resultados obtidos.

1180 (5) A Comissão poderá pedir as informações suplementares que considere necessárias para avaliar a interferência causada aos serviços interessados.

1181 (6) Quando uma administração não responder num prazo de 30 dias, a contar da data de envio do telegrama que a Comissão lhe enviou nos termos do n.º **1176**, pedindo-lhe que acuse a recepção, ou quando essa administração não comunicar a sua decisão sobre o assunto num prazo de 2 meses, a contar da data de envio do telegrama da Comissão nos termos do n.º **1177**, considera-se que a administração junto da qual se procurou a coordenação se obriga a não formular queixa relativa às interferências prejudiciais que possam ser causadas pela estação de Terra em vias de coordenação ao serviço assegurado pela sua estação terrena.

1164.1 (1) Os métodos de cálculo e os critérios para avaliar a interferência deveriam basear-se nos pareceres da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outras disposições. No caso de desacordo sobre um parecer da CCIR ou na ausência de tais pareceres, os métodos e os critérios constituirão objecto de acordos entre as administrações interessadas. Tais acordos deverão ser obtidos sem causar prejuízo às outras administrações.

1166.2 (2) Este período pode ser prolongado com o acordo da administração que pediu a coordenação.

1182 *Notificação das consignações de frequência em caso de desacordo persistente:*

1183 § 30. Em caso de desacordo persistente entre a administração que procura a coordenação e a administração junto da qual se procurou a coordenação, a administração que procura a coordenação adiará por seis meses, excepto nos casos em que tenha sido pedida a assistência da Comissão, o envio à Comissão da sua ficha de notificação relativa à consignação em projecto, sendo esse adiamento de seis meses a contar da data do pedido de coordenação, tendo em consideração as disposições dos n.os **1230** e **1496.**

SECÇÃO V

Assistência especial dispensada pela IFRB

1184 § 31.(1) Se para isso lhe for feito pedido por qualquer administração e, em particular, pela administração de um país que tem necessidade de assistência especial, a Comissão, utilizando os meios de que disponha e que convenham às circunstâncias, prestará a seguinte assistência:

1185 *a*) Cálculo dos aumentos de temperatura de ruído, de acordo com o n.º **1066**;

1186 *b*) Preparação de mapas representando as zonas de coordenação, de acordo com o n.º **1113**;

1187 *c*) Qualquer outra assistência de carácter técnico para que sejam levados a bom termo os procedimentos descritos no presente artigo.

1188 (2) Ao apresentar o seu pedido à Comissão nos termos dos n.os **1184** a **1187**, a administração fornecer-lhe-á as informações necessárias.

1189 a 1213 *(Não atribuídos.)*

ARTIGO 12

Notificação e inscrição no ficheiro de referência internacional das frequências das consignações de frequência (1) às estações de radiocomunicações de Terra (2) (3)

SECÇÃO I

Notificação das consignações de frequência

1214 § 1. (1) Qualquer consignação de frequência (4) a uma estação fixa terrestre de radiodifusão (5), terrestre de radionavegação, terrestre de radiolocalização, de frequência padrão e de sinais horários, ou a uma estação em terra do serviço dos auxiliares de meteorologia, deverá ser notificada à Comissão Internacional do Registo de Frequências:

1215 *a*) Se a utilização da frequência em causa é susceptível de produzir interferências prejudiciais a qualquer serviço de uma outra administração (6);

1216 *b*) Ou se a frequência deve ser utilizada para radiocomunicações internacionais;

1217 *c*) Ou, ainda, se se desejar obter um reconhecimento internacional da utilização dessa frequência (7).

1218 (2) Deverá efectuar-se uma notificação análoga (8) quando uma administração desejar pedir a assistência da Comissão para a escolha de uma consignação de frequência a uma estação do serviço fixo em qualquer das faixas atribuídas em exclusivo ou em partilha a este serviço entre 3000 kHz e 27 500 kHz, ou quando esta administração desejar utilizar, paara o mesmo tipo de estação, uma consignação de frequência

---

A.12.1 (1) A expressão «consignação de frequência», sempre que figure no presente artigo, deve entender-se como referindo-se quer a uma nova consignação de frequência quer a uma modificação de uma consignação já inscrita no ficheiro de referência internacional das frequências (denominado a seguir ficheiro de referência).

A.12.2 (2) No que respeita à notificação e à inscrição no ficheiro de referência das consignações de frequência às estações de radioastrononia e às estações de radiocomunicação espacial. (v. o artigo 13).

A.12.3 (3) No que respeita à notificação e à inscrição das consignações de frequência às estações de Terra nas faixas de frequências 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1), na medida em que estejam implicadas as suas relações com o serviço de radiodifusão por satélite nestas faixas (v. o artigo 15).

1214.1 (4) Nos casos em que numerosas estações dependentes de uma mesma administração utilizem a mesma frequência [v. o apêndice 1 (secção F, II, coluna 5a, §§ 3 e 4)].

1214.2 (5) No que respeita às consignações às estações de radiodifusão nas faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz (v. o artigo 17).

1215.1 (6) Chama-se especialmente a atenção das administrações para a aplicação das disposições dos n.os **1215** e **1217** nos casos em que façam uma consignação de frequência a uma estação de Terra situada no interior da zona de coordenação de uma estação terrena (v. os n.os **1148 a 1154**, numa faixa que os serviços de radiocomunicação de Terra partilhem, com igualdade de direitos, com os serviços de radiocomunicação espacial na gama de frequências superiores a 1 GHz.

1217.1 (7) Chama-se especialmente a atenção das administrações para a aplicação dos n.os **1215** e **1217** nos casos em que façam uma consignação de frequência a uma estação de Terra situada no interior da zona de coordenação de uma estação terrena (v. os n.os **1148** a **1154**, numa faixa que os serviços de radiocomunicação de Terra partilhem, com igualdade de direitos, com os serviços de radiocomunicação espacial na gama de frequências superiores a 1 GHz.

1218.1 (8) V. a Resolução n.º 103.

predeterminada. Neste último caso, indicará as razões que motivam o seu pedido, bem como as modificações eventuais que poderia introduzir nas características da sua consignação, e a Comissão terá esta informação em conta na procura de uma solução satisfatória. Para isso deverá ser elaborada uma ficha individual de notificação pela forma prescrita na secção D do apêndice 1. Recomenda-se que a administração notificadora comunique à Comissão as outras informações indicadas nesse apêndice, bem como qualquer outra informação que julgue útil. O procedimento a seguir é o descrito nos n.os **1275** a **1304**.

1219 (3) Deverá efectuar-se uma notificação análoga no caso de qualquer frequência destinada a ser utilizada na recepção das emissões móveis por uma estação terrestre determinada, sempre que se verifique, pelo menos, uma das circunstâncias especificadas nos n.os **1214** a **1217**.

1220 (4) Não devem ser notificadas as frequências indicadas no prefácio da Lista Internacional das Frequências e prescritas no presente Regulamento como devendo ser utilizadas em comum pelas estações de um serviço determinado (por exemplo, as frequências internacionais de perigo 500 kHz e 2182 kHz, as frequências das estações radiotelegráficas de navio que funcionam em ondas decamétricas nas suas faixas exclusivas, etc.).

1221 § 2. (1) Qualquer consignação de frequência notificada em execução dos n.os **1214** a **1217** ou **1219** deve ser objecto de uma ficha individual de notificação elaborada pela forma prescrita no apêndice 1, no qual as secções A e B especificam as características fundamentais a fornecer, segundo o caso. Recomenda-se que a administração notificadora comunique igualmente à Comissão as outras informações indicadas nesse apêndice, bem como qualquer outra informação que possa julgar útil.

1222 (2) As fichas de notificação apresentadas nos termos dos n.os **1214** a **1217** ou **1218** e relativas às consignações de frequência a estações do serviço fixo nas faixas atribuídas a este serviço entre 3000 kHz e 27 500 kHz devem indicar, empregando os símbolos seguintes, a classe de funcionamento da consignação:

Símbolo A — consignação destinada a ser utilizada em exploração regular que não seja assegurada por um outro meio satisfatório de telecomunicação; ou

Símbolo B — consignação destinada a ser utilizada como consignação de reserva de um outro meio de telecomunicações; ou

Símbolo C — consignação de reservas para utilização ocasional, que não exige protecção internacionalmente reconhecida contra interferências prejudiciais.

1223 (3) Quando estações de um mesmo serviço, como, por exemplo, do serviço móvel terrestre, utilizarem uma faixa de frequências acima de 28 000 kHz numa ou várias zonas determinadas, convirá elaborar para cada frequência consignada a estações nesta faixa uma ficha de notificação pela forma prescrita no apêndice 1, no qual a secção C fixa as características fundamentais a fornecer; porém, as características notificadas deverão referir-se a uma única estação tipo. Esta disposição não se aplica:

1224 *a*) Às estações de radiodifusão;

1225 *b*) Às outras estações de Terra às quais se apliquem as disposições da subsecção II-E do presente artigo;

1226 *c*) Às estações dos serviços fixo ou móvel que funcionam nas faixas de frequências indicadas no quadro II do apêndice 28 com uma potência isotrópica radiada equivalente superior ao valor pertinente nesse quadro;

1227 *d*) Às estações de Terra nas faixas de frequências indicadas nos n.os **2509**, **2510** e **2111**.

1228 § 3. (1) Cada ficha de notificação apresentada nos termos dos n.os **1214** a **1217**, **1219** ou **1223** a **1227** deverá, tanto quanto possível, ser recebida pela Comissão antes da data de entrada em serviço da consignação de frequência em causa. Ela deve ser recebida, no máximo, 3 meses antes dessa data, mas, em qualquer caso, o mais tardar 30 dias depois de tal data.

1229 (2) Uma ficha de notificação apresentada nos termos do n.º **1218** deverá ser recebida pela Comissão no máximo um ano da data de entrada em serviço da frequência que é objecto do pedido.

1230 (3) Qualquer ficha de notificação relativa a uma consignação de frequência a estações de Terra a que se apliquem as disposições da subsecção II-E do presente artigo deverá ser recebida pela Comissão, no máximo, três anos antes e o mais tardar três meses antes da entrada em serviço da consignação de frequência em causa.

1231 (4) Com excepção dos casos abrangidos pelos n.os **1218** e **1229**, qualquer consignação de frequência cuja notificação seja recebida pela Comissão mais de 30 dias depois da data notificada de entrada em serviço ou, no caso de uma estação de Terra a que se refere a subsecção II-E do presente artigo, qualquer consignação de frequência cuja notificação seja recebida pela Comissão menos de 3 meses antes da data notificada de entrada em serviço, levará, quando houver lugar à sua inscrição no ficheiro de referência, uma observação que indique que a ficha de notificação não está conforme as disposições dos n.os **1228** ou **1230**. Todavia, essa observação não será registada no ficheiro quando se trate de uma consignação a uma estação de Terra que não foi notificada nos termos dos n.os **1214** a **1217**, mas que deverá ser notificada depois da sua entrada em serviço como resultado de uma coordenação ou de uma notificação relativa a uma consignação a uma estação terrena.

1232 § 4. Qualquer que seja o meio de comunicação, incluindo o telégrafo, pelo qual for transmitida à Comissão uma ficha de notificação, ela será considerada completa quando contenha, pelo menos, as características fundamentais apropriadas, tais como especificadas no apêndice 1.

1233 § 5. Quando for concluído um acordo regional ou de serviço, a Comissão deverá ser informada dos pormenores desse acordo.

SECÇÃO II

Procedimento para o exame das fichas de notificação e inscrição das consignações de frequência no ficheiro de referência

1234 § 6. Quando a Comissão receber uma ficha de notificação apresentada nos termos dos n.os **1214** a **1217**, **1219** ou **1223** a **1227**, que não contenha, pelo menos, as características fundamentais especificadas no apêndice 1, devolvê-la-á por correio aéreo à administração de origem, acompanhada dos motivos dessa devolução, excepto se as informações que não tinham sido fornecidas forem recebidas imediatamente em resposta a uma pergunta da Comissão. A Comissão informará a administração por telegrama quando uma ficha de notificação for devolvida nos termos da presente disposição.

1235 § 7. Quando a Comissão receber uma ficha de notificação completa, incluirá as informações que ela contém, com a data da sua recepção, numa circular semanal que será publicada num prazo de 40 dias a contar da data da recepção da ficha e que será enviada por correio aéreo a todas as administrações. Se a Comissão não puder respeitar este prazo, informará disso, logo que possível, as administrações interessadas, indicando os motivos.

1236 § 8. A circular conterá as informações completas relativas a todas as fichas de notificação dessa categoria recebidas desde a publicação da circular procedente e desempenhará o papel de aviso de recepção pela Comissão, à administração notificadora, de uma ficha de notificação completa.

1237 § 9. Para os fins dos n.os **1235** e **1236**, as fichas de notificação apresentadas nos termos do n.º **1218** sob a forma de um pedido de assistência à Comissão deverão ser agrupadas e especialmente identificadas.

1238 § 10. As fichas de notificação completas serão examinadas pela Comissão pela ordem em que as receba. Todavia, as fichas de notificação apresentadas nos termos do n.º **1218** serão tratadas logo após a sua recepção. A Comissão não poderá adiar a conclusão, a menos que faltem informações suficientes para tomar uma decisão a esse respeito. Além disso, a Comissão não resolverá sobre uma ficha de notificação que tenha relações técnicas com uma ficha recebida anteriormente.

SUBSECÇÃO II-A

Procedimento a seguir nos casos não tratados nas subsecções II-B a II-E do presente artigo

1239 § 11. (1) Com excepção das fichas de notificação a que se refere o n.º **1218**, as quais são objecto do procedimento previsto nos n.os **1275** a **1304**, a Comissão examinará cada ficha de notificação sob o ponto de vista da:

1240 *a*) Sua conformidade com as cláusulas da Convenção e do quadro de atribuição das faixas de frequências e com outras cláusulas do Regulamento das Radiocomunicações, com excepção das relativas à probabilidade de interferências prejudiciais, as quais são objecto das disposições dos n.os **1241** e **1242**;

1241 *b*) Probabilidade de uma interferência prejudicial em detrimento do serviço assegurado por uma estação para a qual já foi inscrita no ficheiro de referência uma consignação de frequência:

1) Que tenha uma data na coluna 2a (v. o n.º **1416**);
2) Ou que esteja de acordo com as disposições do n.º **1240** e tenha uma data na coluna 2b (v. o n.º **1417**), mas não tenha de facto produzido interferência prejudicial a uma qualquer consignação de frequência que tenha uma data na coluna 2a ou a uma qualquer consignação de frequência conforme com o n.º **1240** e que tenha uma data anterior na coluna 2b;

1242 *c*) Probabilidade de uma interferência prejudicial em detrimento do serviço assegurado por uma estação para a qual foi já inscrita no ficheiro de referência uma consignação de frequência:

1) Que esteja de acordo com as disposições do n.º **1240** e foi inscrita no Ficheiro de referência com uma data na coluna 2d, em seguimento a uma conclusão favorável relativamente ao n.º **1242**;
2) Ou que esteja de acordo com as disposições do n.º **1240** e foi inscrita no ficheiro de referência com uma data na coluna 2d depois de uma conclusão desfavorável relativamente ao n.º **1242**, mas que, de facto, não criou interferência prejudicial a uma qualquer consignação de frequência inscrita anteriormente no ficheiro de referência conforme com o n.º **1240**.

1243 (2) Ao proceder ao exame previsto nos n.os **1241** ou **1242**, a Comissão aplicará para a classe de funcionamento A critérios de protecção mais rigorosos do que para a classe de funcionamento B (1). A Comissão não tomará em conta a probabilidade de interferência às consignações de frequência da classe de funcionamento C.

1243.1 (1) Os diversos critérios de protecção que deverão ser aplicados pela Comissão para as classes de funcionamento A e B vêm publicados nas normas técnicas da Comissão (v. o n.º **1001**).

1244 (3) Quando se tratar de uma ficha de notificação respeitante a uma frequência superior a 28 000 kHz, a Comissão não procederá ao exame especificado no n.º **1242** senão a pedido de uma administração directamente interessada ou cujos serviços sejam afectados, quando não foi possível uma coordenação entre as administrações em causa.

1245 (4) Sempre que para tal haja lugar, a Comissão examinará também a ficha sob o ponto de vista da sua conformidade com um acordo regional ou de serviço. O procedimento a seguir em relação às consignações de frequências feitas em aplicação de um tal acordo deverá ser conforme as disposições dos n.os **1240** e **1241** ou **1242**, excepto que a Comissão não examinará a questão das probabilidades de interferências prejudiciais entre as partes contratantes do acordo. Do mesmo modo, a Comissão não examinará a questão das probabilidades de interferências prejudiciais causadas às consignações de qualquer administração com a qual a administração notificadora coordenou a utilização da frequência em causa.

1246 § 12. Segundo as conclusões a que chegar a Comissão em consequência do exame previsto nos n.os **1240** e **1241** ou **1242** e o resultado da acção empreendida pela Comissão nos termos dos n.os **1275** a **1278** e **1279**, o procedimento continuará pela forma seguinte:

1247 § 13. (1) *Conclusão favorável relativamente ao n.º* **1240** *nos casos em que as disposições dos n.os* **1241** *ou* **1242** *não são aplicáveis (v. o n.º* **1248**).

1248 (2) A consignação é inscrita no Ficheiro de referência. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, será a data de recepção da ficha de notificação pela Comissão.

1249 § 14. (1) *Conclusão favorável relativamente aos n.os* **1240** *e* **1241** *ou* **1242**.

1250 (2) A consignação é inscrita no ficheiro de referência. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, será a data de recepção da ficha de notificação pela Comissão.

1251 (3) Todavia, se resultar do exame que a certas horas, em certas estações ou em certas fases do ciclo da actividade solar a probabilidade de interferências prejudiciais é ligeiramente mais elevada do que a considerada conveniente, será inserida uma observação no ficheiro de referência, a fim de indicar que existe uma pequena probabilidade de interferências prejudiciais e que, por consequência, deverão ser tomadas precauções na utilização dessa consignação para evitar interferências prejudiciais às consignações já inscritas no ficheiro de referência.

1252 § 15. (1) *Conclusão favorável relativamente ao n.º* **1240** *mas desfavorável relativamente aos n.os* **1241** *ou* **1242**.

1253 (2) A ficha será devolvida imediatamente pelo correio aéreo à administração de origem, com uma exposição das razões que motivam a conclusão da Comissão e com as sugestões que ela possa fazer para se chegar a uma solução do problema satisfatória para as administrações que ela identificou.

1254 (3) Se a administração notificadora apresentar pela segunda vez a ficha com modificações que, depois de novo exame, motivam da parte da Comissão uma conclusão favorável relativamente aos n.os **1241** ou **1242**, a consignação será inscrita no ficheiro de referência. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, será a data de recepção da primeira ficha de notificação pela Comissão. A data de recepção da segunda ficha pela Comissão será indicada na coluna «Observações».

1255 (4) A administração notificadora pode apresentar pela segunda vez a ficha, quer não modificada, quer com modificações cujo efeito seja de diminuir a probabilidade de interferências prejudiciais. Quando não exista qualquer modificação ou quando as modificações não permitam aplicar as disposições do n.º **1254** e, por isso, a conclusão da Comissão se mantiver sem alteração, se a administração notificadora insistir num novo exame da ficha, indicando que pôs a sua consignação em serviço, a Comissão:

1256 *a*) Publicará na circular semanal as informações contidas na ficha de notificação, recebidas nos termos do n.º 1255, e indicará ao mesmo tempo quais são as administrações que correm o risco de ser afectadas;

1257 *b*) Enviará, simultaneamente, um telegrama a cada uma das administrações visadas no n.º **1256**, com uma referência à ficha de notificação em causa, pedindo-lhes:

1258 1) Que a informem se a consignação inscrita é ainda utilizada e, na afirmativa, se é utilizada com as características fundamentais notificadas;

1259 2) Que lhe participem qualquer interferência prejudicial que surja num prazo de dois meses a contar da data de publicação da circular semanal mencionada no n.º **1256**;

1260 *c*) Tomará as medidas apropriadas em conformidade com os n.os **1964** a **1966**, se a consignação na origem da conclusão desfavorável foi a presentada em aplicação do n.º **1218**;

1261 *d*) Inscreverá a consignação no ficheiro de referência se, ao expirar o prazo referido no n.º **1259**, não tiver recebido participação de qualquer interferência prejudicial. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, será a data de recepção pela Comissão da ficha de notificação inicial;

1262 *e*) Caso receba participações referentes a qualquer interferência prejudicial que tenha surgido durante o período de dois meses mencionado no n.º **1259**, à Comissão devolverá imediatamente a ficha de notificação à administração notificadora, informando esta da interferência que lhe foi participada e com as sugestões que possa fazer a fim de eliminar a interferência.

1263 (5) Se a Comissão receber informações respeitantes a qualquer interferência prejudicial que tenha surgido depois da inscrição de uma consignação nos termos do n.º **1261**, examinará de novo a questão e, se for caso disso, inscreverá, em frente de tal consignação, uma observação especial a indicar que não a tomará em conta quando do exame de fichas de notificação recebidas ulteriormente.

1264 (6) Se, em seguimento das informações recebidas nos termos dos n.ºs **1257** a **1259**, a Comissão estiver habilitada a formular uma conclusão favorável relativamente aos n.ºs **1241** ou **1242** em relação a uma consignação inscrita no ficheiro de referência nos termos dos n.ºs **1255** e **1261**, serão efectuadas as modificações convenientes na inscrição no ficheiro de referência . Se a conclusão continuar desfavorável, a Comissão inserirá no ficheiro de referência, em frente das consignações em causa, observações que descrevam a situação tal como se lhe afigura.

1265 (7) No caso em que a administração notificadora apresente pela segunda vez a sua ficha com modificações cujo efeito seja de aumentar a probabilidade de interferências prejudiciais e em que as conclusões da Comissão se mantenham, essa segunda ficha é tratada segundo as disposições do n.º **1253**:

1266 § 16. (1) *Conclusão desfavorável relativamente ao n.º* **1240** *nos casos em que as disposições dos n.ºs* **1241** *ou* **1242** *não são aplicáveis (v. o n.º* **1244**).

1267 (2) Quando a ficha comportar uma referência segundo a qual a estação funcionará de acordo com as disposições do n.º **342** do presente regulamento, a consignação será inscrita no ficheiro de referência com a condição de serem observadas as disposições dos n.ºs **1419** ou **1420**. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, é a data de recepção da ficha de notificação pela Comissão.

1268 (3) Quando a ficha não comportar qualquer referência segundo a qual a estação funcionará de acordo com as disposições do n.º **342** do presente Regulamento, essa ficha é devolvida imediatamente pelo correio aéreo à administração notificadora, com uma exposição das razões que motivaram a conclusão da Comissão e com as sugestões que ela possa fazer a fim de se obter uma solução satisfatória do problema.

1269 § 17. (1) *Conclusão desfavorável relativamente ao n.º* **1240** *nos casos em que as disposições dos n.ºs* **1241** *ou* **1242** *sejam aplicáveis.*

1270 (2) Quando a ficha comportar uma referência segundo a qual funcionará de acordo com as disposições do n.º **342** do presente Regulamento, será examinada imediatamente sob o ponto de vista dos n.ºs **1241** ou **1242** e, consoante o caso, ser-lhe-ão aplicadas as disposições dos n.ºs **1271** ou **1272**.

1271 (3) Se a conclusão for favorável relativamente aos n.ºs **1241** ou **1242**, a consignação será inscrita no ficheiro de referência com a condição de serem observadas as disposições do n.º **1419**. A data a inscrever na parte apropriada da coluna 2, segundo as disposições pertinentes da secção III do presente artigo, é a data da recepção pela Comissão da ficha de notificação.

1272 (4) Se a conclusão for desfavorável relativamente aos n.ºs **1242** ou **1242**, a ficha será devolvida imediatamente pelo correio aéreo à administração notificadora. Se esta administração insistir por novo exame da ficha, a consignação de frequência será inscrita apenas para informação, com uma observação apropriada referindo-se ao n.º **1419**.

1273 (5) Quando a ficha não contiver qualquer referência segundo a qual a estação funcionará de acordo com as disposições do n.º **342** do presente Regulamento, essa ficha será devolvida imediatamente pelo correio aéreo à administração notificadora, com uma exposição das razões que motivaram a conclusão da Comissão e com as sugestões que ela possa fazer a fim de se obter uma solução satisfatória do problema.

1274 § 18. *Procedimento a seguir para o tratamento das fichas de notificação apresentadas nos termos do n.º* **1218**.

1275 (1) No caso de uma ficha de notificação apresentada nos termos do n.º **1218** relativamente à escolha de uma consignação de frequência destinada a ser utilizada em exploração regular (classe de funcionamento A), a Comissão escolherá, o mais rapidamente possível, uma frequência que:

1276 *a*) Seja capaz de proporcionar o serviço pretendido;

1277 *b*) Consoante o caso, esteja conforme com os n.ºs **1240** e **1241** ou **1242**, a fim de garantir uma conclusão favorável;

1278 *c*) Esteja isenta de interferência prejudicial causada por qualquer consignação inscrita no ficheiro de referência e conforme com o n.º **1240**.

1279 (2) No caso de uma ficha de notificação apresentada nos termos do n.º **1218** referente à notificação de uma consignação de frequência predeterminada, a administração notificadora poderá pedir á Comissão que efectue, além do exame previsto nos n.ºs **1240** e **1241** ou **1242**, o cálculo da probabilidade de interferência prejudicial que poderá ser causada a essa consignação por consignações inscritas no ficheiro de referência.

A Comissão comunicará à administração notificadora os resultados desse exame e, se necessário, apresentará sugestões que visem evitar qualquer eventual interferência prejudicial à consignação.

1280 (3) Se a aplicação das disposições dos n.ºs **1275** a **1278** e **1279** der origem a dificuldades, deverá ser seguido o procedimento que abaixo se descreve:

1281 *a*) A Comissão procurará em primeiro lugar acesso a uma das partes menos sobrecarregadas de uma faixa apropriada, sem considerar a possibilidade de modificar uma consignação já inscrita;

1282 *b*) Se tanto for necessário, a Comissão consultará a administração que tenha apresentado uma ficha de notificação de acordo com o n.º **1218**, para ver se será possível modificar as características dessa consignação;

1283 *c*) No caso de não resultarem as medidas tomadas nos termos dos anteriores n.os **1281** e **1282** e se a administração que faz o pedido considerar que a frequência escolhida é aceitável, a Comissão determinará se a consignação objecto do pedido poderá ser inserida por anulação ou desclassificação de uma consignação já inscrita. As consultas a efectuar em tal caso são as que vêm descritas na secção VII do presente artigo;

1284 *d*) No caso de não resultarem as medidas tomadas nos termos das disposições do n.º **1283**, a Comissão procurará outros meios de inserir a consignação pedida, de forma a modificar apenas, no mínimo indispensável, as características de qualquer consignação já inscrita;

1285 *e*) Para os fins das medidas previstas no n.º **1284**, a Comissão concentrará as suas consultas sobre as consignações inscritas mais antigas e para as quais a Comissão pense existirem meios de telecomunicação satisfatórios a título de substituição;

1286 *f*) Depois de ter definido as modificações mínimas das características que, em tal caso, seria necessário efectuar a uma consignação já inscrita para inserir uma nova consignação pedida nos termos do n.º **1218**, a Comissão invocará as disposições pertinentes da Convenção para procurar a assistências da administração apropriada a fim de que esta aceite, na devida altura, que seja modificada a consignação já inscrita em seu nome;

1287 *g*) No caso de não resultarem as medidas tomadas nos termos das disposições do n.º **1286**, a Comissão chamará a atenção da administração apropriada para o facto de que, em tais circunstâncias, esta tem obrigação de reduzir a largura da faixa de frequências consignada, se isso for possível sob o ponto de vista da exploração, ou então de deslocar a frequência consignada de um valor que não exceda a largura de faixa da consignação de frequência inscrita, desde que não cause interferência prejudicial às consignações de frequência adjacentes;

1288 *h*) A administração apropriada deverá:

1289 1) Estar de acordo em efectuar as modificações necessárias da sua consignação existente inscrita, indicando a data em que tais modificações serão efectivas; ou

1290 2) Indicar as razões por que não podem ser efectuadas tais modificações;

1291 *i*) Se um tal caso não for resolvido num prazo de três meses a contar da data do pedido de consignação apresentado nos termos do n.º **1218**, a Comissão publicará, para informação de todos os Membros da União, um relatório sobre a questão;

1292 *j*) No decorrer do procedimento, a Comissão consultará, na altura apropriada, a administração que pediu uma consignação de acordo com as disposições do n.º **1218** para saber se a frequência escolhida é aceitável;

1293 *k*) Se, em aplicação do presente parágrafo, uma administração aceitar uma modificação das características fundamentais da sua consignação de frequência, essa modificação será inscrita no ficheiro de referência sem tocar na data ou nas datas iniciais.

1294 (4) Solicita-se instantemente às administrações que prestem à Comissão toda a assistência possível por intermédio das suas estações de fiscalização das emissões para que ela possa desempenhar bem as atribuições previstas na presente subsecção.

1295 § 19. (1) *Resultado das medidas tomadas pela Comissão em aplicação das disposições dos n.os* **1275** a **1278** *e relativas a um pedido de assistência apresentado nos termos do n.º* **1218**.

1296 (2) Depois de ter escolhido uma frequência em aplicação dos n.os **1275** a **1278**, a Comissão submeterá imediatamente, por telegrama, a frequência escolhida à aprovação da administração notificadora e inserirá uma inscrição provisória no ficheiro de referência de acordo com o n.º **1311**. A data de recepção do pedido dirigido à Comissão, em conformidade com o n.º **1218**, será inscrita na parte apropriada da coluna 2.

1297 (3) Logo que receba o telegrama mencionado no n.º **1296**, a administração notificadora estudará rapidamente a questão e, caso não aceite a frequência escolhida, informará disso a Comissão, indicando os motivos da recusa.

1298 (4) Nas condições mencionadas no n.º **1297**, a Comissão anulará a inscrição e informará a administração interessada de que foi feita a anulação.Em tal caso, se a administração notificadora lho pedir, a Comissão tentará novamente escolher uma frequência aceitável; todavia, esse pedido será considerado uma nova notificação nos termos do n.º **1218**.

1299 (5) Quando uma administração notificadora aceitar uma frequência escolhida pela Comissão, informará esta logo que possível.

1300 (6) Se, num prazo de dois meses a contar da data de envio do telegrama indicado no n.º **1296** a pedir a concordância com a frequência escolhida, a Comissão não receber qualquer resposta, anulará a inscrição provisória e informará as outras administrações de que foi feita essa anulação.

1301 § 20. (1) *Resultado das medidas tomadas pela Comissão em aplicação das disposições do n.º* **1280** *relativamente a um pedido de assistência apresentado nos termos do n.º* **1218**.

1302 (2) Depois de ter escolhido uma frequência em aplicação do n.º **1280** e se foram aceites as modificações necessárias da consignação inscrita anteriormente, em conformidade com as disposições do n.º **1289**, a Comissão tratará a consignação escolhida de acordo com as disposições do n.º **1295**.

1303 (3) Depois de ter escolhido uma frequência em aplicação do n.º **1280**, se não puderam ser efectuadas as modificações necessárias da consignação inscrita anteriormente em virtude de medidas tomadas de acordo com as disposições do n.º **1290** e se a frequência escolhida for mesmo assim considerada aceitável pela administração que pediu uma consignação, a Comissão procederá a uma inscrição no ficheiro de referência em nome da administração que fez o pedido. A data de recepção do pedido enviado à Comissão nos termos do n.º 1218 será inscrita na parte apropriada da coluna 2.

1304 (4) As interferências prejudiciais que possam resultar da utilização simultânea das duas consignações serão objecto de consultas entre as administrações interessadas.

1305 § 21. (1) *Modificações das características fundamentais das consignações já inscritas no ficheiro de referência.*

1306 (2) Qualquer notificação de modificação das características fundamentais de uma consignação já inscrita no Ficheiro de referência, tal como definidas no apêndice 1 (com excepção, todavia, das que figuram nas colunas 2c, 3, 4a e 11 do ficheiro de referência), será examinada pela Comissão segundo as disposições dos n.os **1240** e **1241**, **1242** ou **1244**, segundo o caso, e ser-lhe-ão aplicadas as disposições dos n.os **1247 a 1273**, inclusive. Quando a modificação for inscrita no ficheiro de referência, alterar-se-á a consignação original em conformidade com a notificação.

1307 (3) Todavia, no caso de uma modificação das características fundamentais de uma consignação que esteja de acordo com as disposições do n.º **1240** (com excepção de uma alteração da frequência consignada que exceda metade da faixa de frequências primitivamente consignada, tal como definida no n.º **141**) e em que a Comissão formule uma conclusão favorável relativamente aos n.os **1241** ou **1242** ou conclua que essa modificação não aumentará a probabilidade de interferências prejudiciais em detrimento de consignações de frequência já inscritas no ficheiro de referência, a consignação de frequência modificada conservará a data primitivamente inscrita na parte apropriada da coluna 2. Além disso, inscreve-se na coluna «Observações» a data de recepção pela Comissão da ficha de notificação respeitante à modificação.

1308 (4) A data prevista de entrada em serviço de uma consignação de frequência pode ser prorrogada por três meses, a pedido da administração notificadora. No caso de uma administração declarar que circunstâncias excepcionais motivam novo prolongamento desse prazo, esse novo prolongamento poderá ser concedido, mas não deverá em nenhum caso exceder seis meses a contar da data inicial prevista para a entrada em serviço.

1309 § 22. *Na aplicação das disposições das subsecções II-A a II-C*, qualquer ficha de notificação apresentada de novo à Comissão e recebida por ela mais de seis meses após a data em que devolveu a ficha à administração notificadora será considerada como uma nova ficha de notificação.

1310 § 23. (1) *Inscrição das consignações de frequência notificadas antes da sua entrada em serviço.*

1311 (2) Se uma consignação de frequência notificada antes da sua entrada em serviço for objecto de conclusões favoráveis formuladas pela Comissão relativamente aos n.os **1240** e **1241** ou **1242**, será inscrita provisoriamente no ficheiro de referência com um símbolo especial na coluna «Observações», para indicar o carácter provisório dessa inscrição.

1312 (3) Num prazo de 30 dias (v. o n.º **1228**) a contar da data prevista para a entrada em serviço inicialmente notificada ou modificada nos termos do n.º **1308**, a administração notificadora confirmará que a consignação de frequência foi posta em serviço. A Comissão suprimirá o símbolo especial na coluna «Observações» logo que seja avisada de que a consignação foi posta em serviço.

1313 (4) Se a Comissão não receber a confirmação no prazo previsto no n.º **1312**, a inscrição em causa será anulada. A Comissão consultará a administração interessada antes de tomar esta medida.

1314 (5) As disposições dos n.os **1311** a **1113** não se aplicam às consignações de frequência que estejam de acordo com os planos de adjudicação que figuram nos apêndices 25 Mar2, 26, 27 (*) e 27 Aer 2 (*) ao presente Regulamento; a Comissão inscreverá essas consignações de frequência no ficheiro de referência aquando da recepção da ficha de notificação.

Subsecção II-B

Procedimento a seguir pelas estações costeiras radiotelefónicas que funcionam nas faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz

1315 § 24. (1) *Exame das fichas de notificação respeitantes às consignações de frequência às estações costeiras radiotelefónicas nas faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz para as estações costeiras radiotelefónicas (v. o n.º* **1239***).*

1316 (2) A Comissão examinará cada ficha de notificação a que refere o n.º **1315**;

1317 *a*) Relativamente às disposições do n.º **1240** e, em particular, às do n.º **4373**;

1318 *b*) A fim de determinar se a consignação notificada está de acordo com uma adjudicação do plano de adjudicação que figura no apêndice 25 Mar2 ao presente Regulamento.

(*) Nota do Secretariado-Geral: v. o n.º *5189* e a Resolução n.º 400.

1319 (3) Qualquer consignação de frequência que seja objecto de uma conclusão favorável relativamente às disposições dos n.os **1317** e **1318** é inscrita no ficheiro de referência (v. igualmente o n.º **1314**. A data a inscrever na coluna 2a é a determinada pelas disposições pertinentes da secção III do presente artigo.

1320 (4) Qualquer consignação de frequência que seja objecto de uma conclusão desfavorável relativamente às disposições do n.º **1317** é examinada segundo as disposições dos n.os **1267** e **1268**. A data a inscrever na coluna 2b é determinada pelas disposições pertinentes da secção III do presente artigo.

1321 (5) No caso de uma ficha de notificação que seja objecto de uma conclusão favorável relativamente às disposições do n.º **1317**, mas desfavorável relativamente às do n.º **1318**, a Comissão examina essa ficha sob o ponto de vista da probabilidade de interferência prejudicial em detrimento do serviço assegurado por uma estação costeira radiotelefónica cuja consignação de frequência:

1322 *a*) Esteja de acordo com uma das adjudicações do plano e esteja já inscrita no ficheiro de referência ou seja susceptível de aí ser inscrita no futuro;

1323 *b*) Ou, então, foi inscrita no ficheiro de referência numa frequência especificada no apêndice 16, em seguimento a uma conclusão favorável relativamente aos n.os **1321** a **1324**;

1324 *c*) Ou, ainda, foi inscrita no ficheiro de referência numa frequência especificada no apêndice 16, depois de uma conclusão desfavorável relativamente aos n.os **1321** a **1324**, mas não criou, de facto, interferência prejudicial a uma qualquer consignação de frequência a uma estação costeira radiotelefónica anteriormente inscrita no ficheiro de referência.

1325 (6) Em conformidade com as conclusões da Comissão relativamente aos n.os **1321** a **1324**, o procedimento continuará segundo as disposições dos n.os **1249** a **1265**, inclusive, ou **1305** a **1307**, inclusive, consoante o caso, subentendendo-se que no texto destas disposições deverão ler-se os n.os **1321** a **1324** em lugar do n.º **1241**.

1326 § 25. (1) *Exame das fichas de notificação relativas às frequências de recepção utilizadas pelas estações costeiras radiotelefónicas nas faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz para as estações radiotelefónicas de navio (v. os n.os* **1219** *e* **1239**).

1327 (2) A Comissão examinará cada ficha de notificação a que se refere o n.º **1326**:

1328 *a*) Relativamente às disposições do n.º **1240** e em, especial, às do n.º **4374**;

1329 *b*) A fim determinar se a consignação notificada corresponde a uma frequência associada, segundo o apêndice 16, a uma frequência adjudicada à administração notificadora no plano de adjudicação que figura no apêndice 25 Mar2 ao presente Regulamento.

1330 (3) Qualquer consignação de frequência de uma recepção a uma estação costeira radiotelefónica que seja objecto de uma conclusão favorável relativamente aos n.os **1328** e **1329** será inscrita no ficheiro de referência. A data a inscrever na coluna 2a será a determinada pelas disposições pertinentes da secção III do presente artigo.

1331 (4) Qualquer consignação de frequência de recepção a uma estação costeira radiotelefónica que seja objecto de uma conclusão desfavorável relativamente ao n.º **1328** será examinada segundo as disposições pertinentes dos n.os **1267** e **1268**. A data a inscrever na coluna 2b será determinada pelas disposições pertinentes da secção III do presente artigo.

1332 (5) Qualquer consignação de frequência de recepção a uma estação costeira radiotelefónica que seja objecto de uma conclusão favorável relativamente ao n.º **1328** mas desfavorável relativamente ao n.º **1329** será inscrita no ficheiro de referência. A data a inscrever na coluna 2b será a determinada pelas disposições pertinentes da secção III do presente artigo.

SUBSECÇÃO II-C

Procedimento a seguir pelas estações aeronáuticas que funcionam nas faixas atribuídas em exclusivo aos serviços móveis aeronáuticos entre 2850 kHz e 22 000 kHz

1333 § 26. (1) *Exame das fichas de notificação respeitantes às consignações de frequência às estações aeronáuticas do serviço móvel aeronáutico (R) nas faixas atribuídas em exclusivo a este serviço entre 2850 kHz e 22 000 kHz (v. o n.º* **1239**).

1334 (2) A Comissão examinará cada ficha de notificação a que se refere o n.º **1333** a fim de determinar:

1335 *a*) Se a ficha de notificação está de acordo com as disposições do n.º **1240**;

1336 *b*) Se a frequência notificada corresponde a uma das frequências especificadas na coluna 1 do plano de adjudicação das frequência para o serviço móvel aeronáutico (R) que figura no apêndice 27 Aer2 (*) (parte II, secção II, artigo 2) ou se a consignação resulta de uma modificação permitida da classe de emissão, satisfazendo a largura de faixa necessária para a nova emissão à disposição das vias, tal como é dada no apêndice 27 Aer2 (*);

1337 *c*) Se são devidamente observadas as limitações de utilização especificadas na coluna 3 do plano:

(*) Nota do Secretariado-Geral: v. o n.º **5189** e a Resolução n.º 400.

1338 *d*) Se a ficha de notificação está de acordo com os princípios técnicos do plano, tal como são expostos no apêndice 27 Aer2 (*);

1339 *e*) Se a zona de utilização está contida no interior das zonas indicadas na coluna 2 do plano.

1340 (3) Uma ficha de notificação não em conformidade com as disposições do n.º **1335** será examinada segundo as disposições dos n.os **1267** e **1268**. A data a inscrever na coluna 2b será a determinada pelas disposições pertinentes da secção III do presente artigo.

1341 (4) No caso de uma ficha de notificação em conformidade com as disposições dos n.os **1335** a **1338**, mas não com as do n.º **1339**, a Comissão examinará se fica assegurada às adjudicações do plano a protecção especificada no apêndice 27 Aer2 (*) (parte I, secção II-A, § 5). Para isso, Comissão admite que a frequência será utilizada de acordo com as condições de partilha entre as zonas, tal como são especificadas no apêndice 27 Aer2 (*) (parte I, secção II-B, § 4).

1342 (5) Todas as consignações de frequência a que se refere o n.º **1333** serão inscritas no ficheiro de referência de acordo com as conclusões da Comissão. A data a inscrever na coluna 2a ou na coluna 2b será determinada pelas disposições pertinentes na secção III do presente artigo.

1343 § 27. (1) *Exame das fichas de notificação relativas às consignações de frequência a estações aeronáuticas do serviço móvel aeronáutico (OR) nas faixas atribuídas em exclusivo a este serviço entre 3025 kHz e 18 030 kHz (v. o n.º* **1239***).*

1344 (2) A Comissão examinará cada ficha de notificação a que se refere o n.º **1343** a fim de determinar:

1345 *a*) Se a consignação está em conformidade com uma das adjudicações primárias do plano de adjudicação das frequências do serviço móvel aeronáutico (OR) que figura no apêndice 26, bem como as condições especificadas nesse apêndice (partes III e IV);

1346 *b*) Se a consignação está em conformidade com uma das adjudicações secundárias do plano de adjudicação das frequências do serviço móvel aeronáutico (OR) que figura no apêndice 26 ou satisfaz as condições requeridas para as adjudicações secundárias, bem como as condições especificadas nesse mesmo apêndice [parte III, secção II, § 4, subparágrafo *d*), e parte IV]. Ao aplicar estas disposições, a Comissão admite que a frequência é utilizada durante o dia;

1347 *c*) Se a consignação resulta de uma modificação permitida da classe de emissão, se a largura de faixa ocupada pela nova emissão satisfaz a definição das vias, tal como figura no apêndice 26 (parte III, secção II, §§ 1 e 2), e se a consignação satisfaz todas as condições requeridas para uma adjudicação primária ou uma adjudicação secundária do plano, excepto que a frequência não corresponde sob o ponto de vista numérico, a uma das frequências especificadas no plano.

1348 (3) Os critérios técnicos a utilizar pela Comissão para o exame das fichas de notificação são os que figuram no apêndice 26 (parte III).

1349 (4) Todas as consignações de frequência a que se refere o n.º **1343** são inscritas no ficheiro de referência, de acordo com as conclusões da Comissão. A data a inscrever na coluna 2a ou na coluna 2b é a determinada pelas disposições pertinentes da secção III do presente artigo.

SUBSECÇÃO II-D

Procedimento a seguir pelas estações de radiodifusão que funcionam nas faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz

1350 § 1. As consignações de frequência às estações de radiodifusão nas faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz são tratadas em conformidade com as disposições do artigo 17 e não são incluídas senão na lista anual mencionada no n.º **1769**, que é considerada como um suplemento à Lista Internacional de Frequências.

SUBSECÇÃO II-E

Procedimento a seguir nos casos em que estações de Terra funcionam na mesma faixa de frequências de uma estação terrena e se situam na zona de coordenação desta estação, quer se trate de uma estação terrena existente, quer de uma estação terrena para a qual foi efectuada ou iniciada a coordenação

1351 § 29. A Comissão examinará cada ficha de notificação:

1352 *a*) Sob o ponto de vista da sua conformidade com as cláusulas da Convenção, o quando de atribuição das faixas de frequências e as outras cláusulas do Regulamento das Radiocomunicações, com excepção das relativas ao procedimento de coordenação e à probabilidade de interferências prejudiciais, as quais são objecto das disposições dos n.os **1353** e **1354**;

1353 *b*) Sob o ponto de vista da sua conformidade com as disposições dos n.os **1148** a **1154** relativas à coordenação da utilização da consignação de frequência com as outras administrações interessadas;

1354 *c*) Se tal for o caso, sob o ponto de vista da probabilidade de interferência prejudicial em detrimento do serviço assegurado por uma estação terrena de recepção para a qual tenha já sido inscrita

(*) Nota do Secretariado-Geral: v. o n.º **5189** e a Resolução n.º 400.

no ficheiro de referência uma consignação de frequência, de acordo com as disposições do n.º **1503**, se a consignação de frequência correspondente à estação espacial de emissão não tiver, de facto, causado interferência prejudicial a uma qualquer consignação anteriormente inscrita no ficheiro de referência e de acordo com os n.os **1240** ou **1352**, consoante o caso.

1355 § 30. Consoante as conclusões a que a Comissão chegar em consequência do exame previsto nos n.os **1352**, **1353** e **1354**, o procedimento continuará pela forma seguinte:

1356 § 31. (1) *Conclusão desfavorável relativamente ao n.º* **1352**.

1357 (2) Quanto a ficha comportar uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** e a conclusão for favorável relativamente aos n.os **1353** ou **1354**, consoante o caso, a consignação é inscrita no ficheiro de referência, desde que sejam observadas as disposições do n.º **1420**. A data de recepção pela Comissão da ficha de notificação será inscrita na coluna 2d.

1358 (3) Se a conclusão for desfavorável relativamente aos n.os **1353** ou **1354**, consoante o caso, a ficha será devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram a conclusão da Comissão. Se a administração notificadora insistir num novo exame da ficha de notificação, a consignação será inscrita no ficheiro de referência, desde que sejam aplicáveis as disposições do n.º **1420**. A data de recepção pela Comissão da ficha de notificação original será inscrita na coluna 2d.

1359 (4) Quando a ficha não comportar qualquer referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, será devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram a conclusão da Comissão e com as sugestões que esta possa fazer para se obter uma solução satisfatória do problema.

1360 (5) Se a administração notificadora apresentar de novo a ficha com uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, a ficha de notificação será tratada como uma nova ficha de notificação.

1361 § 32. (1) *Conclusão favorável ao n.º* **1352**.

1362 (2) Quando a Comissão concluir que o procedimento de coordenação referido no n.º **1353** foi aplicado com êxito no que respeita a todas as administrações cujas estações terrenas possam ser afectadas, a consignação será inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação será inscrita na coluna 2d.

1363 (3) Quando a Comissão concluir que não foi aplicado o procedimento de coordenação referido no n.º **1353** e:

1364 *a*) Se a administração notificadora lhe pedir que efectue a coordenação requerida, a Comissão tomará as medidas necessárias para esse fim. Se forem coroadas de êxito as tentativas da Comissão para obter um acordo, ela informará disso as administrações interessadas e tratará a ficha de notificação em conformidade com as disposições do n.º **1362**;

1365 *b*) Se falharem as tentativas da Comissão para obter um acordo em aplicação dos n.os **1364** ou **1169** a **1174** ou se, quando notificar a consignação, a administração declarar que não obteve êxito e não lhe pedir que efectue a coordenação requerida, a Comissão examinará a ficha de notificação relativamente ao n.º **1354** e, simultaneamente, informará disso as administrações interessadas;

1366 *c*) Se a administração não lhe pedir que efectue a coordenação requerida, a ficha de notificação será devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram essa devolução e com as sugestões que a Comissão possa fazer para obter uma solução satisfatória do problema.

1367 (4) Quando a administração notificadora apresentar de novo a sua ficha de notificação, e se a Comissão concluir que o procedimento de coordenação referido no n.º **1353** foi aplicado com êxito no que respeita a todas as administrações cujas estações terrenas podem ser desfavoravelmente influenciadas, a consignação será inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação original será inscrita na coluna 2d. A data de recepção, pela Comissão, da ficha de notificação apresentada de novo será indicada na coluna «Observações».

1368 (5) Quando a administração notificadora apresentar de novo a ficha de notificação pedindo à Comissão que efectue a coordenação requerida, a ficha de notificação será tratada em conformidade com as disposições dos n.os **1363**, **1364** ou **1365**. Contudo, se a consignação vier, posteriormente, a ser inscrita no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo será indicada na coluna «Observações».

1369 § 33. (1) *Conclusão favorável relativamente aos n.os* **1352** e **1354**.

1370 (2) A consignação será inscrita no ficheiro de referência e a data de recepção, pela Comissão, da ficha de notificação será inscrita na coluna 2d.

1371 § 34. (1) *Conclusão favorável relativamente ao n.º* **1352**, *mas desfavorável relativamente ao n.º* **1354**.

1372 (2) A ficha será devolvida imediatamente pelo correio aéreo à administração de origem, com a indicação das razões que motivaram a conclusão da Comissão e com as sugestões que esta possa fazer para que se obtenha uma solução satisfatória do problema.

1373 (3) No caso de a administração notificadora apresentar de novo a ficha com modificações que, após novo exame, motivem da parte da Comissão uma conclusão favorável relativamente ao n.º **1354**, a consignação será inscrita no ficheiro de referência. A data de recepção, pela Comissão, da ficha de notificação original será

inscrita na coluna 2d, e a data de recepção, pela Comissão, da ficha de notificação apresentada de novo será indicada na coluna «Observações».

1374 (4) Se a administração notificadora apresentar de novo a ficha, quer não modificada, quer com modificações susceptíveis de diminuir a probabilidade de interferências prejudiciais, mas não em proporções suficientes que permitam a aplicação das disposições do n.º **1373**, se essa administração insistir por um novo exame a ficha e se as conclusões da Comissão se mantiverem, a consignação será inscrita no ficheiro de referência, mas essa inscrição só poderá ser feita se a administração notificadora avisar a Comissão de que a consignação esteve em serviço durante, pelo menos, quatro meses a contar da data em que as duas estações entraram em serviço sem que daí tenha resultado qualquer queixa de interferência prejudicial. A data de recepção pela Comissão da ficha de notificação original será inscrita na coluna 2d, e a data em que a Comissão recebeu aviso de que não se verificou qualquer queixa de interferência prejudicial será indicada na coluna «Observações».

1375 (5) Quando a administração notificadora não possa avisar a Comissão relativamente à interferência mencionada no n.º **1374** porque a consignação susceptível de ser interferida não foi ainda posta em serviço, poderá pedir à Comissão que inscreva provisoriamente a sua consignação no ficheiro de referência. A Comissão inscreverá então essa consignação com um símbolo especial na coluna «Observações» a indicar o carácter provisório dessa inscrição.

1376 § 35. (1) *Modificações das características fundamentais das consignações já inscritas no ficheiro de referência.*

1377 (2) Qualquer notificação de modificação das características fundamentais de uma consignação notificada nos termos do n.º **1221** e já inscrita no ficheiro de referência, tal como vêm definidas no apêndice 1, secção A ou B (com excepção, todavia, das que figuram nas colunas 2c, 3 e 4a do ficheiro de referência), ou qualquer notificação em conformidade com o n.º **1221** relativamente a uma consignação já inscrita nos termos dos n.ºs **1223** e **1227** (apêndice 1, secção C) será examinada pela Comissão de acordo com as disposições dos n.ºs **1352** e **1353** e, se for caso disso, **1354** e serão aplicadas as disposições dos n.ºs **1356** a **1374**. Quando a modificação deva ser inscrita no ficheiro de referência, a consignação original será modificada de acordo com a notificação.

1378 (3) Todavia, no caso de uma modificação das características fundamentais de uma consignação que esteja de acordo com as disposições do n.º **1352**, e se a Comissão formular uma conclusão favorável relativamente ao n.º **1353** e ao n.º **1354**, quando as disposições deste forem aplicáveis, ou concluir que essa modificação não aumenta a probabilidade de interferências prejudiciais em detrimento de consignações de frequência já inscritas no ficheiro de referência, a consignação de frequência modificada conservará a data primitivamente inscrita na coluna 2d. Além disso, será inscrita na coluna «Observações» a data de recepção, pela Comissão, da ficha de notificação relativa à modificação.

1379 (4) A data prevista para a entrada em serviço de uma consignação de frequência poderá ser prorrogada por três meses, a pedido da administração notificadora. Caso a administração venha a declarar que circunstâncias excepcionais motivam novo prolongamento desse prazo, poderá ser concedido esse novo prolongamento o qual, em caso algum, deverá ir além de seis meses a contar da data inicial prevista para a entrada em serviço.

1380 § 36. Na aplicação das disposições da presente subsecção, qualquer ficha de notificação apresentada de novo à Comissão e recebida por esta mais de dois anos após a data em que ela devolveu a ficha à administração notificadora será considerada como uma nova ficha de notificação.

1381 § 37. (1) *Inscrição de consignações de frequência notificadas antes da sua entrada em serviço.*

1382 (2) Se uma consignação de frequência notificada antes da sua entrada em serviço for objecto de conclusões favoráveis formuladas pela Comissão relativamente aos n.ºs **1352** e **1353**, e se for caso disso, **1354**, será inscrita provisoriamente no ficheiro de referência, com um símbolo especial na coluna «Observações» a indicar o carácter provisório dessa inscrição.

1383 (3) Num prazo de 30 dias a contar da data prevista para a entrada em serviço, inicialmente notificada (v. o n.º **1230**) ou modificada nos termos do n.º **1379**, a administração notificadora confirmará que a consignação de frequência foi posta em serviço. Quando a Comissão foi avisada de que a consignação foi posta em serviço, suprirá o símbolo especial na coluna «Observações».

1384 (4) Se a Comissão não receber a confirmação no prazo previsto no n.º **1383**, a inscrição em causa será anulada. A Comissão consultará a administração interessada antes de tomar esta medida.

1385 (5) Quando, ao expirar o período definido no n.º **1374**, a Comissão for avisada da não existência de qualquer queixa de interferência prejudicial, suprirá o símbolo inscrito em aplicação do n.º **1375**.

Secção III

Inscrição de datas e das conclusões no ficheiro de referência

1386 § 38. Sempre que a Comissão inscreva uma consignação de frequência no ficheiro de referência, indicará a sua conclusão por um símbolo colocado na coluna apropriada. Além disso, inscreverá na coluna «Observações» os motivos e qualquer conclusão desfavorável.

1387 § 39. O procedimento a plicar para a inscrição de datas na parte apropriada da coluna 2 do ficheiro de referência, consoante as faixas de frequências e os serviços interessados, é descrito a seguir nos n.ºs **1388** a **1413** no que respeita às consignações de frequência referidas nas subsecções II-A a II-C.

1388 § 40. (1) Faixas de frequências:

9-2850 kHz;
3155-3400 kHz;
3500-3900 kHz na Região 1;
3500-4000 kHz na Região 2;
3500-3950 kHz na Região 3;
4219,4-4349,4 kHz;
6325,4-6493,4 kHz;
8435,4-8704,4 kHz;
12 652,3-13 070,8 kHz;
16 859,4-17 196,9 kHz;
22 310,5-22 561 kHz.

1389 (2) Para qualquer consignação a que sejam aplicáveis as disposições dos n.os **1250**, **1251** ou **1254**, a data pertinente é inscrita na coluna 2a do ficheiro de referência. Contudo, no caso das consignações da classe de funcionamento B a estações de serviço fixo, a data pertinente é inscrita na coluna 2b.

1390 (3) Para qualquer consignação a que sejam aplicáveis as disposições dos n.os **1255**, **1265**, **1267**, **1271** ou **1272**, a data pertinente é inscrita na coluna 2b do ficheiro de referência.

1391 § 41. (1) *Faixas de frequências atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz para as estações costeiras radiotelefónicas.*

1392 (2) Se a conclusão for favorável relativamente aos n.os **1317** e **1318**, inscreve-se a data de 7 de Junho de 1974 na coluna 2a.

1393 (3) Em todos os outros casos referidos no n.º **1315**, a data pertinente é inscrita na coluna 2b (v. os n.os **1250**, **1254**, **1255**, **1261**, **1265**, **1306** e **1307**).

1394 (4) Quando se trate de consignações a estações distintas de estações costeiras radiotelefónicas, a data pertinente é inscrita na coluna 2b (v. os n.os **1271** e **1272**).

1395 § 42. (1) *Faixas de frequências atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz para as estações radiotelefónicas de navio.*

1396 (2) Se a conclusão for favorável relativamente aos n.os **1328** e **1329**, inscreve-se a data de 7 de Junho de 1974 na coluna 2a.

1397 (3) Em todos os outros casos referidos no n.º **1326**, inscreve-se na coluna 2b a data de recepção da ficha de notificação pela Comissão.

1398 (4) Quando se trate de consignações distintas das consignações de frequência de recepção a estações costeiras radiotelefónicas, a data pertinente é inscrita na coluna 2b (v. os n.os **1271** e **1272**).

1399 § 43. (1) *Faixas de frequência atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 25 110 kHz para as estações radiotelegráficas de navio (v. o n.º* **1220**).

1400 (2) Quando se trate de consignações a estações distintas das estações radiotelegráficas de navio, a data pertinente é inscrita na coluna 2b (v. os n.os **1271** e **1272**).

1401 § 44. (1) *Faixas de frequência atribuídas e exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz.*

1402 (2) Se a conclusão for favorável relativamente aos n.os **1336** a **1339**, inscreve-se a data de 5 de Março de 1978 na coluna 2a.

1403 (3) Se a conclusão for favorável relativamente ao n.º **1431**, inscreve-se a data de 5 de Março de 1978 na coluna 2b.

1404 (4) Em todos os outros casos de que trata o n.º **1333**, a Comissão inscreve na coluna 2b a data de 6 de Março de 1978.

1405 (5) Quando se trate de consignações a estações distintas das estações aeronáuticas do serviço móvel aeronáutico (R), a data pertinente é inscrita na coluna 2b (v. os n.os **1271** e **1272**).

1406 § 45. (1) *Faixas de frequências atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 3025 kHz e 18 030 kHz.*

1407 (2) Se a conclusão for favorável relativamente ao n.º **1345**, inscreve-se na coluna 2a a data de 3 de Dezembro de 1951.

1408 (3) Se a conclusão for favorável relativamente ao n.º **1346**, inscreve-se na coluna 2b a data de 3 de Dezembro de 1951.

1409 (4) Se a Comissão concluir que são aplicáveis as disposições do n.º **1347**, inscreve-se a data de 3 de Dezembro de 1951 na coluna 2a, se se tratar de uma adjudicação primária, ou na coluna 2b, se se tratar de uma adjudicação secundária.

1410 (5) Nos outros casos de que trata o n.º **1343**, a data de recepção da ficha pela Comissão é inscrita na coluna 2b.

1411 (6) Quando se trate de consignações a estações distintas das estações aeronáuticas do serviço móvel aeronáutico (OR), a data pertinente é inscrita na coluna 2b (v. os n.os **1271** e **1272**.

1412 § 46. (1) *Faixas de frequências compreendidas entre 3950 kHz (4000 kHz na Região 2) e 28 000 kHz distintas das faixas atribuídas em exclusivo ao serviço móvel aeronáutico, ao serviço móvel marítimo, ao serviço de radiodifusão ou ao serviço de amador e faixas de frequências superiores a 28 000 kHz.*

1413 (2) Para qualquer consignação de frequência a inscrever no ficheiro de referência de acordo com as disposições da secção II do presente artigo, a data pertinente inscreve-se na coluna 2d.

1414 § 47. *Data a inscrever na coluna 2c.*

1415 A data a inscrever na coluna 2c é a data de entrada em serviço notificada pela administração interessada (v. os n.os **1228** a **1231**).

Secção IV

Categoria das consignações de frequência

1416 § 48. (1) Qualquer consignação de frequência que tenha uma data na coluna 2a do ficheiro de referência tem direito à protecção internacional contra interferências prejudiciais, o mesmo acontecendo com as consignações de classe de funcionamento A a estações do serviço fixo nas faixas apropriadas compreendidas entre 3000 kHz e 27 000 kHz inscritas com uma data na coluna 2d em consequência de uma conclusão favorável relativamente aos n.os **1240** e **1242**, especialmente as resultantes da aplicação do n.º **1218**.

1417 (2) Qualquer consignação de frequência que tenha uma data na coluna 2b é inscrita no ficheiro de referência, a fim de dar às administrações a possibilidade de terem em conta o facto de que a consignação de frequência em causa está em serviço. Essa inscrição não dá a essa consignação de frequência qualquer direito a protecção internacional, excepto no caso previsto na alínea 2) do n.º **1241**.

1418 (3) Para as consignações de frequência que tenham datas em duas partes da coluna 2, a data inscrita na coluna 2c é dada apenas a título de informação.

1419 (4) Se a utilização de uma consignação de frequência não em conformidade com as disposições dos n.os **1240** ou **1352** causar, efectivamente, interferência prejudicial à recepção de uma qualquer estação que funcione em conformidade com essas disposições, a estação que utiliza a consignação de frequência não em conformidade com elas deve eliminar imediatamente a interferência prejudicial quando desta for avisada

1420 (5) Se a utilização de uma consignação de frequência não em conformidade com as disposições dos n.os **1240** ou **1352** causar, efectivamente, interferência prejudicial à recepção de uma qualquer estação que funcione em conformidade com as disposições do n.º **1503**, a estação que utilize a consignação de frequência não em conformidade com as disposições dos n.os **1240** ou **1352** deve eliminar imediatamente a interferência prejudicial quando desta for avisada.

Secção V

Reexame das conclusões

1421 § 40. (1) Uma conclusão pode ser reexaminada pela Comissão:

a) A pedido da administração notificadora;

b) A pedido de qualquer outra administração interessada no assunto, mas unicamente com base numa interferência prejudicial verificada;

c) Por iniciativa da própria Comissão, quando esta considere que se justifica tal medida.

1422 (2) Baseando-se em todas as informações de que disponha, a Comissão reexamina o assunto, tendo em conta as disposições dos n.os **1240** ou **1352** e dos n.os **1241**, **1242**, **1353** ou **1354**, consoante o caso, e formula uma conclusão apropriada, após o que informará dessa conclusão a administração notificadora, quer antes de publicar a conclusão, quer, se for esse o caso, antes de a incluir no ficheiro de referência.

1423 § 50. Se a administração notificadora pedir o reexame de uma conclusão desfavorável, a título de assistência especial, a fim de fazer face a uma necessidade urgente e essencial num caso em que se verificou uma interferência prejudicial, a Comissão consulta imediatamente as administrações interessadas e apresenta-lhes sugestões tendentes a facilitar a utilização da sua consignação à administração que pediu assistência especial; as modificações resultantes dessa consulta são efectuadas no ficheiro de referência.

1424 § 51. (1) Depois da utilização real, durante um período razoável, de uma consignação de frequência inscrita no ficheiro de referência a insistência da administração notificadora, em seguimento de uma conclusão desfavorável relativamente aos n.os **1241**, **1242** ou **1354**, consoante o caso, essa administração pode pedir à Comissão que reexamine a conclusão. A Comissão reexamina então o assunto depois de consultar as administrações interessadas.

1425 (2) Se a conclusão da Comissão for então favorável, introduz no ficheiro de referência as modificações necessárias para que a inscrição passe a figurar aí como se a conclusão inicial tivesse sido favorável.

1426 (3) Se a conclusão relativa à probabilidade de interferência prejudicial se mantiver desfavorável, a inscrição inicial não é modificada.

1427 § 52. (1) No caso da supressão ou da modificação de qualquer consignação de frequência inscrita no ficheiro de referência que tenha sido causa de uma conclusão desfavorável e tenha levado á inscrição, em conformidade com o n.º **1255**, de uma consignação notificada posteriormente, a Comissão reexamina esta e, se for caso disso, revê a sua conclusão sob o ponto de vista dos n.os **1241** ou **1242**.

1428 (2) A fim de obter um critério que permita a revisão de uma inscrição no ficheiro de referência feita em aplicação das disposições do n.º **1255**, a Comissão ao reexaminar a ficha de notificação em causa, determina a data em que deverá reexaminar essa consignação de frequência. Se até essa data não tiver sido recebida pela administração responsável qualquer queixa de interferência prejudicial, a Comissão modifica automaticamente a inscrição no ficheiro de referência, de forma que esta figure aí de futuro como se a conclusão original tivesse sido favorável relativamente aos n.ºs **1241** ou **1242**.

SECÇÃO VI

Actualização do ficheiro de referência

1429 § 53. *Modificações, anulação e revisão das inscrições no ficheiro de referência.*

1430 § 54. Se a utilização de uma consignação de frequência inscrita no ficheiro de referência vier a ser abandonada definitivamente, a administração notificadora deve informar do facto a Comissão num prazo de três meses, o que terá como consequência a anulação da inscrição no ficheiro de referência.

1431 § 55. Sempre que a Comissão tenha razões para supor, segundo as informações de que disponha, que uma consignação inscrita no ficheiro de referência não entrou em serviço regular de acordo com as características fundamentais notificadas ou não é utilizada de acordo com essas características, a Comissão consulta a administração notificadora e, sob reserva do seu acordo, anula a inscrição ou introduz-lhe as modificações convenientes.

1432 § 56. Se, em seguimento a um inquérito feito pela Comissão nos termos dos n.ºs **1264** ou **1431**, a administração notificadora não forneceu à Comissão num prazo de três meses as informações necessárias ou pertinentes, a Comissão não considerará de futuro a consignação em causa quando tomar resoluções sobre as fichas de notificação que receber ulteriormente, até que tenha sido informada de que a consignação é utilizada segundo as características notificadas ou até que tenha recebido as informações pedidas. A Comissão inscreve na coluna «Observações» do ficheiro de referência observações que indiquem a situação, e em especial o período durante o qual a consignação não foi tomada em conta pela Comissão.

1433 § 57. (1) *Exames periódicos do ficheiro de referência.*

1434 (2) A Comissão elaborará um programa a longo prazo de exames periódicos de cada secção do ficheiro de referência a fim de o melhorar e de manter a precisão dele.

1435 (3) Para os exames mencionados no n.º **1434**, a Comissão enviará a cada administração, para revisão e devolução, um extracto nacional do ficheiro de referência relativo à secção em estudo. A Comissão chamará ao mesmo tempo a atenção das administrações para qualquer consignação a uma estação do serviço fixo que funcione nas faixas de frequência compreendidas entre 3000 kHz e 27 500 kHz para a qual se pense estarem disponíveis outros meios de telecomunicação.

1436 (4) Para melhorar e manter a precisão do ficheiro de referência, as administrações colaborarão nos exames periódicos, notificando a supressão de qualquer consignação não utilizada e, se necessário, a modificação das outras inscrições.

1437 (5) No seu relatório anual às administrações, a Comissão incluirá uma secção relativa aos trabalhos efectuados em aplicação das disposições do presente § 57, aos resultados obtidos e ao programa do ano seguinte.

SECÇÃO VII

Estudos e recomendações

1438 § 58. (1) Se lhe for feito pedido por qualquer administração, particularmente se se tratar da administração de um país com necessidade de assistência especial, a Comissão, utilizando para o efeito os meios de que disponha e que convenham às circunstâncias, procede a um estudo de qualquer problema de utilização de frequências que entre nas seguintes categorias:

1439 *a*) Pesquisa de uma frequência de substituição que permita evitar uma interferência prejudicial provável, nos casos indicados no n.º **1252**;

1440 *b*) Necessidade eventual de incluir consignações de frequência suplementares numa fracção determinada do espectro das frequências radioeléctricas;

1441 *c*) Caso em que, devido a interferências prejudiciais, várias frequências da mesma ordem de grandeza são utilizadas sucessivamente para manter uma ligação em funcionamento, se bem que esta não requeira senão uma só frequência da ordem de grandeza em causa;

1442 *d*) Presunção de contravenção ao presente Regulamento ou de não observância deste Regulamento, ou caso de interferência prejudicial.

1443 (2) A Comissão elabora em seguida um relatório, que comunica às administrações interessadas e no qual consigna as suas conclusões e recomendações para a solução do problema.

1444 (3) Quando receber as recomendações da Comissão para a solução do problema, uma administração acusa imediatamente a recepção por telegrama e comunica depois as medidas que conta tomar. No caso de as sugestões ou as recomendações da Comissão não poderem ser aceites pelas administrações interessadas, a Comissão tenta de novo encontrar uma solução aceitável para o problema.

1445 § 59. Se, principalmente em seguimento a um pedido da administração de um país que tenha necessidade de assistência especial, a Comissão verificar que uma modificação das características fundamentais, incluindo uma modificação de frequência numa faixa de frequências dada, de uma ou de várias consignações que satisfaçam as disposições do n.º **1240**, permitirá:

1446 *a*) Quer alojar uma nova consignação;

1447 *b*) Quer facilitar a solução de um problema de interferência prejudicial;

1448 *c*) Quer, de qualquer outro modo, concorrer para melhorar a utilização de determinada fracção do espectro de frequências radioeléctricas;

1449 e, se tal modificação for aceite pela ou pelas administrações interessadas, esta modificação das características fundamentais é inscrita no ficheiro de referência sem modificação da data ou das datas primitivas.

1450 § 60. No caso em que, em seguimento a um estudo, a Comissão apresente a uma ou várias administrações propostas ou recomendações tendentes à solução de um problema e se, no prazo de 30 dias, não tiver recebido resposta de uma ou várias dessas administrações, considera que as suas propostas ou recomendações não são aceitáveis pela ou pelas administrações que não responderam. Se a própria administração requerente não responder nesse prazo, a Comissão não dá continuação ao estudo.

Secção VIII

Disposições diversas

1451 § 61. As disposições das secções v, vi (com excepção do n.º **1430**) e vii do presente artigo não se aplicam às consignações de frequência conformes com os planos de adjudicação que figuram nos apêndices 25 Mar2, 26, 27 (*) e 27 Aer (*) do presente Regulamento.

1452 § 62. (1) Se para isso lhe for feito pedido por qualquer administração e, principalmente, pela administração de um país que tenha necessidade de assistência especial, a Comissão, utilizando para o efeito os meios de que disponha e que convenham às circunstâncias, fornece a assistência seguinte:

a) Verificação do mapa que indica a zona de coordenação referida no n.º **1113**;

b) Cálculo dos níveis de interferência de que tratam os n.ºs **1164** a **1166**;

c) Qualquer outra assistência de carácter técnico para que os procedimentos descritos no presente artigo possam ser levados a bom termo.

1453 (2) Ao apresentar o seu pedido à Comissão nos termos do n.º **1452**, a administração fornece-lhe as informações necessárias.

1454 § 63. As normas técnicas da Comissão baseiam-se nas disposições pertinentes do presente Regulamento e dos seus apêndices, nas decisões, se existirem, das conferências administrativas da União, nos pareceres da CCIR, no estado de avanço da técnica radioeléctrica e nos aperfeiçoamentos de novas técnicas de transmissão, tendo em conta as condições de propagação excepcionais que possam dominar em certas regiões (por exemplo, um efeito de condutas particularmente acentuado).

1455 § 64. (1) A Comissão leva ao conhecimento das administrações as suas conclusões e as respectivas justificações, bem como todas as modificações efectuadas no ficheiro de referência, por meio de circular semanal. Essas informações serão publicadas no prazo de 45 dias a contar da data de publicação da ficha completa na circular semanal de que trata o n.º **1235**. Quando a Comissão não puder cumprir o prazo acima mencionado, informará disso, logo que possível, as administrações interessadas, indicando as razões.

1456 (2) A circular semanal da IFRB é publicada nas línguas de trabalho da União, tal como são definidas na Convenção. Ao aplicar os diversos procedimentos especificados no presente Regulamento das Radiocomunicações, a Comissão utilizará, na medida do possível, esta circular semanal como meio de comunicação com as administrações.

1457 § 65. A Comissão informará as administrações, a intervalos convenientes, dos casos de assistência especial que tenha estudado nos termos dos n.ºs **1423** e **1438** a **1450**, inclusive, do presente Regulamento.

1458 § 66. Se um membro recorrer às disposições do artigo 50 da Convenção, a Comissão, se lhe for feito pedido, porá os seus documentos à disposição das partes interessadas para a aplicação de qualquer procedimento prescrito na Convenção para a solução de desacordos internacionais.

1459 a 1487 *(Não atribuídos.)*

(*) Nota do Secretariado-Geral: v. o n.º **5189** e a Resolução n.º 400.

ARTIGO 13

Notificação e inscrição no ficheiro de referência internacional das frequências das consignações de frequência (1) às estações de radioastronomia e às estações de radiocomunicação espacial, com excepção das do serviço de radiodifusão por satélite (2)

SECÇÃO I

Notificação das consignações de frequência

1488 § 1. (1) Qualquer consignação de frequência destinada a ser utilizada na emissão ou na recepção por uma estação terrena espacial deve ser notificada à Comissão:

1489 *a*) Se a utilização da frequência em causa for susceptível de produzir interferências prejudiciais a uma outra administração;

1490 *b*) Ou se a frequência se destinar a ser utilizada em radiocomunicações internacionais;

1491 *c*) Ou ainda se se desejar obter um reconhecimento internacional oficial da utilização dessa frequência.

1492 (2) Qualquer frequência ou faixa de frequência destinada a ser utilizada na recepção por uma estação de radioastronomia determinada pode ser notificada se se desejar que essa informação seja inscrita no ficheiro de referência.

1493 (3) Quando a Comissão receber de uma administração uma ficha de notificação relativa à modificação ou à anulação de uma consignação a uma estação espacial já inscrita no ficheiro de referência em nome de um grupo de administrações, considerará, salvo aviso em contrário, que a ficha de notificação é apresentada em nome de todas as administrações que estavam associadas à notificação original.

1494 (4) Uma notificação feita nos termos dos n.os **1488** a **1491** e relativa a uma consignação de frequência a estações terrenas móveis de um sistema de satélites inclui as características técnicas quer de cada estação terrena móvel, quer de uma estação terrena móvel tipo, bem como a indicação da zona de serviço em que essas estações se destinam a funcionar.

1495 § 2. Qualquer consignação de frequência notificada em execução dos n.os **1488** a **1492** ou **1494** deve ser objecto de uma ficha de notificação elaborada pela forma indicada no apêndice 3, do qual as diversas secções especificam as características fundamentais a fornecer consoante o caso. Recomenda-se que a administração notificadora comunique à Comissão as outras informações indicadas na secção A do referido apêndice, bem como qualquer outra informação que possa considerar útil.

1496 § 3. (1) Quando se tratar de uma consignação de frequência a uma estação terrena ou espacial, a ficha de notificação deve ser recebida pela Comissão no máximo três anos antes da data de entrada em serviço da consignação de frequência em causa. Não deve, em nenhum caso, ser recebida menos de três meses (3) antes dessa data, excepto quando se tratar de uma consignação de frequência a uma estação de serviço de pesquisa espacial numa faixa atribuída em exclusivo a este serviço ou numa faixa partilhada em que ele é o único serviço primário. No caso de uma tal consignação a uma estação do serviço de pesquisa espacial, a ficha de notificação deve, tanto quanto possível, ser recebida pela Comissão antes da data de entrada em serviço da consignação de frequência em causa, mas em nenhum caso deve ser recebida mais de 30 dias depois da data em que a consignação de frequência for efectivamente posta em serviço.

1497 (2) Qualquer consignação de frequência a uma estação terrena espacial cuja notificação seja recebida pela Comissão depois de expirados os prazos prescritos, indicados no n.º **1496**, leva, ao ser inscrita no ficheiro de referência, uma observação a indicar que a ficha de notificação não está em conformidade com as disposições do n.º **1496**.

SECÇÃO II

Procedimento para o exame das fichas de notificação e inscrição das consignações de frequência no ficheiro de referência

1498 § 4. Quando a Comissão receber uma ficha de notificação que não contenha, pelo menos, as características fundamentais especificadas no apêndice 3, devolve-a, pelo correio aéreo, à administração de origem, acompanhada dos motivos dessa devolução, excepto se as informações que não tinham sido recebidas forem recebidas imediatamente em resposta a um pedido da Comissão. A Comissão informa, por telegrama, a administração quando uma ficha de notificação for devolvida nos termos da presente disposição.

A.31.1 (1) A expressão «consignação de frequência» onde quer que figure no presente artigo, deve ser entendida como referindo-se quer a uma nova consignação de frequência, quer a uma modificação de uma consignação já inscrita no ficheiro de referência internacional das frequências (denominado daqui em diante ficheiro de frequência).

A .13.2 (2) Para a notificação e a inscrição de consignações de frequência às estações do serviço de radiodifusão por satélite e aos outros serviços nas faixas 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1), v. igualmente o artigo 15.

1496.1 (3) A administração notificadora iniciará, consoante o caso, o ou os procedimentos de coordenação com a antecedência necessária para que esta data limite seja respeitada.

1499 § 5. Quando a Comissão receber uma ficha de notificação completa, menciona as informações que ela contiver, incluindo os diagramas, e a data da sua recepção na circular semanal de que trata o n.º **1235**, que é publicada no prazo de 40 dias após a recepção da ficha de notificação. Quando a Comissão não puder cumprir este prazo, informará disso, logo que possível, as administrações interessadas, indicando as razões.

1500 § 6. A circular conterá todas as informações que figurarem nas fichas de notificação completas recebidas pela Comissão desde a publicação da circular precedente e será considerada, por cada administração notificadora, como aviso de recepção, pela Comissão, de uma ficha de notificação completa.

1501 § 7. A Comissão examina as fichas de notificação completas pela ordem em que as receber, tendo em conta o prazo mencionado no n.º **1583**. Não pode adiar a conclusão, a menos que lhe faltem informações suficientes para tomar uma decisão a esse respeito. Além disso, a Comissão não resolve sobre uma ficha de notificação que tenha relações técnicas com uma ficha recebida anteriormente e ainda em exame, antes de tomar uma decisão no que respeita a esta última.

1502 § 8. A Comissão examina cada ficha de notificação:

1503 *a*) Sob o ponto de vista da sua conformidade com as cláusulas da Convenção, o quadro da atribuição das faixas de frequência e as outras cláusulas do Regulamento das Radiocomunicações, com excepção das relativas aos procedimentos de coordenação e à probabilidade de interferências prejudiciais que são objecto das alíneas seguintes;

1504 *b*) Sob o ponto de vista da sua conformidade com as disposições relativas à coordenação da utilização da consignação de frequência com as outras administrações interessadas, relativamente às estações de radiocomunicação espacial, nos casos em que sejam aplicáveis as disposições dos n.os **1060** ou **1066** a **1071**;

1505 *c*) Sob o ponto de vista da sua conformidade com as disposições relativas à coordenação da utilização da consignação de frequência com as outras administrações interessadas, relativamente às estações de radiocomunicação de Terra, nos casos em que sejam aplicáveis as disposições do n.º **1107**;

1506 *d*) Sob o ponto de vista da probabilidade de qualquer interferência prejudicial, quando a coordenação nos termos do n.º **1060** não foi aplicada com êxito. Neste exame ([1]) serão tidas em conta as consignações de frequência para a emissão ou a recepção já inscritas no ficheiro de referência:

1507 1) Quer em aplicação das disposições dos n.os **1526**, **1531**, **1534** ou **1543**;

1508 2) Quer em aplicação das disposições do n.º **1544**, se essa consignação de frequência não causou, de facto, interferência prejudicial a qualquer consignação anteriormente inscrita no ficheiro de referência e que esteja em conformidade com o n.º **1503**.

1509 *e*) Sob o ponto de vista da probabilidade de qualquer interferência prejudicial, quando a coordenação nos termos do n.º **1107** não foi aplicada com êxito. Neste exame serão tidas em conta as consignações de frequência para a emissão ou a recepção já inscritas no ficheiro de referência:

1510 1) Quer em aplicação das disposições do n.º **1248**;

1511 2) Quer em aplicação das disposições dos n.os **1362**, **1367**, **1370** ou **1373**;

1512 3) Quer em aplicação das disposições do n.º **1374**, se dessa consignação de frequência não causou, de facto, interferência prejudicial a qualquer consignação anteriormente inscrita no ficheiro de referência e que esteja em conformidade com o n.º **1503**.

1513 § 9. Quando, após o exame de uma ficha de notificação relativamente aos n.os **1506** a **1508**, a Comissão formular uma conclusão desfavorável com base na probabilidade de interferências prejudiciais em detrimento de uma consignação de frequência inscrita no ficheiro de referência e relativa a uma estação espacial que a Comissão tenha razões para supor que não está regularmente em serviço, por exemplo, como consequência das disposições do n.º **1569**, a Comissão consulta sem demora a administração responsável por essa consignação. Se, após essa consulta, ela concluir, com base nas informações disponíveis, que essa consignação inscrita no ficheiro de referência não é utilizada há dois anos, não volta a tê-la em conta quer para o exame em curso quer para o exame de qualquer outra ficha de notificação que venha a ser realizado posteriormente nos termos dos n.os **1506** a **1508**, antes da data em que a consignação de frequência seja novamente posta em serviço. Antes de entrar de novo em serviço, a consignação de frequência será, consoante o caso, objecto de uma nova coordenação em conformidade com as disposições do n.º **1060** ou de um novo exame pela Comissão relativamente aos n.os **1506** a **1508**. A data da nova entrada em serviço será então inscrita no ficheiro de referência.

1514 § 10. Segundo as conclusões a que chegar a Comissão em consequência do exame previsto nos n.os **1503**, **1504**, **1505**, **1506** a **1508** e **1509** a **1512**, consoante o caso, o procedimento continuará pela forma seguinte:

1515 § 11. (1) *Conclusão favorável relativamente ao n.º* **1503** *nos casos em que não sejam aplicáveis as disposições dos n.os* **1504** *e* **1505** *(estação espacial a bordo de um satélite não geostacionário).*

1506.1 ([1]) O exame de uma tal ficha de notificação relativamente a qualquer outra consignação de frequência publicada nos termos do n.º **1078**, mas ainda não notificada, será adiado até que as duas consignações tenham sido notificadas. A Comissão examiná-los-á em seguida pela ordem da sua publicação nos termos do n.º **1078**.

1516 (2) A consignação é inscrita no ficheiro de referência. A data de recepção pela comissão da ficha de notificação inscreve-se na coluna 2d.

1517 § 12. (1) *Conclusão desfavorável relativamente ao n.º* **1503** *nos casos em que não sejam aplicáveis as disposições dos n.os* **1504** *e* **1505** *(estação espacial a bordo de um satélite não geostacionário).*

1518 (2) Quando a ficha de notificação comportar uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inscreve-se na coluna 2d.

1519 (3) Quando a ficha não comportar qualquer referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, essa ficha é devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram a conclusão da Comissão, bem como com as sugestões que esta possa fazer para se obter uma solução satisfatória do problema.

1520 § 13. (1) *Conclusão desfavorável relativamente ao n.º* **1503** *nos casos em que sejam aplicáveis as disposições dos n.os* **1504** *e* **1505**.

1521 (2) Quando a ficha comportar uma referência segundo a qual a estação funcionará em conformidade com as disposições no n.º **342**, e se a conclusão for favorável relativamente aos n.os **1504**, **1505**, **1506** a **1508** e **1509** a **1512**, consoante o caso, a consignação inscrever-se-á no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

1522 (3) Quando a ficha comportar uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, e se a conclusão for desfavorável relativamente aos n.os **1504**, **1505**, **1506** a **1508** ou **1509** a **1512**, consoante o caso, essa ficha é devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram a conclusão da Comissão. Se a administração notificadora insistir num novo exame da ficha de notificação, a consignação será inscrita no ficheiro de referência, subentendendo-se que serão aplicadas as disposições do n.º **1560**. A data de recepção pela Comissão da ficha de notificação original inscrever-se-á na coluna 2d.

1523 (4) Quando a ficha não comportar qualquer referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, essa ficha é devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivaram a conclusão da Comissão, e com as sugestões que esta possa fazer para se obter uma solução satisfatória do problema.

1524 (5) Se a administração notificadora apresentar de novo a ficha não modificada, esta é tratada de acordo com as disposições do n.º **1523**. Se a administração notificadora apresentar de novo a ficha acompanhada de uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342**, a ficha de notificação é tratada de acordo com as disposições dos n.os **1521** ou **1522**, consoante o caso. Se a ficha for apresentada de novo com modificações tais que, após novo exame, a conclusão da Comissão seja favorável relativamente ao n.º **1503**, a ficha é tratada como uma nova ficha de notificação.

1525 § 14. (1) *Conclusão favorável relativamente ao n.º* **1503** *nos casos em que sejam aplicáveis as disposições dos n.os* **1504** *ou* **1505**.

1526 (2) Quando a Comissão concluir que os procedimentos de coordenação de que tratam os n.os **1504** ou **1505** foram aplicados com êxito relativamente a todas as administrações cujas estações de radiocomunicação espaciais ou de Terra pudessem ser afectadas, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inscreve-se na coluna 2d.

1527 (3) Quando a Comissão concluir que não foi aplicado nem um nem outro dos procedimentos de coordenação de que tratam os n.os **1504** e **1505**, e:

1528 *a*) Se a administração notificadora pedir à Comissão que efectue a coordenação, a Comissão tomará as medidas necessárias para o efeito. Se as tentativas da Comissão para se obter um acordo forem coroadas de êxito, informará disso as administrações interessadas e a ficha de notificação será tratada de acordo com as disposições do n.º **1526**;

1529 *b*) Se as tentativas da Comissão para se obter um acordo em aplicação das disposições dos n.os **1528** ou **1089** a **1094** ou **1130** a **1135** não forem coroadas de êxito ou se, ao notificar a consignação, a administração declarar que não obteve êxito e não pedir à Comissão que efectue a coordenação pretendida, a Comissão examina a ficha de notificação sob o ponto de vista das disposições dos n.os **1506** a **1508** e **1509** a **1512**, consoante o caso. Ao mesmo tempo, a Comissão informa disso as administrações interessadas;

1530 *c*) Se a administração notificadora não lhe pedir que efectue a coordenação pretendida, a ficha de notificação é-lhe devolvida imediatamente pelo correio aéreo, com a indicação das razões que motivaram a devolução e com as sugestões que a Comissão possa fazer para se obter uma solução satisfatória do problema.

1531 (4) Quando a administração notificadora apresentar de novo a ficha de notificação, e se a Comissão concluir que os procedimentos de coordenação de que tratam os n.os **1504** e **1505** foram aplicados com êxito relativamente a todas as administrações cujas estações de radiocomunicação espacial ou de Terra podem ser afectadas, a consignação é inscrita no ficheiro de referência. A data da recepção pela Comissão da Ficha de notificação original é inscrita na coluna 2d, e a data de recepção pela Comissão da ficha de notificação apresentada de novo é indicada na coluna «Observações».

1532 (5) Quando a administração notificadora apresentar de novo a ficha de notificação pedindo à Comissão que efectue a coordenação pretendida nos termos dos n.os **1060** e **1107**, a ficha de notificação é tratada em conformidade com as disposições dos n.os **1527, 1528** e **1529**. Se houver motivo, posteriormente, para inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo indicar-se-á na coluna «Observações».

1533 § 15. (1) *Conclusão favorável relativamente aos n.os* **1503, 1506** *a* **1508** *e* **1509** *a* **1512**, *consoante o caso.*

1534 (2) A consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação será indicada na coluna 2d.

1535 (3) Todavia, se no exame se verificar que a interferência e a percentagem de tempo durante o qual esta é susceptível de se produzir têm valores ligeiramente mais elevados do que os que são utilizados para avaliar a probabilidade de interferências prejudiciais (condições especiais de propagação, humidade anormal da atmosfera, etc.), insere-se no ficheiro de referência uma observação a indicar que pode existir um pequeno risco de interferências prejudiciais e que, consequentemente, devem tomar-se precauções suplementares na utilização da consignação para evitar interferências prejudiciais às consignações já inscritas no ficheiro de referências.

1536 (4) Além do exame da consignação de frequência a uma estação terrena sob o ponto de vista das disposições dos n.os **1509** e **1512**, a Comissão, em caso de desacordo persistente, examina essa consignação de frequência sob o ponto de vista da probabilidade de interferência prejudicial, causada às estações de Terra ou produzida pelas estações de Terra cujas consignações tenham sido comunicadas à Comissão em aplicação das disposições do n.º **1126** e que serão postas em serviço nos três anos seguintes.

1537 (5) Após o exame nos termos do n.º **1536**, a Comissão, consoante o caso:

1538 *a*) Informa as administrações interessadas de qualquer conclusão desfavorável;

1539 *b*) No ficheiro de referência, em frente da consignação à estação terrena insere uma observação a indicar tal conclusão desfavorável;

1540 *c*) Inscreve as consignações às estações de Terra no ficheiro de referência, com uma observação a indicar qualquer conclusão desfavorável. A data de recepção das informações comunicadas nos termos do n.º **1136** é inscrita na coluna 2d.

1541 § 16. (1) *Conclusão favorável relativamente ao n.º* **1503** *mas desfavorável relativamente aos n.os* **1506** *a* **1508** *ou* **1509** *a* **1512**, *consoante o caso.*

1542 (2) A ficha de notificação é devolvida imediatamente, pelo correio aéreo, à administração de origem, com a indicação das razões que motivaram a conclusão da Comissão e com as sugestões que esta possa fazer para se obter uma solução satisfatória do problema.

1543 (3) Se a administração notificadora apresentar de novo a ficha com modificações que, após novo exame, motivem da parte da Comissão uma conclusão favorável relativamente aos n.os **1506** a **1508** ou **1509** a **1512**, consoante o caso, a consignação inscreve-se no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação original será inscrita na coluna 2d, e a data de recepção da ficha de notificação apresentada de novo indicar-se-á na coluna «Observações».

1544 (4) No caso em que a administração notificadora apresente de novo a ficha de notificação, quer não modificada, quer com modificações susceptíveis de diminuir a probabilidade de interferências prejudiciais, mas não em proporções suficientes que permitam a aplicação das disposições do n.º **1543**, se essa administração insistir num novo exame da ficha de notificação e se as conclusões da Comissão se mantiverem, a consignação é inscrita no ficheiro de referência, mas essa inscrição só pode fazer-se se a Comissão for informada de que a nova consignação esteve em serviço ao mesmo tempo que a consignação de frequência à estação que está na origem da conclusão desfavorável durante, pelo menos, quatro meses sem que daí tenha resultado qualquer queixa de interferência prejudicial, com a condição de que a mais antiga das consignações de frequência tenha sido posta em serviço durante o prazo adicional mencionado no n.º **1550**. A data de recepção pela Comissão da ficha de notificação original é inscrita na coluna 2d, e a data em que a Comissão recebeu aviso de que não se verificou qualquer queixa de interferência prejudicial indica-se na coluna «Observações».

1545 § 17. (1) *Fichas de notificação relativa às estações de radioastronomia.*

1546 (2) Uma ficha de notificação relativa a uma estação de radioastronomia será examinada pela Comissão somente sob o ponto de vista das disposições do n.º **1503**. Seja qual for a conclusão, a consignação é inscrita no ficheiro de referência com uma data na coluna 2c. A data de recepção pela Comissão da ficha de notificação é indicada na coluna «Observações».

1547 § 18. (1) *Modificação das características fundamentais de consignações já inscritas no ficheiro de referência.*

1548 (2) Qualquer notificação de modificação das características fundamentais de uma consignação já inscrita no ficheiro de referência, tal como definidas no apêndice 3 (com excepção, todavia, do nome da estação ou do nome da localidade onde está situada ou da data de entrada em serviço), é examinada pela Comissão segundo as disposições dos n.os **1503** e, se for o caso disso, **1504, 1505, 1506** a **1508** e **1509** a **1512** e aplicam-se as disposições dos n.os **1515** a **1546**, inclusive. Para inscrever a modificação no ficheiro de referência, a consignação inscrita é modificada de acordo com a notificação.

1549 (3) Contudo, no caso de uma modificação das características de uma consignação que esteja de acordo com as disposições do n.º **1503**, e se a Comissão formular uma conclusão favorável relativamente aos

n.os **1504, 1505, 1506** a **1508** e **1509** a **1512**, consoante o caso, ou concluir que tal modificação não aumentará a probabilidade de interferências prejudiciais em detrimento de consignações de frequência já inscritas no ficheiro de referência, a consignação de frequência modificada conserva a data primitivamente inscrita na coluna 2d. Além disso, a data de recepção pela Comissão da ficha de notificação relativa à modificação é indicada na coluna «Observações».

1550 (4) A data prevista para a entrada em serviço de uma consignação de frequência poderá ser prorrogada por 4 meses a pedido da administração notificadora. Caso a administração venha a declarar que circunstâncias excepcionais motivam novo prolongamento desse prazo, pode conceder-se esse novo prolongamento, que, em caso algum, deverá ir além de 18 meses a contar da data inicial prevista para a entrada em serviço.

1551 § 19. Na aplicação das disposições da presente secção, qualquer ficha de notificação apresentada de novo à Comissão e recebida por ela mais de 2 anos a data em que ela devolveu a ficha à administração notificadora será considerada como um nova ficha de notificação.

1552 § 20, (1) *Inscrição de consignações de frequência notificadas antes da sua entrada em serviço.*

1553 (2) Se uma consignação de frequência notificada antes da sua entrada em serviço for objecto de conclusões favoráveis formuladas pela Comissão relativamente aos n.os **1503** e, se for caso disso, **1504, 1505, 1506** a **1508** e **1509** a **1512**, é inscrita provisoriamente no ficheiro de referência, com um símbolo especial na coluna «Observações», a indicar o carácter provisório dessa inscrição.

1554 (3) No prazo de 30 dias após a data prevista para a entrada em serviço inicialmente notificada ou modificada nos termos do n.º **1550**, a administração notificadora confirmará que a consignação de frequência foi posta em serviço. Quando a comissão for avisada de que a consignação foi posta em serviço, suprime o símbolo especial na coluna «Observações».

1555 (4) Se a Comissão não receber a confirmação no prazo previsto no n.º **1554**, a inscrição em causa é anulada, mas a Comissão consultará a administração interessada antes de tomar tal medida.

1556 (5) No caso previsto nos n.os **1522** e **1544**, e enquanto uma ficha de notificação que tenha sido objecto de uma conclusão desfavorável não puder ser apresentada de novo à Comissão acompanhada de uma declaração relativa ao funcionamento sem interferência, a administração notificadora poderá pedir à Comissão que inscreva provisoriamente a consignação de frequência em causa no ficheiro de referência. Inscreve-se então na coluna «Observações» um símbolo especial a indicar o carácter provisório dessa inscrição. A Comissão anulará esse símbolo quando a administração notificadora a avisar, ao expirar o período especificado no n.º **1544**, da ausência de queixa de interferência prejudicial.

SECÇÃO III

Inscrição das conclusões no ficheiro de referência

1557 § 21. Sempre que a Comissão inscreva uma consignação de frequência no ficheiro de referência, indica a sua conclusão por meio de um símbolo colocado na coluna apropriada. Além disso, insere na coluna «Observações» uma observação que indique os motivos de qualquer conclusão desfavorável.

SECÇÃO IV

Categorias de consignações de frequência

1558 § 22. (1) A data a inscrever na coluna 2c é a da entrada de serviço notificada pela administração interessada. Será dada apenas a título de informação.

1559 (2) Se a utilização de uma consignação de frequência a uma estação de radiocomunicações espaciais que foi inscrita no ficheiro de referência em conformidade com as disposições do n.º **1544** causar efectivamente interferência prejudicial à recepção de uma estação de radiocomunicações espaciais para a qual tenha sido anteriormente inscrita no ficheiro de referência uma consignação de frequência, em seguimento de um conclusão favorável relativamente aos n.os **1503, 1504, 1505, 1506** a **1508** e **1509** a **1512**, consoante o caso, a estação que utilizar a consignação de frequência inscrita em conformidade com as disposições do n.º **1544** deverá fazer cessar imediatamente a interferência prejudicial logo que desta seja avisada.

1560 (3) Se a utilização de uma consignação de frequência que não esteja de acordo com as disposições do n.º **1503** causar efectivamente interferência prejudicial à recepção de qualquer estação que funcione em conformidade com as disposições dos n.os **1240, 1352** ou **1503**, consoante o caso, a estação que utilizar a consignação de frequência que não esteja de acordo com as disposições do n.º **1503** deverá fazer cessar imediatamente a interferência prejudicial logo que desta seja avisada.

SECÇÃO V

Reexame das conclusões

1561 § 23. (1) Uma conclusão pode ser reexaminada pela Comissão:

1562 *a*) A pedido da administração notificadora;

1563 *b*) A pedido de qualquer administração interessada no assunto, mas unicamente devido a interferência prejudicial verificada;

1564 *c*) Por iniciativa da própria Comissão, quando considere essa medida justificada.

1565 (2) Com base em todas as informações que disponha, a Comissão reexamina o assunto tendo em contas as disposições do n.º **1503** e, se for caso disso, as disposições dos n.os **1504, 1505, 1506 a 1508 e 1509 a 1512** e formula uma conclusão apropriada, após o que informará dessa conclusão a administração notificadora, quer antes de publicar a conclusão, quer antes de a incluir no ficheiro de referência.

1566 § 24. (1) Depois da utilização real, durante um período razoável, de uma consignação de frequência inscrita no ficheiro de referência por insistência da administração notificadora, em seguimento de uma conclusão desfavorável relativamente aos n.os **1506 a 1508 ou 1509 a 1512**, essa administração pode pedir à Comissão que reexamine a conclusão. A Comissão reexaminará então o assunto após consulta às administrações interessadas.

1567 (2) Se a conclusão da Comissão for então favorável, ela introduz no ficheiro de referência as modificações necessárias para que a inscrição aí passe a figurar como se a conclusão inicial tivesse sido favorável.

1568 (3) Se a conclusão relativa à probabilidade de interferência prejudicial se mantiver desfavorável, a inscrição inicial não será modificada.

Secção VI

Modificação, anulação e revisão das inscrições do Ficheiro de referência

1569 § 25. A Comissão pedirá à administração notificadora que confirme, a intervalos que não ultrapassem dois anos, que a sua consignação tem sido e continua a ser regularmente utilizada com características idênticas às inscritas no ficheiro de referência.

1570 § 26. (1) Quando a utilização de uma consignação de frequência a uma estação espacial inscrita no ficheiro de referência for suspensa por um período de 18 meses, a administração notificadora informará a Comissão, no decorrer desse período de 18 meses, da data em que essa utilização foi suspensa e da data em que será reiniciada a utilização regular dessa consignação.

1571 (2) Sempre que tenha razões para supor, em consequência ou não de medidas tomadas nos termos do n.º **1570**, que uma consignação de frequência a uma estação espacial inscrita no ficheiro de referência não tem sido utilizada regularmente durante mais de 18 meses, a Comissão consultará a administração notificadora sobre a data em que será reiniciada a utilização regular dessa consignação.

1572 (3) Se, no prazo de seis meses, a Comissão não receber resposta ao seu pedido de informações feito nos termos do n.º **1571**, ou se a resposta recebida não confirmar que será reiniciada no prazo de seis meses a utilização regular dessa consignação a uma estação espacial, insere-se no ficheiro de referência um símbolo em frente da inscrição. De futuro, a consignação será tratada, em conformidade com as disposições do n.º **1513**, como uma consignação em relação à qual se concluiu que não tem sido efectivamente utilizada desde há dois anos.

1573 § 27. Se a utilização de uma consignação de frequência inscrita no ficheiro de referência vier a ser abandonada definitivamente, a administração notificadora deve informar do facto a Comissão no prazo de três meses, após o que será anulada a inscrição no ficheiro de referência.

1574 § 28. Sempre que a Comissão tenha razões para supor, segundo as informações de que disponha, que uma consignação inscrita no ficheiro de referência não entrou em serviço regular de acordo com as características fundamentais notificadas ou não é utilizada de acordo com as suas características fundamentais, a Comissão consultará a administração notificadora e, sob reserva do seu acordo, anulará a inscrição ou introduzir-lhe-á as modificações convincentes ou manterá as suas características fundamentais.

1575 § 29. Se, após um inquérito feito pela Comissão nos termos do n.º **1574**, a administração notificadora não fornecer à Comissão, no prazo de três meses a contar da data desse inquérito, as informações necessárias ou pertinentes, a Comissão inserirá na coluna «Observações» do ficheiro de referência observações que indiquem a situação.

Secção VII

Estudos e recomendações

1576 § 30. (1) Se lhe for pedido por qualquer administração, a Comissão, utilizando para o efeito os meios de que disponha e que convenham às circunstâncias, procede a um estudo de casos de presunção de contravenção ao presente Regulamento ou de não observância deste Regulamento ou dos casos de interferência prejudicial.

1577 (2) A Comissão elabora seguidamente um relatório, que apresentará às administrações interessadas e no qual consignará as suas conclusões e as suas recomendações para a solução do problema.

1578 (3) Quando receber as recomendações da Comissão para a solução do problema, uma administração acusa imediatamente a recepção por telegrama e comunica depois as medidas que conta tomar. No caso de essas propostas ou recomendações não poderem ser aceites pelas administrações interessadas, a Comissão continuará a esforçar-se por encontrar uma solução aceitável.

1579 § 31. No caso em que, no seguimento a um estudo, a Comissão apresente a uma ou várias administrações propostas ou recomendações tendentes à solução de uma questão, e se, no prazo de quatro meses, ela não

tiver recebido resposta de uma ou várias dessa administrações, considerará que as suas propostas ou recomendações não são aceitáveis pela ou pelas administrações que não responderem. Se a própria administração requerente não responder nesse prazo, a Comissão não dará continuação ao estudo.

SECÇÃO VIII

Disposições divesas

1580 § 32. (1) Se para isso lhe for feito pedido por qualquer administração e, principalmente, pela administração de um país que tenha necessidade de assistência especial, a Comissão, utilizando para o efeito os meios de que disponha e que convenham às circunstâncias, prestará toda a assistência de carácter técnico na aplicação das disposições deste artigo.

1581 (2) Ao apresentar o seu pedido à Comissão, nos termos do n.º **1580**, a administração fornecer-lhe-á as informações necessárias.

1582 § 33. As normas técnicas da Comissão baseiam-se nas disposições pertinentes do presente Regulamento e dos seus apêndices, nas decisões, se existirem, das conferências administrativas da União, nos pareceres da CCIR, no estado de avanço da técnica radioeléctrica e nos aperfeiçoamentos de novas técnicas de transmissão, tendo em conta as condições de propagação excepcionais que possam dominar em certas regiões (por exemplo, um efeito de condutas particularmente acentuado).

1583 § 34. A Comissão leva ao conhecimento das administrações as conclusões e as respectivas justificações, vem como todas as modificações efectuadas no ficheiro de referência, por meio da circular semanal. Essas informações são publicadas no prazo de 45 dias a contar da data de publicação da ficha completa na circular semanal de que trata o n.º **1235**. Quanto a Comissão não puder cumprir o prazo acima mencionado, informará disso, logo que possível, as administrações, indicando as razões.

1584 § 35. Se um membro recorrer às disposições do artigo 50 da Convenção, a Comissão, se lhe for feito pedido, porá os seus documentos à disposição das partes interessadas para a aplicação de qualquer procedimento prescrito na Convenção para a solução de desacordos internacionais.

1585 a 1609 *(Não atribuídos.)*

ARTIGO 14

Procedimento suplementar a aplicar nos casos em que uma nota ao quadro de atribuição das faixas de frequência exija um acordo com uma administração

1610 § 1. (1) Antes de notificar à Comissão uma consignação de frequência que esteja de acordo com uma nota ao quadro de atribuição das faixas de frequência na qual uma referência ao presente artigo, a administração interessada deve obter o acordo de qualquer outra administração cujos serviços possam ser afectados. No caso de uma nota relativa a um serviço de radiocomunicação espacial, este procedimento pode ser iniciado antes da aplicação das disposições do artigo 11 ou ao mesmo tempo.

1611 (2) A administração que procura um tal acordo deve comunicar à Comissão, suficientemente antes da data prevista para a entrada em serviço da consignação:

1612 *a*) Para os serviços de radiocomunicação de Terra, as características fundamentais da consignação em projecto, tal como são indicadas na secção pertinente do apêndice 1;

1613 *b*) Para os serviços de radiocomunicação espacial, as características da consignação em projecto, tal como são indicadas no apêndice 4, ou no apêndice 3, quando estas estiverem disponíveis ([1]).

1614 (3) Ao mesmo tempo que comunicar à Comissão as características acima mencionadas, a administração que procura um acordo pode indicar-lhe as administrações que, em sua opinião, possuam serviços susceptíveis de ser afectados.

1615 § 2. (1) A Comissão publicará, numa secção especial da sua circular semanal ([2]), as informações comunicadas em aplicação dos n.os **1611** a **1614**. Por outro lado, quando uma circular semanal contiver informações dessa natureza, a Comissão informará do facto as administrações por telegrama-circular.

1616 (2) A Comissão procurará identificar as administrações com serviços susceptíveis de ser afectados e indicará o nome das que puder identificar na secção especial da sua circular semanal, bem como no telegrama-circular referido no n.º **1615**.

1613.1 ([1]) As informações indicadas nos apêndices 3 ou 4 e comunicadas à Comissão em aplicação do artigo 11 podem também ser utilizadas para os fins do presente procedimento.

1615.1 ([2]) No caso de um serviço de radiocomunicação espacial, a administração que apresentar as informações indicadas noa apêndices 3 ou 4 em conformidade com as disposições do artigo 11 pode pedir à Comissão que utilize igualmente essas informações na aplicação do presente procedimento. Em tal caso, a Comissão indicará na secção especial apropriada da sua circular semanal que é também procurado um acordo do presente artigo.

1617 § 3. (1) Ao receber essas informações, qualquer administração que pense que a consignação em projecto é susceptível de afectar serviços seus que funcionam de acordo com o quadro de atribuição das faixas de frequências ou se destinam a funcionar assim informará de tal facto, no prazo de quatro meses a contar da data de publicação da circular semanal, a administração que procura o acordo, bem como a Comissão.

1618 (2) Considera-se que uma administração que não tenha formulado qualquer comentário ao prazo especificado no n.º **1617** não é afectada pela consignação em projecto.

1619 (3) Uma administração que, em aplicação do n.º **1617**, responda a um pedido de acordo comunicará, se possível ao mesmo tempo, pelo menos as características fundamentais das suas estações cujos serviços são susceptíveis de ser afectados, bem como as sugestões que possa formular para se obter uma solução satisfatória do problema, e enviará simultaneamente à Comissão cópia de todas essa informações.

1620 § 4. A administração que procura um acordo em aplicação dos n.os **1611** a **1613** e a administração que responde em aplicação do n.º 1617 deve procurar resolver em comum (1) o problema antes da data de entrada em serviço da consignação em projecto.

1621 § 5. Qualquer dessas administrações pode pedir à outra informações suplementares que possam conduzir à solução do problema. Será enviada à Comissão cópia de pedido e de qualquer informação que seja dada em resposta.

1622 § 6. Qualquer das administrações pode pedir a ajuda da Comissão para resolver o problema.

1623 § 7. Uma vez resolvido o problema, a administração que procurou o acordo informará do facto a Comissão.

1624 § 8. Uma administração que tenha procurado um acordo em aplicação dos n.os **1611** a **1613** e que não tenha recebido resposta de qualquer administração em aplicação do n.º **1617** informa do facto a Comissão. Considera-se então que essa administração aplicou com êxito o procedimento do presente artigo.

1625 § 9. Considera-se que obteve o acordo exigido pela nota pertinente do quadro de atribuição das faixas de frequências qualquer administração que tenha procurado um acordo em aplicação dos n.os **1611** a **1613**, que tenha recebido uma ou várias respostas em aplicação do n.º **1617** e que, em conformidade com o n.º **1623**, tenha informado a Comissão de que o problema ficou resolvido.

1626 § 10. Uma vez avisada, nos termos do n.º **1624** ou do n.º **1625**, da aplicação completa do presente procedimento, a Comissão publica essa informação na secção especial apropriada da sua circular semanal.

1627 § 11. Uma administração que procura um acordo ou junto do qual é procurado um acordo, ou qualquer outra administração cujos serviços possam ser afectados, pode pedir o auxílio da Comissão na aplicação das diferentes fases do presente procedimento, especialmente para:

1628 *a*) Identificar as administrações cujos serviços possam ser afectados;

1629 *b*) Avaliar os níveis de interferência;

1630 *c*) Definir, com o acordo das administrações implicadas, os critérios técnicos a utilizar (1).

1631 a 1655 *(Não atribuídos.)*

ARTIGO 15

Coordenação, notificação e inscrição de frequências às estações do serviço de radiodifusão por satélite nas faixas de frequências 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1) e aos outros serviços a que estas faixas estão atribuídas, na medida em que esteja implicada a relação deste com o serviço de radiodifusão por satélite nestas faixas.

1656 As disposições e o plano associado aplicáveis ao serviço de radiodifusão por satélite nas faixas de frequências 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1), tais como adoptadas pela Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) e que figuram no apêndice 30, aplicam-se à consignação de frequências às estações do serviço de radiodifusão por satélite nestas faixas e às estações dos outros serviços a que estas faixas estão atribuídas e à utilização destas frequências pelas referidas estações, na medida em que esteja implicada a sua relação como serviço de radiodifusão por satélite nestas faixas.

1657 a 1681 *(Não atribuídos.)*

1620.1 1630.1 (1) Na ausência de pareceres pertinentes da CCIR ou de normas técnicas da IFRB, os critérios técnicos a aplicar em tal caso devem ter sido objecto de um acordo entre as administrações interessadas.

ARTIGO 16

Procedimento para actualização do plano de adjudicação (1) de frequências às estações costeiras radioeléctricas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 kHz e 23 000 kHz

(Apêndice 25 Mar2)

1682 § 1. (1) Antes de notificar à Comissão Internacional do Registo de Frequências ou de pôr em serviço uma consignação de frequência a uma estação costeira radiotelefónica para a qual não figure qualquer adjudicação correspondente no plano de adjudicação de frequências contido no apêndice 25 Mar2, qualquer administração que:

1683 *a*) Se proponha pôr em serviço uma estação costeira radioeléctrica e não tenha qualquer adjudicação no plano; ou

1684 *b*) Se proponha alargar o serviço radiotelefónico assegurado pela sua ou pelas suas estações costeiras e tenha necessidade de uma adjudicação adicional;

envia à Comissão as informações indicadas no apêndice 5 no máximo dois anos antes, no caso mencionado no n.º **1683**, ou no máximo seis meses antes, no caso mencionado no n.º **1684**, mas, em qualquer caso, não mais tarde que três meses antes da data prevista de entrada em funcionamento do seu serviço radiotelefónico em projecto.

1685 (2) A comissão publicará, numa secção especial da sua circular semanal, as informações de que tratam os n.ºs **1682** a **1684**, juntamente com os casos de incompatibilidade aparente que a Comissão possa detectar entre a adjudicação em projecto que é objecto da publicação e qualquer outra adjudicação existente ou em projecto. A Comissão fornecerá igualmente as informações de carácter técnico e as sugestões que possa apresentar com vista a evitar essas incompatibilidades.

1686 (3) Se lhe for pedido por qualquer administração, e especialmente por uma administração de um país que necessite de assistência especial, e se as circunstâncias o justificarem, a Comissão, utilizando todos os meios de que disponha e que convenham às circunstâncias, prestará a assistência seguinte:

1687 *a*) Determinação de uma ou de várias vias que melhor convenham ao serviço projectado pela administração antes de esta enviar as informações para publicação;

1688 *b*) Aplicação do procedimento previsto no n.º **1690**;

1689 *c*) Qualquer outra assistência de carácter técnico para que possam ser levados a bom termo os procedimentos descritos no presente artigo.

1690 § 2. (1) Ao mesmo tempo que envia à Comissão as informações indicadas no apêndice 5 para serem publicadas, a administração interessada procurará, relativamente à adjudicação em causa, obter o acordo das administrações a que a via está adjudicada e enviará à Comissão uma cópia de toda a correspondência efectuada nesse sentido.

1691 (2) Uma administração tem o direito de participar no procedimento encetado nos termos no n.º **1690** se, após estudar as informações publicadas pela Comissão, concluir que os seus serviços já existentes ou em projecto, destinados a entrar em serviço dentro dos prazos indicados nos n.ºs **1682** a **1684**, poderão ser desfavoravelmente influenciados.

1692 § 3. (1) Qualquer administração que receba um pedido nos termos do n.º **1690** acusará imediatamente a recepção, por telegrama. Se a administração que fez o pedido não receber aviso de recepção no prazo de 30 dias a contar da data da circular semanal em que foram publicadas as informações pertinentes de acordo com as disposições do n.º **1685**, enviará um telegrama a pedir o referido aviso de recepção, devendo a administração à qual o telegrama é dirigido responder dentro de um novo prazo de 15 dias.

1693 (2) Ao receber o pedido feito nos termos do n.º **1690**, a administração interessada, tendo em conta a data prevista de entrada em serviço da ou das consignações correspondentes à adjudicação para a qual foi pedido o acordo, estudará rapidamente a questão, sob o ponto de vista da interferência prejudicial que seria causada ao serviço assegurado pela sua ou pelas suas estação(ões) costeira(s):

1694 *a*) Que utiliza(m) uma consignação de frequência correspondente a uma adjudicação que figura no plano; ou

1695 *b*) Que será(ão) posta(s) em serviço no prazo prescrito no n.º **1720**, em conformidade com uma adjudicação que figura no plano; ou

1696 *c*) Que será(ão) posta(s) em serviço no prazo prescrito no n.º **1720**, em conformidade com uma adjudicação que foi comunicado à Comissão nos termos dos n.ºs **1682** a **1684** para ser publicado nos termos do n.º **1685**.

1697 (3) Qualquer administração que receba um pedido nos termos do n.º **1690** e que considere que o projecto de utilização de uma via não causará interferência prejudicial ao serviço assegurado pelas suas estações

---

A.16.1 (1) V. o n.º **18**.

costeiras a que se referem os n.os **1693** a **1696**, comunicará o seu acordo à administração que lhe fez o pedido tão rapidamente quanto possível e nunca mais tarde que dois meses após a data da circular semanal pertinente.

1698 (4) Qualquer administração que receba um pedido nos termos do n.º **1690** e que considere que o projecto de utilização de uma via poderia causar interferência prejudicial ao serviço assegurado pelas suas estações costeiras a que se referem os n.os **1693** a **1696**, comunicará à administração que lhe fez o pedido os motivos do seu desacordo tão rapidamente quanto possível e nunca mais tarde que dois meses após a data da circular semanal pertinentes. Fornecer-lhe-á igualmente qualquer informação ou sugestão que possa contribuir para uma solução satisfatória do problema. A administração que pretende obter o acordo procurará, na medida do possível, adaptar as suas necessidades tomando em consideração as observações que lhe foram feitas.

1699 (5) No caso em que uma administração que procura obter um acordo não tenha qualquer adjudicação na faixa considerada, a administração a que seja feito o pedido de acordo procurará, em conjunto com a administração requerente, todos os meios de satisfazer as necessidades desta.

1700 § 4.(1) A administração que procura obter um acordo pode pedir à Comissão que diligencie obter esse acordo nas seguintes circunstâncias:

1701 *a*) Uma administração à qual foi feito um pedido de acordo nos termos do n.º **1690** não acusa a recepção desse pedido no prazo de 45 dias a contar da data da circular semanal em que foram publicadas as informações pertinentes;

1702 *b*) Uma administração acusou a recepção nos termos do n.º **1692** mas não comunica a sua decisão no prazo de dois meses contar da data da circular semanal em que foram publicadas as informações pertinentes;

1703 *c*) A administração que procura obter um acordo e a administração junto da qual se pretende obter o acordo estão em desacordo no que respeita às possibilidades de partilha;

1704 *d*) Não é possível chegar a acordo por qualquer outro motivo.

1705 (2) A administração que procura obter um acordo, ou qualquer administração à qual foi feito um pedido de acordo, ou a Comissão, podem pedir as informações suplementares de que necessitem para o estudo dos problemas relativos a esse acordo.

1706 (3) Quando a Comissão receber um pedido nos termos do n.º **1701**, enviará sem demora um telegrama à administração interessada pedindo-lhe que acuse a recepção imediatamente.

1707 (4) Quando a Comissão receber um aviso de recepção em seguimento da medida por ela tomada nos termos do n.º **1706** ou quando a Comissão receber um pedido nos termos do n.º **1702**, enviará sem demora um telegrama à administração interessada pedindo-lhe que tome rapidamente uma decisão sobre o assunto.

1708 (5) Quando a Comissão receber um pedido nos termos do n.º **1704**, tentará obter o acordo mencionado no n.º **1690**. Quando a Comissão não receber de uma administração aviso de recepção do pedido feito em aplicação das disposições do n.º **1690** dentro do prazo especificado no n.º **1692**, actuará, no que respeita a essa administração, de acordo com as disposições do n.º **1706**.

1709 (6) Quando uma administração não responder dentro do prazo de 15 dias a contar da data em que a Comissão lhe enviou o telegrama nos termos do n.º **1706** pedindo-lhe que acusasse a recepção, ou quando não comunicar a sua decisão sobre o assunto no prazo de 30 dias a contar da data em que a Comissão lhe enviou o telegrama nos termos do n.º **1707**, considera-se que, uma vez, a adjudicação em projecto inserida no plano, essa administração se obriga a:

1710 *a*) Não formular queixa relativa às interferências prejudiciais que possam ser causadas ao serviço assegurado pelas suas estações costeiras radiotelefónicas pela utilização de consignações de frequências que estejam de acordo com a adjudicação para a qual foi pedido o acordo;

1711 *b*) Proceder de modo a evitar que as suas estações costeiras radiotelefónicas já existentes ou em projecto causem interferências prejudiciais à utilização de consignações de frequências que estejam de acordo com a adjudicação para a qual foi pedido o acordo.

1712 (7) A Comissão inscreve no ficheiro de referência, na coluna «Observações», em frente da adjudicação em causa e das respectivas consignações, uma observação a indicar que essas consignações não beneficiam das disposições do n.º **1416** do presente Regulamento, no que respeita às consignações da administração que procura obter o acordo.

1713 (8) A Comissão examina a adjudicação em projecto, sob o ponto de vista de probabilidade de interferência prejudicial que essa adjudicação possa sofrer por parte de uma adjudicação que figura no plano em nome da administração que não respondeu ao pedido da Comissão ou que comunicou o seu desacordo sem indicar os motivos deste. Se a sua conclusão foi favorável e se a aplicação do presente procedimento às outras administrações em causa o permitir, insere a adjudicação em projecto no plano.

1714 (9) No caso de uma conclusão desfavorável, a Comissão informa a administração interessada do resultado do seu exame. Se esta insistir e se a aplicação do presente procedimento às outras administrações em causa o permitir, insere a adjudicação em projecto no plano.

1715 (10) Quando a Comissão receber um pedido nos termos do n.º **1703**, avaliará as possibilidades de partilha e comunicará às administrações interessadas os resultados obtidos.

1716 (11) Em caso de desacordo persistente, a Comissão examina a adjudicação em projecto sob o ponto de vista das interferências prejudiciais que possam ser causadas ao serviço assegurado pelas estações da administração que manifestou o seu desacordo. Caso a conclusão seja favorável e se a aplicação do presente procedimento às outras administrações interessadas o permitir, a Comissão insere a adjudicação em projecto no plano.

1717 (12) Se, em consequência do exame a que se refere o n.º **1716**, a Comissão chegar a uma conclusão desfavorável, examina a adjudicação em projecto sob o ponto de vista das interferências prejudiciais que possam ser causadas aos serviços assegurados nas diferentes vias da faixa em questão. Se a Comissão formular uma conclusão desfavorável em todos os casos, escolhe a via menos afectada e, se a administração que procura obter o acordo lho pedir, insere a adjudicação em projecto nessa via do plano.

1718 § 5. A administração que procura obter acordo para uma adjudicação informa a Comissão do resultado das consultas feitas às administrações interessadas. Quando a Comissão concluir que o procedimento descrito no presente artigo foi aplicado em relação a todas as administrações interessadas, publica a sua conclusão numa secção especial da sua circular semanal e, se for caso disso, actualiza o plano.

1719 § 6. Apesar das disposições anteriores e se as circunstâncias o justificarem, qualquer administração poderá, em caso excepcionais, notificar à Comissão uma consignação de frequência não abrangida por uma adjudicação, com vista à sia inscrição provisória no ficheiro de referência. Deverá, todavia, iniciar simultaneamente o procedimento descrito no presente artigo.

1720 § 7. Quando, no prazo de 12 meses a contar da data da inclusão de uma adjudicação no plano, a Comissão não receber a notificação de uma primeira consignação de frequência relativa a essa adjudicação ou quando a primeira consignação notificada não for posta em serviço dentro dos prazos prescritos no presente Regulamento, antes de proceder à supressão da adjudicação no plano a Comissão consultará a administração interessada sobre a oportunidade de tal supressão e publicará essa informação no âmbito da actualização do plano. Todavia, quando, em consequência de pedido feito pela administração interessada, a Comissão concluir que circunstâncias excepcionais justificam um prazo suplementar, este não deve, em caso algum, ser superior a 6 meses, excepto tratando-se de uma administração que não tem nenhuma estação costeira em serviço, caso em que esse prazo poderá ser alargado até 18 meses.

1721 § 8. Qualquer administração em cujo nome figure uma adjudicação no plano e que tenha necessidade de a substituir por outra adjudicação na mesma faixa de frequências, com vista a melhorar o seu serviço, aplica o procedimento descrito no presente artigo. No caso de essa administração chegar a um resultado positivo através da aplicação deste procedimento, a Comissão substitui, a seu pedido, a adjudicação existente no plano pela adjudicação em projecto.

1722 § 9. A Comissão manterá actualizado um plano de referência resultante da aplicação do presente procedimento, e elaborará, de forma apropriada, para publicação pelo secretário-geral, a totalidade ou parte de uma versão revista do plano, sempre que as circunstâncias o justifiquem e, pelo menos, uma vez por ano.

1723 a 1747 *(Não atribuídos.)*

ARTIGO 17

Procedimento relativo às faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz

SECÇÃO I

Apresentação dos horários periódicos de radiodifusão em ondas decamétricas

1748 § 1. Em intervalos regulares, as administrações apresentam à Comissão Internacional do Registo de Frequências os projectos de horários periódicos das suas estações de radiodifusão nas faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz. Os horários assim notificados são relativos a cada um dos períodos seguintes, determinados segundo as condições de propagação, e são postos em vigor no primeiro domingo de cada um dos períodos em causa, às 01.00 UTC:

Horário de Março — Março e Abril;
Horário de Maio — Maio, Junho, Julho e Agosto;
Horário de Setembro — Setembro e Outubro;
Horário de Novembro — Novembro, Dezembro, Janeiro e Fevereiro.

1749 § 2. Os primeiros horários entraram em vigor em 4 de Setembro de 1960, para serem aplicados durante o período Setembro-Outubro de 1960. As datas limite antes das quais convém que os horários sejam recebidos pela Comissão são determinadas por esta, de tal modo que a antecipação com que os horários devem ser por ela recebidos seja progressivamente reduzida até ao mínimo que a Comissão tenha considerado conveniente. As consignações que figurem num horário determinado e cujas características sejam susceptíveis de não sofrer modificação podem ser apresentadas à Comissão com uma antecipação máxima de uma ano e devem ser confirmadas, o mais tardar, até à data limite de recepção pela Comissão dos horários relativos aos períodos

em causa. A Comissão tomará as medidas necessárias para, em tempo oportuno, chamar a atenção das administrações para as diversas fases do presente procedimento.

1750 § 3. Várias administrações podem apresentar à Comissão horários coordenados nos quais indiquem a utilização projectadas das frequências em que acordaram.

1751 § 4. As frequências indicadas nos horárias devem ser frequências que serão efectivamente utilizadas durante o período considerado e convém que o seu número seja o mínimo necessário para assegurar uma recepção satisfatória do programa em causa em cada uma das zonas a que é destinado. Convém que cada administração, ao elaborar os seus horários de período em período, utilize, em toda a media do possível, numa dada faixa, as frequências que utilizou nos seus horários precedentes.

1752 § 5. Os horários são apresentados à Comissão pela forma prescrita no apêndice 2, onde estão especificados as características a fornecer para cada consignação.

1753 § 6. As frequências indicadas nos horários devem satisfazer as disposições do n.º **1240** do presente Regulamento e convém que as frequências escolhidas correspondam, tanto quanto possível, a inscrições que figuram no ficheiro de referência internacional das frequências. As administrações em cujo nome não exista qualquer inscrição conveniente no ficheiro de referência poderão sugerir qualquer frequência que julguem conveniente ou, se o desejarem, limitar-se a indicar a faixa de frequência.

SECÇÃO II

Exame preliminar e elaboração do Horário provisório de radiodifusão em ondas decamétricas

1754 § 7. (1) Ao receber os horários periódicos, incluindo, se for caso disso, a confirmação de que continuarão a ser utilizadas certas consignações contidas no horário do período precedente, a Comissão incorpora os dados relativos à utilização projectada das frequências por todas as administrações num horário combinado e procede ao exame técnico preliminar necessário para a elaboração do'Horário provisório de radiodifusão em ondas decamétricas (daqui em diante denominado «Horário provisório») para o período considerado. Este Horário provisório compreenderá:

1755 *a*) Todas as consignações de frequência, nos casos em que a administração não propuser qualquer variante;

1756 *b*) As escolhas efectuadas pela Comissão, nos casos em que a administração tenha proposto uma ou mais variantes;

1757 *c*) As frequências que a Comissão proponha para todos os serviços para os quais não foi incluída, no horário apresentado, qualquer frequência específica: ao formular estas sugestões, a Comissão tomará devidamente em conta as disposições do n.º **1759**, a compatibilidade do Horário provisório e as modificações que poderia haver interesse em introduzir na utilização projectada das frequências, a fim de satisfazer mais equitativamente os pedidos das administrações;

1758 *d*) Os casos de incompatibilidade aparente que a Comissão possa detectar, durante o período de tempo de que dispõe, entre as consignações de frequência.

1759 (2) A pedido das administrações especialmente das administrações dos países que tenham necessidade de assistência especial e no nome das quais não figure qualquer inscrição conveniente no Ficheiro de referência, a Comissão dará uma atenção especial aos pedidos dessas administrações na elaboração do horário provisório.

1760 (3) A comissão começará os trabalho especificados nos n.os **1754** a **1758** suficientemente cedo para que o Horário provisório relativo a um dado período possa ser enviado às administrações o mais tardar dois meses antes do início desse período.

SECÇÃO III

Exame técnico e revisão do Horário provisório

1761 § 8. (1) A Comissão prosseguirá no exame técnico do Horário provisório, a fim de não só detectar e corrigir, sempre que possa outros caos de incompatibilidade entre consignações de frequência reveladoras pelo exame técnico, como ainda melhorar, sob o ponto de vista técnico, o Horário provisório, introduzindo-lhe modificações, para as quais deverá, por consultas, obter o assentimento das administrações interessadas.

1762 (2) Ao apresentar recomendações às administrações, a Comissão terá em conta os resultados da fiscalização das emissões e qualquer outro dado de que disponha. Todavia, quando se lhe afigurar que uma utilização de frequência não está de acordo com as consignações que figuram no horário apresentado por uma administração a Comissão dirigir-se-á a essa administração a fim de obter confirmação.

1763 (3) Convém que as administrações, após examinarem o Horário provisório e as recomendações eventuais da Comissão, notifiquem a esta, tão depressa quanto possível, e de preferência antes do início do período em causa, todas as modificações do Horário provisório que tenham a intenção dé efectuar.

1764 (4) As modificações às consignações das estações de radiodifusão que forem efectuadas depois do início do período considerado deverão ser notificadas à Comissão logo que previstas.

1765 (5) A Comissão aplicará às modificações que lhe sejam notificadas nos termos dos n.os **1763** e **1764** o procedimento especificado nos n.os **1759, 1761** e **1762**. Todas as modificações do Horário provisório que

resultem da aplicação do procedimento especificado na presente secção serão publicadas nas circulares semanais da IFRB, a fim de que as administrações possam actualizar os seus exemplares do Horário provisório.

SECÇÃO IV

Publicação do Horário de radiodifusão em ondas decamétricas

1766 § 9. Após o fim de cada período, a Comissão publica o Horário de radiodifusão em ondas decamétricas, o qual reflectirá o Horário provisório tal como foi modificado em virtude de todas as alterações notificadas à Comissão depois da sua publicação. Nesse Horário de radiodifusão em ondas decamétricas são assinaladas por meio de símbolos:

1767 *a*) As consignações em relação às quais as administrações tenham informado a Comissão não as julgarem satisfatórias na prática;

1768 *a*) As consignações não incluídas no Horário provisório e que a Comissão tenha tido em conta no exame que procedeu nos termos da secção III do presente artigo.

SECÇÃO V

Lista anual das frequências de radiodifusão em ondas decamétricas

1769 § 10. Será publicada uma lista das frequências de radiodifusão em ondas decamétricas no fim do primeiro ano em que tenha estado em vigor o procedimento especificado no presente artigo. Esta lista incluirá todas as consignações de frequência que figuram durante o ano decorrido nos Horários de radiodifusão em ondas decamétricas. Esta lista será publicada como suplemento à Lista Internacional das Frequências e com o mesmo aspecto geral. Incluirá também símbolos que indiquem as consignações de que a Comissão teve conhecimento de que se não revelaram satisfatórias na prática e outros símbolos que indiquem os períodos durante os quais foi utilizada cada consignação. Em seguida e anualmente será publicada uma lista recapitulativa.

SECÇÃO VI

Disposições diversas

1770 § 11. Convém que as normas técnicas utilizadas pela Comissão na aplicação das disposições do presente artigo se baseiem não só nos factores indicados no n.º **1454** mas ainda na experiência passada em matéria de elaboração de planos de radiodifusão e na experiência adquirida pela Comissão na aplicação das disposições do presente artigo.

1771 § 12. Com vista à evolução ulterior para planos tecnicamente compatíveis para as faixas de frequência em causa, a Comissão toma todas as medidas necessárias para proceder a estudos técnicos a longo termo. Usará, para esse efeito, todas as informações sobre a utilização das frequências postas à sua disposição, durante a a aplicação do procedimento descrito no presente artigo. A Comissão manterá as administrações informadas, em intervalos regulares, dos progressos e dos resultados desses estudos.

1772 § 13. Ao aplicar as disposições do artigo 22 do presente Regulamento, as administrações devem dar provas do máximo de boa vontade e de auxílio mútuo na solução dos problemas de interferências prejudiciais nas faixas em causa e devem tomar devidamente em consideração todos os factores pertinentes, tanto técnicos como de exploração.

1773 a 1797 *(Não atribuídos.)*

CAPÍTULO V

Medidas contras as interferências — Ensaios

ARTIGO 18

Interferências

1798 § 1. As administrações devem cooperar na pesquisa e na eliminação das interferências prejudiciais utilizando, se tal for o caso, os meios descritos no artigo 20 e seguindo o procedimento descrito no artigo 22.

SECÇÃO I

Interferências gerais

1799 § 2. São interditas a todas as estações:

1800 *a*) As transmissões inúteis;

1801 *b*) A transmissão de sinais e de correspondência supérfulos;
1802 *c*) A transmissão de sinais falsos ou que enganem;
1803 *d*) A transmissão de sinais cuja identidade não seja dada (excepto nos casos previstos no artigo 25).

1804 § 3. Todas as estações devem limitar a potência radiada no mínimo necessário para assegurar um serviço satisfatório.

1805 § 4. A fim de evitar as interferências:

1806 *a*) As localizações das estações de emissão e, quando a natureza do serviço o permitir, as das estações de recepção deverão ser escolhidas com cuidado especial;
1807 *b*) A radiação em direcções inúteis, bem como a recepção de radiações provenientes de direcções inúteis, deverão ser, sempre que a natureza do serviço o permita, reduzidas o mais possível, tirando o melhor partido das propriedades das antenas direccionais;
1808 *c*) A escolha e a utilização dos emissores e dos receptores deverão satisfazer as disposições do artigo 5;
1809 *d*) Devem ser preenchidas as condições especificadas no n.º **2612.**

1810 § 5. Deve ter-se cuidado muito especial em evitar as interferências nas frequências do perigo e de segurança, bem como nas frequências que têm relação com o perigo e a segurança, indicadas no artigo 38.

1811 § 6. Convém que a classe de emissão a utilizar por uma estação seja tal que produza o mínimo de interferência e assegure a utilização eficaz do espectro. Em geral, isso implica que, ao escolher, para o efeito, a classe de emissão, devem ser feitos todos os esforços para reduzir o mais possível a largura de faixa ocupada, tendo em conta as considerações técnicas e de exploração ao serviço a assegurar.

1812 § 7. Convém que as emissões fora de faixa das estações de emissão não causem interferência prejudicial aos serviços que funcionam em faixas adjacentes em conformidade com as disposições do presente Regulamento e que utilizam receptores de acordo com os n.os **301, 309, 310, 311** e com os pareceres pertinentes da CCIR.

1813 § 8. Se, embora satisfazendo às disposições do artigo 5, uma estação causar interferências prejudiciais em virtude das suas radiações não essenciais, devem ser tomadas medidas especiais para eliminar essas interferências.

Secção II

Interferências causadas por aparelhos e instalações eléctricas de qualquer espécie, com excepção dos aparelhos destinados às utilizações industriais, científicas e médicas

1814 § 9. As administrações devem tomar as medidas práticas necessárias para que o funcionamento dos aparelhos e das instalações eléctricas de qualquer espécie, incluindo as redes de distribuição de energia ou de telecomunicações, mas com excepção dos aparelhos destinados às utilizações industriais, científicas e médicas, não possa causar interferência prejudicial a qualquer serviço de radiocomunicação e em especial aos serviços de radionavegação e outros serviços de segurança, explorado em conformidade com este Regulamento (1).

Secção III

Interferências causadas pelos aparelhos destinados às utilizações industriais, científicas e médicas

1815 § 10. As administrações devem tomar todas as medidas práticas necessárias para que as radiações provenientes de aparelhos destinados às utilizações industriais, científicas e médicas sejam reduzidas ao mínimo e para que, fora das faixas utilizáveis por esses aparelhos, o nível de radiações não possa causar interferência prejudicial a qualquer serviço de radiocomunicação, e em especial aos serviços de radionavegação e outros serviços de segurança, explorado em conformidade com o presente Regulamento (1).

Secção IV

Casos especiais de interferência

1816 § 11. As administrações que autorizarem a utilização de frequências inferiores a 9 kHz deverão assegurar-se de que daí não resulte interferência prejudicial aos serviços a que estão atribuídas as faixas de frequência superiores a 9 kHz.

1817 a 1841 *(Não atribuídos.)*

1814.1 (1) A este respeito, as administrações deverão basear-se nos mais recentes pareceres pertinentes da CCIR.
1815.1

ARTIGO 19

Ensaios

1842 § 1. (1) Antes de autorizar ensaios e experiências numa estação, cada administração prescreverá, a fim de evitar interferências prejudiciais, que sejam tomadas todas as precauções possíveis, tais como: escolha da frequência e do horário, redução e, em todos os casos em que seja possível, supressão da radiação. Qualquer interferência prejudicial que resulte de ensaios e de experiências deverá ser eliminada nos menores prazos.

1843 (2) No que respeita à identificação das emissões feitas durante ensaios, os ajustes ou as experiências (v. o artigo 25).

1844 (3) No serviço de radionavegação aeronáutica não é desejável, por razões de segurança, transmitir a identificação normal quando se efectuarem emissões destinadas a verificações ou ajustes do material já em serviço. Convém, no entanto, que as emissões sem identificação sejam limitadas ao mínimo.

1845 (4) Os sinais de ensaio e de ajuste deverão ser escolhidos de modo tal que não se possa produzir qualquer confusão com um sinal, uma abreviatura, etc., de significado especial definido no presente Regulamento ou no Código Internacional de Sinais.

1846 (5) No que respeita aos ensaios nas estações do serviço móvel, v. os n.^{os} **3766, 3767** e **5058** a **5060.**

1847 a 1871 *(Não atribuídos.)*

ARTIGO 20

Fiscalização internacional das emissões

1872 § 1. Para facilitar, dentro das possibilidades práticas, a aplicação das disposições do presente Regulamento, especialmente para ajudar a garantir uma utilização eficaz e económica do espectro das frequências radioeléctricas e contribuir para a eliminação rápida das interferências prejudiciais, as administrações concordam em continuar a alargar os meios de fiscalização das emissões e em cooperar, em toda a medida do possível, no aperfeiçoamento progressivo de um sistema de fiscalização internacional das emissões.

1873 § 2. O sistema de fiscalização internacional das emissões compreende apenas as estações de fiscalização das emissões que foram designadas como tais pelas administrações nas informações enviadas ao secretário-geral em conformidade com o n.º **1879.** Essas estações podem ser exploradas por uma administração ou, em virtude de uma autorização concedida pela administração responsável, por uma empresa pública ou privada ou por um serviço de fiscalização estabelecido em comum por vários países ou por uma organização internacional.

1874 § 3. As administrações efectuam, na medida em que o considerem possível, as fiscalizações de carácter geral ou especial que lhes possam ser pedidas pela Comissão Internacional do Registo de Frequências ou por outras administrações. Convém que, ao pedirem observações de fiscalização, a Comissão e as administrações tenham em conta as instalações de fiscalização, mencionadas na nomenclatura das estações de fiscalização internacional das emissões (lista VIII, v. o artigo 26) e indiquem claramente, por um lado, para que fim se pedem as observações e, por outro lado, quais os parâmetros (incluindo os programas apropriados) da fiscalização desejada. Os resultados das fiscalizações desta natureza transmitidos a outras administrações poderão também ser comunicados à Comissão, se tal comunicação parecer indicada.

1875 § 4. Cada administração, cada serviço de fiscalização estabelecido em comum por vários países e cada organização internacional que participe no sistema de fiscalização internacional das emissões designa um organismo centralizador, ao qual devem ser endereçados todos os pedidos de fiscalização e por intermédio do qual os resultados da fiscalização serão transmitidos à Comissão e aos organismos centralizadores das outras administrações.

1876 § 5. As administrações concordam em que os pedidos de fiscalização oriundos de organizações internacionais que não participam no sistema de fiscalização das emissões devem ser coordenados pela Comissão e transmitidos por ela às administrações, se para tal houver lugar.

1877 § 6. As disposições do presente artigo não afectam os acordos de fiscalização particulares, concluídos para fins determinados por administrações, organizações internacionais ou empresas públicas ou privadas.

1878 § 7. As normas técnicas que a CCIR recomenda para observação pelas estações de fiscalização são reconhecidas pela Comissão como normas práticas óptimas para as estações de fiscalização internacional das emissões. Todavia, para satisfazer a necessidade de certos dados, as estações que observarem normas técnicas menos elevadas poderão, se a sua administração o desejar, participar no sistema de fiscalização internacional das emissões.

1879 § 8. Após ter determinado se as normas técnicas seguidas pelas estações de fiscalização são suficientes, as administrações notificam ao secretário-geral as informações úteis relativas aos organismos centralizadores e as estações que desejam incluir a lista VIII, identificando claramente as estações susceptíveis de participar no sistema de fiscalização internacional das emissões (v. o artigo 26 e o apêndice 9).

1880 § 9. (1) Os resultados de medidas transmitidos à Comissão ou a outras administrações deverão conter a estimativa de precisão obtida no momento da medida.

1881 (2) Quando a Comissão considerar duvidosos ou insuficientes para as suas necessidades os resultados fornecidos por uma estação de fiscalização, avisa do facto a administração ou organização internacional interessada, fornecendo os pormenores úteis.

1882 § 10. Quando forem necessárias medidas urgentes, as comunicações entre a Comissão e os organismos centralizadores, bem como entre os próprios organismos centralizadores, devem ser encaminhadas pelos mais rápidos meios de transmissão.

1883 § 11. As administrações farão todo o possível para que as observações de fiscalização (v. o apêndice 21) sejam comunicadas à Comissão nos menores prazos.

1884 § 12. Os organismos centralizadores podem pedir o auxílio de outros organismos centralizadores para aplicar as disposições do presente artigo e as do artigo 22.

1885 § 13. A Comissão fará um apanhado dos resultados que lhe forem transmitidos pelas estações de fiscalização que participam no sistema de fiscalização internacional das emissões e elaborará periodicamente, para fins de publicação pelo secretário-geral, resumos dos resultados de fiscalização úteis por ela recebidos, aos quais adicionará uma lista das estações que forneceram esses resultados.

1886 § 14. Quando uma administração, ao fornecer observações feitas por uma das suas estações de fiscalização que participa no sistema de fiscalização internacional das emissões, comunicar à Comissão que uma emissão identificada sem ambiguidade não está em conformidade com as disposições do presente Regulamento, a Comissão chama a atenção da administração responsável para essas observações.

1887 a 1914 *(Não atribuídos.)*

ARTIGO 21

Relatórios sobre infracções

1915 § 1. As infracções à Convenção ou ao Regulamento das Radiocomunicações são comunicadas às suas respectivas administrações pelos organismos de fiscalização, estações ou inspectores que as verifiquem. Para esse fim usar-se-ão formulários de acordo como o modelo reproduzido no apêndice 22.

1916 § 2. As representações relativas a qualquer infracção importante cometida por uma estação são feitas pelas administrações que as verifiquem à administração do país de que depende essa estação.

1917 § 3. Se uma administração tiver conhecimento de uma infracção à Convenção ou ao Regulamento das Radiocomunicações cometida por uma estação sob sua dependência, verificará os factos, determinará responsabilidades e adoptará as medidas necessárias.

1918 a 1942 *(Não atribuídos.)*

ARTIGO 22

Procedimento contra as interferências prejudiciais

1943 § 1. Para resolver os problemas de interferências prejudiciais é essencial que os Membros dêem provas do máximo de boa vontade e de auxílio mútuo na aplicação das disposições do artigo 35 da Convenção e dado presente artigo.

1944 § 2. Para resolver esses problemas tomar-se-ão devidamente em conta todos os factores em causa, incluindo os factores técnicos e de exploração apropriados, por exemplo: ajuste das frequências, características das antenas de emissão e de recepção, partilha no tempo, mudanças de via nas transmissões multivias.

1945 § 3. Quando for assinalada uma interferência prejudicial por uma estação de recepção, esta comunica à estação cuja emissão é interferida todas as informações que possam contribuir para identificar a origem e as características da interferência.

1946 § 4. Quando tal for possível na prática, e sob reserva de acordo entra as administrações interessadas, os problemas de interferências prejudiciais podem ser tratados directamente pelas suas estações de fiscalização especialmente designadas ou ao nível dos seus serviços de exploração.

1947 § 5. No presente artigo, o termo «administração» pode incluir o organismo centralizador designado pela administração em conformidade com o n.º **1875.**

1948 § 6. Se um caso de interferência prejudicial justificar tal diligência, a administração de que depende a estação de recepção que verificou a interferência informa do facto a administração de que depende a estação cuja emissão é interferida, comunicando-lhe o máximo de informações possível.

1949 § 7. Se forem necessárias observações e medidas complementares para determinar a origem e as características da interferência prejudicial, a administração de que depende a estação cuja emissão é interferida pode pedir, para tal efeito, a colaboração de outras administrações, em especial daquela de que depende a estação de recepção que verificou a interferência, ou de outras organizações.

1950 § 8. Depois de ter determinado a origem e as características da interferência prejudicial, a administração de que depende a estação cuja emissão é interferida comunica à administração de que depende a estação

interferente todas as informações úteis para que esta administração possa tomar as medidas necessárias a fim de eliminar a interferência.

1951 § 9. Quando for causada uma interferência prejudicial a um serviço de segurança, a administração de que depende a estação de recepção que notou a interferência pode intervir directamente junto da administração de que depende a estação interferente. Pode também fazê-lo noutros casos, sob reserva de aprovação prévia da administração de que depende a estação cuja emissão é interferida.

1952 § 10. Uma administração que seja avisada de uma das suas estações causa interferências prejudiciais a um serviço de segurança deve estudar rapidamente o assunto e, se for caso disso, tomar as medidas necessárias que se imponham.

1953 § 11. Quando é causada uma interferência prejudicial ao serviço assegurado por uma estação terrena, a estação de que depende a estação de recepção que verificou a interferência pode igualmente intervir directamente junto da administração de que depende a estação interferente.

1954 § 12. Uma administração de que depende uma estação que se presume tenha causado interferência prejudicial deve, logo que possível, após ter sido informada do facto, acusar a recepção dessa informação por telegrama, sem que, por fazê-lo, esteja a reconhecer a sua responsabilidade.

1955 § 13. Se as emissões de estações espaciais causarem interferências prejudiciais, as administrações que dependem essas estações interferentes devem, a pedido da administração de que depende a estação interferida, fornecer os dados necessários das efemérides que permitam determinar a posição dessas estações espaciais, quando essa posição não for conhecida de outra maneira.

1956 § 14. Para tratar de casos de interferência prejudicial que exijam decisões de urgência, as administrações comunicam entre si pelas vias mais rápidas. Sob reserva de autorização prévia das administrações responsáveis, as estações do sistema de fiscalização internacional das emissões especialmente designadas podem comunicar directamente entre si.

1957 § 15. Reconhecendo que as emissões das frequências de perigo e de segurança (v. artigo 38) têm necessidade de protecção internacional absoluta e que, por consequência, é imperativa a eliminação das interferências prejudiciais que afectem essas emissões, as administrações concordam em tratar com prioridade qualquer interferência prejudicial dessa natureza que chegue ao seu conhecimento.

1958 § 16. As informações pormenorizadas relativas à interferência prejudicial são, sempre que possível, fornecidas sob a forma indicada no apêndice 23.

1959 § 17. Se a interferência prejudicial persistir apesar da adopção do procedimento acima previsto, a administração de que depende a estação cuja emissão é interferida pode enviar àquela de que depende a estação de emissão interferente um relatório sobre a irregularidade ou a infracção, de acordo com as disposições do artigo 21.

1960 § 18. Quando existir uma organização internacional especializada para um serviço determinado, os relatórios relativos às irregularidades ou infracções que respeitem a interferências prejudiciais causadas ou sofridas pelas estações desse serviço poderão ser dirigidos a essa organização ao mesmo tempo que à administração interessada.

1961 § 19. (1) Em caso de necessidade, especialmente se as intervenções precedentes não produzirem resultado satisfatório, a administração interessada comunicará, a título de informação, os pormenores do assunto à Comissão Internacional do Registo de Frequências.

1962 (2) Nesse caso, a administração interessada poderá também pedir a intervenção da Comissão, em conformidade com as disposições das secções VII e VIII do artigo 12 e das secções VII e VIII do artigo 13, mas deverá então dar a conhecer à Comissão todos os factos, incluindo todos os pormenores técnicos, as informações de exploração e ainda cópias da correspondência.

1963 § 20. (1) Quando uma administração tiver dificuldade em determinar a origem de uma interferência prejudicial e desejar a assistência urgente da Comissão, no caso de ter sido esta que escolheu a consignação afectada em resposta a um pedido apresentado nos termos do n.º **1218**, comunicar-lhe-á sem demora o caso.

1964 (2) Ao receber essa informação, a Comissão solicitará imediatamente a cooperação das administrações interessadas ou das estações especialmente designadas do sistema internacional de fiscalização das emissões que possam ajudar a determinar a origem da interferência prejudicial.

1965 (3) A Comissão reunirá todos os relatórios recebidos em resposta aos pedidos feitos nos termos do n.º **1964** e, utilizando qualquer outra informação de que disponha, tentará determinar rapidamente a origem da interferência prejudicial.

1966 (4) A Comissão em seguida, por telegrama, á administração que lhe assinalou o caso de interferência prejudicial as suas conclusões e recomendações. Também comunicará, por telegrama, à administração presumivelmente responsável pela origem da interferência prejudicial essas conclusões e recomendações, pedindo-lhes ao mesmo tempo que tome rapidamente medidas apropriadas.

1967 a 1991 *(Não atribuídos.)*

CAPÍTULO VI

Disposições administrativas relativas às estações

ARTIGO 23

Sigilo

1992 Quando da aplicação das disposições apropriadas da Convenção, as administrações obrigam-se a tomar as medidas necessárias para proibir e, reprimir:

1993 *a*) A intercepção, sem autorização, de radiocomunicações que não se destinem ao uso geral do público;

1994 *b*) A divulgação do conteúdo ou simplesmente da existência, a publicação ou qualquer outro uso, sem autorização, das informações de qualquer natureza obtidas pela intercepção das radiocomunicações mencionadas no n.º **1993**.

1995 a 2019 *(Não atribuídos.)*

ARTIGO 24

Licenças

2020 § 1. (1) Nenhuma estação de emissão pode ser estabelecida ou explorada por um particular, ou por uma empresa qualquer, sem licença concedida, sob a forma apropriada e em conformidade com as disposições do presente Regulamento, pelo governo do país de que depende a referida estação (v., contudo, os n.ºs **2021**, **2027** e **2030**.

2021 (2) Todavia, o governo de um país pode concluir com o ou os governos de um ou de vários países limítrofes um acordo especial referente a uma ou mais estações do seu serviço de radiodifusão ou dos seus serviços móveis terrestres, funcionando em frequências superiores a 41 MHz, situadas no território de um país limítrofes e destinadas a melhorar a sua cobertura nacional. Esse acordo, que deve ser compatível com as disposições do presente Regulamento, assim como com as dos acordos regionais de que sejam signatários os países interessados, pode prever excepções às disposições do n.º **2020** e deverá ser comunicado ao secretário-geral, a fim de ser dado conhecimento às administrações, a título informativo.

2022 (3) As estações móveis matriculadas num território ou grupo de territórios que não tenham inteira responsabilidade das suas relações internacionais podem considerar-se, no que respeita à concessão de licenças, como dependentes da autoridade desse território ou grupo de territórios.

2023 § 2. O titular de uma licença fica obrigado a guardar sigilo das telecomunicações, como previsto nas disposições pertinentes da Convenção. Além disso, se a estação comportar um receptor, a licença deverá estipular expressamente ou por referências que é proibido captar as correspondências de radiocomunicações que não sejam as que ela está autorizada a receber e que, no caso de tais correspondências se receberem involuntariamente, não se devem reproduzir, comunicar a terceiros, utilizar para qualquer fim ou mesmo revelar a sua existência.

2024 § 3. (1) A fim de facilitar a verificação das licenças concedidas a estações móveis, acrescentar-se-á, quando necessário, ao texto redigido na língua nacional uma tradução numa das línguas de trabalho da União.

2025 § 4. (1) O governo que concede licença a uma estação móvel mencionará nela, de modo preciso, o estado sinalético da estação, incluindo o nome, o indicativo de chamada e, se for caso disso, a categoria em que fica classificada sob o ponto de vista da correspondência pública, assim como as características gerais da instalação.

2026 (2) Para estações móveis terrestres, incluindo as estações que comportam apenas um ou vários receptores, será incluída na licença uma disposição mencionando expressamente ou por referência que é proibida a exploração dessas estações em territórios de países diferentes do que concedeu a licença, salvo acordo especial entre os governos dos países interessados.

2027 § 5. (1) No caso de nova matrícula de um navio ou de uma aeronave em circunstâncias em que a concessão de licença pelo país em que vier a ser matriculado possa provocar atrasos, a administração do país de onde a estação móvel deseja partir para a sua travessia ou voo poderá, a pedido da companhia exploradora, conceder um certificado que indique que a estação satisfaz as estipulações do presente Regulamento. Esse certificado, elaborado pela forma fixada pela administração que o concede, deverá incluir o estado sinalético mencionado no n.º **2025** e só será válido para a travessia ou voo com destino ao país em que o navio ou aeronave será matriculado; de qualquer modo, a sua validade expirará passado um período de três meses.

2028 (2) A administração que conceder o certificado deverá informar a administração a quem compete conceder a licença das medidas que tomou.

2029 (3) O titular do certificado deverá satisfazer as disposições do presente Regulamento aplicáveis ao titular de um licença.

2030 § 6. Em caso de aluguer, de fretamento ou de troca de aeronaves, a administração de que depende o explorador de aeronaves que receba um aparelho em operações desta natureza pode, de acordo, com a administração do país em que a aeronave está registada, conceder uma licença nos moldes da definida no n.º 2025 e que substituirá temporariamente a licença inicial.

2031 a 2054 *(Não atribuídos.)*

ARTIGO 25

Identificação das estações

SECÇÃO I

Disposições gerais

2055 § 1. Todas as emissões devem poder ser identificadas por sinais de identificação ou por outros meios (1).

2056 § 2. (1) É proibido a todas as estações emitir utilizando um sinal de identificação falso ou enganoso.

2057 (2) Quando for possível na prática e nos serviços apropriados, os sinais de identificação deverão ser emitidos automaticamente, em conformidade com os pareceres pertinentes da CCIR.

2058 (3) Com excepção dos casos previstos nos n.os 2066 a 2068, todas as emissões dos serviços abaixo indicados deveriam conter sinais de identificação:

2059 *a*) Serviço de amador;

2060 *b*) Serviço de radiodifusão;

2061 *c*) Serviço fixo nas faixas inferiores a 28 000 kHz;

2062 *d*) Serviço móvel;

2063 *e*) Serviço de frequências padrão e de sinais horários.

2064 (4) Todas as emissões operacionais de radiobalizas devem conter sinais de identificação. Todavia, para as radiobalizas e para certos outros serviços de radionavegação, que emitem normalmente sinais de identificação, admite-se que, durante os períodos de funcionamento defeituoso ou não operacional, a supressão deliberada dos sinais de identificação seja um meio convencionado para advertir os utentes de que as emissões não podem ser utilizadas com todas a segurança para a navegação.

2065 (5) Os sinais de identificação emitidos devem estar de acordo com as disposições do presente artigo.

2066 (6) Contudo, a obrigação imposta a certas emissões de conterem sinais de identificação não se aplica:

2067 *a*) Nem às estações de engenho de salvamento, quando emitem automaticamente o sinal de perigo;

2068 *b*) Nem às radiobalizas de localização de sinistros.

2069 § 3. No caso das emissões que contém sinais de identificação, identifica-se uma estação por um indicativo de chamada, por uma identidade do serviço móvel marítimo em conformidade com o apêndice 43 (2) ou por qualquer outro processo de identificação reconhecido, que pode ser uma ou várias das indicações seguintes: nome da estação, localização da estação, nome do explorador, marcas oficiais de matrícula, número de identificação do voo, número ou sinal de chamada selectiva, número ou sinal de identificação para a chamada selectiva, sinal característico, características da emissão ou qualquer outra característica distintiva susceptível de identificação internacional fácil.

2070 § 4. No caso das emissões que contêm sinais de identificação, para poder ser facilmente identificada, cada estação deverá transmitir o seu sinal de identificação tão frequentemente quanto possível na prática, durante as suas emissões, incluindo as emissões de ensaio, de ajuste ou experimentais. Contudo, durante essas emissões, os sinais de identificação deverão ser transmitidos, pelo menos, uma vez por hora, de preferência durante o período que vai de cinco minutos antes até cinco minutos depois de cada hora exacta (UTC), a menos que daí resulte uma interrupção inaceitável do tráfego, caso em que a identificação será dada no início e no fim das emissões.

2071 § 5. Sempre que possível, os sinais de identificação devem ter uma das formas seguintes:

2072 *a*) Sinais vocais, utilizando a simples modulação de amplitude ou de frequência;

2073 *b*) Sinais do código Morse internacional transmitido em velocidade manual;

2074 *c*) Sinais emitidos segundo um código telegráfico compatível com o equipamento de impressão convencional;

2075 *d*) Qualquer outra forma recomendada pela CCIR.

2055.1 (1) No estado actual da técnica reconhece-se, contudo, que a transmissão de sinais de identificação nem sempre é possível em certos sistemas radioeléctricos (radiodeterminação, feixes hertzianos e sistemas espaciais, por exemplo).

2069.1 (2) Relativamente à aplicação do apêndice 43, v. a Resolução n.º 313.

2076 § 6. Na medida do possível, o sinal de identificação deveria ser transmitido em conformidade com os pareceres pertinentes da CCIR.

2077 § 7. As administrações devem providenciar para que, sempre que possível, os métodos de identificação por sobreposição sejam empregados em conformidade com os pareceres pertinentes da CCIR.

2078 § 8. Quando várias estações trabalham simultaneamente numa mesma ligação, ou como estações repetidoras ou em paralelo em diferentes frequências, cada uma delas deverá, na medida do praticável, emitir o seu próprio sinal de identificação ou então os de todas as estações interessadas.

2079 § 9. As administrações devem providenciar para que, salvo nos casos indicados nos n.os **2066** a **2068**, todas as emissões que não contenham sinais de identificação possam ser identificadas por outros meios, quando sejam susceptíveis de causar interferências prejudiciais aos serviços de uma outra administração explorados segundo as disposições do presente Regulamento.

2080 § 10. Tendo em conta as disposições do presente Regulamento relativas à notificação de consignações de frequência para inscrição no ficheiro de referência, as administrações devem adoptar as suas próprias medidas para seguir as disposições do n.º **2079**.

2081 § 11. Cada Membro reserva-se o direito de estabelecer os seus próprios processos de identificação para as estações que utilizar para as necessidades da sua defesa nacional. Contudo, deverão empregar-se para esse efeito, na medida do possível, indicativos de chamada reconhecíveis como tais e que contenham os caracteres distintivos da nacionalidade.

Secção II

Atribuição das séries internacionais e consignação dos indicativos de chamada

2082 § 12. (1) Todas as estações abertas à correspondência pública internacional, todas as estações de amador e todas as outras estações susceptíveis de causarem interferências prejudiciais para além das fronteiras dos países de que dependem devem possuir indicativos de chamada da série internacional atribuída ao seu país no quadro de atribuição das séries internacionais de indicativos de chamada que figura no apêndice 42.

2083 (2) A todas as estações de navio e a todas as estações terrenas de navio a que se aplicam as disposições do capítulo IX e a todas as estações costeiras ou estações terrenas costeiras capazes de comunicar com essas estações de navio são consignadas identidades do serviço móvel marítimo de acordo com o apêndice 43 (1).

2084 (3) Não é obrigatório consignar indicativos de chamada da série internacional às estações identificadas por identidades do serviço móvel marítimo ou que possam ser facilmente identificadas por outros processos (v. o n.º **2069**) e cujos sinais de identificação ou características de emissão sejam publicados em documentos internacionais.

2085 § 13. No caso de as disponibilidades do apêndice 42 se esgotarem, podem atribuir-se novas séries de indicativos de chamada, segundo os princípios enunciados na Resolução n.º 13, relativa à formação dos indicativos de chamada e à atribuição de novas séries internacionais.

2086 § 14. No intervalo entre duas conferências administrativas das radiocomunicações, o secretário-geral fica autorizado a tratar, a título provisório e sob reserva de confirmação pela próxima conferência, das questões relativas às alterações na atribuição das séries de indicativos de chamada (v. também o n.º **2085**.)

2087 § 15. Para o sistema de identificação utilizado no serviço móvel marítimo, o secretário-geral fica encarregado de atribuir as séries de algarismos de identificação de nacionalidade aos países que não figurarem no quadro dos algarismos de identificação de nacionalidade [v. o apêndice 43 (1)].

2088 § 16. O secretário-geral fica encarregado de fornecer, a pedido das administrações, séries de números ou de sinais de chamada selectiva (v. os n.os **2143** a **2146**).

2089 § 17. (1) Cada país escolhe os indicativos de chamada e, se o sistema de chamada selectiva utilizado estiver de acordo com as disposições do apêndice 39, escolhe também os números de chamada selectiva das suas estações de navio e os números de identificação das suas estações costeiras nas séries internacionais que lhe são atribuídas ou fornecidas e, em conformidade com o artigo 26, notifica essas informações ao secretário-geral, agrupando-as com as informações a figurar nas listas I, II, IV, V, VI e VIII-A. Esta última disposição não abrange os indicativos de chamada consignados às estações de amador e às estações experimentais.

2090 (2) Cada país consigna às suas estações identidades do serviço móvel marítimo escolhidas nas séries de algarismos de identificação de nacionalidade que lhe são atribuídas e notifica essas informações ao secretário-geral para que figurem nas listas pertinentes, como o previsto no artigo 26.

2091 (3) O secretário-geral cuida de evitar que um mesmo indicativo de chamada selectiva ou um mesmo número de identificação seja consignado mais de uma vez e que sejam consignados indicativos de chamada que possam confundir-se com os sinais de perigo ou com outros sinais da mesma natureza.

2092 § 18. (1) Quando uma estação fixa utilizar, no serviço internacional, mais de uma frequência, cada frequência pode ser identificada por uma indicativo de chamada distinto, utilizado unicamente para essa frequência.

2083.1 (1) Relativamente à aplicação do apêndice 43, v. a Resolução n.º 313.
2087.1

2093 (2) Quando uma estação de radiodifusão utilizar, no serviço internacional mais de uma frequência, cada frequência pode ser identificada quer por um indicativo de chamada distinto utilizado unicamente para essa frequência, quer por outros processos apropriados, tais como o anúncio da localização geográfica e da frequência utilizada.

2094 (3) Quando uma estação terrestre utilizar mais de uma frequência pode, a título facultativo, ser identificada por um indicativo de chamada distinto.

2095 (4) Convém que as estações costeiras utilizem, quando foi praticável, um indicativo de chamada comum para cada série de frequência (1).

SECÇÃO III

Formação dos indicativos de chamada

2096 § 19. (1) Para formar os indicativos de chamada podem utilizar-se as 26 letras do alfabeto, assim os algarismos, nos casos previstos a seguir. São excluídas as letras acentuadas.

2097 (2) Todavia, não se devem utilizar como indicativos de chamada as combinações indicadas a seguir:

2098 *a*) As que possam confundir-se com sinais de perigo ou com outros sinais da mesma natureza;

2099 *b*) As reservadas às abreviaturas a empregar nos serviços de radiocomunicação (v. os apêndices 13 e 14);

2100 *c*) Para as estações de amador, as que comecem por um algarismo e cujo segundo caracter seja uma das letras O ou I.

2101 § 20. Os indicativos de chamada das séries internacionais são formados como se indica nos n.os **2101** a **2122.** Os dois primeiros caracteres podem ser duas letras ou uma letra seguida de um algarismo ou um algarismo seguido de uma letra. Os dois primeiros caracteres ou, em certos casos, o primeiro caracter de um indicativo de chamada constituem a identificação de nacionalidade (2).

2102 *Estações terrestres e estações fixas:*

2103 § 21. (1):

Dois caracteres e duas letras; *ou*
Dois caracteres e uma letra seguidos de três algarismos, no máximo (não sendo 0 ou 1).

2104 (2) Todavia, recomenda-se que, na medida do possível, os indicativos de chamada das estações fixas sejam compostos por dois caracteres e uma letra seguidos de dois algarismos (não sendo 0 nem 1 o algarismo que segue imediatamente as letras).

2105 *Estações de navio:*

2106 § 22. (1):

Dois caracteres e uma letra; *ou*
Dois caracteres, duas letras e um algarismo (não sendo 0 ou 1).

2107 (2) Todavia, as estações de navio que utilizem somente a radiotelefonia poderão também utilizar um indicativo de chamada composto por:

Dois caracteres (com a condição de o segundo ser uma letra) seguidos de quatro algarismos (não sendo 0 nem 1 o que segue imediatamente as letras); *ou*
Dois caracteres e uma letra seguidos de quatro algarismos (não sendo 0 nem 1 o algarismo que segue imediatamente as letras).

2108 *Estações de aeronave:*

2109 § 23. Dois caracteres e três letras.

2110 *Estações de engenhos de salvamente de navio:*

2111 § 24. Indicativo de chamada do navio de base seguido de dois algarismos (não sendo 0 nem 1 o algarismo que segue imediatamente as letras).

2112 *Estações de radiobaliza de localização de sinistros:*

2113 § 25. A letra B em código de Morse ou o indicativo de chamada do navio a que pertence a radiobaliza, ou estas duas informações.

2095.1 (1) Por «série de frequências» entende-se um grupo de frequências em cada uma delas pertence a uma das diferentes faixas compreendidas entre 4000 kHz e 27 500 kHz e atribuídas em exclusivo ao serviço móvel marítimo.

2101.1 (2) Para as séries de indicativos de chamada que comecem por B, F, G,I, K, M, N, R e W só é necessários os três primeiros caracteres para a identificação de nacionalidade.

2114 *Estações de engenho de salvamento de aeronave:*

2115 § 26. Indicativo de chamada completo da aeronave de base (v. o n.º **2109**) seguido de um algarismo diferente de 0 ou 1.

2116 *Estações móveis terrestres:*

2117 § 27:

Dois caracteres (com a condição de o segundo ser uma letra) seguidos de quatro algarismos (não sendo 0 nem 1 o algarismo que segue imediatamente as letras); *ou*
Dois caracteres e uma ou duas letras seguidas de quatro algarismos (não sendo 0 nem 1 o algarismo que segue imediatamente as letras).

2118 *Estações de amador e estações experimentais:*

2119 § 28. (1):

Um caracteres (v. o n.º **2101.1**) e um só algarismo (diferente de 0 ou 1), seguidos de um grupo de três letras, no máximo, ou
Dois caracteres e um algarismos (diferente de 0 ou 1), seguidos de um grupo de três letras, no máximo.

2120 (2) Todavia, não se aplica às estações de amador a proibição de utilizar os algarismos 0 e 1.

2121 *Estações do serviço espacial:*

2122 § 29. Quando se empregam indicativos de chamada em estações de serviços espacial, recomenda-se que sejam compostos por dois caracteres seguidos de dois ou três algarismos (não sendo 0 nem 1 o que se segue imediatamente as letras).

Secção IV

Identificação das estações que utilizam a radiotelefonia

2123 § 30. As estações que utilizam a radiotelefonia são identificadas pelo modo indicado nos n.ºs **2124** a **2133.**

2124 § 31. (1) *Estações costeiras:*

Quer por um indicativo de chamada (v. o n.º **2103**);
Quer pelo nome geográfico do local, tal como figura na nomenclatura das estações costeiras, seguido, de preferência, da palavra RADIO ou de qualquer outra indicação apropriada.

2125 (2) *Estações de navio:*

Quer por um indicativo de chamada (v. os n.ºs **2106** e **2107**);
Quer pelo nome oficial do navio, precedido, se necessário, do nome de proprietário e sob condição de não resultar daí qualquer confusão possível com sinais de perigo, de urgência e de segurança;
Quer pelo seu número ou sinal de chamada selectiva.

2126 (3) *Estações de engenho de salvamento de navio:*

Quer por um indicativo de chamada (v. o n.º **2111**);
Quer por um sinal de identificação constituído pelo nome do navio de base seguido de dois algarismos.

2127 (4) *Estações de radiobaliza de localização de sinistros,* no caso de emissões vocais (v. o n.º **3265**):

O nome ou o indicativo de chamada do navio ao qual pertence a radiobaliza, ou ambas as informações.

2128 § 32. (1) *Estações aeronáuticas:*

Pelo nome do aeroporto ou o nome geográfico do local, seguido, se necessário, de uma palavra apropriada indicando a função da estação.

2129 (2) *Estações de aeronave:*

Quer por um indicativo de chamada (v. o n.º **2109**), que pode ser precedido de uma palavra que designe o proprietário ou o tipo de aeronave;

Quer por uma combinação de caracteres correspondente à marca de matrícula oficialmente atribuída à aeronave;
Quer por uma palavra que designe a empresa de transporte aéreo, seguida do número de identificação do voo.

2130 (3) Nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico as estações de aeronave que utilizam a radiotelefonia poderão, após acordo especial entre os governos, empregar outros métodos de identificação, sob reserva de serem internacionalmente conhecidos.

2131 (4) *Estações de engenho de salvamento de aeronave:*

Por um indicativo de chamada (v. o n.º **2115**).

2132 § 33. (1) *Estações de base:*

Quer por um indicativo de chamada (v. o n.º **2103**);
Quer pelo nome geográfico do local seguido, se apropriado, de qualquer outra indicação necessária.

2133 (2) *Estações móveis terrestres:*

Quer por um indicativo de chamada (v. o n.º **2117**);
Quer pela indicação da identidade do veículo ou qualquer outra indicação apropriada.

SECÇÃO V

Números de chamada selectiva no serviço móvel marítimo

2134 § 34. Quando as estações do serviço móvel marítimo utilizarem dispositivos de chamada selectiva de acordo com os apêndices 38 e 39, os números de chamada são-lhes consignados pelas administrações de que dependem, em conformidade com as disposições seguintes:

2135 *Formação dos números de chamada selectiva de estação de navio e dos números de identificação de estação costeira:*

2136 § 35. (1) Os dez algarismos 0 a 9 devem ser utilizados para formar os números de chamada selectiva.

2137 (2) Todavia, não devem ser utilizadas, para formar os números de identificação de estações costeiras, as combinações que comecem pelos algarismo 00 (zero,zero).

2138 (3) Os números de chamada selectiva das estações de navio e os números de identificação das estações costeiras, formados a partir das séries internacionais, devem estar de acordo com as disposições dos n.ºs **2139, 2140** e **2141.**

2139 (4) *Números de identificação de estação costeira:*

Quatro algarismos (v. o n.º **2137**).

2140 (5) *Números de chamada selectiva de estação de navio:*

Cinco algarismos.

2141 (6) *Grupos predeterminados de estação de navio:*

Cinco algarismos:

Quer o mesmo algarismo repetido cinco vezes;
Quer dois algarismos diferentes repetidos alternadamente.

2142 *Consignação dos números de chamada selectiva de estação de navio e dos números de identipificação de estação costeira:*

2143 § 36. (1) Nos casos em que sejam necessários números de chamada selectiva de estação de navio e números de identificação de estação costeira, para utilização no serviço móvel marítimo, e o sistema de chamada selectiva esteja de acordo com as disposições do apêndice 39, esses números de chamada selectiva e esses números de identificação são fornecidos, a pedido, pelo secretário-geral.

Quando uma administração notificar a introdução da chamada selectiva para fins de utilização no serviço móvel marítimo:

2144 *a*) Os números de chamada selectiva de estação de navio ser-lhe-ão fornecidos, segundo as necessidades, por grupos de 100;

2145 *b*) Os números de identificação de estação costeira ser-lhe-ão fornecidos, por grupos de 10, para satisfazer as necessidades efectivas;

2146 *c*) Os números de chamada selectiva para a chamada de grupos predeterminados de estações de navio (v. o n.º **2141**) ser-lhe-ão fornecidos nas mesmas condições dos números para estações individuais.

2147 (2) Cada administração escolherá os números de chamada selectiva a consignar às suas estações de navio nos grupos de séries que lhe são fornecidos.

2148 (3) Cada administração escolherá os números de identificação a consignar às suas estações costeiras nos grupos de séries que lhe são fornecidos.

Secção VI

Identidades do serviço móvel marítimo no serviço móvel marítimo e no serviço móvel marítimo por satélite

2149 § 37. Quando uma estação do serviço móvel marítimo ou do serviço móvel marítimo por satélite deva utilizar uma identidade de serviço móvel marítimo, a administração responsável consignará a essa estação uma identidade de acordo com as disposições do apêndice 43 e com a Resolução n.º 313, tendo em conta os pareceres pertinentes da CCIR e da CCITT.

Secção VII

Disposições especiais

2150 § 38. No serviço móvel aeronáutico, depois de estabelecida a comunicação por meio de indicativo de chamada completo, a estação de aeronave pode utilizar, se não existir risco de confusão, um indicativo ou um sinal de identificação abreviado, constituído:

2151 *a*) Em radiotelegrafia, pelo primeiro caracter e as duas últimas letras do indicativo de chamada completo (v. o n.º **2109**).

2152 *b*) Em radiotelefonia:

Quer pelo primeiro caracter do indicativo de chamada completo;
Quer pela abreviatura do nome de proprietário da aeronave (companhia ou particular);
Quer pelo tipo da aeronave;

seguido pelas últimas duas letras do indicativo completo (v. o n.º **2109**) ou pelos últimos dois caracteres da marca de matrícula.

2153 (2) As disposições dos n.os **2150, 2151** e **2152** podem ser completadas ou modificadas por acordos entre administrações interessadas.

2154 § 39. Os sinais distintos atribuídos aos navios para sinalização visual ou auditiva devem, em geral, coincidir com os indicativos de chamada das estações de navio.

2155 a 2179 *(Não atribuídos.)*

CAPÍTULO VII

ARTIGO 26

Documentos de serviço

Secção I

Títulos, conteúdo e publicação dos documentos de serviço

2180 § 1. O secretário-geral publica os documentos que seguem. Para fazer às circunstâncias e responder aos pedidos especiais das administrações, a informação publicada está também disponível sob as seguintes formas: extractos impressos por ordenador, suportes que podem ser lidos por máquinas, filmes, microfichas ou por outros meios apropriados.

2181 § 2. Lista I. *Lista internacional das frequências:*

2182 (1) Esta lista baseia-se nas informações elaboradas pela IFRB e contém:

2183 *a*) Os estabelecimentos sinaléticos das consignações de frequência inscritas no Ficheiro de referência internacional das frequências;

2184 *b*) As frequências (por exemplo 500 kHz ou 2182 kHz) prescritas pelo presente Regulamento para utilização comum em certos serviços;

2185 *c*) As adjudicações que figuram nos planos de adjudicação que são objecto do apêndice 25 Mar2 (v. o n.º **4212**), bem como dos apêndices 26, 27 (*) e 27 Aer 2 (*).

(*) Nota do Secretariado-Geral (v. o n.º **5189** e a Resolução n.º 400).

2186 (2) Será incluída nas inscrições correspondentes uma menção do emprego das frequências e das adjudicações mencionadas nos n.os **2184** e **2185.**

2187 (3) As consignações de frequência que figuram na Lista internacional das frequências serão inscritas por ordem numérica crescente das frequências consignadas.

2188 (4) Acima de 28 MHz, a Lista internacional das frequências é formada por quatro partes distintas:

2189 *a*) Consignações de frequência nas faixas compreendidas entre 28 MHz e 50 MHz, excluindo as estações de radiodifusão;

2190 *b*) Consignações de frequência da Região 1 nas faixas acima de 50 MHz e consignações de frequência ([1]) às estações de radiodifusão da Região 1 nas faixas compreendidas entre 28 MHz e 50 MHz.

2191 *c*) Consignações de frequência da Região 2 nas faixas acima de 50 MHz.

2192 *d*) Consignações de frequência da Região 3 nas faixas acima de 50 MHz e consignações de frequência às estações de radiodifusão da Região 3 nas faixas compreendidas entre 28 MHz e 50 MHz.

2193 (5) A Lista internacional das frequências é reeditada a intervalos que o secretário-geral determinar, mas que não devem ultrapassar dois anos, e é mantida actualizada por meio de suplementos recapitulativos trimestrais publicados com o mesmo aspecto geral da própria Lista. Deve indicar-se de modo apropriado qualquer nova inscrição ou qualquer modificação de uma inscrição introduzida no Ficheiro após a publicação do último suplemento recapitulativo e que apareça num novo suplemento recapitulativo ou numa nova edição da Lista.

2194 (6) Os suplementos recapitulativos dividem-se em duas secções:

2195 *a*) A secção A contém as novas inscrições e as modificações das inscrições que figuram já na Lista internacional das frequências;

2196 *b*) A secção B contém as inscrições da Lista internacional das frequências que foram completamente anuladas.

2197 § 3. Lista II. *Nomenclatura das estações fixas que assegurem ligações internacionais:*

2198 (1) Esta lista contém os estados sinaléticos das estações fixas que asseguram ligações internacionais e cujas frequências figuram na lista I.

2199 (2) Lista II é reeditada a intervalos que o secretário-geral determinar e é mantida actualizada por meio de suplementos recapitulativos trimestrais.

2200 § 4. Lista III. *(Disponível.)*

2201 § 5. Lista IV. *Nomenclatura das estações costeiras:*

2202 (1) Juntam-se a esta lista um quadro e um mapa que indiquem, segundo as zonas os horários de serviços a bordo dos navios cujas estações estão classificadas nas 2.ª e 3.ª categorias (v. apêndice 12) e um quadro com as taxas telegráficas interiores e limítrofes, etc. Esta Lista contém um anexo dando informações sobre sistemas móveis marítimos por satélites que possam ser comunicadas ao secretário-geral pelas administrações participantes.

2203 (2) A lista IV é reeditada de dois em dois anos e é mantida actualizada por meio de suplementos recapitulativos semestrais.

2204 § 6. Lista V. *Nomenclatura das estações de navio:*

2205 (1) Esta lista contém os estados sinaléticos:

2206 *a*) Das estações de navios equipados com instalações radiotelegráficas;

2207 *b*) Das estações de navios equipados com instalações radiotelegráficas e radiotelefónicas;

2208 *c*) Das estações de navios equipados unicamente com instalações radiotelefónicas, quando essas estações comuniquem com estações do serviço móvel marítimo que não sejam da sua própria nacionalidade ou quando esses navios efectuam viagens internacionais;

2209 *d*) Das estações de navios equipados com estações terrenas móveis.

2210 (2) Esta lista é completada por um quadro e um mapa que indiquem, segundo as zonas, os horários de serviço a bordo dos navios cujas estações estão classificadas nas 2.ª e 3.ª categorias (v. o apêndice 12) e por um anexo dando informações sobre os sistemas móveis marítimos por satélites que possam ser comunicadas ao secretário-geral pelas administrações participantes.

2211 (3) A lista V é reeditada anualmente e é mantida actualizada por meio um suplemento trimestral publicado além do suplemento recapitulativo semestral.

2190 ([1]) Relativamente às estações de televisão da Região 1, figurarão na lista I, inscrições distintas para as frequências das ondas portadoras do som e da imagem, respectivamente.

2212 § 7. Lista VI. *Nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais:*

2213 (1) Esta Lista compreende os estados sinaléticos das estações radiogoniométricas e de radiofarol do serviço de radionavegação marítima, incluindo as estações de radiofarol do serviço de radionavegação aeronáutica susceptíveis de utilização da radionavegação marítima, assim como os estados sinaléticos dos sistemas de radiodeterminação por satélite disponíveis para a utilização marítima, dos navios-estações oceânicos, das estações que emitem sinais para calibração de goniómetros, bem como das estações que emitem frequências padrão e sinais horários, boletins meteorológicos regulares, avisos aos navegadores, pareceres médicos, boletins epidemiológicos e ursigramas. Nesta lista é consagrada uma secção especial a cada classe de estações.

2214 (2) A lista VI é reeditada a intervalos que o secretário-geral determinar e será mantida actualizada por meio de suplementos recapitulativos semestrais.

2215 § 8. Lista VII. *Lista alfabética dos indicativos de chamada das séries internacionais consignados às estações que figuram nas listas I, II, IV, V, VI e VIII-A:*

2216 (1) Lista VII-A. *Lista alfabética dos indicativos de chamada e ou quadro numérico das identidades das estações utilizadas no serviço móvel marítimo e no serviço móvel marítimo por satélite (estações costeiras, estações terrenas costeiras, estações de navio, estações terrenas de navio, estações de radiodeterminação e estações que efectuam serviços especiais), dos números ou sinais de chamada selectiva de estação de navio e de estação terrena de navio, das identidades do serviço móvel marítimo para as estações de navio e para as estações terrenas de navio, dos números, dos números ou sinais de identificação de estação costeira e de estação terrena costeira e das identidades do serviço móvel marítimo para as estações costeiras e para as estações terrenas costeiras:*

2217 *a*) Esta lista é precedida do Quadro de atribuição das séries internacionais de indicativos de chamada e do Quadro das séries de algarismos de identificação de nacionalidade que figurem nos apêndices 42 e 43, respectivamente, assim como de um quadro dos sinais que caracterizam as emissões dos radiofaróis utilizados no serviço móvel marítimo:

2218 *b*) A lista VII-A é reeditada de dois em dois anos e é mantida actualizada por meio de suplementos recapitulativos trimestrais.

2119 (2) Lista VII-B. *Lista alfabética dos indicativos de chamada das estações que não são estações de amador, estações experimentais e estações do serviço móvel marítimo:*

2220 *a*) Esta lista é precedida do quadro de atribuição das séries internacionais de indicativos de chamada que figuram no apêndice 42 e de um quadro que indica a forma dos indicativos de chamada consignados por cada administração às suas estações de amador e às suas estações experimentais;

2221 *b*) A lista VII-B é reeditada a intervalos que o secretário-geral determinar e será mantida actualizada por meio de suplementos recapitulativos trimestrais.

2222 § 9. Lista VIII. *Nomenclatura das estações de fiscalização internacional das emissões:*

2223 (1) Esta lista contém em forma de quadro o estado sinalético das estações de fiscalização que participam no sistema de fiscalização internacional das emissões.

2224 (2) A lista VIII é publicada a intervalos que o secretário-geral determinar e é mantida actualizada por meio de suplementos recapitulativos publicados a intervalos determinados pelo secretário-geral.

2225 § 10. Lista VIII-A. *Nomenclatura das estações dos serviços de radiocomunicação espacial e do serviço de radioastronomia:*

2226 (1) Esta lista compreende os estados sinaléticos das estações terrenas, das estações espaciais e das estações de radioastronomia. A Comissão elabora e mantém actualizado o conteúdo desta lista e agrupa as suas rubricas de modo que as administrações possam identificar mais facilmente todas as estações que fazem parte de uma dada rede de satélite. Além disso, a Comissão efectua as melhorias necessárias à apresentação da lista, sem modificar seja de que maneira for os dados fundamentais especificados no presente Regulamento. Contudo, não deverão ser incluídas nesta lista as estações terrenas móveis do serviço móvel marítimo por satélite, mas deverá figurar nela uma nota geral referente à nomenclatura das estações de navio.

2227 (2) A lista VIII-A é reeditada a intervalos que o secretário-geral determinar e é mantida actualizada por meio de suplementos recapitulativos semestrais.

2228 § 11. *Mapa das estações costeiras abertas à correspondência pública ou que participam no serviço das operações portuárias:*

Este mapa é reeditado com o formato e a intervalos que o secretário-geral determinar.

2229 § 12. *Gráfico a cores, indicando a repartição das faixas de frequência* tal como especificada no artigo 8.

2230 § 13. *Manual para uso dos serviços móvel e marítimo por satélite:*

2231 (1) Este Manual deve incluir os extractos pertinentes:

2232 *a*) Da Convenção Internacional das Telecomunicações em vigor;

2233 *b*) Do Regulamento das Radiocomunicações em vigor;

2234 *c*) Do Regulamento Telegráfico em vigor, da versão actualizada das Instruções para a Exploração do Serviço Telegráfico Público Internacional e das resoluções e pareceres da CCITT;

2235 *d*) Do Regulamento Telefónico em vigor, da versão actualizada das Instruções Relativas ao Serviço Telefónico Internacional e das resoluções e pareceres da CCITT.

2236 (2) O Manual deveria ser revisto, se necessário, especialmente após as conferências administrativas e as assembleias plenárias da CCITT ou da CCIR. São publicadas novas edições a intervalos que o secretário-geral deve determinar.

SECÇÃO II

Preparação e modificação dos documentos de serviço

2237 § 14. (1) O secretário-geral publicará as modificações a introduzir nos documentos indicados na secção I do presente artigo.

Dado o interesse que apresentam especialmente para a segurança, as informações relativas à exploração que figuram nas listas IV, V e VI, as administrações adoptarão as disposições necessárias para notificar imediatamente ao secretário-geral quaisquer modificações introduzidas nessas informações. Pelo menos uma vez por mês, as administrações darão a conhecer ao secretário-geral, pela forma indicada para as próprias listas no apêndice 9, modificações e supressões a introduzir nas listas IV, V e VI, utilizando os símbolos apropriados que figuram no apêndice 10. Por outro lado, para introduzir nas listas I, II e VII-A as adições, modificações e supressões necessárias, o secretário-geral utilizará as informações que lhe forneça a IFRB e que provenham de informações recebidas em aplicação das disposições dos artigos 11, 12, 13 e 17. Introduzirá também na lista VII as emendas necessárias utilizando as informações que receba relativamente às listas I, II, IV, V, VI e VIII-A. As informações incluídas nas listas IV e VI serão coordenadas com as que figuram na lista I. O secretário-geral comunicará todas as divergências às administrações interessadas.

2238 (2) Para as modificações permanentes do funcionamento das estações de radiodeterminação (lista VI), (v. o n.º **2833**).

2239 § 15. (1) Os modelos segundo os quais se devem elaborar as listas II, IV, V, VI, VIII e VIII-A são indicados no apêndice 9. Os prefácios destes documentos e da lista I darão todas as indicações necessárias sobre a forma de os utilizar. Cada inscrição deverá ser acompanhada do símbolo apropriado indicado no apêndice 10 para designar a categoria da estação de que se trata. O secretário-geral poderá escolher símbolos suplementares quando for necessário e deverá notificá-los às administrações.

2240 (2) Nos documentos de serviço, os nomes das estações costeiras, aeronáuticas, radiogoniométricas e de radiofarol são seguidos pelas palavras:

2241 *a*) RADIO para as estações costeiras;
2242 *b*) AERADIO para as estações aeronáuticas;
2243 *c*) GONIO para as estações radiogoniométricas marítimas;
2244 *d*) PHARE para as estações de radiofarol marítimas;
2245 *e*) AEROPHARE para as estações de radiofarol aeronáuticas.

2246 § 16. No que respeita aos documentos de serviço, entende-se por «país» o território em cujos limites se encontra a estação. Um território que não tenha completa responsabilidade das suas relações internacionais é igualmente considerado como país para este caso especial.

2247 a 2500 *(Não atribuídos.)*

PARTE B

CAPÍTULO VIII

Disposições relativas a grupos de serviços, assim como a estações e a serviços particulares (*)

ARTIGO 27

Serviços de radiocomunicação de Terra que partilham faixas de frequência com os serviços de radiocomunicação espacial acima de 1 GHz

SECÇÃO I

Escolha das localizações e das frequências

2501 § 1. As localizações e as frequências das estações de Terra que funcionam nas faixas de frequências partilhadas, com igualdade de direitos, entre os serviços de radiocomunicação de Terra e os serviços de

(*) Para as disposições que regem os serviços móveis e os serviços especiais que interessem a segurança, ver:

Serviços especiais que interessam a segurança — capítulo IX;
Serviço móvel aeronáutico — capítulo X;
Serviço móvel marítimo — capítulo XI;
Serviço móvel marítimo por satélite — capítulo XI;
Serviço móvel terrestre — capítulo XII.

radiocomunicações espacial devem ser escolhidas em conformidade com os pareceres pertinentes da CCIR relativos à separação geográfica entre estações de Terra e estações terrenas.

2502 § 2. (1) Tanto quanto seja possível na prática, as localizações das estações de emissão (1) do serviço fixo ou do serviço móvel cujas potências isotrópicas radiadas equivalentes (p. i. r. e.) tenham valores máximos superiores a + 35 dBW nas faixas de frequências compreendidas entre 1 GHz e 10 GHz devem escolher-se de tal modo que a direcção da radiação máxima de qualquer antena se desvie, pelo menos, 2° da órbita dos satélites geostacionários, tendo em conta os efeitos da refracção atmosférica (2).

2503 (2) Tanto quanto seja possível na prática, as localizações das estações de emissão (3) do serviço fixo ou do serviço móvel cujas potências isotrópicas radiadas equivalentes (p. i. r. e.) tenham valores máximos superiores a + 45 dBW nas faixas de frequências compreendidas entre 10 GHz e 15 GHz devem escolher-se de tal modo que a direcção da radiação máxima de qualquer antena se desvie, pelo menos, 1,5° da órbita do satélites geostacionários, tendo em conta os efeitos da refracção atmosférica (4).

2504 (3) Nas faixas de frequências superiores a 15 GHz não há restrições (5) quanto à direcção da radiação máxima das estações do serviço fixo ou do serviço móvel.

Secção II

Limites de potência

2505 § 3. (1) O nível máximo da potência radiada equivalente (p. i. r. e.) de uma estação do serviço fixo ou do serviço móvel não deve ultrapassar + 55 dBW.

2506 (2) Caso não seja praticamente possível adoptar as disposições do n.º **2502**, o nível máximo da potência isotrópica radiada equivalente (p. i. r. e.) de uma estação do serviço fixo ou do serviço móvel não deve ultrapassar:

+ 47 dBW em qualquer direcção que esteja afastada menos de 0,5° da órbita dos satélites geostacionários; ou

+ 47 dBW a + 55 dBW, segundo uma variação linear em decibéis (8 dB por grau), em qualquer direcção compreendida entre 0,5° e 1,5° em relação à órbita dos satélites geostacionários, tendo em conta os efeitos da refacção atmosférica (6).

2507 (3) Nas faixas de frequências compreendidas entre 1 GHz e 10 GHz, o nível da potência fornecida à antena por um emissor do serviço fixo ou do serviço móvel não deve ultrapassar + 13 dBW.

2508 (4) Nas faixas de frequências superiores a 10 GHz, o nível da potência fornecida à antena por um emissor do serviço fixo ou do serviço móvel não deve ultrapassar + 10 dBW.

2509 (5) Os limites especificados nos n.os **2502, 2505, 2506** e **2507** aplicam-se nas faixas de frequências que a seguir se indicam e que estão atribuídas ao serviço fixo por satélite, ao serviço de meteorologia por satélite e ao serviço móvel por satélite, para a recepção pelas estações espaciais, quando estas faixas forem partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

1626,5-1645,5 MHz (para os países indicados no n.º **730**);
1646,5-1660 MHz (para os países indicados no n.º **730**);
2655-2690 MHz (7) (para as Regiões 2 e 3);
5725-5755 MHz (7) (para os países da Região 1 indicados nos n.os **803** e **805**);
5755-5850 MHz (7) (para os países da Região 1 indicados nos n.os **803, 805** e **807**);
5850-7075 MHz;
7900-8400 MHz.

2502.1 (1) Para sua própria protecção, convém que as estações de recepção do serviço fixo ou do serviço móvel que funcionem nas faixas de frequências partilhadas com os serviços de radiocomunicação espacial (no sentido espaço para Terra) evitem orientar as respectivas antenas na direcção da órbita dos satélites geostacionários, se a sua sensibilidade for suficiente elevada para que daí possam resultar interferências importantes causadas pelas emissões das estações espaciais.

2502.2 (2) Figuram informações sobre o assunto na versão mais recente do Relatório n.º 393 da CCIR.

2503.1 (3) Para sua própria protecção, convém que as estações de recepção do serviço fixo ou do serviço móvel que funcionem nas faixas de frequências partilhadas com os serviços de radiocomunicação espacial (no sentido espaço para Terra) evitem orientar as respectivas antenas na direcção da órbita dos satélites geostacionários, se a sua sensibilidade for suficientemente elevada para que daí possam resultar interferências importantes causadas pelas emissões das estações espaciais.

2503.2 (4) Figuram informações sobre o assunto na versão mais recente do Relatório n.º 393 da CCIR.

2504.1 (5) As disposições do n.º **2504** continuam aplicáveis até que a CCIR emita um parecer elativo à necessidade de serem aplicadas restrições nas faixas de frequências especificadas no n.º **2571**. Todos os sistemas postos em serviço a partir de 1 de Janeiro de 1982 deveriam desde então respeitar, dentro das possibilidades práticas, as restrições especificadas.

2506.1 (6) V. o n.º **2503.2**.

2509.1 (7) Quando uma faixa de frequência é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos no que diz respeito à exploração de serviços encontra-se estipulada no n.º **346**. Convirá, portanto, que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidades práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

2510 (6) Os limites especificados nos n.os **2503**, **2505** e **2508** aplicam-se nas faixas de frequências que a seguir se indicam e que estão atribuídas, para a recepção pelas estações espaciais, ao serviço fixo por satélite quando estas faixas forem partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

10,7-11,7 GHz (1) (2) (para a Região 1);
12,5-12,75 GHz (1) (para os países indicados nos n.os **848** e **850**);
12,7-12,75 GHz (1) (para a Região 2);
12,75-13,25 GHz;
14,0-14,25 GHz (para os países indicados no n.º **857**);
14,25-14,3 GHz (para os países indicados nos n.os **857**, **860** e **861**);
14,3-14,4 GHz (1) (para as regiões 1 e 3);
14,4-14,5 GHz;
14,5-14,8 GHz (2).

2511 (7) Os limites especificados nos n.os **2505** e **2508** aplicam-se nas faixas de frequências que a seguir se indicam e que estão atribuídas, para a recepção pelas estações espaciais, ao serviço fixo por satélite quando estas faixas forem partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

17,7-18,1 GHz (3);
27,0-27,5 GHz (4) (para as Regiões 2 e 3);
27,5-29,5 GHz.

2512 a **2538** *(Não atribuídos.)*

ARTIGO 28

Serviços de radiocomunicação espacial que partilham faixas de frequências com os serviços de radiocomunicação de Terra acima de 1 GHz

SECÇÃO I

Escolha das localizações e das frequências

2539 § 1. As localizações e as frequências das estações terrenas que funcionam nas faixas de frequências partilhadas, com igualdade de direitos, entre os serviços de radiocomunicação de Terra e os serviços de radiocomunicação espacial devem ser escolhidas em conformidade com os pareceres pertinentes da CCIR relativos à separação geográfica entre estações terrenas e estações de Terra.

SECÇÃO II

Limites de potência

2540 § 2. (1) Estações terrenas.

2541 (2) O nível da potência isotrópica radiada equivalente (p. i. r. e.) emitida em qualquer direcção para o horizonte por uma estação terrena que funcione nas faixas de frequências compreendidas entre 1 GHz e 15 GHz não deve exceder os limites seguintes, excepto nos casos a que se apliquem as disposições dos n.os **2544** ou **2546**:

$+ 40$ dBW em qualquer faixa com largura de 4 kHz, para $\theta \leq 0°$;
$+ 40 + 3\,\theta$ dBW em qualquer faixa com largura de 4 kHz para $0° < \theta \leq 5°$,

sendo θ o ângulo de elevação do horizonte, em graus, visto do centro de radiação da antena da estação terrena. Este ângulo é expresso por um valor positivo acima do plano horizontal e por um valor negativo abaixo desse plano.

2542 (3) O nível de potência isotrópica radiada equivalente (p. i. r. e.) emitida em qualquer direcção para o horizonte por uma estação terrena que funcione nas faixas de frequências superiores a 15 GHz não deve exceder os limites seguintes, excepto nos casos em que se apliquem as disposições dos n.os **2545** ou **2546**:

$+ 64$ dBW em qualquer faixa com largura de 1 MHz para $\theta \leq 0°$;
$+ 64 + 3\,\theta$ dBW em qualquer faixa com largura de 1 MHz para $0° < \theta \leq 5°$,

sendo θ definido como no n.º **2541**.

2510.1 (1) Quando a faixa de frequências é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos no que diz respeito à exploração de serviços encontra-se estipulada no n.º **346**. Convirá, portanto, que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidades práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

2510.2 (2) A aplicação dos limites nesta faixa é provisória (v. a Resolução n.º 101).

2511.1 (3) A aplicação dos limites nesta faixa é provisória (v. a Resolução n.º 101).

2511.2 (4) V. o n.º **2509.1**

2543 (4) Para ângulos de elevação do horizonte superiores a 5° não há quaisquer restrições quanto ao valor de potência isotrópica radiada equivalente (p. i. r. e.) emitida por uma estação terrena em direcção ao horizonte.

2544 (5) Em derrogação dos limites especificados no n.º **2541**, a potência isotrópica radiada equivalente (p. i. r. e.) emitada para o horizonte por uma estação terrena do serviço de pesquisa espacial (espaço longínquo) não deve exceder + 55 dBW em qualquer faixa com largura de 4 kHz.

2545 (6) Em derrogação dos limites especificados no n.º **2542**, a potência isotrópica radiada equivalente (p. i. r. e.) emitida para o horizonte por uma estação terrena do serviço de pesquisa espacial (espaço longínquo) não deve exceder + 79 dBW em qualquer faixa com largura de 1 MHz.

2546 (7) Os limites especificados nos n.os **2541**, **2542**, **2544** e **2455**, segundo o caso, podem ser aumentados de um valor máximo de 10 dB. Contudo, se a zona de coordenação resultante se estender sobre o território de outro país, esse aumento deve ser submetido a acordo da administração desse país.

2547 (8) Os limites especificados no n.º **2541** aplicam-se às faixas de frequência que a seguir se indicam e que são atribuídas, para a emissão pelas estações terrenas, ao serviço fixo por satélite e ao serviço de exploração da Terra por satélite e em especial ao serviço de meteorologia por satélite, ao serviço móvel por satélite e ao serviço de pesquisa espacial, quando estas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

5670-5725 MHz (para os países indicados no n.º **804** em relação aos países indicados nos n.os **803** e **805**;
5725-5755 MHz (1) (para a Região 1 em relação aos países indicados nos n.os **803** e **805**);
5755-5850 MHz (1) (para a Região 1 em relação aos países indicados nos n.os **803**, **805** e **807**);
5850-7075 MHz;
7900-8400 MHz;
10,7-11,7 GHz (1) (Região 1);
12,5-12,75 GHz (1) (para a Região 1 em relação aos países indicados no n.º **848**;
12,7-12,75 GHz (1) (Região 2);
12,75-13,25 GHz;
14,0-14,25 GHz (em relação aos países indicados no n.º **857**);
14,25-14,3 GHz (em relação aos países indicados nos n.os **857**, **860** e **861**);
14,3-14,4 GHz (1) (Regiões 1 e 3);
14,4-14,8 GHz.

2548 (9) Os limites especificados no n.º **2542** aplicam-se às faixas de frequências que a seguir se indicam e que são atribuídas, para a emissão pelas estações terrenas, ao serviço fixo por satélite, ao serviço de exploração da Terra por satélite, ao serviço móvel por satélite e ao serviço de pesquisa espacial, quando estas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

17,7-18,1 GHz;
27,0-27,5 GHz (1) (Regiões 2 e 3);
27,5-29,5 GHz;
31,0-31,3 GHz (todos os países indicados no n.º **885**);
34,2-35,23 GHz (todos os países indicados no n.º **895** e **896** em relação aos países indicados no n.º **894**).

Secção III

Ângulo mínimo de elevação

2549 § 3. (1) Estações terrenas.

2550 (2) As antenas das estações terrenas não devem ser utilizadas, na emissão, com ângulos de elevação inferiores a 3°, medidos a partir do plano horizontal na direcção da radiação máxima, salvo acordo das administrações interessadas ou daquelas cujos serviços possam ser afectados. No caso da recepção por uma estação terrena, o valor dado acima deve ser utilizado para fins de coordenação se o ângulo de elevação de funcionamento for inferior a esse valor.

2551 (3) Em derrogação das disposições do n.º **2550**, as antenas das estações terrenas do serviço de pesquisa espacial (na vizinhança da Terra) não devem ser utilizadas, na emissão, com ângulos de elevação inferiores a 5° e as antenas das estações terrenas do serviço de pesquisa espacial (espaço longínquo) não devem ser utilizadas, na emissão, com ângulos de elevação inferiores a 10°, sendo estes dois ângulos medidos a partir do plano horizontal na direcção da radiação máxima. No caso da recepção por uma estação terrena, os valores dados acima devem ser utilizados para fins de coordenação se ângulo de elevação de funcionamento for inferior a esses valores.

2547.1 (1) Quando uma faixa de frequências é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos, no que diz respeito à exploração de serviços, encontra-se estipulada no n.º **346**. Convirá, portanto, que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidades práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

SECÇÃO IV

Limites da densidade de fluxo de potência produzida pelas estações espaciais

2552 § 4. (1) Limites da densidade de fluxo de potência entre 1670 MHz e 1700 MHz.

2553 *a)* A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em qualquer condição e para qualquer método de modulação, não deve exceder — 133 dB(W/m²) em qualquer faixa com largura de 1,5 MHz. Este limite aplica-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2554 *b)* O limite especificado no n.º 2553 aplica-se à faixa de frequências indicada no n.º 2555, que é atribuída, para a emissão pelas estações espaciais, ao serviço da exploração da Terra, por satélite, e em especial ao serviço da meteorologia por satélite, quando esta faixa é partilhada, com igualdade de direitos, com o serviço dos auxiliares da meteorologia:

2555 1670-1700 MHz.

2556 (2) Limites de densidade de fluxo de potência entre 1525 MHz e 2500 MHz.

2557 *a)* A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em qualquer condição e para qualquer método de modulação, não deve exceder os seguintes limites:

— 154 dB(W/m²) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 154 + 0,5 (δ — 5) dB(W/m²) em qualquer faixa com largura de 4 hKz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 25° acima do plano horizontal;
— 144 dB(W/m²) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2558 *b)* Os limites especificados no n.º **2557** aplicam-se às faixas de frequências indicadas no n.º **2559**, que são atribuídas, para a emissão pelas estações espaciais, aos serviços de radiocomunicação espacial seguintes:

Serviço de meteorologia por satélite (espaço para Terra);
Serviço de pesquisa espacial (espaço para Terra);
Serviço de exploração espacial (espaço para Terra)

quando as referidas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel:

2559 1525-1530 MHz (1) (Regiões 1 e 3);
1530-1535 MHz (1) (Regiões 1 e 3, até 1 de Janeiro de 1990);
1670-1690 MHz;
1690-1700 MHz (sobre o território dos países indicados nos n.os **740** e **741**);
1700-1710 MHz;
2290-2300 MHz.

2560 *c)* Os valores da densidade de fluxo de potência especificados no n.º **2557** foram calculados tendo como objectivo a protecção do serviço fixo que funciona em visibilidade directa. Quando o serviço fixo que utiliza as técnicas de difusão troposférica funcionar nas faixas indicadas no n.º **2559** e a separação de frequência for insuficiente, é necessário prever uma separação angular suficiente entre a direcção da estação espacial e a da radiação máxima da antena da estação receptora do serviço fixo que utiliza as técnicas de difusão troposférica para que a potência de interferência à entrada do receptor da estação do serviço fixo não exceda — 168 dBW em qualquer faixa com largura de 4 kHz.

2561 (3) Limites da densidade de fluxo de potência entre 2500 MHz e 2690 MHz.

2562 *a)* A densidade do fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial do serviço de radiodifusão por satélite ou do serviço fixo por satélite, em quaisquer condições e para todos os métodos de modulação, não deve exceder os limites seguintes:

— 152 dB (W/m²) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 152 + 0,75 (δ — 5) dB (W/m²) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 28° acima do plano horizontal;

2559.1 (1) Quando uma faixa de frequências é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos, no que diz respeito à exploração de serviços, encontra-se estipulada no n.º **346**. Convirá, portanto, que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidades práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

— 137 dB (W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2563 *b*) Os limites especificados ao n.º **2562** aplicam-se à faixa de frequências:

2500–2690 MHz,

que é partilhada entre, por um lado, o serviço de radiodifusão por satélite ou o serviço fixo por satélite e, por outro, o serviço fixo ou o serviço móvel.

2564 *c*) Os valores da densidade de fluxo de potência especificados no n.º **2562** foram calculados tendo como objectivo a protecção do serviço fixo que funciona em visibilidade directa. Quando o serviço fixo que utiliza as técnicas de difusão troposférica funcionar na faixa indicada no n.º **2563** e a separação de frequência for insuficiente, é necessário prever uma separação angular suficiente entre a direcção da estação espacial e a da radiação máxima da antena da estação receptora do serviço fixo que utiliza as técnicas de difusão troposférica para que a potência de interferência à entrada do receptor da estação de serviço fixo não exceda — 168 dBW em qualquer faixa com largura de 4 Khz.

2565 (4) Limites da densidade de fluxo de potência produzida entre 3400 MHz e 7750 MHz.

2566 *a*) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em todas as condições e para todos os métodos de modulação, não deve exceder os limites seguintes:

— 152 dB(W/m2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 152 + 0,5 (δ-5) dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 25° acima do plano horizontal;
— 142 dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2567 *b*) Os limites especificados no n.º **2566** aplicam-se às faixas de frequências indicadas no n.º **2568**, que são atribuídas, para a emissão pelas estações espaciais, aos serviços de radiocomunicação espacial seguintes:

Serviço fixo por satélite (espaço para Terra);
Serviço de meteorologia por satélite (espaço para Terra);
Serviço móvel por satélite;
Serviço de pesquisa espacial,

quando as referidas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel.

2568 3400–4200 MHz.
4500–4800 MHz.
5670–5725 MHz (sobre o território dos países indicados nos n.ºs **803** e **805**).
7250–7750 MHz.

2569 (5) Limites de densidade de fluxo de potência entre 8025 MHz e 11,7 GHz.

2570 *a*) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em quaisquer condições e para todos os métodos de modulação, não deve exceder os valores seguintes:

— 150 dB(W/m^2) em qualquer faixa com largura de 4 KHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 150 + 0,5 (δ-5) dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 25° acima do plano horizontal;
— 140 dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2571 *b*) Os limites especificados no n.º **2570** aplicam-se às faixas de frequências indicadas no n.º **2572**, que são atribuídas, para a emissão pelas estações espaciais, aos serviços de radiocomunicação espacial seguintes:

Serviço de exploração da terra por satélite (espaço para Terra);
Serviço de pesquisa espacial (espaço para Terra);
Serviço fixo por satélite (espaço para Terra),

quando as referidas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel.

2572 8025–8500 MHz.
10,7–11,7 GHz.

2573 (6) Limites da densidade de fluxo de potência entre 12,2 GHz e 12,75 GHz.

2574 *a*) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em quaisquer condições e para todos os métodos de modulação, não deve exceder os limites seguintes:

— 148 dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 148 + 0,5 (δ-5) dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 25° acima do plano horizontal;
— 138 dB(W/m^2) em qualquer faixa com largura de 4 kHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2575 *b*) Os limites especificados no n.º **2574** aplicam-se às faixas de frequências indicadas no n.º **2576**, que são atribuídas, para a emissão pelas estações espaciais, ao serviço fixo por satélite, quando as referidas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel.

2576 12,2–12,5 GHz ([1]) (Região 3).
12,5–12,75 GHz ([2]) (Região 3 e na Região 1 sobre o território dos países indicados nos n.os **848** e **850**).

2577 (7) Limites da densidade de fluxo de potência entre 17,7 GHz e 19,7 GHz.

2578 *a*) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em quaisquer condições e para todos os métodos de modulação, não deve exceder os limite seguintes:

— 115 dB(W/m^2) em qualquer faixa com largura de 1 MHz, para os ângulos de chegada compreendidos entre 0° e 5° acima do plano horizontal;
— 115 + 0,5 (δ-5) dB(W/m^2) em qualquer faixa com largura de 1 MHz, para os ângulos de chegada δ (em graus) compreendidos entre 5° e 25° acima do plano horizontal;
— 105 dB(W/m^2) em qualquer faixa com largura de 1 MHz, para os ângulos de chegada compreendidos entre 25° e 90° acima do plano horizontal.

Estes limites aplicam-se à densidade de fluxo de potência que se obteria supondo uma propagação em espaço livre.

2579 *b*) Os limites especificados no n.º **2578** aplicam-se à faixa de frequências indicadas no n.º **2580**, que é atribuída, para a emissão pelas estações espaciais, aos serviços de radiocomunicação espacial seguintes:

Serviço fixo por satélite (espaço para Terra);
Serviço de exploração da Terra por satélite, incluindo o serviço meteorológico por satélite (espaço para Terra),

quando a referida faixa for partilhada, com igualdade de direitos, com o serviço fixo ou o serviço móvel.

2580 17,7–19,7 GHz ([3]).

2581 (8) Limites da densidade de fluxo de potência entre 31,0 GHz e 40,5 GHz.

2582 *a*) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial, incluindo as provenientes de um satélite reflector, em quaisquer condições e para todos os métodos de modulação, não deve exceder os limites especificados no n.º **2578** ([4]).

2583 *b*) Os limites especificados no n.º **2582** aplicam-se às faixas de frequências indicadas no n.º **2584**, que são atribuídas, para a emissão pelas estações espaciais, ao serviço fixo por satélite, ao serviço móvel por satélite e ao serviço de pesquisa espacial, quando as referidas faixas são partilhadas, com igualdade de direitos, com o serviço fixo ou o serviço móvel.

2576.1 ([1]) Quando uma faixa de frequência é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos, no que diz respeito à exploração de serviços, encontra-se estipulada no n.º **346**. Convirá, portanto que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidades práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

2576.2 ([2]) V. o n.º **2576.1** e as Resoluções n.os 31, 34 e 700.

2580.1 ([3]) Quando uma faixa de frequência é atribuída a serviços diferentes da mesma categoria em Regiões diferentes, a igualdade de direitos, no que diz respeito à exploração de serviços, encontra-se estipulada no n.º **346**. Convirá, portanto, que, relativamente às interferências entre Regiões, as administrações respeitem, dentro das possibilidade práticas, todos os limites que possam ser especificados nos pareceres da CCIR.

2582.1 ([4]) As disposições do n.º **2582** aplicar-se-ão até que a CCIR adopte um parecer a indicar os limites de densidade de fluxo de potência que deverão aplicar-se às faixas de frequências indicadas no n.º **2584**, devendo então todos os sistemas respeitar os limites de densidade de fluxo de potência recomendados pela CCIR e aprovados por uma competente conferência administrativa mundial de radiocomunicações.

2584 31,0–31,3 GHz.

34,2–35,2 GHz (para as transmissões espaço para Terra segundo os n.os **895** e **896** sobre o território dos países indicados no n.° **894**.

37,5–40,5 GHz.

2585 (9) Os limites especificados nos n.os **2553**, **2557**, **2562**, **2566**, **2570**, **2574**, **2578**, **2582** e **2582.1** podem ser excedidos sobre o território de qualquer outro país cuja administração tenha dado para isso o seu acordo.

2586 a 2611 (*Não atribuídos.*)

ARTIGO 29

Disposições especiais relativas aos serviços de radiocomunicação espacial

SECÇÃO I

Cessação das emissões

2612 § 1. As estações espaciais devem estar dotadas de dispositivos que permitam fazer cessar imediatamente, por telecomando, as suas emissões radioeléctricas sempre que essa cessação seja imposta pelas disposições do presente Regulamento.

SECÇAO II

Medidas contra as interferências causadas aos sistemas de satélites geostacionários

2613 § 2. As estações espaciais não geostacionárias devem cessar as suas emissões ou reduzi-las a nível desprezável e as estações terrenas que comunicam com elas devem deixar de emitir sempre que não haja uma separação angular suficiente entre satélites não geostacionários e satélites geostacionários e sejam causadas interferências inaceitáveis (1) a sistemas espaciais de satélites geostacionários do serviço fixo por satélite que funcione em conformidade com as disposições do presente Regulamento.

2614 § 3. Na faixa de frequências 29,95–30 GHz, as estações espaciais do serviço de exploração da Terra por satélite instaladas a bordo de satélites geostacionários e que funcionam com estações espaciais do mesmo serviço instaladas abordo de satélites não geostacionários devem observar a seguinte restrição:

Sempre que as emissões provenientes de satélites geostacionários sejam dirigidas para a órbita de satélites geostacionários e causem interferências inaceitáveis (1) a um sistema espacial de satélites geostacionários do serviço fixo por satélite, essas emissões devem ser reduzidas a um nível igual ou inferior ao nível de interferência aceite (1).

SECÇAO III

Manutenção em posição das estações espaciais (2)

2615 § 4. (1) As estações espaciais instaladas a bordo de satélites geostacionários que utilizarem qualquer faixa de frequência atribuída ao serviço fixo por satélite ou ao serviço de radiodifusão por satélite (3):

2616 *a*) Devem poder ser mantidas em posição a menos de ± 0,1° de longitude da sua posição nominal;

2617 *b*) Devem ser mantidas em posição a menos de ± 0,1° de longitude da sua posição nominal;

2618 *c*) Contudo, as estações experimentais instaladas a bordo de satélites geostacionários não são obrigadas a observar as disposições dos n.os **2616** e **2617**, mas devem ser mantidas em posição a menos de ± 0,5° de longitude da sua posição nominal;

2619 *d*) As estações espaciais não são, contudo, obrigadas a observar as disposições do n.° **2617** ou do n.° **2618**, consoante o caso, desde que a rede de satélite a que pertencem não cause interferência inaceitável (4) a qualquer rede de satélite cuja estação espacial respeite os limites fixados nos n.os **2617** e **2618**.

2613.1 2614.1 S.III.1 (1) O nível de interferências aceite é fixado por acordo entre as administrações interessadas, com base nos pareceres pertinentes da CCIR.

(2) No caso de estações espaciais instaladas a bordo de satélites geossíncronos cuja órbita tenha uma inclinação superior a 5°, as tolerâncias de posição referem-se ao ponto nodal.

2615.1 (3) As estações espaciais do serviço de radiodifusão por satélite geostacionários que funcionam na faixa 11,7–12,7 GHz não são obrigadas a observar estas disposições, mas deverão ser mantidas em posição de acordo com o apêndice 30.

2619.1 (4) O nível de interferência aceite é fixado por acordo entre as administrações interessadas, com base nos pareceres pertinentes da CCIR.

2620 (2) As estações espaciais instaladas a bordo de satélites geostacionários que não utilizarem qualquer faixa de frequências atribuídas ao serviço fixo por satélite ou ao serviço de radiodifusão por satélite:

2621 a) Devem poder ser mantidas em posição a menos de ± 0,5° de longitude da sua posição nominal;

2622 b) Devem ser mantidas em posição a menos de ± 0,5° de longitude da sua posição nominal;

2623 c) Contudo, não são obrigadas a observar as disposições do n.º **2622** desde que a rede de satélite a que pertencem não cause interferência inaceitável (1) a qualquer outra rede de satélite cuja estação espacial respeite os limites fixados no n.º **2622**.

2624 (3) As estações (2) instaladas a bordo de satélites geostacionárias que forem postas em serviço antes de 1 de Janeiro de 1987 não são obrigadas a observar as disposições dos n.os **2615** a **2623** desde que a publicação antecipada das informações relativas à rede a que pertencem tenha sido efectuada antes de 1 de Janeiro de 1982. Contudo:

2625 a) Devem poder ser mantidas em posição a menos de ± 1° de longitude da sua posição nominal, mas deverá ser feito um esforço para se poder reduzir essa tolerância a ± 0,5°, pelo menos;

2626 b) Devem ser mantidas em posição a menos de ± 1° de longitude da sua posição nominal;

2627 c) Contudo não são obrigadas a observar as disposições do n.º **2626** desde que a rede de satélites a que elas pertencem não cause interferência inaceitável (1) a qualquer outra rede de satélite cuja estação espacial respeite os limites fixados no n.º **2626**.

SECÇÃO IV

Precisão da orientação das antenas dos satélites geostacionários

2628 § 5. (1) Deve ser possível manter a direcção da orientação da radiação máxima de qualquer feixe dirigido para a Terra de uma antena de satélite geostacionário (3) a menos de:

a) 10 % da abertura do feixe a meia potência em relação à direcção de orientação nominal; ou

b) 0,3 em relação à direcção de orientação nominal,

mantendo-se apenas o mais elevado destes dois valores. Esta disposição aplica-se unicamente quando o feixe é destinado a uma cobertura inferior à cobertura mundial.

2629 (2) No caso de o feixe não apresentar simetria de revolução em torno do eixo de radiação máxima, a tolerância em qualquer plano que contenha esse eixo deve referir-se à abertura do feixe a meia potência nesse plano.

2630 (3) Esta precisão só deve ser mantida se tal for necessário para evitar que sejam causadas interferências inaceitáveis (4) outros sistemas.

SECÇÃO V

Densidade de fluxo de potência na órbita dos satélites geostacionários

2631 § 6. Na faixa de frequências 8025-8400 MHz, que o serviço de exploração de Terra por satélite utilizando satélites não geostacionários partilha com o serviço fixo por satélite (Terra para espaço) ou com o serviço de meteorologia por satélite (Terra para espaço), a densidade de fluxo de potência máxima produzida na órbita dos satélites geostacionários por qualquer faixa com largura de 4 kHz.

SECÇÃO VI

Radioastronomia na zona tranquila da Lua

2632 § 7. (1) Na zona tranquila da Lua (5) são proibidas na totalidade do espectro as emissões que causem interferência prejudicial às observações da radioastronomia (6) ou a outros usuários de serviços passivos, com excepção das seguintes faixas de frequências:

2633 a) As faixas de frequências atribuídas ao serviço de pesquisa espacial utilizando detectores activos;

2623.1 (1) O nível de interferência aceite é fixado por acordo entre as administrações interessadas, com base nos pareceres pertinentes da
2627.1 CCIR.

2624.1 (2) V. o n.º **2615.1**.

2628.1 (3) As antenas de emissão das estações espaciais do serviço de radiodifusão por satélite que funcionam na faixa 11,7–12,7 GHz não são obrigados a observar estas disposições, mas deverão conservar a precisão de orientação especificada no § 3.14.1 do anexo 8 do apêndice 30.

2630.1 (4) V. o n.º **2627.1**.

2632.1 (5) A zona tranquila da Lua compreende a parte da superfície da Lua e o volume de espaço adjacente que estão protegidos de emissões provenientes de qualquer ponto situado a menos de 100 000 km do centro da Terra.

2632.2 (6) O nível de interferência prejudicial é fixado por acordo entre as administrações interessadas, tendo em conta os pareceres pertinentes da CCIR.

2634 *b*) As faixas de frequências atribuídas ao serviço de exploração espacial, ao serviço de exploração da Terra por satélite utilizando detectores activos e ao serviço de radiolocalização utilizando estações instaladas em engenhos espaciais que são necessários como auxiliares da pesquisa espacial e para as radiocomunicações e as emissões de pesquisa espacial na zona tranquila da Lua.

2635 (2) Nas faixas de frequências em que as emissões não sejam proibidas pelas disposições dos n.os **2632** a **2634** as observações da radioastronomia e da pesquisa espacial (passiva) na zona tranquila da Lua podem ser protegidas contra interferências prejudiciais por acordo entre as administrações interessadas.

SECÇÃO VII

Limitações da potência das estações terrenas fora do eixo do feixe principal

2636 § 8. O nível de potência isotrópica radiada equivalente (p. i. r. e.) emitido por uma estação terrena fora do eixo do feixe principal na direcção da órbita dos satélites geostacionários exerce uma influência significativa nas interferências causadas às outras redes de satélite geostacionário. A redução ao mínimo das radiações fora desse eixo asseguraria uma utilização mais eficaz da órbita dos satélites geostacionários e facilitaria a coordenação. Convidam-se as administrações a obter, a este respeito, os valores mais fracos praticamente possíveis, tendo em conta os mais recentes pareceres da CCIR sobre o assunto. A redução ao mínimo desses níveis é particularmente importante nas faixas de frequências utilizadas de modo intensivo nas ligações ascendentes.

2637 a 2663 *(Não atribuídos.)*

ARTIGO 30

Serviços de radiodifusão e serviço de radiodifusão por satélite

SECÇÃO I

Serviço de radiodifusão

2664 A) Generalidades

2665 § 1. (1) É proibido instalar e explorar estações de radiodifusão (radiodifusão sonora e televisão) a bordo de navios, de aeronaves ou de qualquer objecto flutuante ou aerotransportado fora dos territórios nacionais.

2666 (2) Em princípio, a potência das estações de radiodifusão que utilizam frequências inferiores a 5060 kHz ou superiores a 41 MHz não deve ultrapassar (excepto na faixa 3900-4000 kHz) o valor necessário para assegurar economicamente um serviço nacional de boa qualidade no interior das fronteiras do país considerado.

2667 B) Radiodifusão na zona tropical

2668 § 2. (1) No presente Regulamento, a expressão «radiodifusão na zona tropical» designa um tipo especial de radiodifusão para o uso interno nacional dos países incluídos na zona definida nos n.os **406** a **411**, onde se pode verificar que, em virtude do nível elevado dos parasitas atmosféricos e das dificuldades de propagação, não é possível realizar economicamente um serviço de melhor qualidade pela utilização das ondas quilométricas, hectométricas ou métricas.

2669 (2) A utilização pelo serviço de radiodifusão das faixas de frequências abaixo indicadas é limitada á zona tropical:

2300-2498 kHz (Região 1);
2300-2495 kHz (Regiões 2 e 3);
3200-3400 kHz /todas as Regiões);
4750-4995 kHz (todas as Regiões);
5005-5060 kHz (todas as Regiões).

2670 (3) A potência da onda portadora dos emissores que funcionam neste serviço nas faixas indicadas no n.º **2669** não deve ultrapassar 50 KW.

2671 (4) Na zona tropical o serviço de radiodifusão tem prioridade sobre os serviços que com ele partilham as faixas de frequências indicadas no n.º **2669**.

2672 (5) Todavia, na parte da Líbia situada a norte do paralelo 30 º o serviço de radiodifusão, nas faixas indicadas no n.º **2669**, funciona em base de igualdade de direitos com os outros serviços com os quais partilha essas faixas na zona tropical.

2673 (6) O serviço de radiodifusão no interior da zona tropical e os outros serviços no exterior desta zona devem funcionar em conformidade com as disposições do n.º **346**.

SECÇÃO II

Serviço de radiodifusão por satélite

2674 § 3. Ao definirem-se as características de qualquer estação espacial do serviço de radiodifusão por satélite serão utilizados todos os meios técnicos disponíveis para reduzir o mais possível a radiação sobre o território de outros países, salvo acordo prévio destes últimos.

2675 a 2699 *(Não atribuídos.)*

ARTIGO 31

Serviço fixo

SECÇÃO I

Generalidades

2700 § 1. (1) As administrações são instantemente convidadas a abandonar o emprego, no serviço fixo, das emissões radiotelefónicas por faixa lateral dupla (classe A3E).

2701 (2) As emissões da classe F3E ou G3E não são autorizadas, no serviço fixo, nas faixas inferiores a 30 MHz.

SECÇÃO II

Frequências para a permuta internacional de informações da polícia

2702 § 2. (1) As frequências necessárias para a permuta internacional de informações que tenham por fim auxiliar a prisão dos criminosos são escolhidas as faixas atribuídas ao serviço fixo, se necessário por acordos especiais concluídos entre as administrações interessadas no quadro do artigo 31 da Convenção, relativo aos acordos especiais.

2703 (2) A fim de economizar o mais possível, as frequências, convém que a Comissão Internacional do Registo de Frequências seja consultada pelas administrações interessadas sempre que tais acordos venham a ser discutidos numa base regional ou mundial.

SECÇÃO III

Frequências para a permuta intenacional de informações meteorológicas sinópticas

2704 § 3. (1) As frequências necessárias para a permuta internacional de informações relativas à meteorologia sinóptica escolhem-se nas faixas atribuídas ao serviço fixo, se necessário por acordos especiais concluídos pelas administrações interessadas no quadro do artigo 31 da Convenção, relativo aos acordos especiais.

2705 (2) A fim de economizar o mais possível as frequências, convém que a Comissão Internacional do Registo de Frequências seja consultada pelas administrações interessadas sempre que tais acordos venham a ser discutidos numa base regional ou mundial.

2706 a 2730 *(Não atribuídos.)*

ARTIGO 32

Serviço de amador e serviço de amador por satélite

SECÇÃO I

Serviço de amador

2731 § 1. As radiocomunicações entre estações de amador de países diferentes ficam proibidas logo que a administração de um dos países interessados notificar a sua oposição.

2732 § 2. (1) Quando forem autorizadas, as transmissões entre estações de amador de países diferentes devem efectuar-se em linguagem clara e limitar-se a mensagens de ordem técnica relativas a ensaios e a observações de carácter puramente pessoal que, em virtude da sua reduzida importância, não justifiquem o recurso ao serviço público de telecomunicações.

2733 (2) É absolutamente proibido utilizar as estações de amador para transmitir comunicações internacionais emanadas de ou com destino a terceiras pessoas.

2734 (3) As disposições antecedentes podem ser modificadas por acordos especiais entre as administrações dos países interessados.

2735 § 3. (1) Qualquer pessoa que deseje obter uma licença para manobrar os aparelhos de uma estação de amador deve provar que está apta à transmissão manual correcta e à recepção auditiva correcta de textos em sinais do código Morse. Contudo, as administrações responsáveis podem não exigir a aplicação desta prescrição quando se tratar de estações que utilizem exclusivamente frequências superiores a 30 MHz.

2736 (2) As administrações tomarão as medidas que julguem necessárias para verificar as aptidões operacionais e técnicas de qualquer pessoa que deseje manobrar os aparelhos de uma estação de amador.

2737 § 4. A potência máxima das estações de amador será ficxada pelas administrações responsáveis, tendo em atenção as aptidões técnicas dos operadores e as condições em que essas estações deverão funcionar.

2738 § 5. (1) Aplicam-se às estações de amador todas as regras gerais fixadas pela Convenção e pelo presente Regulamento. Em especial, a frequência emitida deverá ser tão estável e tão isenta de radiações não essenciais quanto o permita o estado da técnica para estações desta natureza.

2739 (2) Durante as suas emissões as estações de amador deverão transmitir frequentemente o seu indicativo de chamada.

SECÇÃO II

Serviço de amador por satélite

2740 § 6. Quando para tal houver lugar, as disposições da secção I aplicam-se do mesmo modo ao serviço de amador por satélite.

2741 § 7. As estações espaciais do serviço de amador por satélite que funcionem em faixas partilhadas com outros serviços estarão equipadas com dispositivos apropriados ao comando das suas emissões, para o caso de serem assinaladas interferências prejudiciais, em conformidade com o procedimento especificado no artigo 22. As administrações que autorizarem tais estações espaciais informarão disso a IFRB e procederão de modo que sejam instaladas, antes do lançamento, estações terrenas de comando suficientes para que qualquer interferência prejudicial assinalada possa ser eliminada pelas referidas administrações (v. o n.º **2612**).

2742 a 2766 *(Não atribuídos.)*

ARTIGO 33

Serviço de frequências padrão e de sinais horários

2767 § 1. (1) Para permitir uma utilização mais eficaz do espectro das frequências radioelétricas e para favorecer outras actividades técnicas e científicas, as administrações que assegurem ou projectem assegurar um serviço de frequências padrão e de sinais horários devem coordenar, em conformidade com as disposições do presente artigo, o estabelecimento e a exploração deste serviço no plano mundial, providenciando para o estender às regiões do mundo que estão insuficientemente servidas.

2768 (2) Para esse efeito, as administrações tomam as medidas necessárias para coordenar com o concurso da Comissão Internacional do Registo de Frequências qualquer nova emissão de frequências padrão ou de sinais horários ou qualquer modificação introduzida nas emissões existentes nas faixas de frequência padrão. Trocam entre si e comunicam à Comissão todas as informações úteis a esse respeito. A Comissão consulta sobre essa matéria o director da CCIR, o qual continuará a socorrer-se da parecer e da cooperação da Comissão Internacional da Hora (CIH), da União Radiocientífica Internacional (URSI) e de outros organismos internacionais que têm interesse directo e essencial neste domínio.

2769 (3) Tanto quamto possível, não se consignará qualquer nova frequência nas faixas do serviço de frequências padrão nem se notificará à Comissão sem se ter efectuado a coordenação mencionada anteriormente.

2770 § 2. A fim de reduzir as interferências nas faixas do serviço de frequências padrão, as administrações cooperarão entre si de acordo com os pareceres da CCIR.

2771 § 3. As addministrações que asseguram este serviço colaborarão entre si, por intermédio da CCIR, para coligir e distribuir os resultados das medidas de frequências padrão e de sinais horários, assim como os valores dos ajustes das frequências e dos sinais horários.

2772 § 4. Ao escolher as características técnicas das emissões de frequências padrão e de sinais horários, as administrações deverão inspirar-se nos pareceres pertinentes da CCIR.

2773 a 2797 *(Não atribuídos.)*

ARTIGO 34

Estações experimentais

2798 § 1. (1) Uma estação experimental não poderá entrar em comunicação com estações experimentais de outros países senão com o acordo da administração de que depende. Cada administração notificará as administrações de que depende. Cada administração notificará as administrações interessadas das autorizações que conceder.

2799 (2) As administrações interessadas fixarão, por acordos particulares, as condições em que poderão ser estabelecidas as comunicações.

2800 § 2. (1) Nas estações experimentais, qualquer pessoa que manobre aparelhos radiotelegráficos por sua própria conta ou por conta de terceiros deverá ter provcado que está apta à transmissão manual e à recepção auditiva de textos em sinais do código Morse.

2801 (2) As adminsitrações tomarão as medidas que julgarem necessárias para verificar as aptidões operacionais e técnicas de qualquer pessoa que deseje manobrar os aparelhos de uma estação experimental.

2802 § 3. A potência máxima das estações experimentais será fixada pelas administrações responsáveis, tendo em conta a finalidade para que foi autorizada a sua criação e as condições em que essas estações deverão funcionar.

2803 § 4. (1) Aplicam-se às estações experimentais todas as regras gerais fixadas pela Conveção e pelo presente Regulamento. Além disso, estas estações devem satisfazer as condições técnicas impostas aos emissores que trabalham nas mesmas faixas de frequências, salvo quando o próprio princípio técnico das experiências a isto se oponha. Neste caso, a administração que autorizar a exploração destas estações poderá conceder uma dispensa sob a forma apropriada.

2804 (2) Durante as suas emissões, as estações experimentais decerão transmitir frequentemente o seu indicativo de chamada ou qualquer outra forma de identificação reconhecida (v. o artigo 25).

2805 § 5. A administração responsável poderá, se o julgar desejável, adoptar disposições das previstas no presente artigo para uma estação experimental não susceptível de produzir interferência prejudicial a um serviço de outro país.

2806 a 2830 *(Não atribuídos.)*

ARTIGO 35

Serviços de radiodeterminação e serviço de radiodeterminação por satélite

SECÇÃO I

Disposições gerais

2831 § 1. As administrações que tenham organizado um serviço de radiodeterminação tomam todas as disposições necessárias para assegurar a eficácia e a regularidade desse serviço. Todavia, não aceitam qualquer responsabilidade relativamente às consequências eventuais tanto da inexactidão dos resultados fornecidos como do funcionamento defeituoso ou da paragem do funcionamento das suas estações.

2832 § 2. Em caso de medida duvidosa ou aleatória, a estação que determinar um azimute ou uma posição deve, se possível, avisar dessa incerteza a estação móvel a que fornece essa informação.

2833 § 3. As administrações notificam o secretário-geral das características de cada estação de radiodeterminação que assegure um serviço internacional que interessa ao serviço móvel marítimo, e, especialmente, se for necessário, para cada estação ou grupo de estações, os sectores nos quais os resultados fornecidos serão normalmente certos. Essas informações são publicadas na nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais; é notificada ao secretário-geral qualquer alteração de carácter permanente.

2834 § 4. Os processos de identificação das estações de radiodeterminação devem ser escolhidos de modo a evitar qualquer incerteza quando se trate de reconhecer uma estação.

2835 § 5. Os sinais emitidos por estações de radiodeterminação devem permitir medidas exactas e precisas.

2836 § 6. Qualquer informação relativa a uma modificação ou a uma irregularidade do funcionamento de uma estação de radiodeterminação deve ser difundida sem demora. Para esse fim:

2837 *a*) As estações terrestres dos países onde funcione um serviço de radiodeterminação emitem cada dia, em caso de necessidade, avisos de modificação ou de irregularidade de funcionamento até ao momento em que se retome o funcionamento normal ou, se se verificar uma modificação permanente, até ao momento em que se possa razoavelmente admitir ter sido avisada toda a navegação interessada;

2838 *b*) As modificações permanentes ou as irregularidades de longa duração serão publicadas nos avisos à navegação no mais breve prazo.

SECÇÃO II

Disposições relativas ao serviço de radiodeterminação por satélite

2839 § 7. (1) Aplicam-se ao serviço de radionavegação marítima por satélite as disposições dos n.os **2831** a **2838**, com excepção do n.º **2832**.

2840 (2)Aplicam-se ao serviço de radionavegação areonáutica por satélite as disposições dos n.os **2831** a **2838**, com excepção dos n.os **2832** e **2833**.

SECÇÃO III

Estações radiogoniométricas

2841 § 8. (1) No serviço de radionavegação marítima, a frequência de 410 kHz é a frequência normal de radiogoniometria um radiotelegrafia. Todas as estações radiogoniométricas do serviço de radionavegação marítima que usem a radiotelegrafia devem poder utilizá-la. Além disso, devem estar em condições de determinar azimutes na frequência de 500 kHz, especialmente para localizar as estações que emitam sinais de perigo, de alarme e de urgência.

2842 (2) Quando exista um serviço de radiogoniometria nas faixas autorizadas entre 1605 kHz e 2850 kHz convém que as estações radiogoniométricas estejam em condições de determinar azimutes na frequência da chamada e de perigo radiotelefónico de 2182 kHz.

2843 § 9. O procedimento a seguir pelas estações radiogoniométricas está definido no apêndice 41.

2844 § 10. Na falta de arranjo prévio, uma estação de aeronave que se dirija a uma estação radiogoniométrica para obter uma azimute deve utilizar, para esse efeito, uma frequência na qual a estação chamada normalmente escute.

2845 § 11. No serviço de radionavegação aeronáutica é aplicável o procedimento referido na presente secção para a radiogoniometria, salvo quando vigorarem procedimentos especiais resultantes de arranjos concluídos pelas administrações interessadas.

SECÇÃO IV

Estações de radiofarol

2846 A) Generalidades

2847 § 12. Quando uma administração julgar útil no interesse da navegação, organizar um serviço de estações de radiofarol, pode utilizar para esse fim:

2848 *a*) Radiofaróis propriamente ditos, instalados em terra firme ou em navios permanentemente ancorados ou, excepcionalmente, em navios que naveguem numa zona restrita cujos limites sejam conhecidos e publicados. O diagrama de emissão desses radiofaróis poderá ser direccional ou não direccional;

2849 *b*) Estações fixas, estações costeiras ou estações aeronáuticas designadas para funcionar como radiofaróis a pedido das estações móveis.

2850 § 13. (1) Os radiofaróis propriamente ditos utilização as frequências das faixas que lhes são atribuídas consoante o capítulo III.

2851 (2) As outras estações notificadas como radiofaróis utilização para esse efeito a sua frequência normal de trabalho e a sua classe normal de emissão.

2852 (3) A potência radiada por cada radiofarol propriamente dito deverá ser regulada para o valor necessário para que a intensidade de campo tenha o valor estipulado no limite do alcance que se pretende (v. os n.^{os} **2855** e **2860**).

2853 B) Radiofaróis aeronáuticos

2854 § 14. (1) A consignação das frequências aos radiofaróis aeronáuticos que funcionam nas faixas compreendidas entre 160 kHz e 435 kHz é baseada numa relação de protecção contra interferências de, pelo menos, 15 dB em toda a zona de serviço de cada radiofarol.

2855 (2) Convém que a potência seja mantida no valor mínimo necessário para que a intensidade de campo tenha o valor pretendido no limite ao alcance.

2856 (3) O limite de alcance de dia dos radiofaróis indicados no n.º **2854** é definido pelos valores de intensidade de campo especificados abaixo:

2857 (4) Regiões 1 e 2:

70μ V por metro para os radiofaróis situados ao norte do paralelo 30° N.;
120μ V por metro para os radiofaróis situados entre os paralelos 30° N. e 30° S.;
70μV por metro para os radiofaróis situados ao sul do paralelo 30° N.;

2858 (5) Região 3:

70μ V por metro para os radiofaróis situados ao norte do paralelo 40° N.;
120μ V por metro para os radiofaróis situados entre os paralelos 40° N. e 50° S.;
70μV por metro para os radiofaróis situados ao sul do paralelo 40° N.;

2859 C) Radiofaróis marítimos

2860 § 15. (1) Os valores das relações de protecção aplicáveis aos radiofaróis marítimos que funcionam nas faixas compreendidas entre 283,5 kHz e 335 kHz são determinados admitindo que a potência radiada é mantida no valor necessário para obter a intensidade de campo desejada no limite do alcance.

2861 (2) O limite de alcance de dia dos radiofaróis indicados no n.º **2860** é definido pela condição de que, nesse limite, as intensidades de campo seja as seguintes:

2862 (3) Região 1:

50μ V por metro para os radiofaróis situados ao norte do paralelo 43° N.;
75μ V por metro para os radiofaróis situados entre os paralelos 43° N. e 30° S.;
100μ V por metro para os radiofaróis situados entre os paralelos 30° N. e 30° S.;
75μ V por metro para os radiofaróis situados entre os paralelos 30° S. e 43° S.;
50μV por metro para os radiofaróis situados ao sul do paralelo 43° S.

2863 (4) Região 2:

50μ V por metro para os radiofaróis situados ao norte do paralelo 40º N.;
75μ V por metro para os radiofaróis situados entre os paralelos 40º N. e 31º S.;
100μ V por metro para os radiofaróis situados entre os paralelos 31º N. e 30º S.;
75μ V por metro para os radiofaróis situados entre os paralelos 30º S. e 43º S.;
50μV por metro para os radiofaróis situados ao sul do paralelo 43º S.

2864 (5) Região 3:

75μ V por metro para os radiofaróis situados ao norte do paralelo 40º N.;
100μ V por metro para os radiofaróis situados entre os paralelos 40º N. e 50º S.;
75μV por metro para os radiofaróis situados ao sul do paralelo 50º S.

2865 (6) Na região 1, a consignação de frequências aos radiofaróis marítimos é feita na base de um espaçamento de 2,3 kHz entre frequências adjacentes utilizadas para as emissões de classe A2A.

2866 (7) Na região 1, convém que a percentagam de modulação das emissões dos radiofaróis marítimos seja de, pelo menos, 70 %.

2867 a 2891 (*Não atribuídos.*)

ARTIGO 36

Serviço de radioastronomia

SECÇÃO I

Disposições gerais

2892 § 1. As administrações colaboração entre si para proteger o serviço de radioastronomia contra interferência, tendo em conta:

2893 *a*) A sensibilidade excepcionalmente elevada das estações de radioastronomia;
2894 *b*) A necessidade frequente de longos períodos de observação isentos de interferências prejudiciais;
2895 *c*) O facto de que o reduzido número de estações de radioastronomia em cada país e o conhecimento da sua localização permitem frequentemente prestar atenção especial ao modo de evitar as interferências.

2896 § 2. A localização das estações de radioastronomia a proteger e as frequências de observação que elas utilizam são notificadas à IFRB em conformidade com o n.º **1492** e publicadas pelo secretário-geral, em conformidade com o n.º **2237**, para comunicação aos Membros.

SECÇÃO II

Medidas a tomar no serviço de radioastronomia

2897 § 3. A localização das estações de radioastronomia é escolhida tendo em conta as possibilidades de interferências prejudiciais a essas estações.

2898 § 4. Serão adoptados nas estações de radioastronomia todos os meios técnicos praticáveis para reduzir a sua susceptibilidade às interferências. Dever-se-á prosseguir o desenvolvimento de técnicas aperfeiçoadas para reduzir a susceptibilidade às interferências, incluindo a participação em estudos conjuntos por intermédio da CCIR.

SECÇÃO III

Protecção do serviço de radioastronomia

2899 § 5. O estatuto do serviço de radioastronomia nas diversas faixas de frequência está especificado no quadro de atribuição das faixas de frequência (artigo 8). As administrações assegurarão a protecção das estações do serviço de radioastronomia contra interferências, em observância do estatuto deste serviço nas faixas consideradas (v., também, os n.ºs **344**, **2632** a **2634** e **2635**).

2900 § 6. Quando assegurem, a título permanente ou temporário, a protecção do serviço de radioastronomia contra interferências, as administrações utilizarão, consoante o caso, meios tais como a separação geográfica, o efeito de blindagem do terreno, a directividade da antena, a utilização da partilha no tempo e mais fraca potência de emissão que se possa conseguir na prática.

2901 § 7. Solicita-se instantemente às administrações que, ao consignarem frequências às estações dos outros serviços nas faixas adjacentes àquelas que o serviço de radioastronomia utiliza para as suas observações em conformidade com as disposições do presente Regulamento, tomem todas as medidas dentro das possibilidades práticas para proteger o serviço de radioastronomia contra interferências prejudiciais, de acordo com o n.º **343**.

Além das medidas mencionadas no n.º **2900**, convém examinar especialmente os meios técnicos que permitem reduzir ao mínimo a potência radiada nas frequências compreendidas na faixa utilizada para a radioastronomia (v., também, o n.º **344**).

2902 § 8. Solicita-se instantemente às administrações que, ao consignarem frequências e estações noutras faixas, tenham em conta a necessidade de, dentro das possibilidades práticas, evitar as radiações não essenciais susceptíveis de causar interferências prejudiciais ao serviço de radioastronomia explorado em conformidade com o presente Regulamento (v., também, o n.º **344**).

2903 § 9. Solicita-se instantemente às administrações que, ao aplicarem as disposições definidas na presente secção, não percam de vista que o serviço de radioastronomia é extremamente sensível às interferências causadas pelas emissões provenientes de estações espaciais ou de aeronave.

2904 § 10. As administrações deverão tomar nota dos pareceres pertinentes da CCIR para limitar as interferências causadas por outros serviços ao serviço de radioastronomia.

2905 a 2929 *(Não atribuídos.)*

CAPÍTULO IX

Comunicação de perigo e de segurança

ARTIGO 37

Disposições gerais

2930 § 1. O procedimento indicado no presente capítulo é obrigatório no serviço móvel marítimo, assim como nas comunicações entre estações de aeronave e estações do serviço móvel marítimo. As disposições do presente capítulo são igualmente aplicáveis no serviço móvel aeronáutico, excepto no caso de acordos especiais concluídos pelos governos interessados.

2931 § 2. O procedimento indicado no presente capítulo é obrigatório no serviço móvel marítimo por satélite, assim como nas comunicações entre as estações a bordo de aeronaves e as estações do serviço móvel marítimo por satélite em todos os casos em que este serviço ou estas estações sejam expressamente mencionados.

Aplicam-se igualmente as disposições dos n.ºs **3086, 3090, 3095, 3096, 3097, 3098, 3200, 3203** e **3223.**

2932 § 3. (1) Nenhuma disposição do presente Regulamento pode constituir obstáculo à utilização, por uma estações móvel ou uma estação terrena de navio em perigo, de todos os meios de que disponha para chamar a atenção, assinalar a sua situação e obter socorro.

2933 (2) Nenhuma disposição do presente Regulamento pode constituir obstáculo à utilização, por estações a bordo de aeronaves ou de navios que participem em operadores de busca e salvamento em circunstâncias excepcionais, de todos os meios de que disponham para prestar assistência a uma estação móvel em perigo.

2934 (3) Nenhuma disposição do presente Regulamento pode constituir obstáculo à utilização, por uma estação terrestre, em circunstâncias excepcionais, de todos os meios de que disponha para prestar assistência a uma estação móvel em perigo (v. igualmente o n.º **959**).

2935 § 4. Nos casos de perigo, de urgência ou de segurança, as transmissões:

2936 *a*) Em radiotelegrafia, não devem em geral ultrapassar a velocidade de 16 palavras por minuto;

2937 *b*) Em radiotelefonia, devem ser efectuadas lenta e distintamente, pronunciando-se distintamente cada palavra para facilitar a sua transcrição.

2938 § 5. Convém aplicar, se for caso disso, as abreviaturas e os sinais do apêndice 14, bem como os quadros de soletração das letras e dos algarismos do apêndice 24. Além disso, em caso de dificuldades linguísticas, recomenda-se a utilização do Código Internacional de Sinais.

2939 § 6. (1) A Convenção Internacional para a Salvaguarda da Vida Humana no Mar determina quais os navios e os respectivos engenhos de salvamento que devem ser equipados com instalações radioeléctricas, assim como os navios que devem ser equipados com aparelhos radioeléctricos portáteis para serem utilizados pelos engenhos de salvamento. A Convenção prescreve também as condições a que devem satisfazer tais aparelhos.

2940 (2) Os anexos à Convenção Relativa à Aviação Civil Internacional definem quais as aeronaves que convém equipar com instalaçoes radioeléctricas, bem como as aeronaves que convém equipar com aparelhos radioeléctricos portáteis para serem utilizados pelos engenhos de salvamento. Definem igualmente as condições a que convém que tais aparelhos satisfaçam.

2941 § 7. Todavia, as prescrições do presente Regulamento devem ser observadas por todos os aparelhos dessa natureza.

2942 § 8. As estações móveis do serviço móvel marítimo podem comunicar para fins de segurança com as estações do serviço móvel aeronáutico.

2943 § 9. Qualquer estação instalada a bordo de uma aeronave e obrigada por regulamentação nacional ou internacional a entrar em comunicação, por motivos de perigo, de urgência ou de segurança, com as estações do serviço móvel marítimo deve estar em condições de efectuar emissões, de preferência da classe A2A ou H2A, e de receber emissões, de preferência das classes A2A e H2A, na frequência portadora de 500 kHz, ou de efectuar emissões da classe A3E ou H3E e de receber emissões das classes A3E e H3E na frequência portadora de 2182 kHz, ou então de efectuar e receber emissões da classe G3E na frequência de 156,8 MHz.

2944 a 2968 *(Não atribuídos.)*

ARTIGO 38

Frequências para o perigo e a segurança

SECÇÃO I

Frequências disponíveis

2669 A) 500 kHz

2970 § 1. (1) A frequência de 500 kHz é a frequência internacional de perigo em radiotelegrafia (v. igualmente o n.º **472**; deve ser utilizada para esse fim pelas estações de navio, de aeronave e de engenho de salvamento que usem frequências compreendidas entre 405 kHz e 535 kHz quando essas estações peçam a assistência dos serviços marítimos. Empregar-se-á a chamada e o tráfego de perigo, bem como para o sinal e as mensagens de urgência, para o sinal de segurança e, fora das regiões de tráfego intenso, para curtas mensagens de segurança. Quando for praticável, as mensagens de segurança serão emitidas na frequência de trabalho, depois de um aviso preliminar na frequência de 500 kHz (v., também, o n.º **4236**).

2971 (2) Todavia, convém que as estações de navio e de aeronave que não possam emitir na frequência de 500 kHz utilizem qualquer outra frequência disponível na qual possam chamar a atenção.

2972 B) 2182 kHz

2973 § 2. (1) A frequência de 2182 kHz (1) é a frequência internacional de perigo em radiotelefonia (v. igualmente os n.ºs **500** e **501**); deverá ser utilizada para esse fim pelas estações de navio, de aeronave e de engenho de salvamento e pelas radiobalizas de sinistros que usem faixas autorizadas compreendidas entre 1605 kHz, quando essas estações peçam a assistência dos serviços marítimos. É utilizada para a chamada e o tráfego de perigo, para os sinais de radiobaliza de localização de sinistros, para o sinal e as mensagens de urgência, bem como para o sinal de segurança. As mensagens de segurança são transmitidas, quando praticável, numa frequência de trabalho, depois de um aviso preliminar na frequência de 2182 kHz. A classe de emissão em radiotelefonia na frequência de 2182 kHz é a classe A3E ou H3E (v. o n.º **4127**). A classe de emissão a utilizar pelas radiobalizas de localização de sinistros é a especificada no apêndice 37 (v. igualmente o n.º **3265**).

2974 (2) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., se uma mensagem de perigo transmitida na frequência portadora 2182 kHz não obtiver confirmação de recepção, é permitido, se tal for possível, transmitir de novo o sinal de alarme radiofónico seguido da chamada e da mensagem de perigo numa ou noutra, consoante o caso, das duas frequências portadoras 4125 kHz ou 6215,5 kHz (v. os n.ºs **2982**, **2986** e **3054**).

2975 (3) Todavia, convém que as estações de navio e de aeronave que não possam emitir na frequência portadora 2182 kHz nem, nas condições do n.º **2974**, nas frequências portadoras 4125 kHz ou 6215,5 kHz utilizem qualquer outra frequência disponível na qual possam chamar a atenção.

2976 (4) As chamadas selectivas efectuadas segundo as disposições do artigo 62 podem ser emitidas na frequência portadora 2182 kHz, nos sentidos estação costeira-navio e navio-estação costeira e entre navios; devem ser limitadas, nesta frequência, aos casos de perigo e de urgência e aos avisos de extrema importância para a navegação. Este procedimento não pode, em caso algum, substituir os indicados nos n.ºs **3101**, **3102**, **3116**, **3117** e **3270**.

2977 (5) Qualquer estação costeira que utilizar para fins de perigo a frequência 2182 kHz deve estar em condição de transmitir o sinal de alarme radiotelefónico descrito no n.º **3270** (v., também, os n.ºs **3277**, **3278** e **3279**).

2978 (6) Convém que qualquer estação costeira autorizada a emitir avisos à navegação possa transmitir o sinal de aviso aos navegantes descrito nos n.ºs **3284**, **3285** e **3286**.

2979 C) 3023 kHz

2980 § 3. A frequência portadora (frequência de referência) aeronáutica 3023 kHz pode ser utilizada para estabelecer comunicações entre as estações móveis que participem em operações coordenadas de busca e salvamento, bem como comunicações entre essas estações e as estações terrestres participantes, em conformidade com as disposições dos apêndices 27 (*) e 27 Aer2 (*) (v. igualmente os n.ºs **501** e **505**).

2973.1 (1) Quando as administrações assegurem nas suas estações costeiras uma escuta aturada em 2182 kHz para receber emissões das classes R3E e J3E, bem como emissões das classes A3E e H3E, as estações de navio que se encontrem para além da distância a que poderiam comunicar com essas estações costeiras por meio de emissões das classes A3E ou H3E poderão chamar, para fins de segurança, as estações utilizando as classes de emissão R3E ou J3E. Esta utilização só será autorizada quando tenham sido infrutuosas as chamadas efectuadas com emissões das classes A3E e H3E.

(*) Nota do Secretariado-Geral (v. o n.º **5189** e a Resolução n.º 400).

2981 D) 4125 kHz

2982 §4. Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., a frequência portadora 4125 kHz é designada, além da frequência portadora 2182 kHz, para o perigo e a segurança, bem como para a chamada e a resposta (v. igualmente o n.° **520**. As estações que utilizarem esta frequência, 4125 kHz, podem continuar a utilizar a classe de emissão H3E até 1 de Janeiro de 1984.

2983 E) 5680 kHz

2984 §5. A frequência portadora (frequência de referência) aeronáutica 5680 kHz pode ser utilizada para estabelecer comunicações entre as estações móveis que participem em operações coordenadas de busca e de salvamento, bem como para comunicações entre essas estações e as estações terrestres participantes, em conformidade com as disposições dos apêndices 27(*) e 27 Aer2(*) (v. igualmente os n.os **501** e **505**).

2985 F) 6215,5 kHz

2986 §6. Na zona da Região 3 situada ao sul do paralelo 25° N., a frequência portadora 6215,5 kHz é designada, além da frequência portadora 2182 kHz, para o perigo e a segurança, bem como para a chamada e a resposta (v. igualmente o n.° **523**). As estações que utilizarem esta frequência, 6215,5 kHz, podem continuar a utilizar a classe de emissão H3E até 1 de Janeiro de 1984.

2987 G) 8364 kHz

2988 §7. A frequência 8364 kHz é designada para ser utilizada pelas estações de engenho de salvamento, se estas estiverem equipadas para emitir nas frequências das faixas compreendidas entre 4000 kHz e 27 500 kHz e se desejarem estabelecer com as estações dos serviços móveis marítimo e aeronáutico comunicações relativas às operações de busca e de salvamento (v. igualmente o n.° **501**).

2989 H) 121,5 MHz e 123,1 MHz

2990 §8. (1) As estações móveis do serviço móvel marítimo podem comunicar para fins de segurança com as estações do serviço móvel aeronáutico.

2991 (2) É apenas nessas ocasiões que elas podem utilizar a frequência aeronáutica de urgência 121,5 MHz e a frequência aeronáutica auxiliar 123,1 MHz em emissões da classe A3E para as duas frequências (v. igualmente os n.os **501** e **593**). Devem então satisfazer aos acordos especiais concluídos pelos governos interessados que regulam o serviço móvel aeronáutico.

2992 I) 156,3 MHz e 156,8 MHz

2993 §9. As frequências 156,3 MHz e 156,8 MHz poderão ser utilizadas pelas estações de aeronave, mas unicamente para fins relativos à segurança [v. igualmente a nota *h*) do apêndice 18].

2994 §10. (1) A frequência 156,8 MHz é a frequência internacional de perigo, de segurança e de chamada em radiotelefonia para as estações do serviço móvel marítimo, quando utilizarem frequências das faixas autorizadas compreendidas entre 156 MHz e 174 MHz (v. igualmente os n.os **501** e **613**). Ela é utilizada para o sinal, as chamadas e o tráfego de perigo, para o sinal e o tráfego de urgência e para o sinal de segurança (v. igualmente o n.° **2993**). As mensagens de segurança deverão ser transmitidas, quando praticável, numa frequência de trabalho depois de aviso preliminar na frequência 156,8 MHz. A classe de emissão a utilizar para a radiotelefonia na frequência 156,8 MHz é a classe G3E (v. o apêndice 19).

2995 (2) Todavia, convém que as estações de navio que não possam emitir na frequência 156,8 MHz utilizem qualquer outra frequência disponível na qual possam chamar a atenção.

2996 J) 243 MHz

(V. os n.os **501** e **642**.)

2997 K) Faixa 406-406,1 MHz

(V. o n.° **649**.)

(*) Nota do Secretariado-Geral (v. o n.° **5189** e a Resolução n.° 400).

2998 L) Faixa 1544-1545 MHz e faixa 1645,5-1646,5 MHz

(V. o n.º 728.)

2999 M) Aeronave em perigo

3000 § 11.Qualquer aeronave em perigo transmite a chamada de perigo na frequência em que as estações terrestres ou móveis susceptíveis de lhe prestar assistência mantêm a escuta. Se essa chamada for destinada a estações do serviço móvel marítimo, deverão ser observadas as disposições dos n.ºs **2970** e **2971** ou dos n.ºs **2973** e **2975** ou **2994** e **2995**.

3001 N) Estações de engenho de salvamento

3002 § 12. Os aparelhos a utilizar nas estações de engenho de salvamento deverão, se lhes for possível usar frequências:

3003 *a*) *Nas faixas compreendidas entre 405 kHz e 535 kHz*, poder efectuar emissões das classes A2A e A2B(*) ou H2A e H2B(*) na frequência portadora 500 kHz. Se a instalação comportar um receptor para uma dessas faixas, este deverá poder receber emissões das classes A2A e H2A na frequência portadora 500 kHz;

3004 *b*) *Nas faixas compreendidas entre 1605 kHz e 2850 kHz*, poder efectuar da classe A3E ou H3E na frequência portadora 2182 kHz. Se a instalação comportar um receptor para uma dessas faixas, este deverá poder receber emissões das classes A3E e H3E na frequência portadora 2182 kHz;

3005 *c*) *Nas faixas compreendidas entre 4000 kHz e 27 500 kHz*, poder efectuar emissões da classe A2A ou H2A na frequência portadora 8364 kHz. Se a instalação comportar um receptor para uma dessas faixas, este deverá poder receber emissões das classes A1A, A2A e H2A em toda a faixa 8341, 75-8728,5 kHz;

3006 *d*) *Nas faixas compreendidas entre 118 MHz e 136 MHz*, poder efectuar emissões na frequência 121,5 MHz, utilizando de preferência a modulação de amplitude. Se a instalação comportar um receptor para uma dessas faixas, este deverá poder receber emissões da classe A3E em 121,5 MHz;

3007 *e*) *Nas faixas compreendidas entre 156 MHz e 174 MHz*, poder efectuar emissões da classe G3E na frequência 156,8 MHz. Se a instalação comportar um receptor para uma dessas faixas, este deverá receber emissões da classe G3E na frequência 156,8 MHz;

3008 *f*) *Nas faixas compreendidas entre 235 MHz e 328,6 MHz*, poder efectuar emissões na frequência 243 MHz.

SECÇÃO II

Protecção das frequências de perigo

3009 A) Generalidades

3010 § 13.É proibida qualquer emissão susceptível de produzir interferências prejudiciais às comunicações de perigo, alarme, urgência ou segurança nas frequências internacionais de perigo 500 kHz ou 2182 kHz (v. n.ºs **472, 500, 3018** e **3023**). É proibida qualquer emissão que produza interferências prejudiciais às comunicações de perigo, de segurança e de chamada na frequência 156,8 MHz (v. os n.ºs **613, 3033** e **4414**).

3011 § 14.(1) As emissões de ensaio deverão ser reduzidas ao mínimo, especialmente:

3012 *a*) Na frequência portadora 2182 kHz;

3013 *b*) Na frequência 156,8 MHz;

3014 *c*) Na frequência portadora 4125 kHz na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N.;

3015 *d*) Na frequência portadora 6215,5 kHz na zona da Região 3 situada ao sul do paralelo 25° N.

3016 (2) É proibido efectuar emissões de ensaios do sinal de alarme radiofónico na frequência portadora 2182 kHz e na frequência 156,8 MHz, excepto se se tratar de um equipamento de socorro que não possa emitir senão nessas frequências. Neste caso, será necessário tomar as medidas que se imponham para evitar a radiação. É necessário igualmente tomar medidas para impedir a radiação proveniente dos ensaios do sinal de alarme radiotelefónico em frequências diferentes de 2182 kHz e 156,8 MHz.

(*) Isto permite a recepção automática de sinais radiotelegráficos de alarme.

3017 B) 500 kHz

3018 § 15. (1) Exceptuando as emissões autorizadas na frequência 500 kHz, e sob reserva das disposições do n.º **4226**, é proibida qualquer emissão na faixa 490-510 kHz (v. o n.º **471** e a Recomendação n.º 200).

3019 (2) A fim de facilitar a recepção das chamadas de perigo, as outras emissões na frequência 500 kHz deverão ser reduzidas ao mínimo e a sua duração não deverá ultrapassar um minuto.

3020 (3) Antes de emitir na frequência 500 kHz, uma estação de serviço móvel deve escutar nessa frequência durante um período suficiente, a fim de se assegurar de que não está em curso qualquer tráfego de perigo (v. o n.º **3702** ou **4713**).

3021 (4) As disposições do n.º **3020** não se aplicam às estações em perigo.

3022 C) 2182 kHz

3023 § 16. (1) Exceptuando as emissões autorizadas na frequência portadora 2182 kHz, é proibida qualquer emissão nas frequências compreendidas entre 2173,5 kHz e 2190,5 kHz.

3024 (2) Antes de emitir na frequência portadora 2182 kHz, uma estação do serviço móvel deve escutar nesta frequência durante um período suficiente, a fim de se assegurar de que não está em curso qualquer tráfego de perigo (v. o n.º **4915**).

3025 (3) As disposições do n.º **3024** não se aplicam às estações em perigo.

3026 (4) A fim de facilitar a recepção das chamadas de perigo, deverão ser reduzidas ao mínimo todas as emissões na frequência 2182 kHz.

3027 (5) A fim de limitar as emissões inúteis de sinais de alarme, são proibidos os ensaios do sinal de alarme radiotelefónico na frequência portadora 2182 kHz (v. o n.º **3016**).

3028 (6) Excepcionalmente, esses ensaios serão autorizados para os equipamentos radiotelefónicos de socorro que disponham unicamente da frequência internacional de perigo 2182 kHz, desde que seja utilizada uma antena artificial apropriada.

3029 D) 4125 kHz e 6215,5 kHz

3030 § 17. (1) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15º N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25º N., antes de emitir na frequência portadora 4125 kHz ou 6215,5 kHz, as estações escutarão nessa frequência durante um período suficiente, a fim de se assegurarem de que não está em curso qualquer tráfego de perigo (v. o n.º **4915**).

3031 (2) As disposições do n.º **3030** não se aplicam às estações em perigo.

3032 E) 156,8 MHz

3033 § 18. (1) É proibida qualquer emissão na faixa 156,725-156,875 MHz (1) que possa causar interferências prejudiciais às emissões autorizadas das estações do serviço móvel marítimo em 156,8 MHz.

3034 (2) Antes de emitir na frequência 156,8 MHz, convém que as estações do serviço móvel escutem nessa frequência durante um período suficiente para se certificarem de que não está em curso qualquer tráfego de perigo (v. o n.º **4915**).

3035 (3) As disposições do n.º **3034** não se aplicam às estações em perigo.

3036 (4) A fim de facilitar a recepção das chamadas de perigo, todas as emissões na frequência 156,8 MHz deverão ser reduzidas ao mínimo e não ultrapassar um minuto.

SECÇÃO III

Vigília nas frequências de perigo

3037 A) 500 kHz

3038 § 19. (1) A fim de aumentar a segurança da vida humana no mar e por cima do mar, todas as estações do serviço móvel marítimo que escutem normalmente nas frequências das faixas autorizadas entre 405 kHz e 535 kHz deverão, durante o seu período de serviço, tomar as providências necessárias para que a escuta na frequência de perigo 500 kHz, duas vezes por hora, durante três minutos, começando às X horas e 15 minutos e X horas e 45 minutos, tempo universal coordenado (UTC), seja assegurada por um operador utilizando auscultadores ou um altifalante.

3033.1 (1) A partir de 1 de Janeiro de 1983 esta faixa passará a 156,7625-156,8375 MHz (v. a Resolução n.º 308).

3039 (2) Durante os intervalos de tempo atrás indicados, com excepção das emissões previstas no presente capítulo:

3040 *a*) Deverão cessar as emissões nas faixas compreendidas entre 485 kHz e 515 kHz

3041 *b*) Fora dessas faixas, poderão continuar as emissões das estações do serviço móvel. As estações do serviço móvel marítimo poderão escutá-las, com a condição expressa de assegurarem em primeiro lugar a escuta na frequência de perigo, como está prescrito no n.º **3038**).

3042 § 20. (1) As estações do serviço móvel marítimo abertas ao serviço da correspondência pública e que utilizem frequências das faixas autorizadas entre 405 kHz e 535 kHz deverão, durante o seu período de serviço, ficar à escuta na frequência 500 kHz. Esta escuta é obrigatória apenas para as emissões das classes A2A e H2A.

3043 (2) Estas estações, mantendo a observância das prescrições do n.º **3038**, serão autorizadas a abandonar essa escuta apenas quando ocupadas numa comunicação noutras frequências.

3044 (3) Enquanto estiverem ocupadas com uma tal comunicação:

3045 *a*) As estações de navio poderão manter a escuta na frequência 500 kHz quer por meio de um operador utilizando auscultadores ou um altifalante quer por meio de qualquer outro dispositivo conveniente, tal como um receptor automático de alarme;

3046 *b*) As estações costeiras poderão manter a escuta na frequência 500 kHz por meio de um operador utilizando auscultadores ou um altifalante; neste último caso poderá fazer-se menção do facto na nomenclatura das estações costeiras.

3047 B) 2182 kHz

3048 § 21.(1) Todas as estações costeiras abertas à correspondência pública e que constituem um elemento essencial da protecção em caso de perigo na sua zona deverão assegurar a escuta na frequência 2182 kHz durante o seu período de serviço.

3049 (2) Essas estações assegurarão essa escuta por intermédio de um operador utilizando meios auditivos: auscultadores, dois auscultadores independentes ou altifalante.

3050 (3) Além disso, convém que as estações de navio assegurem uma escuta tão prolongada quanto possível na frequência portadora 2182 kHz, a fim de poderem receber, por todos os meios apropriados, o sinal de alarme radiofónico descrito no n.º **3270** e o sinal de aviso aos navegantes descrito nos n.ºs **3284, 3285** e **3286**, bem como os sinais de perigo, urgência e segurança.

3051 § 22. Convém que as estações de navio abertas à correspondência pública assegurem, tanto quanto possível, a escuta na frequência 2182 kHz durante o seu período de serviço.

3052 § 23. A fim de aumentar a segurança de vida humana no mar e por cima do mar, todas as estações do serviço móvel marítimo que efectuem normalmente escuta nas frequências das faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz tomarão, dentro do possível, as medidas necessárias para assegurar, durante o seu período de serviço, a escuta na frequência internacional de perigo 2182 kHz duas vezes por hora, durante três minutos, começando às X horas e 30 minutos, tempo universal coordenado (UTC).

3053 C) 4125 kHz e 6215,5 kHz

3054 § 24. (1) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., todas as estações costeiras abertas à correspondência pública e que constituem um elemento essencial da protecção em caso de perigo na zona por elas servida poderão manter escuta, durante o seu período de serviço, nas frequências portadoras 4125 kHz e ou 6215,5 kHz (v. os n.ºs **2982** e **2986**). Convém que esta escuta seja indicada na nomenclatura das estações costeiras.

3055 (2) Convém que as estações assegurem esta escuta por intermédio de um operador utilizando meios auditivos: auscultadores, dois auscultadores independentes ou altifalante.

3056 D) 156,8 MHz

3057 § 25. (2) Convém que qualquer estação costeira do serviço móvel marítimo radiotelefónico internacional na faixa 156-174 MHz, quando constitua um elemento essencial da protecção em caso de perigo na zona por ela servida, assegure, durante o seu período de serviço nesta faixa, uma escuta eficaz, por meios auditivos, na frequência 156,8 MHz (v. a Recomendação n.º 306).

3058 (2) Quando se encontrarem na zona de serviço de estações costeiras do serviço móvel marítimo radiotelefónico nas faixas compreendidas entre 156 MHz e 174 MHz, e quando tal for praticável, convém que as estações de navio assegurem a escuta na frequência 156,8 MHz. Convém que as equipadas apenas com aparelhos radiotelefónicos funcionando nas faixas autorizadas compreendidas entre 156 MHz e 174 MHz, assegurem, quando estiverem no mar, a escuta na frequência 156,8 MHz.

3059 (3) Quando estiverem em ligação com uma estação portuária, as estações de navio poderão, excepcionalmente e sob reserva de acordo da administração interessada, continuar a manter a escuta apenas na frequência prevista para as operações portuárias, desde que a estação portuária mantenha a escuta na frequência 156,8 MHz.

3060 (4) Quando estiverem em ligação com uma estação costeira do serviço de movimento de navios, as estações de navio poderão, sob reserva de acordo das administrações interessadas, continuar a manter a escuta somente na frequência apropriada do serviço de movimento de navios, desde que essa estação costeira mantenha a escuta na frequência 156,8 MHz

3061 a 3085 *(Não atribuídos.)*

ARTIGO 39

Comunicações de perigo

SECÇÃO I

Generalidades

3086 § 1.A chamada de perigo tem prioridade absoluta sobre todas as comunicações. Todas as estações que a oiçam devem cessar imediatamente qualquer emissão susceptível de perturbar o tráfego de perigo e continuar a escutar na frequência de emissão da chamada de perigo. Esta chamada não deve ser dirigida a uma estação determinada e não se deve dar o entendido antes de transmitida a mensagem de perigo que se lhe segue.

3087 § 2.A chamada e a mensagem de perigo só serão emitidas por ordem do comandante ou da pessoa responsável pelo navio, pela aeronave ou por qualquer outro veículo onde esteja a estação móvel ou a estação terrena de navio.

SECÇÃO II

Sinal de perigo

3088 § 3.(1) O sinal radiotelegráfico de perigo é constituído pelo grupo ... – – – ... simbolizado por $\overline{\text{SOS}}$, emitido como um só sinal e no qual se deverão acentuar os traços de modo que se distingam nitidamente dos pontos.

3089 (2) O sinal radiotelefónico de perigo é constituído pela palavra MAYDAY, pronunciada como a expressão francesa *m'aider*.

3090 (3) Estes sinais de perigo indicam que um navio, uma aeronave ou qualquer outro veículo está sob a ameaça de perigo grave iminente e pede assistência imediata.

SECÇÃO III

Chamada de perigo

3091 § 4. (1) A chamada de perigo emitida em radiotelegrafia compreende:

O sinal de perigo $\overline{\text{SOS}}$ (emitido três vezes);
A palavra DE;
O indicativo de chamada da estação móvel em perigo (emitido três vezes).

3092 (2) A chamada de perigo emitida em radiotelefonia compreende:

O sinal de perigo MAYDAY (pronunciado três vezes);
A palavra AQUI (ou DE soletrada, empregando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
O indicativo de chamada ou qualquer outra forma de identificação da estação móvel em perigo (pronunciado três vezes).

SECÇÃO IV

Mensagens de perigo

3093 § 5. (1) A mensagem radiotelegráfica de perigo compreende:

O sinal de perigo $\overline{\text{SOS}}$;
O nome de qualquer outra forma de identificação da estação móvel em perigo;
As informações relativas à posição desta;
A natureza do perigo e a natureza do socorro pedido;
Qualquer outro esclarecimento que possa facilitar esse socorro.

3094 (2) A mensagem radiotelefónica de perigo compreende:

O sinal de perigo MAYDAY;
O nome ou qualquer outra forma de identificação da estação móvel em perigo;
As informações relativas à posição desta;
Qualquer outro esclarecimento que possa facilitar esse socorro.

3095 § 6.(1) Como em regra geral, um navio assinala a sua posição em latitude e longitude (Greenwich) empregando algarismos para os graus e minutos, acompanhados de uma palavra NORTH ou SOUTH e de uma das palavras EAST ou WEST. Em radiotelegrafia, o sinal . – . – . – separa os graus dos minutos. Todavia, isto não deve necessariamente aplicar-se ao serviço móvel marítimo por satélite. Quando tal seja possível na prática, podem ser indicados o azimute verdadeiro e a distância em milhas marítimas em relação a um ponto geográfico conhecido.

3096 (2) Como regra geral, qualquer aeronave transmite na sua mensagem de perigo, se para isso tiver tempo, as informações seguintes:

Posição aproximada e hora da estimativa;
Rumo em graus (indicando se se trata do rumo magnético ou verdadeiro);
Velocidade no indicador em relação ao ar;
Altitude;
Tipo de aeronave;
Natureza do perigo e género de assistência desejada;
Quaisquer outras informações que facilitem o salvamento (especialmente a intenção do comandante de fazer, por exemplo, uma amaragem forçada ou uma aterragem com todos os riscos).

3097 (3) Como regra geral, uma aeronave em voo assinala a sua posição em radiotelefonia ou em radiotelegrafia:

Quer pela sua latitude e longitude (Greenwich), empregando algarismos para os graus e minutos, acompanhados de uma das palavras NORTH ou SOUTH e de uma das palavras EAST ou WEST;
Quer pelo nome da localidade mais próxima e da sua distância aproximada em relação a esta, acompanhada, segundo o caso, de uma das palavras NORTH, SOUTH, EAST ou WEST, ou, eventualmente, quando for possível, na prática, de palavras que indiquem as direcções intermédias.

3098 (4) Todavia, em radiotelegrafia, as palavras NORTH ou SOUTH, EAST ou WEST, indicadas nos n.ºs **3095** e **3097**, podem ser substituídas pelas letras N ou S e E ou W.

SECÇÃO V

Procedimentos

3099 A) Radiotelegrafia

3100 § 7. (1) O procedimento radiotelegráfico de perigo compreende:

3101 O sinal de alarme seguido consecutivamente de:

3102 Chamada de perigo e um intervalo de dois minutos;
3103 Chamada de perigo;
3104 Mensagem de perigo;
3105 Dois traços de dez a quinze segundos cada um;
3106 Indicativo de chamada da estação em perigo.

3107 (2) Todavia, quando o tempo tiver importância vital, pode omitir-se ou encurtar-se a segunda parte deste procedimento (n.º **3102**) ou mesmo a primeira e segunda partes (n.ºs **3101** e **3102**). A primeira e segundas partes podem igualmente ser omitidas em circunstâncias em que se não julge necessário a transmissão do sinal de alarme.

3108 § 8.(1) A mensagem de perigo da chamada de perigo, repete-se com intervalos, especialmente durante os períodos de silêncio no n.º **3038** para radiotelegrafia, até se obter resposta.

3109 (2) Todavia, os intervalos devem ser suficientemente longos para que as estações que se preparam para responder tenham tempo para pôr os seus aparelhos emissores em funcionamento.

3110 (3) Pode igualmente repetir-se o sinal de alarme, se necessário.

3111 § 9. As transmissões indicadas nos n.ºs **3105** e **3106**, cuja finalidade é permitir às estações radiogoniométricas determinar a posição da estação em perigo, podem ser repetidas a intervalos frequentes, em caso de necessidade.

3112 § 10. No caso em que a estação móvel não receba resposta a uma mensagem de perigo transmitida na frequência de perigo, pode repetir a mensagem em qualquer outra frequência disponível por meio da qual possa chamar a atenção.

3113 § 11. Imediatamente antes de uma aterragem com todos os riscos ou antes de uma aterragem ou amaragem forçada de uma aeronave, bem como antes do abandono total de um navio ou de uma aeronave, colocam-se os aparelhos radioeléctrivos em posição de emissão contínua, se parecer necessário e as circunstâncias o permitirem.

3114 B) Radiotelefonia

3115 § 12. O procedimento radiotelefónico de perigo compreende:

3116 O sinal de alarme (sempre que possível) seguido consecutivamente de:

3117 Chamada de perigo;

3118 Mensagem de perigo.

3119 § 13. Depois de transmitir em telefonia a sua mensagem de perigo, a estação móvel pode ser convidada a transmitir sinais apropriados seguidos do seu indicativo de chamada ou de qualquer outra forma de identificação, a fim de permitir às estações radiogoniométricas determinar a sua posição. Este pedido pode ser repetido a intervalos próximos, em caso de necessidade.

3120 § 14. (1) A mensagem de perigo, precedida da chamada de perigo, é repetida a intervalos, especialmente durante os períodos de silêncio previstos no n.º **3052** para a radiotelefonia, até que se receba resposta.

3121 (2) Todavia, os intervalos devem ser suficientemente longos para que as estações que se preparam para responder tenham tempo de pôr os seus aparelhos emissores em funcionamento.

3122 (3) Esta repetição é precedida do sinal de alarme, sempre que possível.

3123 § 15. No caso em que a estação móvel em perigo não receba resposta de perigo transmitida na frequência de perigo, poderá repetir a mensagem em qualquer outra frequência disponível por meio da qual possa chamar a atenção.

3124 § 16. Imediatamente antes de uma aterragem com todos os riscos ou antes de uma aterragem ou amaragem forçada de uma aeronave, bem como antes do abandono total de um anvio ou de uma aeronave, colocam-se os aparelhos radioeléctricos em posição de emissão contínua, se parecer necessário e as circustâncias o permitirem.

SECÇÃO VI

Entendido de uma mensagem de perigo

3125 § 17. (1) As estações do serviço móvel que receberem uma mensagem de perigo de uma estação móvel que se encontre, sem dúvida possível nas suas proximidades devem dar o entendido imediatamente.

3126 (2) Todavia, nas zonas em que se possam estabelecer ligações seguras com uma ou mais estações costeiras convém que as estações de navio deixem passar um pequeno espaço de tempo antes de dar o entendido, de forma que uma estação costeira possa transmitir o seu entendido.

3127 (3) As estações do serviço móvel que receberem uma mensagem de perigo de uma estação móvel que, sem dúvida possível, não se encontre nas suas proximidades devem deixar decorrer um pequeno espaço de tempo antes de darem o entendido, a fim de permitir às estações mais próximas da estação móvel em perigo darem o entendido sem interferência.

3128 (4) Todavia, as estações do serviço móvel marítimo que recebam uma mensagem de perigo de uma estação móvel que, sem qualquer dúvida possível, esteja muito longe, não são obrigadas a dar o entendido, excepto no caso previsto no n.º **3160**.

3129 § 18. O entendido de uma mensagem de perigo é dado pela seguinte forma:

3130 *a*) Em radiotelegrafia:

O sinal de perigo $\overline{\text{SOS}}$;
O indicativo de chamada da estação que emite a mensagem de perigo (emitido três vezes);
A palavra DE;
O indicativo de chamada da estação que dá o entendido (emitido três vezes);
O grupo RRR;
O sinal de perigo $\overline{\text{SOS}}$.

3131 *b*) Em radiotelefonia:

O sinal de perigo MAYDAY;
O indicativo de chamada ou qualquer outra identificação da estação que emite a mensagem de perigo (pronunciado três vezes);
A palavra AQUI (ou DE soletrada empregando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);

O indicativo de chamada ou qualquer outra identificação da estação que dá o entendido (pronunciado três vezes);
A palavra REÇU (ou RRR soletrada, empregando as palavras de código ROMEO ROMEO ROMEO em caso de dificuldades linguísticas);
O sinal de perigo MAYDAY.

3132 § 19. (1) Qualquer estação móvel que der o entendido de uma mensagem de perigo deve, por ordem do comandante ou da pessoa responsável do navio, aeronave ou veículo, fornecer, logo que possível, as seguintes indicações pela ordem indicada:

O seu nome;
A sua posição, pela forma descrita nos n.ºs **3095, 3097 e 3098;**
A velocidade com que se dirige para a estação móvel em perigo e o espaço de tempo aproximadamente de que necessitará para a alcançar;
Além disso, se a posição do navio em perigo parecer duvidosa, convirá que as estações de navio transmitam igualmente, se o conhecerem, o azimute verdadeiro do navio em perigo, precedido da abertura QTE (para a classificação do azimute, v. o apêndice 41).

3133 (2) Antes de emitir a mensagem descrita no n.º **3132,** a estação deve certificar-se de que não vai interferir as emissões de outras estações em melhor posição para prestar socorro imediato à estação em perigo.

SECÇÃO VII

Tráfego de perigo

3134 § 20. O tráfego de perigo compreende todas as mensagens relativas ao socorro imediato necessário à estação móvel em perigo.

3135 § 21. No tráfego de perigo transmite-se o sinal de perigo antes da chamada e o início do preâmbulo de qualquer radiotelegrama.

3136 § 22. A orientação do tráfego de perigo pertence à estação móvel em perigo ou à estação que, por aplicação das disposições da secção VIII do presente artigo, emitiu a mensagem de perigo. Essas estações podem, todavia, ceder a uma outra estação a orientação do tráfego de perigo.

3137 § 23. A estação em perigo ou a estação que orienta o tráfego de perigo pode impor o silêncio, quer a todas as estações do serviço móvel da região, quer a uma estação que perturbe o tráfego de perigo. Consoante o caso, dirigirá essas instruções a «todos» (CQ) ou somente a uma estação. Em ambos os casos usará:

3138 *a*) Em radiotelegrafia, a abreviatura QRT, seguida do sinal de perigo $\overline{\text{SOS}}$;

3139 *b*) Em radiotelefonia, o sinal SILENCE MAYDAY, pronunciado como palavras francesas *silence m'aider*.

3140 § 24. Quando o julge indispensável, qualquer estação de serviço móvel próxima do navio, da aeronave ou do veículo em perigo pode igualmente impor silêncio. Empregará para esse efeito:

3141 *a*) Em radiotelegrafia, a abreviatura QRT, seguida da palavra DETRESSE e do seu próprio indicativo de chamada;

3142 *b*) Em radiotelefonia, a palavra SILENCE, pronunciada como palavra francesa *silence*, seguida da palavra DETRESSE e do seu indicativo de chamada.

3143 § 25. (1) Em radiotelegrafia, o emprego do sinal QRT $\overline{\text{SOS}}$ deve ficar reservado à estação móvel em perigo e à estação que exerce a orientação do tráfego de perigo.

3144 (2) Em radiotelefonia, o emprego do sinal SILENCE MAYDAY fica reservado à estação móvel em perigo e à estação que exerce a orientação do tráfego de perigo.

3145 § 26. (1) Qualquer estação de serviço móvel que tenha o conhecimento de um tráfego de perigo e que não possa ela própria prestar assistência à estação em perigo deverá, contudo, acompanhar o tráfego até se certificar de que foi prestado socorro.

3146 (2) Enquanto não receberem uma mensagem indicando que podem retomar o trabalho normal (v. o n.º **3150**), é interdito a todas as estações que tenham conhecimento desse tráfego mas que nele não participam emitir nas frequências em que tem lugar o tráfego de perigo.

3147 § 27. Se uma estação do serviço móvel, ao mesmo que acompanha o tráfego de perigo, tiver possibilidade de continuar o seu serviço normal, pode fazê-lo, desde que o tráfego de perigo esteja bem estabelecido, mas com a condição de observar as disposições do n.º **3146** e de não pertubar o tráfego de perigo.

3148 § 28. Em casos muito excepcionais e se não resultar qualquer interferência ou atraso no escoamento do tráfego de perigo, podem ser anunciadas mensagens de urgência e de segurança durante um período morto do tráfego de perigo, de preferência por estações costeiras, numa frequência de perigo. Esse anúncio deve ser acompanhado da indicação na frequência de funcionamento em que a mensagem de urgência ou segurança será transmitida. Neste

caso, convém que os sinais previstos nos n.os **3196, 3197, 3221** e **3222** não sejam transmitidos mais de uma vez (exemplo: XXX DE ABC QSW...).

3149 § 29. Uma estação terrestre ou uma estação terrena do serviço móvel marítimo por satélite situada num ponto fixo determinado, ao receber uma mensagem de perigo, deve tomar sem demora as medidas necessárias para avisar as autoridades competentes responsáveis pela operação dos meios de salvamento.

3150 § 30. (1) Quando haja terminado o seu tráfego de perigo numa frequência que foi utilizada para o tráfego de perigo, a estação que teve a seu cargo a orientação desse tráfego transmite nessa mesma frequência uma mensagem endereçada «a todos» (CQ), indicando que pode recomeçar o trabalho normal.

3151 (2) Quando não seja necessário manter o silêncio completo numa frequência utilizada para o tráfego de perigo, a estação que tem a seu cargo a orientação desse tráfego transmite nessa mesma frequência uma mensagem endereçada «a todos» (CQ), indicando que pode recomeçar um trabalho limitado.

3152 (3):

a) Em radiotelegrafia, a mensagem mencionada no n.º **3150** apresenta a forma seguinte:

O sinal de perigo $\overline{\text{SOS}}$;
A chamada «a todos» CQ (emitida três vezes);
A palavra DE;
O indicativo de chamada da estação que emite a mensagem;
A hora da aceitação da mensagem;
O nome e indicativo da chamada da estação móvel que estava em perigo;
A abreviatura regulamentar QUM.

3153 *b*) Em radiotelegrafia, a mensagem mencionada no n.º **3151** apresenta a forma seguinte:

O sinal de perigo $\overline{\text{SOS}}$;
A chamada «a todos» CQ (emitida três vezes);
A palavra DE;
O indicativo de chamada da estação que emite a mensagem;
A hora de aceitação da mensagem;
O nome e o indicativo de chamada da estação móvel que está em perigo;
A abreviatura regulamentar QUZ.

3154 (4):

b) Em radiotelefonia, a mensagem no n.º **3250** apresenta a forma seguinte:

O sinal de perigo MAYDAY;
A chamada «a todos» ou CQ (soletrada, empregando as palavras do código CHARLIE QUEBEC) pronunciada três vezes;
A palavra AQUI (ou DE soletrada, empregando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
O indicativo de chamada ou de qualquer outra identificação da estação que emite a mensagem;
A hora de aceitação da mensagem;
O nome e indicativo de chamada da estação móvel que estava em perigo;
As palavras SILENCE FINI pronunciadas como palavras francesas *silence fini.*

3155 *b*) Em radiotelefonia, a mensagem mencionada no n.º **3151** apresenta a forma seguinte:

O sinal de perigo MAYDAY;
A chamada «a todos» ou CQ (soletrada utilizando as palavras do código CHARLIE QUEBEC) pronunciada três vezes;
A palavra AQUI (ou DE soletrada, empregando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
O indicativo de chamada ou de qualquer outra identificação da estação que emite a mensagem;
A hora de aceitação da mensagem;
O nome e indicativo de chamada da estação móvel que estava em perigo;
A palavra PRUDENCE pronunciada como a palavra francesa *prudence.*

3156 § 31. Se a pessoa responsável por uma estação em perigo que cedeu a uma outra estação a direcção do tráfego de perigo considerar que já não se justifica manter o silêncio, deverá imediatamente informar do facto a estação que orienta o tráfego de perigo, a qual actuará então em conformidade com as disposições do n.º **3150.**

Secção VIII

Transmissão de uma mensagem de perigo por uma estação que não se encontra em perigo

3157 § 32. Uma estação móvel ou uma estação terrestre que tem conhecimento de que está em perigo uma estação móvel deverá transmitir uma mensagem de perigo nos seguintes casos:

3158 *a*) Se a estação em perigo não estiver em condições de transmitir ela própria a mensagem de perigo;

3159 *b*) Se o comandante ou pessoa responsável pelo navio, aeronave ou outro veículo não em perigo, ou ainda o responsável pela estação terrestre, calcular que são necessários outros socorros;

3160 *c*) Se a estação não tiver possibilidades de prestar socorros mas tiver ouvido uma mensagem de perigo de que não foi dado entendido por outras estações.

3161 § 33.(1) A transmissão de uma mensagem de perigo nas condições descritas nos n.os **3158** a **3160** efectua-se numa ou em várias das frequências internacionais de perigo (500 kHz, 2182 kHz e 156,8 MHz) ou ainda em qualquer outra frequência que possa ser utilizada em caso de perigo (v. os n.os **2970, 2971, 2973, 2975, 2994, 2995** e **3000**).

3162 (2) A transmissão da mensagem de perigo é sempre precedida da chamada que se indica a seguir. Além disso, sempre que possível, essa chamada será precedida do sinal de alarme radiotelegráfico ou radiotelefónico.

3163 (3) Essa chamada compreende:

3164 *a*) Em radiotelegrafia:

O sinal $\overline{\text{DDD}}$ $\overline{\text{SOS}}$ $\overline{\text{SOS}}$ $\overline{\text{SOS}}$ $\overline{\text{DDD}}$;
A palavra DE;
O indicativo de chamada da estação que transmite (emitido três vezes).

3165 *b*) Em radiotelefonia:

O sinal MAYDAY RELAY, pronunciado como a expressão frances *m'aider relais* (pronunciado três vezes);
A palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
O indicativo de chamada ou qualquer outra identificação da estação que transmite (pronunciado três vezes).

3166 § 34. Quando se utilizar o sinal de alarme radiotelegráfico, um intervalo de dois minutos separará, o sinal de alarme, quando for julgado necessário, a chamada mencionada no n.º **3164.**

3167 § 35.Quando uma estação de serviço móvel emitir uma mensagem de perigo nas condições especificadas no n.º **3160**, deve tomar as providências para informar as autoridades susceptíveis de prestar socorro.

3168 § 36.Uma estação de navio não deve dar o entendido de uma mensagem de perigo transmitida por uma estação costeira nas condições indicadas nos n.os **3157** a **3160** antes de o comandante ou de a pessoa responsável ter confirmado que essa estação de navio está em condições de prestar socorro.

3169 a 3195 *(Não atribuídos.)*

ARTIGO 40

Transmissões de urgência e de segurança e transportes sanitários

SECÇÃO I

Sinal e mensagens de urgência

3196 § 1. (1) Em radiotelegrafia, o sinal de urgência consiste em três repetições do grupo «XXX», transmitidoseparando bem as letras de cada grupo e os grupos sucessivos. Emite-se antes da chamada.

3197 (2) Em radiotelefonia, o sinal de urgência consiste em três repetições do grupo «PAN PAN», sendo a palavra PAN pronunciada como a palavra francesa *panne*. Emite-se antes da chamada.

3198 § 2. (1) O sinal de urgência só pode transmitir-se com autorização do comandante ou da pessoa responsável pelo navio, pela aeronave ou por qualquer outro veículo em que se encontre a estação móvel ou a estação terrena móvel so serviço móvel marítimo por satélite.

3199 (2) O sinal de urgência só pode ser transmitido por uma estação terrestre ou por uma estação terrena do serviço móvel marítimo por satélite situada num ponto fixo determinado com a aprovação da autoridade responsável.

3200 § 3. (1) O sinal de urgência indica que a estação que chama tem para transmitir uma mensagem muito urgente relativa à segurança de um navio, de uma aeronave, de um outro veículo ou de uma pessoa.

3201 (2) O sinal de urgência e a mensagem que se segue são transmitidos numa das frequências internacionais de perigo (500 kHz, 2182 kHz, 156,8 MHz) ou em qualquer outra frequência que possa ser utilizada em caso de perigo.

3202 (3) Todavia, no serviço móvel marítimo, a mensagem é transmitida numa frequência de trabalho:

a) Se se tratar de uma mensagem comprida ou de um parecer médico; ou
b) Nas zonas de tráfego intenso, se se tratar da repetição de uma mensagem transmitida da acordo com as disposições do n.º **3201.**

No fim da chamada deverá ser dada uma indicação para esse efeito.

3203 (4) O sinal de urgência tem prioridade sobre todas as outras comunicações, excepto as de perigo. Todas as estações que oiçam o sinal de urgência deverão ter o cuidado de não interferir a transmissão da mensagem que se lhe segue.

3204 (5) No serviço móvel marítimo, as mensagens de urgência podem ser endereçadas quer a todas as estações quer a uma estação determinada.

3205 § 4.As mensagens precedidas pelo sinal de urgência devem, como regra geral, ser emitidas em linguagem clara.

3206 § 5. (1) As estações móveis que recebam o sinal de urgência devem ficar à escuta durante três minutos, pelo menos. Decorrido esse tempo, se não for ouvida qualquer mensagem de urgência, deve ser avisada, se possível, uma estação terrestre da recepção do sinal de urgência. O serviço normal poderá ser retomado em seguida.

3207 (2) Todavia, as estações terrestres e móveis que estejam em comunicação em frequências diferentes das utilizadas para transmissão do sinal de urgência e da chamada que se lhe segue podem continuar sem interrupção o seu trabalho normal, a não ser que se trate de mensagem dirigida a «a todos» (CQ).

3208 § 6. Quando o sinal de urgência precedeu a emissão de uma mensagem «a todos» (CQ) que inclua medidas a tomar pelas estações que recebam essa mensagem, a estação responsável pela emissão deve anulá-la logo que saiba já não ser necessário dar-lhe andamento. Essa mensagem de anulação deve ser igualmente uma mensagem «a todos» (CQ).

SECÇÃO II

Transportes sanitários

3209 § 7. A expressão «transportes sanitários», definida nas Convenções de Genebra de 1949 e nos Protocolos Adicionais, abrange qualquer meio de transporte, terrestre, marítimo ou aéreo, militar ou civil, permanente ou temporário, destinado exclusivamente ao transporte sanitário, colocado sob a direcção de uma autoridade competente de uma Parte num conflito.

3210 § 8. Para fins de anúncio e de identificação de transportes sanitários que estejam protegidos em conformidade com as Convenções acima mencionadas, qualquer transmissão completa dos sinais de urgência descritos nos n.os **3196** e **3197** é seguida, em radiotelegrafia, pela junção apenas do grupo «YYY» e, em radiotelefonia, pela junção apenas da palavra «MEDICAL» pronunciada como em francês.

3211 § 9. As frequências indicadas no n.º **3201** podem ser utilizadas pelos transportes sanitários para fins de auto-identificação e de estabelecimento das comunicações. Logo que seja possível, na prática, dever transferir-se a comunicação para uma frequência de trabalho apropriada.

3212 § 10. A utilização dos sinais descritos no n.º **3210** indica que a mensagem que se segue diz respeito a um transporte sanitário protegido. Essa mensagem deve conter os dados seguintes:

3213 *a*) Indicativo de chamada ou qualquer outro meio reconhecido de identificação do veículo de transporte sanitário;

3214 *b*) A posição do veículo de transporte sanitário;

3215 *c*) O número e o tipo de veículos de transporte sanitário;

3216 *d*) O itinerário previsto;

3217 *e*) A duração calculada da deslocação e as horas de partida e de chegada previstas, consoante o caso;

3218 *f*) Qualquer outra informação, tal como a altitude de voo, frequências radioeléctricas de escuta, línguas utilizadas, modos e códigos dos sistemas de radar secundários de vigilância.

3219 § 11. As disposições da secção I do presente artigo aplicam-se, quando necessário, à utilização dos sinais de urgência por transportes sanitários.

3220 § 12. A utilização das radiocomunicações para anunciar e identificar os transportes sanitários é facultativa. Todavia, se forem utilizadas, devem aplicar-se as disposições do presente Regulamento e, especialmente, as da presente secção e as dos artigos 37 e 38.

SECÇÃO III

Sinal e mensagens de segurança

3221 § 13. Em radiotelegrafia, o sinal de segurança consiste em três repetições do grupo «TTT», transmitido separando bem as letras de cada grupo e os grupos sucessivos. O sinal de segurança transmite-se antes da chamada.

3222 (2) Em radiotelefonia, o sinal de segurança consiste em três repetições da palavra «SÉCURITÉ», pronunciada distintamente como em francês. Transmite-se antes da chamada.

3223 § 14. (1) O sinal de segurança anuncia que a estação vai transmitir um aviso importante aos navegantes ou uma prevenção meteorológica importante.

3224 (2) O sinal de segurança e a chamada são transmitidos numa ou em várias das frequências internacionais de perigo (500 kHz, 2182 kHz, 156,8 MHz) ou em qualquer outra frequência que possa ser utilizada em caso de perigo.

3225 (3) Convém que a mensagem de segurança que se segue à chamada seja transmitida numa frequência de trabalho. No fim da chamada deve dar-se uma indicação apropriada para o efeito.

3226 (4) No serviço móvel marítimo, as mensagens de segurança são, como regra geral, endereçadas a todas as estações. Todavia, em certos casos podem ser endereçadas a uma dada estação.

3227 § 15. (1) Com excepção das mensagens transmitidas a hora fixa, o sinal de segurança, quando empregado no serviço móvel marítimo, deve transmitir-se cerca do fim do primeiro período de silêncio que se apresente

(v. o n.º **3038** para a radiotelegrafia e o n.º **3052** para a radiotelefonia). A mensagem transmite-se imediatamente depois do período de silêncio.

3228 (2) Nos casos previstos nos n.os **3328**, **3331** e **3335**, o sinal de segurança e a mensagem que se lhe segue deverão ser transmitidos no mais curto prazo possível, mas devem repetir-se no fim do primeiro período de silêncio seguinte.

3229 § 16. Todas as estações que recebam o sinal de segurança devem escutar a mensagem de segurança até obterem a certeza de que essa mensagem não lhes diz respeito. Não devem fazer qualquer emissão susceptível de interferir a mensagem.

3230 a 3254 *(Não atribuídos.)*

ARTIGO 41

Sinais de alarme e de prevenção

SECÇÃO I

Sinais das radiobalizas de localização de sinistros

3255 § 1. O sinal de radiobaliza de localização de sinistros compõe-se:

3256 *a*) Em ondas hectométricas, isto é, na frequência de 2182 kHz (1):

3257 1) De uma emissão modulada pela frequência acústica de 1300 Hz, manipulada de modo que a relação entre a duração da emissão e a duração do silêncio seja igual ou superior à unidade; a duração da emissão estará compreendida entre um e cinco segundos; *ou*

3258 2) Do sinal de alarme radiotelefónico (v. o n.º **3270**) seguido da letra B em código Morse, ou do indicativo de chamada do navio a que pertence a radiobaliza, ou de ambas as informações transmitidas por manipulação de uma onda portadora modulada pela frequência acústica de 1300 Hz ou de 2200 Hz;

3259 *b*) Em ondas métricas, isto é, nas frequências de 121,5 MHz e 243 MHz, de um sinal cujas características devem estar de acordo com as recomendadas pelas organizações mencionadas na Resolução n.º 601.

3260 § 2. (1) Os sinais das radiobalizas de localização de sinistros têm por fim essencial facilitar a determinação da posição de náufragos durante as operações de busca e salvamento.

3261 (2) Estes sinais indicam que uma ou mais pessoas estão em perigo, que elas se não encontram provavelmente já a bordo de um navio ou de uma aeronave e que possivelmente já não dispõem de aparelho receptor.

3262 (3) Qualquer estação de serviço móvel que receba um desses sinais quando não esteja em curso qualquer tráfego de perigo ou de urgência deve considerar como aplicáveis as disposições dos n.os **3157** e **3158**.

3263 § 3. (1) As radiobalizas e pequena potência (tipo L) apenas utilizam o sinal definido no n.º **3257**, o qual deve ser emitido continuamente.

3264 (2) As radiobalizas de grande potência (tipo H) podem emitir quer o sinal definido no n.º **3257** quer o definido no n.º **3258**, segundo um ciclo de manipulação constituído por um sinal de manipulação de duração compreendida entre trinta e cinquenta segundos, seguido de um período de silêncio com duração de trinta a sessenta segundos.

3265 (3) Todavia, os ciclos de manipulação especificados nos n.os **3263** e **3264** podem, se as administrações o desejarem, ser interrompidos para permitir emissões vocais.

3266 § 4. (1) O material destinado a transmitir sinais de radiobalizas de localização de sinistros na frequência portadora 2182 kHz deve satisfazer às especificações dadas no apêndice 37.

3267 (2) O material destinado a emitir nas frequências 121,5 MHz e 243 MHz os sinais das radiobalizas de localização de sinistros deve satisfazer às recomendações e normas das organizações mencionadas na Resolução n.º 601.

SECÇÃO II

Sinais de alarme radiotelegráfico e radiotelefónico

3268 § 5. (1) O sinal de alarme radiotelegráfico compõe-se de uma série de 12 traços transmitidos num minuto, sendo a duração de cada traço de quatro segundos e o intervalo entre dois traços consecutivos de um segundo. Pode transmitir-se à mão, mas recomenda-se a sua transmissão por meio de aparelho automático.

3256.1 (1) No Japão existem radiobalizas de localização de sinistros que utilizam emissões da classe A1A para emitir sinais de perigo e de identificação em frequências compreendidas entre 2089,5 kHz e 2092,5 kHz.

3269 (2) Qualquer estação de navio que funcione nas faixas compreendidas entre 405 kHz e 535 kHz e não disponha de uma aparelho automático para a emissão do sinal de alarme radiotelegráfico deve ter instalado permanentemente um relógio que indique nitidamente os segundos, munido, de preferência, de um ponteiro de segundos que dê uma volta por minuto. Este relógio deve estar colocado de modo a ficar visível da mesa de manipulação, para que o operador possa, seguindo-o com os olhos, dar sem dificuldade aos diferentes sinais elementares do sinal de alarme a sua duração normal.

3270 § 6. (1) O sinal de alarme radiotelefónico compõe-se de dois sinais sensivelmente sinusoidais de frequência audível emitidos alternadamente. Um deles tem uma frequência de 2200 Hz e o outro uma frequência de 1300 Hz. Ambos são emitidos durante 250 milissegundos.

3271 (2) Quando é produzido automaticamente, o sinal de alarme radiotelefónico deve ser emitido continuamente durante um mínimo de trinta segundos e um máximo de um minuto. Se for produzido por outros meios, este sinal deve ser emitido de modo tão contínuo quanto praticamente possível durante cerca de um minuto.

3272 (3) O sinal de alarme radiotelefónico emitido por uma estação costeira deve ser o que é descrito nos n.os **3270** e **3271** e poderá ser seguido de um sinal único em 1300 Hz com a duração de dez segundos.

3273 § 7. Estes sinais têm por fim:

3274 *a*) Em radiotelegrafia, fazer funcionar os dispositivos automáticos de alarme, cuja finalidade é chamar a atenção do operador quando não esteja assegurada a escuta na frequência de perigo;

3275 *b*) Em radiotelefonia, chamar a atenção da pessoa que assegura a escuta ou fazer funcionar os dispositivos automáticos que dão o alarme ou põem em funcionamento um altifalante silencioso para que este difunda a mensagem que se vai seguir.

3276 § 8. (1) Esses sinais apenas devem ser utilizados para anunciar:

3277 *a*) Que se segue uma chamada ou uma mensagem de perigo; ou

3278 *b*) A emissão de um aviso urgente de ciclone, o qual deve ser precedido do sinal de segurança (v. os n.os **3221** e **3222**). Neste caso, só podem ser utilizados pelas estações costeiras devidamente autorizadas pelo seu governo; ou

3279 *c*) Que uma ou mais pessoas caíram ao mar. Neste caso, só podem ser utilizados se for necessário o auxílio de outros navios e se o emprego apenas do sinal de urgência não permitir que esse auxílio seja obtido em condições satisfatórias, mas o sinal de alarme não deve ser repetido por outras estações. A mensagem deve ser precedida do sinal de urgência (v. os n.os **3196** e **3197**).

3280 (2) Nos casos previstos nos n.os **3278** e **3279**, convém que um intervalo de dois minutos separe, se possível, o fim do sinal de alarme radiotelegráfico do início do aviso ou da mensagem.

3281 § 9. Os dispositivos automáticos destinados à recepção dos sinais de alarme radiotelegráfico e radiotelefónico devem satisfazer às condições especificadas no apêndice 36.

3282 § 10. Antes de aprovar, para uso dos navios, um tal dispositivo automático, a administração de que dependem esses navios deve certificar-se, por ensaios práticos feitos em condições equivalentes às que se apresentam na prática (interferências, vibrações, etc.), de que o aparelho satisfaz às prescrições do presente Regulamento.

Secção III

Chamada selectiva a todos os navios

3283 § 11. As características da «chamada a todos os navios» no sistema de chamada selectiva, reservada exclusivamente ao alarme, são indicadas no apêndice 39.

Secção IV

Sinal de aviso à navegação

3284 § 12. (1) O sinal de aviso à navegação é constituído por uma frequência acústica sensivelmente sinusoidal de 2200 Hz, interrompida de tal modo que as durações do sinal acústico e do intervalo, sejam de 250 milissegundos cada uma.

3285 (2) Convém que este sinal seja transmitido pelas estações costeiras continuamente durante quinze segundos antes da transmissão dos avisos de grande importância para a navegação nas faixas de ondas hectométricas do serviço móvel marítimo radiotelefónico.

3286 (3) Este sinal tem por objectivo chamar a atenção da pessoa que assegura a escuta por meio de um altifalante ou de um altifalante de filtros, ou fazer funcionar um dispositivo automático que põe em funcionamento um altifalante silencioso para que este difunda a mensagem que se vai seguir.

3287 a 3311 *(Não atribuídos.)*

ARTIGO 42

Serviços especiais relativos à segurança

SECÇÃO I

Mensagens meteorológicas

3312 § 1. (1) As mensagens meteorológicas compreendem:

3313 *a*) Mensagens destinadas ao serviço de meteorologia oficialmente encarregado da previsão do tempo, utilizadas especialmente para a protecção das navegações marítima e aeronáutica;

3314 *b*) Mensagens originárias desses serviços meteorológicos e destinadas especialmente:

3315 Às estações de navio;
3316 À protecção das aeronaves;
3317 Ao público.

3318 (2) As informações contidas nessas mensagens podem ser:

3319 *a*) Observações a hora fixa;
3320 *b*) Avisos de fenómenos perigosos;
3321 *c*) Previsões e avisos;
3322 *d*) Exposições da situação meteorológica geral.

3323 § 2. (1) Os diferentes serviços meteorológicos nacionais colaboram para elaborar programas comuns de emissões, de modo a utilizar os emissores melhor colocados para servir as regiões interessadas.

3324 (2) Convém que as observações meteorológicas compreendidas nas categorias mencionadas nos n.os **3313** a **3316** sejam redigidas num código meteorológico internacional, quer sejam transmitidas por estações móveis, quer se destinem a elas.

3325 § 3. Para a transmissão de mensagens de observação destinadas a um serviço oficial de meteorologia devem ser utilizadas as frequências postas à sua disposição para as necessidades de meteorologia, em conformidade com os acordos regionais estabelecidos pelos serviços interessados no emprego dessas frequências.

3326 § 4. (1) As mensagens meteorológicas destinadas especialmente ao conjunto das estações de navio são emitidas, em princípio, segundo um horário determinado e, tanto quanto possível, às horas em que possam ser recebidas pelas estações de navio providas de um só operador. Em radiotelegrafia, a velocidade de transmissão não deve ultrapassar 16 palavras por minuto.

3327 (2) Durante as transmissões «a todos» das mensagens meteorológicas destinadas às estações do serviço móvel marítimo, todas as estações deste serviço, cujas estações possam interferir a recepção dessas mensagens devem guardar silêncio, a fim de permitir que todas as estações que o desejem recebam as referidas mensagens.

3328 (3) As mensagens de avisos meteorológicos destinadas ao serviço móvel marítimo transmitem-se imediatamente, e devem ser repetidas no fim do primeiro período de silêncio a seguir à sua recepção (v. os n.os **3038** e **3052**, assim como durante o período de difusão seguinte previsto na nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais. Serão precedidas do sinal de segurança e transmitidas nas frequências apropriadas (v. o n.º **3224**).

3329 (4) Além dos serviços regulares de informação previstos nas alíneas precedentes, as administrações tomarão as proveniências necessárias para que certas estações comuniquem, a pedido, mensagens meteorológicas às estações do serviço móvel marítimo.

3330 (5) As disposições dos n.os **3326** a **3329** são aplicáveis ao serviço móvel aeronáutico, na medida em que não estejam em contradição com arranjos especiais mais precisos que assegurem à navegação aérea uma protecção pelo menos igual.

3331 § 5. (1) As mensagens provenientes de estações móveis e que contenham informações sobre a presença de ciclone deverão ser transmitidas, no mais curto prazo possível, às outras estações móveis vizinhas e às autoridades competentes do primeiro ponto da costa com que se possa estabelecer contacto.

3332 (2) Qualquer estação móvel pode escutar, par seu próprio uso, as mensagens de observações meteorológicas emitidas por outras estações móveis, mesmo quando elas sejam endereçadas a um serviço meteorológico nacional.

3333 (3) As estações dos serviços móveis que transmitem observações meteorológicas endereçadas a um serviço meteorológico nacional não são obrigadas a transmiti-las a outras estações. Todavia, fica autorizada a permuta entre estações móveis, a pedido, de informações relativas ao estado do tempo.

SECÇÃO II

Avisos à navegação marítima

3334 § 6. As prescrições dos n.os **3326** a **3330**, inclusive, são aplicáveis aos avisos à navegação marítima.

3335 § 6. As mensagens que contenham informações sobre a presença de gelos perigosos, destroços perigosos ou qualquer outro perigo iminente para a navegação marítima deverão transmitir-se, no mais curto prazo pos-

sível, às outras estações de navio vizinhas e às autoridades competentes do primeiro ponto da costa com que se possa estabelecer contacto. Estas transmissões deverão ser precedidas do sinal de segurança.

3336 § 8. As administrações poderão, quando o julguem conveniente e com o consentimento do expedidor, autorizar as suas estações terrestres a comunicar informações relativas às avarias ou sinistros marítimos, ou que apresentem um interesse geral para a navegação, às agências de informação marítima aceites por elas e segundo condições também por elas fixadas.

Secção III

Pareceres médicos

3337 § 9. As estações móveis que desejem receber um parecer médico podem obtê-lo por intermédio das estações terrestres indicadas como assegurando tal serviço na nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais.

3338 § 10. Os radiotelegramas e as conversações radiotelefónicas relativos aos pareceres médicos podem ser precedidos do sinal de urgência apropriado (v. os n.os **3198** a **3208**).

3339 a 3363 *(Não atribuídos.)*

CAPÍTULO X

Serviço móvel aeronáutico

ARTIGO 43

Autoridade da pessoa responsável pelas estações móveis no serviço móvel aeronáutico

3364 § 1. O serviço de uma estação móvel depende da autoridade superior da pessoa responsável pela aeronave ou qualquer outro veículo em que se encontre a estação móvel.

3365 § 2. A pessoa investida dessa autoridade deve exigir dos operadores o cumprimento do presente Regulamento que a estação móvel, colocada sob a responsabilidade de um operador, seja sempre utilizada como estipula este Regulamento.

3366 § 3. A pessoa responsável assim como todas as pessoas que possam ter conhecimento do texto ou simplesmente da existência de radiotelegramas ou de qualquer outra informação obtida por intermédio do serviço de radiocomunicação, ficam obrigadas a guardar e assegurar o sigilo das correspondências.

3367 a 3391 *(Não atribuídos.)*

ARTIGO 44

Certificados dos operadores das estações de aeronave

Secção I

Disposições gerais

3392 § 1. (1) O serviço de qualquer estação radiotelegráfica de aeronave deve se assegurado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação.

3393 (2) O serviço de qualquer estação radiotelefónica de aeronave deve ser orientado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação. Com reserva desta disposições, a instalação radiotelefónica poderá ser utilizada por outras pessoas além do titular do certificado.

3394 (3) O serviço dos aparelhos automáticos de telecomunicação (1) instalados numa estação de aeronave deve ser orientado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação. Com reserva desta disposição, podem utilizar esses aparelhos outras pessoas além do titular do certificado. Se o funcionamento desses aparelhos se basear essencialmente no emprego dos sinais do código Morse descritos nas instruções para a exploração do serviço telegráfico público internacional, o serviço deve ser assegurado por um operador titular de certificado de operador radiotelegrafista. Todavia, esta última condição não se aplica aos aparelhos automáticos, que podem utilizar os sinais do código Morse apenas para fins de identificação.

3394.1 (1) O termo «aparelhos automáticos de telecomunicações» compreende aparelhos tais como teleimpressores, aparelhos para transmissão de dados, etc.

3395 (4) Todavia, para o serviço das estações radiotelefónicas que funcionam unicamente em frequências superiores a 30 MHz, cada governo determina se é necessário um certificado e, no caso afirmativo, fixa os requisitos a preencher para a sua obtenção.

3396 (5) As disposições do n.º **3395** não são aplicáveis às estações de aeronave que funcionam nas frequências consignadas para uma utilização internacional.

3397 § 2. (1) No caso de improcedimento absoluto do operador no decorrer do voo, a pessoa responsável pela estação pode autorizar, mas somente a título temporário, que um operador titular de um certificado concedido pelo governo de outro Membro da União assegure o serviço das radiocomunicações.

3398 (2) Quando seja necessário recorrer, como operador provisório, a pessoa que não possua qualquer certificado ou a operador que não tenha certificado adequado, a sua intervenção deverá limitar-se unicamente aos sinais de perigo, de urgência e de segurança, às mensagens que a estes digam respeito, às mensagens que interessam directamente à segurança da vida humana e às mensagens essenciais relativas à navegação e à segurança da marcha da aeronave. As pessoas assim utilizadas ficam sujeitas ao sigilo das correspondências previsto no n.º **3402**.

3399 (3) Em todos os casos, o operador provisório deve ser substituído, logo que possível, por um operador titular do certificado previsto no § 1 do presente artigo.

3400 § 3. (1) Cada administração adopta as disposições necessárias para evitar, na maior medida possível, o emprego fraudulento de certificados. Para esse efeito, estes terão aposta a assinatura do titular e serão autenticados pela administração que os concedeu. As administrações podem empregar, se o desejarem, outros meios de identificação, tais como fotografias, impressões digitais, etc.

3401 (2) A fim de facilitar a verificação dos certificados, estes conterão, quando necessário, além do texto redigido na língua nacional, uma tradução desse texto numa das línguas de trabalho da União.

3402 § 4. Cada administração adopta as providências necessárias para submeter os operadores à obrigação do sigilo das correspondências previsto no n.º **2023**.

SECÇÃO II

Classes e categorias de certificados

3403 § 5. (1) Há duas classes de certificados, bem como um certificado especial para operadores radiotelegrafistas (1).

3404 (2) Há duas categorias de certificados, geral e restrito, para os operadores radiotelegrafistas (1).

3405 § 6. (1) O titular de certificado de operador radiotelegrafista de 1.ª ou de 2.ª classe pode assegurar o serviço radiotelegráfico ou radiotelefónico de qualquer estação de aeronave.

3406 (2) O titular de certificado geral de radiotelefonista pode assegurar o serviço radiotelefónico de qualquer estação de aeronave.

3407 (3) O titular de certificado restrito de radiotelefonista pode assegurar o serviço radiotelefónico de qualquer estação de aeronave que funcione nas frequências atribuídas ao serviço móvel marítimo, desde que:

3408 *a*) A potência de ponta do emissor não exceda 200 W; *ou*

3409 *b*) O comando do emissor apenas comporte a manobra de órgãos de comutação externos e simples e não necessite qualquer ajuste manual dos elementos que determinam a frequência, sendo o próprio emissor a manter a estabilidade das frequências, nos limites das tolerâncias especificadas no apêndice 7, e não devendo a potência de ponta do emissor exceder 1 kW.

3410 (4) O titular de certificado restrito de radiotelefonista pode assegurar o serviço radiotelefónico de qualquer estação de aeronave que funcione em frequências atribuídas exclusivamente ao serviço móvel aeronáutico, desde que o comando do emissor apenas comporte a manobra de órgãos de comutação externos e simples sem que seja necessário efectuar qualquer ajuste manual dos elementos que determinam a frequência, sendo o próprio emissor a manter a estabilidade das frequências nos limites das tolerâncias especificadas no apêndice 7.

3411 (5) O serviço radiotelefónico das estações de aeronave para as quais se exige o certificado restrito de radiotelefonista pode ser assegurado por um operador titular de certificado especial de radiotelegrafista.

3412 § 7. Excepcionalmente, o certificado de operador radiotelegrafista de 2.ª classe, bem como o certificado especial de operador radiotelegrafista, podem ser limitados exclusivamente ao serviço radiotelegráfico. Neste caso, deverá fazer-se menção desta limitação no certificado.

3403.1 }
3404.1 } (1) Para o emprego dos operadores titulares dos diferentes certificados, v. o artigo 45.

Secção III

Condições de obtenção de certificados de operador

3413 A) Generalidades

3414 § 8. (1) As condições a impor para a obtenção dos diferentes certificados são as mencionadas nos parágrafos seguintes. Devem ser consideradas como condições mínimas.

3415 (2) Cada administração tem a liberdade de fixar o número de exames que julgue necessários para obtenção de cada certificado.

3416 § 9. (1) A administração que concede um certificado pode, antes de autorizar o seu titular a assegurar o serviço a bordo de uma aeronave, exigir que esse operador satisfaça outras condições (por exemplo: conhecimento dos aparelhos automáticos de telecomunicação, conhecimentos técnicos e profissionais complementares, relativos principalmente à navegação, aptidões físicas, ter efectuado como operador um certo número de horas de voo, etc.).

3417 (2) Convém que as administrações tomem todas as medidas julgadas necessárias para verificar a aptidão dos operadores, quando estes tenham deixado de exercer as suas funções durante um período de tempo prolongado.

3418 B) Certificado de operador radiotelegrafista de 1.ª classe

3419 § 10. Concede-se certificado de 1.ª classe aos candidatos que provarem possuir os conhecimentos e aptidões técnicos e profissionais indicados a seguir:

3420 *a*) Conhecimento tanto dos princípios gerais da electricidade como da teoria da radioelectricidade, conhecimento de regulação e funcionamento prático dos diferentes tipos de aparelhos radiotelegráficos e radiotelefónicos utilizados no serviço móvel, incluindo os aparelhos utilizados para radiogoniometria e obtenção de azimutes radiogoniométricos, assim como conhecimento geral dos princípios de funcionamento de outros aparelhos habitualmente empregados para a radionavegação;

3421 *b*) Conhecimento teórico e prático do funcionamento dos aparelhos, tais como grupos electrogéneos, acumuladores, etc., utilizados para pôr a funcionar e regular os aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos mencionados no n.º **3420**;

3422 *c*) Conhecimentos práticos necessários para reparar, com os meios existentes a bordo, as avarias que possam ocorrer nos aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos durante o voo;

3423 *d*) Aptidão para a transmissão manual correcta e auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 20 grupos por minuto, e de um texto em linguagem clara à velocidade de 25 palavras por minuto. Cada grupo de código deve compreender cinco caracteres, contando-se por dois caracteres cada algarismo ou sinal de pontuação. A palavra média do texto em linguagem clara deve comportar cinco caracteres. A duração de cada prova de transmissão e de recepção é, em geral, de cinco minutos;

3424 *e*) Aptidão para a transmissão correcta e para a recepção correcta em radiotelefonia;

3425 *f*) Conhecimento minucioso dos regulamentos aplicáveis às radiocomunicações, conhecimento dos documentos relativos à taxação das radiocomunicações, conhecimento das disposições da Convenção para a Salvaguarda da Vida Humana no Mar no que respeita à radioelectricidade e, no caso da navegação aérea, conhecimento das disposições especiais que regem os serviços aeronáuticos fixo e móvel, bem como a radionavegação aeronáutica. Neste último caso, o certificado estipulará que o titular ficou aprovado no exame relativo a estas disposições especiais;

3426 *g*) Conhecimentos suficientes da geografia do Mundo, especialmente das principais linhas de navegação marítima e aérea, bem como das vias de telecomunicação mais importantes;

3427 *h*) Conhecimento suficiente de uma das línguas de trabalho da União. Os candidatos devem poder exprimir-se nessa língua de modo conveniente, quer verbalmente quer por escrito. Cada administração indica a ou as línguas impostas.

3428 C) Certificado de operador radiotelegrafista de 2.ª classe

3429 § 11. Concede-se certificado de 2.ª classe aos candidatos que provarem possuir os conhecimentos e aptidões técnicos e profissionais indicados a seguir:

3430 *a*) Conhecimento elementar teórico e prático da electricidade e da radiolectricidade, conhecimento de regulação e do funcionamento prático dos diferentes tipos de aparelhos radiotelegráficos e radiotelefónicos utilizados no serviço móvel, incluindo os aparelhos utilizados para a radiogoniometria e obtenção de azimutes radiogoniométricos, bem como o conhecimento elementar dos princípios de funcionamento de outros aparelhos habitualmente empregados para a radionavegação;

3431 *b*) Conhecimento elementar teórico e prático do funcionamento e manutenção de aparelhos, tais como grupos electrogéneos, acumuladores, etc., utilizados para pôr a funcionar e regular os aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos mencionados no n.º **3430**;

3432 *c*) Conhecimentos práticos suficientes para poder reparar as pequenas avarias susceptíveis de ocorrer nos aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos durante o voo;

3433 *d*) Aptidão para a transmissão manual correcta e auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 16 grupos por minuto, e de um texto em linguagem clara à velocidade de 20 palavras por minuto. Cada grupo de código deve compreender cinco caracteres, contando-se por dois caracteres cada algarismo ou sinal de pontuação. A palavra média do texto em linguagem clara deve comportar cinco caracteres. A duração de cada prova de transmissão e de recepção é, em geral, de cinco minutos;

3434 *e*) Aptidão para a transmissão correcta e recepção correcta radiotelefónicas, salvo no caso previsto no n.º **3412**;

3435 *f*) Conhecimento dos regulamentos aplicáveis às radiocomunicações, conhecimento dos documentos relativos à taxação das radiocomunicações, conhecimento das disposições da Convenção para a Salvaguarda da Vida Humana no Mar no que respeita à radioelectricidade e, no caso da navegação aérea, conhecimento das disposições especiais que regem os serviços aeronáuticos fixo e móvel, bem como a radionavegação aeronáutica. Neste último caso, o certificado estipulará que o titular ficou aprovado no exame relativo às disposições especiais;

3436 *g*) Conhecimentos suficientes da geografia do Mundo, especialmente das principais linhas de navegação marítima e aérea, bem como das vias de telecomunicação mais importantes;

3437 *h*) Se necessário, conhecimento elementar de uma das línguas de trabalho da União. Os candidatos devem pode exprimir-se nessa língua de modo conveniente, quer verbalmente quer por escrito. Cada administração indica a ou as línguas impostas.

3438 D) Certificado especial de operador radiotelegrafista

3439 § 12. Concede-se certificado especial de radiotelegrafista aos candidatos que provarem possuir os conhecimentos e aptidões profissionais indicados a seguir:

3440 *a*) Aptidão para transmissão manual correcta e recepção auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 16 grupos por minuto, e de um texto em linguagem clara à velocidade de 20 palavras por minuto. Cada grupo de código deve compreender cinco caracteres, contando-se cada sinal de pontuação por dois caracteres. A palavra média do texto em linguagem clara deverá comportar cinco caracteres;

3441 *b*) Conhecimento da regulação e funcionamento dos aparelhos radiotelegráficos;

3442 *c*) Conhecimento dos regulamentos aplicáveis às radiocomunicações telegráficas, especialmente da parte desses regulamentos relativa à segurança da vida humana no mar.

3443 (2) É da competência de cada administração interessada fixar as outras condições para a obtenção desse certificado. Todavia, salvo caso previsto no n.º **3412**, deverão ser satisfeitas as condições enunciadas nos n.os **3450, 3451, 3452** e **3453** ou **3454**, consoante o caso.

3444 E) Certificado de operador radiotelegrafista

3445 § 13. Concede-se certificado geral de operador radiotelegrafista aos candidatos que provarem possuir os conhecimentos e aptidões profissionais indicados a seguir (v. igualmente os n.os **3405** e **3406**):

3446 *a*) Conhecimento dos princípios elementares da radiotelefonia;

3447 *b*) Conhecimento minucioso da regulação e do funcionamento prático dos aparelhos de radiotelefonia;

3448 *c*) Aptidão para a transmissão correcta e recepção correcta radiotelefónicas;

3449 *d*) Conhecimento minucioso dos regulamentos aplicáveis às radiocomunicações telefónicas e especialmente da parte desses regulamentos relativa à segurança da vida humana.

3450 § 14. (1) Concede-se certificado restrito de radiotelefonista aos candidatos que provarem possuir os conhecimentos e aptidões profissionais indicados a seguir:

3451 *a*) Conhecimento prático da exploração e do procedimento radiotelefónicos;

3452 *b*) Aptidão para transmissão correcta e recepção correcta radiotelefónicas;

3453 *c*) Conhecimento geral dos regulamentos aplicáveis às radiocomunicações telefónicas e especialmente da parte desses regulamentos relativa à segurança da vida humana.

3454 (2) Para as estações radiotelefónicas de aeronave que funcionem em frequências atribuídas exclusivamente ao serviço móvel aeronáutico, cada administração pode fixar as condições de obtenção de um certificado res-

trito de radiotelefonista, desde que o funcionamento do emissor apenas exija o emprego de dispositivos externos de comutação de concepção simples, excluindo qualquer regulação manual dos elementos que determinam a frequência, e desde que a estabilidade das frequências seja mantida pelo próprio emissor nos limites das tolerâncias fixadas no apêndice 7.

Todavia, ao fixar as condições, as administrações deverão assegurar-se de que o operador possui conhecimento suficiente da exploração e das formas de procedimento do serviço radiotelefónico, especialmente no que respeita ao perigo, urgência e segurança. As disposições acima indicadas em nada contradizem as do n.º **3457**.

3455 (3) As administrações dos países da Região 1 não concedem certificados correspondentes às disposições do n.º **3454**.

3456 § 15. No certificado de radiotelefonista deve indicar-se se é um certificado geral ou um certificado restrito e, neste último caso, se foi concedido em conformidade com as disposições do n.º **3454**.

3457 § 16. Para satisfazer necessidades especiais, podem acordos especiais entre administrações fixar as condições a preencher para a obtenção de certificado de radiotelefonista destinado a ser utilizado em estações radiotelefónicas que satisfaçam certas condições técnicas e certas condições de exploração. Tais acordos só podem ser concluídos desde que, pela sua aplicação, não resulte qualquer interferência prejudicial aos serviços internacionais.

Estas condições e esses acordos serão mencionados nos certificados assim concedidos.

3458 a 3482 *(Não atribuídos.)*

ARTIGO 45

Pessoal das estações aeronáuticas

SECÇÃO I

3483 As administrações tomam as providências necessárias para garantir que nas estações aeronáuticas o pessoal possua as aptidões profissionais que lhe permitam assegurar eficazmente o serviço dessas estações.

3484 a 3508 *(Não atribuídos.)*

ARTIGO 46

Inspecção das estações de aeronave

3509 § 1. (1) Os governos ou as administrações competentes dos países onde uma estação de aeronave faça escala podem exigir a apresentação da licença para a examinarem. O operador da estação, ou a pessoa responsável pela estação, deve prestar-se a esta verificação. A licença deverá conservar-se de maneira a poder ser apresentada quando pedida. Na medida do possível, a licença, ou uma cópia autenticada pela autoridade que a concedeu, deverá estar afixada permanentemente no local da estação.

3510 (2) Os inspectores devem possuir um cartão ou um distintivo de identidade passado pelas autoridades competentes, que devem mostrar a pedido da pessoa responsável pela aeronave.

3511 (3) Quando a licença não possa ser apresentada ou se verifiquem manifestas anomalias os governos ou administrações podem mandar proceder à inspecção das instalações radioeléctricas, a fim de se assegurarem de que elas satisfazem as disposições do presente Regulamento.

3512 (4) Os inspectores têm, além disso, o direito de exigir a apresentação dos certificados dos operadores, mas não podem pedir qualquer justificação de conhecimentos profissionais.

3513 § 2. (1) Quando um governo ou uma administração se vir obrigado a recorrer à medida prevista no n.º **3511**, ou quando não se apresentem os certificados de operador, deverá informar-se sem demora o governo ou administração de que depende a estação da aeronave em causa. Além disso, aplicam-se, se necessário, as disposições do artigo 21.

3514 (2) Antes de se retirar da aeronave, o inspector deve comunicar as suas observações à pessoa responsável. No caso de infracção às disposições do presente Regulamento, o inspector apresenta o seu relatório por escrito.

3515 § 3. Os Membros comprometem-se a não impor às estações de aeronave estrangeiras que se encontrem temporariamente nos seus limites territoriais ou que se detenham temporariamente no seu território condições técnicas e de exploração mais rigorosas do que as previstas no presente Regulamento. Esta prescrição em nada afecta as disposições que dependem de acordos internacionais relativos à navegação aérea e não estão mencionadas no presente Regulamento.

3516 a 3540 *(Não atribuídos.)*

ARTIGO 47

Horários das estações do serviço móvel aeronáutico

SECÇÃO I

Generalidades

3541 § 1. A fim de permitir a aplicação das regras seguintes relativas às horas de vigília, qualquer estação do serviço móvel aeronáutico deve ter um relógio que regule bem e esteja certo pelo tempo universal coordenado (UTC).

SECÇÃO II

Estações aeronáuticas

3542 § 2. Uma estação aeronáutica assegura um serviço contínuo durante todo o período em que lhe cabe a responsabilidade do serviço das radiocomunicações com as aeronaves em voo.

SECÇÃO III

Estações de aeronave

3543 § 3. Para o serviço internacional de correspondência pública as estações de aeronave constituem uma só categoria. Elas asseguram um serviço cuja duração não é fixada pelo presente Regulamento.

3544 a 3568 *(Não atribuídos.)*

ARTIGO 48

Condições de funcionamento do serviço móvel aeronáutico

SECÇÃO I

Generalidades

3569 § 1. Salvo disposições contrárias do presente Regulamento, o serviço móvel aeronáutico pode ser regido por acordos especiais concluídos pelos governos interessados, no quadro das disposições do artigo 31 da Convenção (Málaga, Torremolinos, 1973) relativas aos acordos especiais.

3570 § 2. Salvo acordos especiais, as disposições do presente Regulamento relativas ao escoamento e à contabilidade da correspondência pública são aplicáveis às estações do serviço móvel aeronáutico (v., também, o n.º 3633).

SECÇÃO II

Comunicações com estações do serviço móvel marítimo e do serviço móvel marítimo por satélite

3571 § 3. As estações a bordo de aeronaves podem comunicar com as estações do serviço móvel marítimo ou do serviço móvel marítimo por satélite. Devem então satisfazer as disposições do presente Regulamento relativas a esses serviços (v. o capítulo XI, especialmente o artigo 59, secção III).

3572 a 3596 *(Não atribuídos.)*

ARTIGO 49

Condições a que devem satisfazer as estações móveis do serviço móvel aeronáutico

3597 § 1. As estações móveis devem ser estabelecidas de modo a que satisfaçam as disposições dos capítulos III e X no que respeita às frequências e classes de emissão.

3598 § 2. As frequências de emissão das estações móveis devem ser verificadas o maior número de vezes possível pelo serviço de inspecção de que elas dependem.

3599 § 3. A energia radiada pelos aparelhos receptores deve ser tão reduzida quanto possível e não deverá causar interferência prejudicial às outras estações.

3600 § 4. As administrações tomam todas as medidas práticas necessárias para que o funcionamento dos aparelhos eléctricos ou electrónicos de qualquer natureza instalados nas estações móveis não cause interferência

prejudicial aos serviços radioeléctricos essenciais dessas estações, quando funcionam de acordo com as disposições do presente Regulamento.

3601 § 5. (1) As mudanças de frequência nos aparelhos emissores e receptores de qualquer estação móvel devem poder efectuar-se tão rapidamente quanto possível.

3602 (2) As instalações de qualquer estação móvel devem permitir, uma vez estabelecida a comunicação, passar da emissão à recepção, e vice-versa, num tempo tão curto quanto possível.

3603 § 6. Fica proibido às estações de aeronave no mar ou por cima do mar efectuar qualquer serviço de radiodifusão (v. o n.º **36** e igualmente o n.º **2665**).

3604 § 7. As estações móveis, excepto as de engenho de salvamento, devem estar providas com os documentos de serviço indicados na secção pertinente do apêndice 11 (secção VI, «Estações de aeronaves»).

3605 a 3629 *(Não atribuídos.)*

ARTIGO 50

Disposições especiais relativas à utilização das frequências no serviço móvel aeronáutico

3630 § 1. As frequências de todas as faixas atribuídas ao serviço móvel aeronáutico (R) são reservadas às comunicações entre quaisquer aeronaves e as estações aeronáuticas principalmente encarregadas de garantir a segurança e a regularidade dos voos ao longo das rotas nacionais ou internacionais da aviação civil.

3631 § 2. As frequências de todas as faixas atribuídas ao serviço móvel aeronáutico (OR) são reservadas às comunicações entre quaisquer aeronaves e as estações aeronáuticas que não sejam as principalmente encarregadas do serviço móvel aeronáutico ao longo das rotas nacionais ou internacionais da aviação civil.

3632 § 3. As frequências das faixas atribuídas ao serviço móvel aeronáutico entre 2850 kHz e 22 000 kHz (v. o artigo 8) são consignadas de acordo com as disposições dos apêndices 26, 27 (*) e 27 Aer2 (*) e com as outras disposições pertinentes do presente Regulamento.

3633 § 4. As administrações não devem autorizar a correspondência pública nas faixas de frequências atribuídas exclusivamente ao serviço móvel aeronáutico, a menos que se disponha de outro modo em regulamentos especiais do serviço aeronáutico, aprovados por uma conferência da União para a qual tenham sido convidados todos os Membros interessados. Esses regulamentos devem reconhecer prioridade absoluta às comunicações de segurança e de comando.

3634 § 5. A fim de reduzir as interferências, as estações de aeronave devem, de acordo com os meios de que disponham, esforçar-se por escolher para a chamada a faixa cujas frequências apresentem as características de propagação mais favoráveis para estabelecer uma comunicação satisfatória. Na falta de dados mais precisos, qualquer estação de aeronave deve, antes de emitir uma chamada, escutar os sinais da estação com a qual deseja entrar em comunicação. A intensidade e a inteligibilidade dos sinais recebidos fornecerão elementos úteis sobre as condições de propagação e indicarão em que faixa é preferível efectuar a chamada.

3635 § 6. Os governos podem, por meio de acordos, decidir quais as frequências a utilizar para a chamada e para a resposta no serviço móvel aeronáutico.

3636 a 3650 *(Não atribuídos.)*

ARTIGO 51

Ordem de prioridade das comunicações no serviço móvel aeronáutico

3651 A ordem de prioridade das comunicações (1) no serviço móvel aeronáutico deve ser a que se indica a seguir, salvo impossibilidade prática num sistema inteiramente automatizado. Todavia, mesmo neste caso, deve ser dada prioridade às comunicações da primeira categoria:

1) Chamadas de perigo, mensagens de perigo e tráfego de perigo;
2) Comunicações precedidas do sinal de urgência;
3) Comunicações precedidas do sinal de segurança;
4) Comunicações relativas aos azimutes radiogoniométricos;
5) Comunicações relativas à navegação e à segurança dos movimentos das aeronaves que participem em operações de busca e salvamento;
6) Comunicações relativas à navegação, aos movimentos e às necessidades das aeronaves e dos navios e mensagens de observação meteorológica destinadas a um serviço meteorológico oficial;

(*) Nota do Secretariado-Geral: v. o n.º **5189** e a Resolução n.º 400.

3651.1 (1) O termo «comunicações», empregado no presente artigo, engloba os radiotelegramas, as conversações radiotelefónicas, bem como as comunicações radiotelex.

7) ETATPRIORITENATIONS — radiotelegramas relativos à aplicação da Carta das Nações Unidas;
8) ETATPRIORITE — radiotelegramas de Estado com prioridade e comunicações de Estado para as quais foi expressamente pedido o direito de prioridade;
9) Comunicações de serviço relativas ao funcionamento do serviço de radiocomunicações ou a comunicações escoadas precedentemente;
10) Comunicações de Estado que não sejam as indicadas na alínea 8 anterior, comunicações particulares ordinárias, radiotelegramas RCT (1) e radiotelegramas da imprensa.

3652 a 3676 *(Não atribuídos.)*

ARTIGO 52

Procedimento geral radiotelegráfico no serviço móvel aeronáutico

SECÇÃO I

Disposições gerais

3677 § 1. (1) O procedimento pormenorizado no presente artigo é obrigatório, salvo nos casos de perigo, de urgência ou de segurança, aos quais são aplicáveis as disposições do capítulo XI.

3678 (2) O procedimento fixado nas secções IV, V e VI do presente artigo só é aplicável na ausência de acordos especiais que prevejam disposições contrárias e concluídos pelos governos interessados.

3679 § 2. No serviço móvel aeronáutico é obrigatório o emprego dos sinais do código Morse que figuram nas instruções para a exploração do serviço telegráfico público internacional. Todavia, não se exclui o uso de outros sinais nas radiocomunicações de carácter especial.

3680 § 3. Para facilitar as radiocomunicações, as estações utilizam as abreviaturas regulamentares definidas no apêndice 13.

SECÇÃO II

Chamadas

3681 A) Generalidades

3682 § 4. As disposições do presente artigo não são aplicáveis ao serviço móvel aeronáutico quando tenham sido concluídos acordos especiais pelos governos interessados.

3683 § 5. (1) Regra geral, incumbe à estação de aeronave estabelecer a comunicação com a estação aeronáutica. Para o efeito, a estação de aeronave só pode chamar a estação aeronáutica depois de ter entrado na sua zona de serviço, isto é, na zona em que, utilizando uma frequência apropriada, a estação de aeronave pode ser ouvida pela estação aeronáutica.

3684 (2) Todavia, uma estação aeronáutica que tenha tráfego para uma estação de aeronave pode chamar esta estação se tiver razões para supor que a estação de aeronave se encontra na sua zona de serviço e está à escuta.

3685 § 6. Quando uma estação aeronáutica receber praticamente ao mesmo tempo chamadas de várias estações de aeronave, decidirá a ordem pela qual estas estações poderão transmitir-lhe o seu tráfego. A sua decisão basear-se-á na ordem de prioridade (v. o n.º **3651**) dos radiotelegramas pendentes nas estações de aeronave e na necessidade de permitir a cada uma das estações que chama escoar o maior número possível de comunicações.

3686 § 7. (1) Quando uma estação chamada não responder à chamada emitida três vezes com intervalos de dois minutos, a chamada deverá cessar e só poderá recomeçar quinze minutos depois.

3687 (2) Antes de renovar a chamada, a estação que chama deve certificar-se de que a estação chamada não está em comunicação com outra estação.

3688 (3) Se não houver razão para recear que interferências prejudiciais afectem comunicações em curso, não se aplicam as disposições do n.º **3686**. Nesse caso, a chamada emitida três vezes com intervalos de dois minutos pode ser renovada depois de um intervalo de duração inferior a quinze minutos, mas, pelo menos, igual a três minutos.

3689 § 8. As estações de aeronave não devem emitir a sua portadora entre as chamadas.

3690 § 9. Quando o nome e endereço da administração ou da exploração particular de que depende uma estação de aeronave não vêm mencionados na nomenclatura apropriada ou não estão de acordo com as indica-

---

3651.2 (1) RCT (Red Cross Telegrams — Telegramas da Cruz Vermelha): telegramas respeitantes às pessoas protegidas em tempo de guerra pelas Convenções de Genebra de 12 de Agosto de 1949.

ções desta, é dever da estação de aeronave, como regra de procedimento, fornecer à estação aeronáutica a que transmite o tráfego todos os esclarecimentos necessários nesse sentido.

3691 § 10. (1) A estação aeronáutica pode, por meio da abreviatura TR, pedir à estação de aeronave que lhe dê as indicações seguintes:

3692 *a*) Posição e, tanto quanto possível, rumo e velocidade;

3693 *b*) Próximo ponto de escala..

3694 (2) Convém que as informações indicadas nos n.os **3691** a **3693**, precedidas da abertura TR, sejam fornecidas pelas estações de aeronave, sempre que pareça apropriado e sem pedido prévio da estação aeronáutica. Essas informações só são prestadas mediante autorização prévia da pessoa responsável pela aeronave.

3695 B) Chamadas a várias estações

3696 § 11. Reconhecem-se dois tipos de sinais de chamada «a todos»:

3697 *a*) Chamada CQ seguida da letra K (v. o n.º **3699**);

3698 *b*) Chamada CQ não seguida da letra K (v. o n.º **3700**).

3699 § 12. As estações que desejarem entrar em comunicação com estações do serviço móvel sem todavia saberem quais dessas estações estão na sua zona de serviço podem utilizar o sinal de pesquisa CQ para substituir, na chamada, o indicativo da estação chamada. A chamada deverá então ser seguida da letra K (chamada geral a todas as estações do serviço móvel, com pedido de resposta).

3700 § 13. A chamada CQ não seguida da letra K (chamada geral a todas as estações sem pedido de resposta) utiliza-se antes da transmissão de informações de qualquer natureza destinadas a serem lidas ou utilizadas por quem quer que as possa captar.

3701 § 14. A chamada CP seguida de dois ou mais indicativos de chamada ou de uma palavra convencional (chamada a certas estações receptoras sem pedido de resposta) só se utiliza para a transmissão de informações de qualquer natureza destinadas a serem lidas ou utilizadas pelas pessoas autorizadas.

Secção III

Operações preliminares

3702 § 15. (1) Antes de emitir, uma estação toma as precauções necessárias para se assegurar de que as suas emissões não interferirão transmissões em curso; se for provável uma tal interferência, a estação esperará uma paragem oportuna da transmissão que ela poderia interferir. Esta obrigação não se aplica às estações que podem funcionar sem vigilância por meios automáticos (v. o n.º **3394**) em frequências destinadas aos sistemas de faixa estreita de telegrafia com impressão directa.

3703 (2) No caso em que, mesmo procedendo assim, a emissão dessa estação venha interferir uma transmissão já em curso, aplicar-se-ão as regras seguintes:

3704 *a*) A estação de aeronave cuja emissão interfere a comunicação entre uma estação móvel, de um lado, e uma estação terrestre, de outro, deve deixar de emitir ao primeiro pedido da estação terrestre interessada;

3705 *b*) A estação de aeronave cuja emissão interfere as comunicações entre estações móveis deve deixar de emitir ao primeiro pedido de uma qualquer dessas estações;

3706 *c*) A estação que solicita essa paragem deve indicar a duração aproximada da espera imposta à estação cuja emissão ela suspende.

Secção IV

Fórmula da chamada, resposta à chamada e sinais preparatórios do tráfego

3707 A) Fórmula da chamada

3708 § 16. (1) A chamada é constituída como segue:

Três vezes, no máximo, o indicativo de chamada da estação chamada;
A palavra DE;
Três vezes, no máximo, o indicativo de chamada da estação que chama.

3709 (2) Todavia, nas faixas compreendidas entre 4000 kHz e 27 500 kHz, e se as condições de estabelecimento do contacto forem difíceis, podem-se emitir os indicativos de chamada mais de três vezes, mas não mais de dez. Nesse caso os indicativos de chamada da estação chamada e da estação que chama devem ser emitidos em sequências alternadas (exemplo: ABC ABC de WXYZ ... *ou* ABC ABC ABC de WXYZ WXYZ WXYZ ...) até completar um máximo de vinte indicativos. Esta chamada pode ser emitida três vezes com intervalos de dois minutos. Só pode recomeçar quinze minutos mais tarde.

3710 § 17. Para fazer a chamada, assim como para transmitir os sinais preparatórios, a estação que chama utiliza uma frequência na qual a estação chamada assegura a escuta.

3711 B) Indicação da frequência a utilizar para o tráfego

3712 § 18. (1) A chamada, tal como se indica nos n.os **3708** e **3709**, deve ser seguida da abreviatura regulamentar, indicando a frequência de trabalho e, se for útil, a classe de emissão que a estação que chama se propõe utilizar para transmitir o seu tráfego.

3713 (2) Quando, por excepção a esta regra, a chamada não for seguida da indicação da frequência a utilizar para o tráfego, isso significa que:

3714 *a*) Se a estação que chama for uma estação aeronáutica, ela se propõe utilizar para o tráfego a sua frequência normal de trabalho indicada no documento apropriado;

3715 *b*) Se a estação que chama é uma estação de aeronave, a frequência a utilizar para o tráfego fica à escolha da estação chamada de entre as frequências em que pode emitir a estação que chama.

3716 C) Indicação de prioridade, do motivo da chamada e da transmissão dos radiotelegramas por séries

3717 § 19. (1) Quando a estação que chama tem mais de um radiotelegrama para transmitir à estação chamada, os sinais preparatórios anteriores são seguidos da abreviatura regulamentar e do número que especifica a quantidade desses telegramas.

3718 (2) Além disso, quando a estação que chama desejar transmitir os seus radiotelegramas por séries, indica-o acrescentando a abreviatura regulamentar para pedir o assentimento da estação chamada.

3719 D) Fórmula da resposta à chamada

3720 § 20. A resposta à chamada é constituída como segue:

Três vezes, no máximo, o indicativo de chamada da estação que chama;
A palavra DE;
Uma vez somente o indicativo de chamada da estação chamada.

3721 E) Frequência de resposta

3722 § 21. Salvo indicação contrária no presente Regulamento, para transmitir a resposta às chamadas e aos sinais preparatórios, a estação chamada utiliza a frequência de escuta da estação que chama, a não ser que esta tenha designado uma outra frequência para a resposta.

3723 F) Acordo sobre a frequência a utilizar para o tráfego

3724 § 1. (1) Se a estação chamada estiver de acordo com a estação que chama, transmite:

3725 *a*) A resposta à chamada;

3726 *b*) A abreviatura regulamentar que indica que a partir desse momento ela escuta na frequência de trabalho anunciada pela estação que chama;

3727 *c*) Eventualmente, as indicações previstas no n.º **3736**;

3728 *d*) Se for útil, a abreviatura regulamentar e o número que indique a intensidade e ou a inteligibilidade dos sinais recebidos (v. o apêndice 13);

3729 *e*) A letra K, se a estação chamada está pronta a receber o tráfego da estação que chama.

3730 (2) Se a estação chamada não estiver de acordo com a estação que chama sobre a frequência de trabalho a empregar, transmite:

3731 *a*) A resposta à chamada:

3732 *b*) A abreviatura regulamentar que indique a frequência de trabalho a utilizar pela estação que chama e, quando necessário, a classe de emissão;

3733 *c*) Eventualmente, as indicações previstas no n.º **3736.**

3734 (3) Realizado acordo relativamente à frequência de trabalho que a estação que chama deve utilizar para o seu tráfego, a estação chamada transmite a letra K a seguir às indicações contidas na sua resposta.

3735 G) Resposta ao pedido de transmissão por séries

3736 § 23. A estação chamada, ao responder a uma estação que chama e que pediu para transmitir os seus radiotelegramas por séries (v. o n.º **3718**), indica, por meio da abreviatura regulamentar, a sua aceitação ou a sua recusa. No primeiro caso especifica, se necessário, o número de radiotelegramas que está pronta a receber numa série.

3737 H) Dificuldades de recepção

3738 § 24. (1) Se a estação chamada estiver impedida de receber o tráfego imediatamente, responde à chamada como preceituam os n.os **3724** a **3729**, mas substituindo a letra K pelo sinal . — . . . (espera) seguido do número que indique em minutos a duração provável da espera. Se essa duração provável ultrapassar dez minutos (cinco minutos no caso de uma estação de aeronave em comunicação com uma estação do serviço móvel marítimo), deverá justificar-se o motivo da espera.

3739 (2) Quando uma estação recebe uma chamada sem ter a certeza de que se lhe destina, não deve responder sem que essa chamada se repita e seja compreendida. Quando, por outro lado, uma estação recebe uma chamada que se lhe destina mas tem dúvidas sobre o indicativo de chamada da estação que chama, deve responder imediatamente, utilizando a abreviatura regulamentar em substituição do indicativo de chamada desta última estação.

Secção V

Escoamento do tráfego

3740 A) Frequência de tráfego

3741 § 25. (1) Como regra geral, uma estação do serviço móvel aeronáutico transmite o seu tráfego utilizando uma das suas frequências de trabalho da faixa em que se efectuou a chamada.

3742 (2) Com excepção do tráfego de perigo (v. o capítulo IX), é proibido para o tráfego o emprego das frequências reservadas para a chamada.

3743 (3) Se a transmissão de um radiotelegrama se fizer numa frequência e ou numa classe de emissão diferentes das empregadas para a chamada, essa transmissão será precedida:

De duas vezes, no máximo, o indicativo de chamada da estação chamada;
Da palavra DE;
Do indicativo de chamada da estação que chama, uma vez somente.

3744 (4) Se a transmissão se fizer nas mesmas frequências e classe de emissão que a chamada, a transmissão do radiotelegrama será precedida, se necessário:

Do indicativo de chamada da estação chamada;
Da palavra DE;
Do indicativo de chamada da estação que chama.

3745 B) Numeração por séries quotidianas

3746 § 26. (1) Como regra geral, os radiotelegramas de correspondência pública transmitidos pelas estações de aeronave serão numerados por séries quotidianas, dando-se o n.º 1 ao primeiro radiotelegrama transmitido em cada dia para cada estação diferente.

3747 (2) Convém que uma série de números começada em radiotelegrafia seja continuada em radiotelefonia e inversamente.

3748 C) Radiotelegramas extensos

3749 § 27. (1) No caso em que duas estações estão providas de dispositivos que lhes permitem passar da emissão à recepção sem manobra de comutação, a estação emissora pode prosseguir a sua transmissão até ao fim da mensagem ou até que a estação receptora a interrompa por meio da abreviatura regulamentar BK. As duas estações pôr-se-ão, em geral, antecipadamente de acordo relativamente a um tal método de trabalho, por meio da abreviatura regulamentar QSK.

3750 (2) Se não puder ser empregado este método de trabalho, os radiotelegramas extensos, tanto em linguagem clara como em linguagem secreta, serão, como regra geral, transmitidos por partes, contendo cada parte 50 palavras no caso de linguagem clara e 20 palavras ou grupos no caso de linguagem secreta.

3751 (3) No fim de cada parte transmitir-se-á o sinal . . — — . . (?), que significa «recebeu bem o radiotelegrama até aqui?». Se essa parte se recebeu correctamente, a estação receptora responde transmitindo a letra K e prossegue-se na transmissão do radiotelegrama.

3752 D) Suspensão do tráfego

3753 § 1. Quando uma estação de aeronave transmite numa frequência de trabalho de uma estação aeronáutica e interfere a transmissão da referida estação aeronáutica, deve suspender o seu trabalho ao primeiro pedido desta última.

SECÇÃO VI

Fim do tráfego e do trabalho

3754 A) Sinal de fim de transmissão

3755 § 29. (1) A transmissão de um radiotelegrama terminará pelo sinal . — . — . (fim de transmissão) seguido da letra K.

3756 (2) No caso de uma transmissão por séries, indica-se o fim de cada radiotelegrama pelo sinal . — . — . (fim de transmissão) e o fim de cada série pela letra K.

3757 B) Entendido

3758 § 30. (1) Dá-se o entendido de um radiotelegrama ou de uma série de radiotelegramas pela seguinte forma:

O indicativo de chamada da estação emissora;
A palavra DE;
O indicativo de chamada da estação receptora;
A letra R seguida do número do radiotelegrama; *ou*
A letra R seguido do número do último radiotelegrama de uma série.

3759 (2) O entendido é transmitido pela estação receptora na frequência de tráfego (v. o n.º **3741**).

3760 C) Fim do trabalho

3761 § 31. (1) O fim do trabalho entre as duas estações é indicado por cada uma delas por meio do sinal . . . — . — (fim do trabalho).

3762 (2) O sinal . . . — . — (fim do trabalho) utiliza-se também:

No fim de qualquer transmissão de radiotelegramas de informação geral, de avisos gerais de segurança e de informações meteorológicas;
No fim da transmissão no serviço das radiocomunicações a grande distância, com entendido diferido ou sem entendido.

SECÇÃO VII

Orientação do trabalho

3763 § 32. As disposições da presente secção não se aplicam aos casos de perigo, urgência e segurança (v. o n.º **3677**).

3764 § 33. Nas comunicações entre estação aeronáutica e estação de aeronave, a estação de aero- nave seguirá as instruções dadas pela estação aeronáutica em tudo o que se refere à ordem e hora de transmissão, escolha da frequência e da classe de emissão, duração e suspensão do trabalho.

3765 § 34. Nas comunicações entre estações de aeronave incumbe à estação chamada a direcção do trabalho, segundo as indicações do n.º **3764**. Contudo, de uma estação aeronáutica julgar necessário intervir, aquelas estações conformar-se-ão com as instruções que lhes forem dadas pela estação aeronáutica.

SECÇÃO VIII

Ensaios

3766 § 35. Quando for necessário a uma estação de aeronave emitir sinais de ensaio ou de ajuste susceptível de interferir o trabalho das estações costeiras ou aeronáuticas vizinhas, deverá obter-se o assentimento destas estações antes de se efectuarem tais emissões.

3767 § 36. Quando for necessário a uma estação do serviço móvel aeronáutico emitir sinais de ensaio, quer para ajuste de um emissor antes de transmitir uma chamada, quer para ajuste de um receptor, esses sinais não devem durar mais de dez segundos. Devem ser constituídos por uma série de «VVV» seguida do indicativo de chamada da estação que emite para ensaios.

3768 a 3792 *(Não atribuídos.)*

ARTIGO 53

Procedimento radiotelefónico no serviço móvel aeronáutico — Chamadas

3793 § 1. As disposições do presente artigo não são aplicáveis ao serviço móvel aeronáutico quando existam acordos especiais entre os governos interessados.

3794 § 2. (1) Como regra geral, compete à estação de aeronave estabelecer a comunicação com a estação aeronáutica. Para isso, a estação de aeronave só pode chamar a estação aeronáutica depois de ter entrado na sua zona de serviço, quer dizer, na zona em que, utilizando uma frequência apropriada, a estação de aeronave poderá ser ouvida pela estação aeronáutica.

3795 § 2. Todavia, uma estação aeronáutica que tenha tráfego para uma estação de aeronave poderá chamar essa estação se tiver razões para supor que a referida estação de aeronave se encontra na sua zona de serviço e está à escuta.

3796 § 3. Quando uma estação aeronáutica receber praticamente ao mesmo tempo chamadas de várias estações de aeronave, decidirá a ordem pela qual essas estações lhe poderão transmitir o seu tráfego. A sua decisão basear-se-á na ordem de propriedade (v. o n.º **3651**) dos radiotelegramas ou das conversações radiotelefónicas pendentes nas estações de aeronave e na necessidade de permitir a cada uma das estações que chamam escoar o maior número possível de comunicações.

3797 § 4. (1) Quando uma estação chamada não responder à chamada emitida três vezes com intervalos de dois minutos, a chamada deverá cessar e não deverá recomeçar antes de passados quinze minutos.

3798 (2) Antes de renovar a chamada, a estação que chama deve verificar se a estação chamada não está em comunicação com outra estação.

3799 (3) Se não houver motivo para recear que interferências prejudiciais afectem as comunicações em curso, não serão aplicáveis as disposições do n.º **3797**. Nesses casos, a chamada emitida três vezes com intervalos de dois minutos poderá ser renovada depois de um intervalo de duração inferior a quinze minutos, mas, pelo menos, igual a três minutos.

3800 § 5. As estações de aeronave não devem emitir a sua portadora entre as chamadas.

3801 § 6. Quando o nome e o endereço da administração ou da exploração particular de que depende uma estação de aeronave não estiverem mencionados na nomenclatura apropriada ou já não estiverem em conformidade com esta, a estação de aeronave tem por dever fornecer à estação aeronáutica a que transmite tráfego todos os esclarecimentos necessários a esse respeito.

3802 § 7. (1) A estação aeronáutica pode, por meio da abreviatura TR (soletrada, utilizando palavras do código TANGO ROMEO), pedir à estação de aeronave que lhe forneça as seguintes informações:

3803 *a*) Posição e, tanto quanto possível, rumo e velocidade;

3804 *b*) Próximo ponto de escala.

3805 (2) Convém que as informações indicadas nos n.ºs **3802** a **3804**, precedidas da abreviatura TR, sejam fornecidas pelas estações de aeronave, sempre que pareça apropriado, sem pedido prévio da estação aeronáutica. Essas informações só são fornecidas após autorização da pessoa responsável pela aeronave.

3806 a 3830 *(Não atribuídos.)*

CAPÍTULO XI

Serviço móvel marítimo e móvel marítimo por satélite

ARTIGO 54

Autoridade do comandante

3831 § 1. O serviço de uma estação de navio depende da autoridade superior do comandante ou da pessoa responsável pelo navio ou por qualquer outra embarcação em que se encontre essa estação.

3832 § 2. A pessoa investida dessa autoridade deve exigir dos operadores o cumprimento do presente Regulamento e que a estação de navio, colocada sob a responsabilidade de um operador, seja sempre utilizada como estipula este Regulamento.

3833 § 3. O comandante ou a pessoa responsável, assim como todas as outras pessoas que possam ter conhecimento do texto ou simplesmente da existência de radiotelegramas ou de qualquer outra informação obtida por intermédio do serviço de radiocomunicação, ficam obrigados a guardar e assegurar o sigilo das correspondências.

3834 § 4. As disposições dos n.ºs **3831**, **3832** e **3833** aplicam-se igualmente ao pessoal das estações terrenas de navio.

3835 a 3859 *(Não atribuídos.)*

ARTIGO 55

Certificados dos operadores das estações de navio e das estações terrenas de navio

SECÇÃO I

Disposições gerais

3860 § 1. (1) O serviço de qualquer estação radiotelegráfica de navio deve ser assegurado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação.

3861 (2) O serviço de qualquer estação radiotelefónica de navio deve ser orientado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação. Com reserva desta disposição, a instalação radiotelefónica pode ser utilizada por outras pessoas além do titular do certificado.

3862 (3) O serviço de qualquer estação terrena de navio deve ser orientado por uma pessoa titular de certificado concedido ou reconhecido pelo governo de que depende essa estação. Com reserva desta disposição, a instalação pode ser utilizada por outras pessoas além do titular do certificado.

3863 (4) O serviço dos aparelhos automáticos de telecomunicação (1) instalados numa estação de navio deve ser orientado por um operador titular de certificado concedido ou reconhecido pelo governo de que depende essa estação. Com reserva desta disposição, podem utilizar esses aparelhos outras pessoas além do titular do certificado. Se o funcionamento desses aparelhos se basear essencialmente no emprego dos sinais do código Morse descritos nas instruções para a exploração do serviço telegráfico público internacional, o serviço deve ser assegurado por um operador titular de certificado de operador radiotelegrafista. Todavia, esta última condição não se aplica aos aparelhos automáticos que podem utilizar os sinais do código Morse apenas para fins de identificação.

3864 (5) Todavia, para o serviço das estações radiotelefónicas que funcionam unicamente em frequências superiores a 30 MHz, cada governo determina se é necessário um certificado e, no caso afirmativo, fixa os requisitos a preencher para a sua obtenção.

3865 (6) As disposições do n.º **3864** não são aplicáveis às estações de navio que funcionam nas frequências consignadas para utilização internacional.

3866 § 2. (1) No caso de impedimento absoluto do operador no decorrer da travessia, o comandante ou a pessoa responsável pela estação pode autorizar, mas somente a título temporário, que um operador titular de um certificado concedido pelo governo de outro Membro assegure o serviço de radiocomunicação.

3867 (2) Quando seja necessário recorrer, como operador provisório, a pessoa que não possua qualquer certificado ou a operador que não tenha certificado adequado, a sua intervenção deverá limitar-se unicamente aos sinais de perigo, de urgência e de segurança, às mensagens que a estes digam respeito, às mensagens que interessam directamente à segurança da vida humana e às mensagens urgentes relativas à marcha do navio. As pessoas assim utilizadas ficam sujeitas ao sigilo das correspondências previsto no n.º **3877**.

3868 (3) Em todos os casos o operador provisório deve ser substituído, logo que possível, por um operador titular do certificado previsto no § 1 do presente artigo.

3869 § 3. (1) Cada administração adopta as disposições necessárias para evitar, na maior medida possível, o emprego fraudulento de certificados. Para esse efeito, estes terão aposta a assinatura do titular e serão autenticados pela administração que os concedeu. As administrações podem utilizar, se o desejarem, outros meios de identificação, tais como fotocópias, impressões digitais, etc.

3870 (2) No serviço móvel marítimo os certificados concedidos a partir de 1 de Janeiro de 1978 devem incluir a fotografia e a data de nascimento do titular.

3871 (3) A fim de facilitar a verificação dos certificados, estes conterão, quando necessário, além do texto redigido na língua nacional, uma tradução desse texto numa das línguas de trabalho da União.

3872 (4) No serviço móvel marítimo todos os certificados que não sejam redigidos numa das línguas de trabalho da União e que tenham sido concedidos a partir de 1 de Janeiro de 1978 devem incluir, pelo menos, as indicações seguintes, redigidas numa das línguas de trabalho:

3873 *a*) Nome e data de nascimento do titular;

3874 *b*) Título do certificado e data em que foi concedido;

3875 *c*) Número e prazo de validade do certificado, se for caso disso;

3876 *d*) Nome da administração que concedeu o certificado.

3877 § 4. Cada administração adopta as providências necessárias para submeter os operadores à obrigação do sigilo das correspondências previsto no n.º **2023**.

3863.1 (1) O termos «aparelhos automáticos de telecomunicação» compreende aparelhos tais como teleimpressores, aparelhos para transmissão de dados, etc.

Secção II

Categorias de certificados para os operadores de estações de navio

3878 § 5. (1) Há quatro categorias de certificados para operadores radiotelegrafistas (1). São elas:

3879 *a*) O certificado geral do operador de radiocomunicações;
3880 *b*) O certificado de operador radiotelegrafista de 1.ª classe;
3881 *c*) O certificado de operador radiotelegrafista de 2.ª classe;
3882 *d*) O certificado especial de operador radiotelegrafista.

3883 (2) Há duas categorias de certificados para operadores radiotelefonista (1): o certificado geral e o certificado restrito.

3884 § 6. (1) O titular de um certificado geral de operador de radiocomunicações ou de um certificado de operador radiotelegrafista de 1.ª ou de 2.ª classe pode assegurar o serviço radiotelegráfico ou radiotelefónico de qualquer estação de navio.

3885 (2) O titular de um certificado geral de operador radiotelefonista pode assegurar o serviço radiotelefónico de qualquer estação de navio.

3886 (3) O titular de um certificado restrito de operador radiotelefonista pode assegurar o serviço radiotelefónico de qualquer estação de navio desde que o comando do emissor apenas comporte a manobra de órgãos de comutação externos e simples, sem que seja necessário efectuar qualquer ajuste manual dos elementos que determinam a frequência, sendo o próprio emissor a manter a estabilidade das frequências nos limites das tolerâncias especificadas no apêndice 7 e não devendo a potência de ponta do emissor ser superior a 1,5 kW.

3887 (4) O certificado restrito de operador de radiotelefonista pode ser limitado exclusivamente a uma ou várias faixas de frequência do serviço móvel marítimo. Neste caso, deve fazer-se menção dessa limitação no certificado.

3888 (5) O serviço radiotelegráfico dos navios aos quais nenhum acordo internacional imponha instalação radiotelegráfica, assim como o serviço radiotelefónico das estações de navio para as quais apenas se exiga o certificado restrito de radiotelefonista, podem ser assegurados pelo titular de um certificado especial de operador radiotelegrafista.

3889 (6) Todavia, sempre que sejam satisfeitas as condições no n.º **3934,** o serviço radiotelegráfico dos navios aos quais nenhum acordo internacional imponha instalação radiotelegráfica, assim como o serviço radiotelefónico de qualquer estação de navio, podem ser assegurados pelo titular de um certificado especial de operador radiotelegrafista.

3890 § 7. Excepcionalmente, o certificado de operador telegrafista de 2.ª classe, bem como o certificado especial de operador radiotelegrafista, podem ser limitados exclusivamente ao serviço radiotelegráfico. Neste caso, deve fazer-se menção desta limitação no certificado.

Secção III

Condições de obtenção de certificados de operador

3891 **A) Generalidades**

3892 § 8. (1) As condições a impor para a obtenção dos diferentes são as mencionadas nos parágrafos seguintes. Devem ser consideradas como condições mínimas.

3893 (2) Cada administração tem a liberdade de fixar o número de exames que julge necessários para obtenção de cada certificado.

3894 § 9. (1) A administração que concede um certificado pode, antes de autorizar o seu titular a assegurar o serviço a bordo de um navio, exigir que esse operador satisfaça outras condições (por exemplo: conhecimentos de aparelhos automáticos de telecomunicação, conhecimentos técnicos e profissionais complementares relativos especialmente à navegação, aptidões físicas, etc.).

3895 (2) Convirá que as administrações tomem todas as medidas julgadas necessárias para verificar a aptidão dos operadores, quando estes tenham deixado de exercer as suas funções durante um período de tempo prolongado.

3896 (3) Todavia, no que respeita ao serviço móvel marítimo, convém que as administrações tomem igualmente todas as medidas julgadas necessárias para verificar a aptidão dos operadores em serviço.

3778.1.1 } (1) Para o emprego dos operadores titulares dos diferentes certificados, v. o artigo 56.º
3883.1 }

3897 B) Certificado geral de operador de radiocomunicações do serviço móvel marítimo

3898 § 10. Concede-se certificado geral de operador de radiocomunicações do serviço móvel marítimo aos candidatos que provarem possuir os conhecimentos e aptidões técnicas e profissionais indicados a seguir:

3899 *a*) Conhecimento tanto dos princípios gerais de electricidade como da teoria da radioelectricidade e da electrónica que permitam satisfazer as condições estipuladas nos n.os **3900, 3901** e **3902;**

3900 *b*) Conhecimento teórico dos equipamentos modernos da radiocomunicação, nomeadamente de emissores, de receptores e de sistemas de antenas utilizados no serviço móvel marítimo radiotelegráfico e radiotelefónico, dos aparelhos automáticos de alarme, da aparelhagem radioeléctrica das embarcações e outros engenhos de salvamento, dos aparelhos utilizados para a radiogoniometria e todo o material auxiliar, incluindo unidades de alimentação de energia eléctrica (motores, alternadores, geradores, conversores, rectificadores e acumuladores), assim como conhecimentos gerais de outros equipamentos habitualmente utilizados para a radionavegação, particularmente com vista a assegurar a manutenção dos aparelhos;

3901 *c*) Conhecimento prático do funcionamento, ajuste e manutenção dos equipamentos mencionados no n.º **3900,** incluindo os conhecimentos práticos necessários para a obtenção de azimutes radiogoniométricos e conhecimento dos princípios de calibração dos radiogoniométros;

3902 *d*) Conhecimentos práticos necessários para localizar e reparar, com aparelhos de medida e ferramentas apropriados, as avarias que possam ocorrer durante a viagem nos aparelhos mencionados no n.º **3900;**

3903 *e*) Aptidão para a transmissão manual correcta e recepção auditiva correcta, em código Morse, de grupos de código (misturas de letras, algarismos e sinais de pontuação), à velocidade de 16 grupos por minuto, e de um texto em linguagem clara, à velocidade de 20 palavras por minuto. Cada grupo de código deve compreender 5 caracteres, contando-se por 2 caracteres cada algarismo ou sinal de pontuação. A palavra média do texto em linguagem clara deve comportar 5 caracteres. A duração de cada prova de transmissão e de recepção é, em geral, de cinco minutos;

3904 *f*) Aptidão para a transmissão correcta e para a recepção correcta em radiotelefonia;

3905 *g*) Conhecimento dos regulamentos aplicáveis às radiocomunicações, dos documentos relativos à taxação das radiocomunicações e das disposições da Convenção para a Salvaguarda da Vida Humana no Mar, no que respeita à radioelectricidade;

3906 *h*) Conhecimentos suficientes da geografia do Mundo, especialmente das principais linhas de navegação marítima e das vias de telecomunicações mais importantes;

3907 *i*) Conhecimento de uma das línguas de trabalho da União. Os candidatos deveriam poder exprimir-se nessa língua de modo conveniente, quer verbalmente quer por escrito. Cada administração indicará a ou as línguas impostas.

3908 C) Certificado de operador radiotelegrafista de 1.ª classe

3909 § 11. Concede-se certificado de 1.ª classe aos candidatos que provarem possuir os conhecimentos e aptidões técnicas e profissionais indicados a seguir:

3910 *a*) Conhecimento tanto dos princípios gerais da electricidade como da teoria da radioelectricidade, conhecimentos de regulação e funcionamento prático dos diferentes tipos de aparelhos radiotelegráficos e radiotelefónicos utilizados no serviço móvel, incluindo os aparelhos utilizados para a radiogoniometria e obtenção de azimutes radiogoniométricos, assim como conhecimento geral dos princípios de funcionamento de outros aparelhos, habitualmente empregados para a radionavegação;

3911 *b*) Conhecimento teórico e prático do funcionamento e manutenção dos aparelhos, tais como grupos electrogéneos, acumuladores, etc., utilizados para pôr a funcionar e regular os aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos mencionados no n.º **3910;**

3912 *c*) Conhecimentos práticos necessários para reparar, com os meios existentes a bordo, as avarias que possam ocorrer nos aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos durante a travessia;

3913 *d*) Aptidão para a transmissão manual correcta e recepção auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 20 grupos por minuto, e de um texto em linguagem clara, à velocidade de 25 palavras por minuto. Cada grupo de código deve compreender 5 caracteres, contando-se por 2 caracteres cada algarismo ou sinal de pontuação. A palavra média do texto em linguagem clara deve comportar 5 caracteres. A duração de cada prova de transmissão e de recepção é, em geral, de cinco minutos;

3914 *e*) Aptidão para a transmissão correcta e para a recepção correcta em radiotelefonia;

3915 *f*) Conhecimento minucioso dos regulamentos aplicáveis às radiocomunicações e conhecimento dos documentos relativos à taxação das radiocomunicações e conhecimento das disposições da Convenção para a Salvaguarda da Vida Humana no Mar, no que respeita à radioelectricidade;

3916 *g*) Conhecimentos suficientes da geografia do Mundo, especialmente das principais linhas de navegação marítima e aérea, bem como das vias de telecomunicações mais importantes;

3917 *h*) Conhecimento suficiente de uma das línguas de trabalho da União. Os candidatos devem poder exprimir-se nessa língua de modo conveniente, quer verbalmente quer por escrito. Cada administração indicará a ou as línguas impostas.

3918 D) Certificado de operador de radiotelegrafistas de 2.ª classe

3919 § 12. Concede-se certificado de 2.ª classe aos candidatos que provarem possuir os conhecimentos e aptidões técnicas e profissionais indicados a seguir:

3920 *a*) Conhecimento elementar teórico e prático da electricidade e da radioelectricidade e do funcionamento prático dos diferentes tipos de aparelhos radiotelegráficos e radiotelefónicos utilizados no serviço móvel, incluindo os aparelhos utilizados para a radiogoniometria e obtenção de azimutes radiogoniométricos, bem como o conhecimento elementar dos princípios de funcionamento de outros aparelhos, habitualmente empregados para a radionavegação;

3921 *b*) Conhecimento elementar teórico e prático do funcionamento e manutenção dos aparelhos, tais como grupos electrogéneos, acumuladores, etc., utilizados para pôr a funcionar e regular os aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos mencionados no n.º **3920**;

3922 *c*) Conhecimentos práticos suficientes para poder reparar as pequenas avarias susceptíveis de ocorrer nos aparelhos radiotelegráficos, radiotelefónicos e radiogoniométricos durante a travessia;

3923 *d*) Aptidão para a transmissão manual correcta e recepção auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 16 grupos por minuto, e de um texto em linguagem clara, à velocidade de 20 palavras por minuto. Cada grupo de código deve compreender 5 caracteres, contando-se por 2 caracteres cada algarismo ou sinal de pontuação. A palavra média do texto em linguagem clara deve comportar 5 caracteres. A duração de cada prova de transmissão e de recepção é, em geral, de cinco minutos;

3924 *e*) Aptidão para a transmissão correcta e recepção radiotelefónicas, salvo no caso previsto no n.º **3890**;

3925 *f*) Conhecimento dos regulamentos aplicáveis às radiocomunicações, conhecimento dos documentos relativos à taxação das radiocomunicações e conhecimento das disposições da Convenção para a Salvaguarda da Vida Humana no Mar, no que respeita à radioelectricidade;

3926 *g*) Conhecimentos suficientes da geografia do Mundo, especialmente das principais linhas de navegação marítima e aérea, bem como das vias de telecomunicações mais importantes;

3927 *h*) Se necessário, conhecimento elementar de uma das línguas de trabalho da União. Os candidatos devem ser capazes de se exprimir nessa língua de modo conveniente, quer verbalmente quer por escrito. Cada administração indica a ou as línguas impostas.

3928 E) Certificado especial de operador radiotelegrafistas

3929 § 13. (1) Concede-se certificado especial de radiotelegrafista aos candidatos que provarem possuir os conhecimentos e aptidões profissionais indicados a seguir:

3930 *a*) Aptidão para transmissão manual correcta e recepção auditiva correcta, em código Morse, de grupos de código (mistura de letras, algarismos e sinais de pontuação), à velocidade de 16 grupos por minuto, e de um texto em linguagem clara, à velocidade de 20 palavras por minuto. Cada grupo de código deve compreender 5 caracteres, contando-se cada sinal de pontuação por 2 caracteres. A palavra média do texto em linguagem clara deve comportar 5 caracteres;

3931 *b*) Conhecimento da regulação do funcionamento dos aparelhos de radiotelegrafia;

3932 *c*) Conhecimento dos regulamentos aplicáveis às radiocomunicações telegráficas, especialmente da parte desses regulamentos relativa à segurança da vida humana no mar.

3933 (2) É da competência de cada administração interessada fixar as outras condições para a obtenção deste certificado. Todavia, devem ser satisfeitas as condições enunciadas nos n.ºs **3941, 3942, 3943** e **3944** ou **3945**, consoante o caso.

3934 (3) No serviço móvel marítimo é da competência de cada administração interessada fixar as outras condições para a obtenção deste certificado. Todavia, salvo nos casos previstos no n.º **3890**, as condições enunciadas nos n.ºs **3936, 3937, 3938, 3939** e **3940** devem ser satisfeitas para um tal certificado concedido aos operadores de estação de navio a partir de 1 de Janeiro de 1976.

F) Certificados de operadores radiotelefonistas

§ 14. Concede-se certificado geral de operador radiotelefonista aos candidatos que provarem possuir conhecimentos e aptidões profissionais indicados a seguir (v. igualmente os n.os **3884, 3885, 3888** e **3889**):

a) Conhecimento dos princípios elementares da radiotelefonia;

b) Conhecimento minucioso da regulação e do funcionamento prático dos aparelhos de radiotelefonia;

c) Aptidão para a transmissão correcta e recepção correcta radiotelefónicas;

d) Conhecimento minucioso dos regulamentos aplicáveis às radiocomunicações telefónicas e especialmente da parte desses regulamentos relativa à segurança da vida humana.

§ 15. (1) Concede-se certificado restrito de radiotelefonista aos candidatos que provarem possuir os conhecimentos e aptidões indicados a seguir:

a) Conhecimento prático da exploração e da forma de procedimento radiotelefónicos;

c) Aptidão para a transmissão correcta e recepção correcta telefónicas;

d) Conhecimento geral dos regulamentos aplicáveis às radiocomunicações telefónicas e especialmente da parte desses regulamentos relativa à segurança da vida humana.

(2) Para as estações telefónicas de navio cuja potência de ponta do emissor não exceda 400 W, cada administração pode fixar as condições de obtenção de um certificado restrito de radiotelefonista, desde que o funcionamento de emissor apenas exiga o emprego de dispositivos externos de comutação de concepção simples, excluindo qualquer regulação manual dos elementos que determinam a frequência, e desde que a estabilidade das frequências seja mantida pelo próprio emissor nos limites das tolerâncias fixadas no apêndice 7. Todavia, ao fixar as condições, as administrações devem assegurar-se de que o operador possui conhecimento suficiente da exploração e das formas de procedimento do serviço radiotelefónico, especialmente no que respeita ao perigo, urgência e segurança. As disposições acima indicadas em nada contradizem ao do n.º **3949.**

(3) As administrações dos países da Região 1 não concedem certificados correspondentes às disposições do n.º **3945.**

§ 16. No certificado da radiotelefonista deve indicar-se se é um certificado geral ou um certificado restrito e, neste último caso, se foi concedido em conformidade com as disposições do **n.º 3945.**

§ 17. No serviço móvel marítimo, o certificado restrito de operador radiotelefonista deve, se for cado disso, mencionar igualmente a limitação prevista no n.º **3887.**

§ 18. Para satisfazer necessidades especiais, podem acordos especiais entre as administrações fixar as condições a preencher para a obtenção de certificado de radiotelefonista destinado a ser utilizado em estações radiotelefónicas que satisfaçam certas condições técnicas e certas condições de exploração. Tais acordos só podem ser concluídos desde que, pela sua aplicação, não resulte qualquer interferência prejudicial aos serviços internacionais. Essas condições e esses acordos serão mencionados nos certificados assim concedidos.

SECÇÃO IV

Estágios profissionais

§ 19. (1) O titular de um certificado de operador de radiocomunicações ou de um certificado de operador radiotelegrafista de 1.ª ou de 2.ª classe fica autorizado a embarcar como chefe de estação num navio cuja estação esteja classificada na IV categoria (v. o n.º **4056**).

(2) Todavia, para poder embarcar como chefe de estação ou apenas como operador num navio cuja estação esteja classificada na IV categoria (v. o n.º **4056** e que, nos termos dos acordos internacionais, deve contar com um operador radiotelegrafista, o titular de um certificado geral de operador de radiocomunicações ou de um certificado de operador telegrafista de 1.ª ou de 2.ª classe tem de ter prática suficiente como operador a bordo de um navio no mar.

(3) Antes de poder embarcar como chefe de uma estação de navio de II ou III categoria (v. os n.os **4054** e **4055**), o titular de um certificado geral de operador de radiocomunicações ou de um certificado geral de operador de radiocomunicações ou de um certificado de operador de radiotelegrafista de 1.ª ou de 2.ª classe deve ter, pelo menos, seis meses de experiência como operador a bordo de um navio ou numa estação costeira, devendo, neste último caso, ter, pelo menos três meses de experiência a bordo de um navio.

(4) Antes de poder embarcar como chefe de navio de I categoria (v. o n.º **4053**) o titular de um certificado geral de operador de radiocomunicações ou de um certificado de radiotelegrafista de 1.ª classe deve ter, pelo menos, um ano de experiência como operador a bordo de um navio ou numa estação costeira, devendo, neste último caso, ter, pelo menos, seis meses de experiência a bordo de um navio

3954 a 3978 *(Não atribuídos.)*

ARTIGO 56

Pessoal das estações do serviço móvel marítimo

SECÇÃO I

Pessoal das estações costeiras

3979 § 1. As administrações tomam as previdências necessárias para garantir que nas estações costeiras o pessoal possua qualificações profissionais que lhe permitam assegurar eficazmente o serviço dessas estações.

SECÇÃO II

Classe e número mínimo de operadores nas estações a bordo de navios

3980 § 2. No que respeita ao serviço de correspondência pública, compete a cada governo tomar as providências necessárias para que as estações a bordo dos navios da sua nacionalidade estejam dotadas de pessoal suficiente para assegurar um serviço eficaz.

3981 § 3. Tendo em conta as disposições do artigo 55, o pessoal das estações de navio do serviço de correspondência pública deve comportar, pelo menos:

3982 *a*) Para estações de navio de I categoria, excepto no caso previsto no n.º **3986:** um chefe de estação titular de certificado geral de operador de telecomunicações ou de certificado de operador radiotelegrafista de 1.ª classe;

3983 *b*) Para as estações de navio de II e III categorias, excepto nos casos previstos no n.º **3986:** um chefe de estação titular de certificado geral de operador de radiocomunicações ou de certificados de operador radiotelegrafista de 1.ª ou de 2.ª classe;

3984 *c*) Para os casos de navio de IV categoria, excepto nos casos previstos nos n.ºs **3985** e **3986:** um operador titular de certificado geral de operador de radiocomunicações ou de certificado de operador radiotelegrafista de 1.ª ou de 2.ª classe;

3985 *d*) Para as estações de navio com instalação radiotelegráfica não imposta por acordos internacionais: um operador titular do certificado geral de operador de radiocomunicações ou de um certificado de operador de radiotelegrafista de 1.ª ou de 2.ª classe ou um certificado especial de operador de radiotelegrafista;

3986 *e*) Para as estações de navio que dispõem unicamente de uma instalação radiotelefónica: um operador titular quer de certificado de radiotelefonista quer de certificado de radiotelegrafista.

3987 a 4011 *(Não atribuídos.)*

ARTIGO 57

Inspecção das estações de navio e das estações terrenas de navio

4012 § 1. (1) Os governos ou as administrações competentes dos países onde uma estação de navio ou uma estação terrena de navio faça escala podem exigir a apresentação da licença para a examinarem. O operador da estação, ou a pessoa responsável pela estação, deve prestar-se a esta verificação. A licença deverá conservar-se de maneira a poder ser apresentada quando pedida. Na medida do possível, a licença, ou uma cópia autenticada pela autoridade que a concedeu, deverá estar afixada permanentemente no local da estação.

4013 (2) Os inspectores devem possuir um cartão ou um distintivo de identidade passado pelas autoridades competentes, que devem mostrar o pedido do comandante ou da pessoa responsável pelo navio ou por qualquer outra embarcação em que se encontre a estação de navio ou a estação terrena de navio.

4014 (3) Quando a licença não possa ser apresentada, ou se verifiquem manifestas anomalias, os governos ou administrações podem mandar proceder à inspecção das instalações radioeléctricas, a fim de se assegurarem de que elas satisfazem as disposições do presente Regulamento.

4015 (4) Os inspectores têm, além disso, o direito de exigir a apresentação dos certificados dos operadores, mas não podem pedir qualquer justificação de conhecimento profissionais.

4016 § 2. (1) Quando um governo ou uma administração se vir obrigado a recorrer à medida prevista no n.º **4014,** ou quando não se apresentem os certificados de operador, deverá informar-se sem demora o governo ou a administração de que depende a estação de navio ou a estação terrena de navio em causa. Além disso, aplicam-se, se necessário, as disposições do artigo 21.

4017 (2) Antes de se retirar do navio ou de qualquer outra embarcação em que se encontre a estação de navio ou a estação terrena de navio o inspector deverá comunicar as suas observações ao comandante ou à pessoa responsável. No caso de infracção às disposições do presente Regulamento, o inspector apresenta o seu relatório por escrito.

4018 § 3. Os Membros da União comprometem-se a não impor às estações estrangeiras ou às estações terrenas de navio estrangeiras que se encontrem temporariamente nas suas águas territoriais ou que se detenham temporariamente no seu território condições técnicas e de exploração mais rigorosas do que as previstas no presente Regulamento. Esta prescrição em nada afecta as disposições que dependem de acordos internacionais relativos à navegação marítima e não previstas no presente Regulamento.

4019 a 4043 *(Não atribuídos.)*

ARTIGO 58

Horários das estações do serviço móvel marítimo

4044 § 1. A fim de permitir a aplicação das regras seguintes relativas às horas de vigília, qualquer estação do serviço móvel marítimo deve ter um relógio que regule bem e esteja certo pelo tempo universal coordenado (UTC).

4045 § 2. O tempo universal coordenado (UTC), contado das 00.00 às 23.59 horas a partir da meia-noite, empregar-se-á para todas as inscrições no diário do serviço de radiocomunicação e em todos os documentos análogos dos navios obrigatoriamente munidos de aparelhos de radiocomunicação em consequência de acordo internacional. O mesmo se observará, tanto quanto possível, nos outros navios.

SECÇÃO II

Estações costeiras

4046 § 3. (1) O serviço das estações costeiras é, tanto quanto possível, permanente de dia e de noite. Todavia, o serviço de certas estações pode ser de duração limitada. Cada administração ou exploração particular reconhecida devidamente autorizada para o efeito fixa o horário de serviço das estações suas dependentes.

4047 (2) Esses horários são notificados ao secretário-geral, que os publica na nomenclatura das estações costeiras.

4048 § 4. As estações costeiras cujo serviço não é permanente não podem encerrar antes de terem:

4049 *a*) Terminado todas as operações motivadas por uma chamada de perigo ou um sinal de urgência ou de segurança;

4050 *b*) Escoado todo o tráfego originário ou destinado às estações de navio que se encontram na sua zona de serviço e que assinalaram a sua presença antes da cessação efectiva do trabalho;

4051 *c*) Feito uma chamada geral a todas as estações para anunciar o fecho do serviço e indicar a hora de reabertura, se esta foi diferente das suas horas normais de serviço.

SECÇÃO III

Estações de navio

4052 § 5. (1) Para o serviço internacional de correspondência pública, as estações de navio classificam-se em quatro categorias:

4053 *a*) Estações de I categoria: estas estações desempenham um serviço permanente;

4054 *b*) Estações de II categoria: estas estações desempenham um serviço de 16 horas por dia;

4055 *c*) Estações de III categoria: estas estações desempenham um serviço de 8 horas por dia;

4056 *d*) Estações de IV categoria: estas estações desempenham um serviço de duração mais limitada que o das estações de III categoria ou um serviço cuja duração o presente Regulamento não fixa.

4057 (2) Cada administração determina as regras segunda as quais as estações de navio suas dependentes são repartidas pelas quatro categorias acima definidas.

4058 § 6. (1) As estações de navio classificadas na II categoria assegurão o serviço durante as seguinte horas:

00.00-04.00
08.00-12.00
16.00-18.00
20.00-22.00
} hora local do navio ou hora do fuso horário;

e durante quatro horas fixadas pela administração, pelo comandante ou pela pessoa responsável, a fim de satisfazer as necessidades essenciais do navio em matéria de comunicações, tendo em conta as condições de propagação e as necessidades do tráfego.

4059 (2) As estações de navio classificadas na III categoria assegurarão o serviço durante as seguintes horas: 08.00-12.00 — hora local do navio ou hora do fuso horário;

e duas horas seguidas entre as 18.00 e as 22.00 horas, local do navio ou do fuso horário, fixadas pela administração, pelo comandante ou pela pessoa responsável, e ainda durante duas horas fixadas pela administração, pelo comandante ou pela pessoa responsável, a fim de satisfazer as necessidades essenciais do navio em matéria de comunicações, tendo em conta as condições de propagação e as necessidades do tráfego.

4060 (3) Cada administração decide-se a hora local do navio observada pelos seus navios deve ser ou não a hora do fuso horário, conforme indicado no apêndice 12 (v. os n.os **4058** e **4059**).

4061 (4) No caso de curtas travessias, essas estações asseguram o serviço durante o horário fixado pelas administrações de que dependem.

4062 § 7. Recomenda-se às estações de navio de IV categoria que assegurem o serviço das 08.30 às 09.30 horas, hora local do navio ou hora do fuso horário.

4063 § 8. (1) As estações de navio cujo serviço não é permanente só podem encerrar depois de :

4064 *a*) Terem terminado todas as operações motivadas por uma chamada de perigo ou um sinal de urgência ou de segurança;

4065 *b*) Terem escoado, tato quanto praticamente possível, todo o tráfego originário ou destinado às estações costeiras que se encontram na sua zona de serviço e das estações de navio que, encontrando-se na sua zona de serviço, assinalaram a sua presença antes da cessação efectiva do trabalho.

4066 (2) Uma estação de navio que não tenha horário de serviço determinado deve informar a ou as estações costeiras com as quais está em comunicação das horas de encerramento e de reabertura do seu serviço.

4067 § 9. (1) Qualquer estação de navio, ao chegar a um porto e cujo serviço está, por consequência, prestes a cessar, deve:

4068 *a*) Avisar desse facto a estação costeira mais próxima e, sento útil, as outras estações costeiras com que em geral se corresponde;

4069 *b*) Proceder ao encerramento só depois de estar concluído o tráfego pendente, a não ser que as disposições em vigor no país em que faz escala o não permitam.

4070 (2) Por ocasião da saída do porto, a estação de navio deve informar da sua reabertura a ou as estações costeiras interessadas, desde que essa reabertura lhe seja consentida pelas disposições em vigor no país do porto de saída. Todavia, uma estação de navio cujo horário não seja fixado no presente Regulamento pode esperar o próprio momento da sua reabertura, depois da partida do porto, para informar do facto a ou as estações costeiras interessadas.

4071 a 4095 *(Não atribuídos.)*

ARTIGO 59

Condições a satisfazer no serviço móvel marítimo e no serviço móvel por satélite

SECÇÃO I

Serviço móvel marítimo

4096 A) Disposições gerais

4097 § 1. As estações de navio devem ser estabelecidas de modo que satisfaçam as disposições dos capítulos III e XI, no que respeita às frequências e classes de emissão.

4098 § 2. As frequências de emissão das estações de navio deverão ser verificadas o maior número de vezes possível pelo serviço de inspecção de que as estações dependem.

4099 § 3. A energia radiada pelos aparelhos receptores deverá ser tão reduzida quanto possível e não deverá causar interferência prejudicial às outras estações.

4100 § 4. As administrações tomam todas as medidas práticas necessárias para que o funcionamento dos aparelhos eléctricos ou electrónicos de qualquer natureza instalados nas estações de navio não cause interferência prejudicial aos serviços radioeléctricos essenciais das estações que funcionam de acordo com as disposições do presente Regulamento.

4101 § 5. (1) As mudanças de frequência nos aparelhos emissores e receptores de qualquer estação de navio deverão poder efectuar-se tão rapidamente quanto possível.

4102 (2) As instalações de qualquer estação de navio devem permitir, uma vez estabelecida a comunicação passar da emissão à recepção, e vice-versa, num tempo tão curto quanto possível.

4103 § 6. É proibido às estações de navio no mar efectuar serviço de radiodifusão (v. o n.° **36** e, igualmente, o n.° **2665**.)

4104 § 7. As estações de navio, exceptuando as estações de engenho de salvamento, deverão estar providas com os documentos de serviço indicados na secção pertinente do apêndice 11.

4105 § 8. Quando o emissor de uma estação de navio não seja susceptível de ser regulado de maneira que a frequência satisfaça a tolerância fixada no apêndice 7, a estação de navio deve estar munida de um dispositivo que lhe permita medir a frequência de emissão com uma precisão, pelo menos, igual a metade daquela tolerância.

4106 B) Estações de navio que utilizam a radiotelegrafia

4107 § 9. As estações de navio providas de aparelhos radioeléctricos destinados a ser utilizados para o tráfego normal em telegrafia morse devem estar equipadas com dispositivos quer permitam passar da emissão à recepção, e vice-versa, sem manobra de comutação. Convém, além disso, que as estações de navio possam escutar na frequência de recepção durante os períodos de emissão.

4108 B1) Faixas compreendidas entre 405 kHz e 535 kHz

4109 § 10. Os emissores utilizados nas estações de navio que funcionam nas faixas autorizadas compreendidas entre 405 kHz e 535 kHz devem ser providos de dispositivos que permitam, de maneira fácil, reduzir apreciavelmente a potência.

4110 § 11. Qualquer estação de navio provida de aparelhos radiotelegráficos destinados a funcionar nas faixas autorizadas compreendidas entre 405 kHz e 535 kHz deve poder:

4111 *a*) Efectuar emissões das classes A2A e A2B (*) ou H2B (*) e receber emissões das classes A2A, A2B (*), H2A e H2B (*) na frequência portadora de 500 kHz;

4112 *b*) Efectuar, além disso, emissões da classe A1A e da classe A2A ou H2A, pelo menos, em duas frequências de trabalho;

4113 *c*) Receber, além disso, emissões das classes A1A, A2A e H2A em todas as outras frequências necessárias à execução do seu serviço.

4114 § 12. As disposições dos n.os **4112** e **4113** não se aplicam aos aparelhos previstos unicamente para os casos de perigo, de urgência ou de segurança.

4115 B2) Faixas compreendidas entre 1605 kHz e 2850 kHz

4116 § 13. Na Região 2, qualquer estação radiotelegráfica instalada a bordo de um navio utilizando a faixa 2089,5-2092,5 kHz para a chamada e a resposta deve dispor de, pelo menos, uma outra frequência nas faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz.

4117 B3) Faixas compreendidas entre 4000 kHz e 27 500 kHz

4118 § 14. Todos os aparelhos de estação de navio que utilizam emissões da classe A1A nas frequências das faixas autorizadas compreendidas entre 4000 kHz e 27 500 kHz devem satisfazer as seguintes condições:

4119 *a*) Em cada uma das faixas necessárias à execução do seu serviço devem permitir o emprego de, pelo menos, duas frequências de trabalho, além de uma frequência da faixa de chamada (v. o n.º **4306**);

4120 *b*) As mudanças de frequência nos aparelhos emissores devem poder efectuar-se tão rapidamente quanto possível e, em qualquer caso, em menos de quinze segundos;

4121 *c*) Os aparelhos receptores devem apresentar as mesmas qualidades que os aparelhos emissores no que se refere a mudança de frequência.

4122 C) Estações de navio que utilizam a telegrafia com impressão directa de faixa estreita

4123 § 15. As características dos aparelhos de telegrafia com impressão directa de faixa estreita devem estar de acordo com as disposições do apêndice 38.

4124 D) Estações de navio que utilizam a radiotelefonia

4125 D1) Faixas compreendidas entre 1605 kHz e 4000 kHz

4126 § 16. Qualquer estação de navio provida de aparelhos radiotelefónicos destinados a funcionar nas faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz deve poder:

4127 *a*) Efectuar emissões das classes A3E e H3E na frequência portadora de 2182 kHz e receber emissões das classes A3E e H3E na frequência portadora de 2182 kHz. Todavia, a partir de

---

(*) Isto permite a recepção automática de sinais radiotelegráficos de alarme.

1 de Janeiro de 1982 as emissões da classe A3E não serão mais autorizadas na frequência portadora de 2182 kHz, excepto para os aparelhos a que se refere o n.º **4130**;

4128 *b*) Efectuar, além disso, emissões das classes:

1) A3E, ou
2) H3E, R3E,e J3E (1);

em duas frequências de trabalho, pelo menos (2). Todavia, a partir de 1 de Janeiro de 1982 as emissões das classes A3E e H3E deixarão de ser autorizadas nas frequências de trabalho;

4129 *c*) Receber, além disso, emissões das classes:

1) A3E e H3E, ou
2) A3E, H3E, R3E, e J3E;

em todas as frequências necessárias à execução do seu serviço. Todavia, a partir de 1 de Janeiro de 1982 deixará de ser exigida a capacidade para receber emissões das classes A3E e H3E.

4130 § 17. As disposições dos n.ºs **4128** e **4129** não se aplicam aos aparelhos previstos unicamente para casos de perigo, urgência e segurança.

4131 **D2) Faixas compreendidas entre 4000 kHz e 23 000 kHz**

4132 § 18. Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N. é conveniente que todas as estações de navio providas de aparelhos radiotelefónicos destinados a funcionar nas faixas autorizadas compreendidas entre 4000 kHz e 23 000 kHz possam emitir e receber nas frequências portadoras de 4125 kHz e 6215,5 kHz (v. os n.ºs **2982** e **2896**).

4133 **D3) Faixas compreendidas entre 156 MHz e 174 MHz**

4134 § 19. Qualquer estação de navio provida de aparelhos radiotelefónicos destinados a funcionar nas faixas autorizadas compreendidas entre 156 MHz e 174 MHz (v. o n.º **613** e o apêndice 189) deve poder efectuar e receber emissões da classe G3E (v. a Resolução n.º 308):

4135 *a*) Na frequência de perigo, de segurança e de chamada 156,8 MHz;
4136 *b*) Na primeira frequência «navio-navio» 156,3 MHz;
4137 *c*) Em todas as frequências necessárias à execução do seu serviço.

Secção II

Condições a satisfazer pelas estações terrenas de navio

4138 § 20. As estações terrenas de navio devem ser estabelecidas de modo que satisfaçam as disposições do capítulo III no que respeita às frequências.

4139 § 21. As frequências das emissões das estações terrenas de navio devem ser verificadas o maior número de vezes possível pelo serviço de inspecção de que dependem.

4140 § 22. A energia radiada pelos aparelhos receptores deve ser tão reduzida quanto possível na prática e não deve causar interferência prejudicial às outras estações.

4141 § 23. As administrações tomam todas as medidas práticas necessárias para que o funcionamento dos aparelhos eléctricos ou electrónicos de qualquer natureza instalados nas estações terrenas de navio não cause interferência prejudicial aos serviços radioeléctricos essenciais dessas estações que funcionam de acordo com as disposições do presente Regulamento.

Secção III

Comunicações de aeronaves com estações do serviço móvel marítimo e do serviço móvel marítimo por satélite

4142 A) Disposições gerais

4143 § 24. (1) As estações a bordo de aeronaves podem comunicar com as estações do serviço móvel marítimo ou do serviço móvel marítimo por satélite. Elas devem então satisfazer as disposições do presente Regulamento relativas a esses serviços.

4128.1 (1) Até 1 de Janeiro de 1982 as administrações podem, em certas zonas, restringir esta cláusula às emissões das classes H3E e J3E nas frequências de trabalho.

4128.2 (2) Em certas zonas, as administrações podem restringir esta cláusula a uma única frequência de trabalho.

4144 (2) É conveniente que, para esse fim, as estações a bordo de aeronaves utilizem as frequências atribuídas ao serviço móvel marítimo ou ao serviço móvel marítimo por satélite.

4145 (3) Quando transmitem ou recebem correspondência pública por intermédio das estações do serviço móvel marítimo ou do serviço móvel marítimo por satélite, as estações a bordo de aeronaves devem proceder de acordo com todas as disposições aplicáveis à transmissão da correspondência pública no serviço móvel marítimo ou no serviço móvel marítimo por satélite (v. especialmente os artigos 61, 62, 63, 65 e 66).

4146 § 25. Quando se trate de uma comunicação entre uma estação do serviço móvel marítimo e uma estação de aeronave, a chamada poderá recomeçar cinco minutos depois, não obstante as disposições do n.º **4735.**

4147 B) Disposições relativas à utilização das frequências compreendidas entre 156 MHz e 174 MHz

4148 § 26. (1) Em virtude das interferências que as estações de aeronave a altitudes elevadas podem causar, as frequências do serviço móvel marítimo compreendidas nas faixas superiores a 30 MHz não devem ser utilizadas pelas estações de aeronave, com excepção das frequências compreendidas entre 156 MHz e 174 MHz que estão especificadas no apêndice 18 e cuja utilização está sujeita às condições seguintes:

4149 *a*) A altitude das estações de aeronave não deve ultrapassar 300 m (1000 pés), excepto para as aeronaves de reconhecimento que participam nas operações dos quebra-gelos, às quais é autorizada uma altitude de 450 m (1500 pés);

4150 *b*) A potência média dos emissores das estações de aeronave não deve exceder 5 W. Todavia, na medida do possível, deve utilizar-se uma potência igual ou inferior a 1 W;

4151 *c*) As estações de aeronave devem utilizar as vias designadas para o efeito no apêndice 18;

4152 *d*) Salvo o previsto no n.º **4150**, os emissores das estações de aeronave devem satisfazer as características técnicas indicadas no apêndice 19;

4153 *e*) As comunicações de uma estação de aeronave devem ser breves e limitar-se às operações nas quais as estações do serviço móvel marítimo desempenham o papel principal e em que é necessário estabelecer comunicações directas entre a aeronave e a estação de navio ou a estação costeira.

4154 (2) As frequências de 165,3 MHz e 156,8 MHz podem ser utilizadas pelas estações de aeronave, mas unicamente para fins relativos à segurança.

4155 a 4179 *(Não atribuídos.)*

ARTIGO 60

Disposições especiais relativas à utilização das frequências no serviço móvel marítimo

SECÇÃO I

Disposições gerais

4180 A) Emissões radiotelegráficas de faixa lateral única

4181 § 1. As estações que efectuam emissões radiotelegráficas de faixa lateral única utilizam para esse fim a faixa lateral superior. As frequências especificadas no presente Regulamento para emissões das classes H2A e H2B (*), tais como as frequências de 410 kHz, 425 kHz, 454 kHz, 468 kHz, 480 kHz, 500 kHz, 512 kHz e 8364 kHz, são utilizadas como frequências portadoras.

4182 B) Faixas compreendidas entre 405 kHz e 535 kHz

4183 § 2. As estações de navio autorizadas a funcionar nas faixas compreendidas entre 415 kHz e 535 kHz devem emitir nas frequências indicadas no presente artigo (v. o n.º **4237**), excepto nos casos previstos no n.º **961.**

4184 § 3. Como regra geral, o espaçamento mínimo entre frequências adjacentes utilizadas, respectivamente, por estações costeiras e estações de navio é de 4 kHz.

4185 § 4. Na Região 1 não será consignada às estações costeiras qualquer frequência da faixa 405-415 kHz, a fim de proteger a frequência de 410 kHz, designada para o serviço de radionavegação marítima (radiogoniometria).

4186 § 5. Na zona africana da Região 1, a consignação de frequências às estações costeiras que funcionam nas faixas 415-490 kHz e 510-525 kHz é efectuada, como regra geral, na base de um espaçamento de 3 kHz

(*) Isto permite a recepção automática de sinais radiotelegráficos de alarme.

entre frequências adjacentes. Todavia, esse espaçamento é reduzido em certos casos, a fim de que as frequências possam coincidir com as utilizadas na zona europeia nas mesmas faixas.

4187 C) Faixas compreendidas entre 1605 kHz e 4000 kHz

4188 § 6. (1) Na Região 1 é conveniente que as frequências consignadas às estações que funcionam nas faixas compreendidas entre 1606,5 kHz e 3800 kHz (v. o artigo 8) sejam escolhidas, na medida do possível, nas seguintes faixas:

1606,5-1625 kHz: exclusivamente radiotelegrafia;
1625-1670 kHz: radiotelefonia de pequena potência;
1670-1950 kHz: estações costeiras;
1950-2053 kHz: emissões das estações de navio destinadas às estações costeiras;
2053-2065 kHz: comunicações de navios entre si;
2065-2170 kHz: emissões das estações de navio destinadas às estações costeiras;
2170-2173,5 kHz: chamada das estações de navio pelas estações costeiras (incluindo a chamada selectiva) e, a título excepcional, transmissão de mensagens de segurança pelas estações costeiras;
2173,5-2190,5 kHz: *faixa de guarda da frequência de perigo e chamada 2182 kHz;*
2190,5-2194 kHz: chamada das estações costeiras pelas estações de navio;
2194-2440 kHz: comunicações de navios entre si;
2440-2578 kHz: emissões das estações de navio com destino às estações costeiras;
2578-2850 kHz: estações costeiras;
3155-3340 kHz: emissões das estações de navio com destino às estações costeiras;
3340-3400 kHz: comunicações de navios entre si;
3500-3600 kHz: comunicações de navios entre si;
3600-3800 kHz: estações costeiras.

4189 (2) Sempre que possível, as frequências destas faixas consignadas na Região 1 são espaçadas de:

7 kHz, quando as duas frequências adjacentes são utilizadas para a radiotelefonia por faixa lateral dupla:
3 kHz, quando as duas frequências adjacentes são utilizadas para a radiotelegrafia;
5 kHz, quando as duas frequências adjacentes são utilizadas uma para a radiotelefonia por faixa lateral dupla e a outra para a radiotelegrafia.

4190 (3) Todavia, nas faixas atribuídas na Região 1 às comunicações entre navios, o espaçamento entre frequências adjacentes utilizadas para a radiotelefonia por faixa lateral dupla é reduzido a 5 kHz.

4191 (4) Quando estas faixas são utilizadas para a radiotelefonia por faixa lateral única, uma estação que funciona na metade inferior de uma via de dupla faixa lateral utiliza a faixa lateral superior com uma frequência portadora 3 kHz inferior à frequência central dessa via.

4192 (5) Todavia, nas faixas atribuídas às comunicações entre navios, a frequência portadora de uma estação que funciona na metade inferior de uma via de dupla faixa lateral é apenas 2,5 kHz inferior à frequência central dessa via.

4193 § 7. Nas Regiões 2 e 3 as frequências portadoras de 2635 kHz (frequência consignada 2636,4 kHz) e de 2638 kHz (frequência consignada 2639,4 kHz), além das frequências prescritas para utilização comum em certos serviços, são utilizadas como frequências de trabalho navio-navio pelas estações radiotelefónicas de navio em faixa lateral única. A frequência portadora de 2635 kHz pode ser utilizada somente para emissões das classes R3E e J3E. A frequência portadora de 2638 kHz pode ser utilizada para emissões das classes A3E, H3E, R3E e J3E. Todavia, as emissões das classes A3E e H3E deixam de estar autorizadas a partir de 1 de Janeiro de 1982. Na Região 3 essas frequências são protegidas por uma faixa de guarda compreendida entre 2634 kHz e 2642 kHz.

4194 § 8. A frequência consignada de uma via radiotelefónica em faixa lateral única é 1400 superior à frequência portadora.

4195 D) Faixas compreendidas entre 4000 kHz e 27 500 kHz

4196 § 9. (1) As faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz (v. o artigo 8) são subdivididas do modo seguinte:

4197 *a) Estação de navio,* telefonia, exploração dúplex (vias de duas frequências):

4063-4143,6 kHz;
6200-6218,6 kHz;
8195-8291,1 kHz;
12 330-12 429,2 kHz;
16 460-16 587,1 kHz;
22 000-22 124 kHz;

4198 *b) Estações costeiras,* telefonia, exploração dúplex (vias de duas frequências):

4357,4-4438 kHz;
6506,4-6525 kHz;
8718,9-8815 kHz;
13 100,8-13 200 kHz;
17 232,9-17 360 kHz;
22 596-22 720 kHz;

4199 *c) Estações de navio e estações costeiras,* telefonia, exploração *simplex* (vias de uma frequência) e exploração de faixas cruzadas entre navios (duas frequências):

4143,6-4146,6 kHz;
6218,6-6224,6 kHz;
8291,1-8297,3 kHz;
12 429,2-12 439,5 kHz;
16 587,1-16 596,4 kHz;
22 124-22 139,5 kHz;

4200 *d) Estações de navio,* telegrafia de faixa larga, fac-símile e sistemas especiais de transmissão:

4146,6-4162,5 kHz;
4166-4170 kHz;
6224,6-6244,5 kHz;
6248-6256 kHz;
8300-8328 kHz;
8331,5-8343,5 kHz;
12 439,5-12 479,5 kHz;
12 483-12 491 kHz;
16 596,4-16 636,5 kHz;
16 640-16 660 kHz;
22 139,5-22 160,5 kHz;
22 164-22 192 kHz;

4201 *e) Estações de navio,* transmissão de dados oceanográficos [v. a nota *c*) do apêndice 31]:

4162,5-4166 kHz;
6244,5-6248 kHz;
8328-8331,5 kHz;
12 479,5-12 483 kHz;
16 636,5-16 640 kHz;
22 160,5-22 164 kHz;

4202 *f) Estações de navio,* sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação não superiores a 100 bauds (frequências emparelhadas com as indicadas no n.º **4207**).

4170-4177,25 kHz;
6256-6267,75 kHz;
8343,5-8357,25 kHz;
12 491-12 519,75 kHz;
16 660-16 694,75 kHz;
22 192-22 225,75 kHz;

4203 *g) Estações de navio,* sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação não superiores a 100 bauds (frequências não emparelhadas):

4177,25-4179,75 kHz;
626,75-6269,75 kHz;
8297,3-8300 kHz;
8357,25-8357,75 kHz;
12 519,75-12 526,75 kHz;
16 694,75-16 705,8 kHz;
22 225,75-22 227 kHz;
25 076-25 090,1 kHz;

4204 *h*) *Estações de navio,* telegrafia, morse de classe A1A, Chamada:

4179,75-4187,2 kHz;
6269,75-6280,8 kHz;
8359,75-8374,4 kHz;
12 539,6-12 561,6 kHz;
16 719,8-16 748,8 kHz;
22 227-22 247 kHz;
25 070-25 076 kHz;

4205 *i*) *Estações de navio,* chamada selectiva numérica:

4187,2-4188 kHz;
6280,8-6282 kHz;
8374,4-8376 kHz;
12 561,6-12 564 kHz;
16 748,8-16 752 kHz;
22 247-22 250 kHz;

4206 *j*) *Estações de navio,* telegrafia morse de classe A1A, trabalho:

4188-4299,4 kHz;
6282-6325,4 kHz;
8357,75-8359,75 kHz;
8376-8435,4 kHz;
12 526,75-12 539,6 kHz;
12 564-12 652,3 kHz;
16 705,8-16 719,8 kHz;
16 752-16 859,4 kHz;
22 250-22 310,5 kHz;
25 090,1-25 110 kHz:

4207 *k*) *Estações costeiras,* sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação não superiores a 100 bauds (frequências emparelhadas com as indicadas no n.° **4202**);

4349,4-4356,75 kHz;
6493,9-6505,75 kHz;
8704,4-8718,25 kHz;
13 070,8-13 099,75 kHz;
17 196,9-17 231,75 kHz;
22 561-22 594,75 kHz;

4208 *l*) *Estações costeiras,* chamada selectiva numérica:

4356,75-4357,4 kHz;
6505,75-6506,4 kHz;
8718,25-8718,9 kHz;
130 99,75-13 100,8 kHz;
17 231,75-17 232,9 kHz;
22 594,75-22 596 kHz;

4209 *m*) *Estações costeiras,* telegrafia morse de classe A1A e telegrafia de faixa larga, fac-símile, sistemas especiais de transmissão de dados e telegrafia com impressão directa:

4219,4-4349,4 kHz;
6325,4-6493,9 kHz;
8435,4-8704,4 kHz;
12 652,3-13 070,8 kHz;
16 859,4-17 196,9 kHz;
22 310,5-22 561 kHz.

4210 (2) Podem consignar-se às estações costeiras as frequências das faixas 25 010-25 070 kHz, 25 110-25 600 kHz e 26 100-27 500 kHz.

4211 § 10. (1) O apêndice 16 indica as vias radiofónicas nas faixas de frequências indicadas nos n.os **4197** e **4199.**

4212 (2) O plano de adjudicação de frequências às estações costeiras radiotelefónicas em ondas decamétricas consta do apêndice 25 Mar2.

4213 E) Faixas compreendidas entre 156 MHz e 174 MHz

4214 § 11. Convém que o serviço do movimento de navios seja explorado unicamente nas frequências atribuídas ao serviço móvel marítimo na faixa 156-174 MHz.

SECÇÃO II

Emprego das frequências em radiografia

4215 A) Generalidades

4216 § 12. Sempre que no presente Regulamento se faça menção no que respeita ao serviço móvel marítimo, à classe de emissão A2A, A2B (*), H2A ou H2B (**), o tipo de transmissão considerado é, excepto para fins de chamada selectiva, a telegrafar por manipulação por tudo ou nada da emissão modulada, com exclusão da manipulação por tudo ou nada de apenas as frequências acústicas de modulação.

4217 B) Faixas compreendidas entre 405 kHz e 535 kHz

B1) Chamada e resposta

4218 § 13. (1) A frequência de 500 kHz é a frequência internacional de perigo em radiotelegrafia (v. o n.º **2970** para os pormenores da sua utilização nas comunicações de perigo, de segurança e de urgência).

4219 (2) Além desse fim, a frequência de 500 kHz só poderá ser utilizada:

4220 *a*) Para a chamada e a resposta (v. os n.os **4225** e 4229);

4221 *b*) Pelas estações costeiras, para anunciarem a emissão das suas listas de chamadas, nas condições previstas nos n.os **4727, 4728** e **4729**.

4222 (3) A fim de facilitar a recepção das chamadas de perigo, as outras emissões na frequência de 500 kHz devem reduzir-se ao mínimo e a sua duração não deve ultrapassar um minuto.

4223 (4) Antes de emitir na frequência de 500 kHz, uma estação deve escutar essa frequência durante um espaço de tempo suficiente, a fim de se certificar de que não está em curso qualquer tráfego de perigo (v. o n.º **4713**).

4224 (5) As disposições do n.º **4223** não se aplicam às estações em perigo.

4225 § 14. (1) A frequência geral de chamada que, excepto no caso indicado no n.º **4849,** devem utilizar todas as estações de navio ou todas as estações costeiras que funcionem em radiografia nas faixas autorizadas entre 405 kHz e 535 kHz, assim como as aeronaves que desejem entrar em comunicação com uma estação do serviço marítimo que utilize frequências dessas faixas, é a frequência de 500 kHz.

4226 (2) Contudo, a fim de reduzir as interferências nas regiões de tráfego intenso, as administrações podem considerar como satisfeitas as disposições do n.º **4225** quando as frequências chamada consignadas às estações costeiras abertas à correspondência pública não se afastem mais de 3 kHz da frequência geral de chamada de 500 kHz.

4227 § 15. (1) Uma estação de navio que chama uma estação costeira deve, sempre que possível, especialmente nas zonas de tráfego intenso, indicar à estação costeira que está apta a receber na frequência de trabalho dessa estação.

4228 (2) A estação de navio deve assegurar-se previamente de que essa frequência não está já a ser utilizada pela estação costeira.

4229 § 16. (1) A frequência de resposta a uma chamada emitida na frequência geral de chamada (v. o n.º **4225**) é:

Quer a frequência de 500 kHz;
Quer a frequência indicada pela estação que chama (v. os n.os **4227** e **4769**).

4230 (2) Nas regiões de tráfego intenso, uma estação costeira pode responder às chamadas dos navios da sua própria nacionalidade, conforme arranjos especiais efectuados pela administração interessada (v. o n.º **4769**).

4231 § 17. Na frequência de 500 kHz podem ser feitas chamadas selectivas, de acordo com as disposições do artigo 62, no sentido estação costeira-navio e navio-estação costeira e entre navios.

B2) Tráfego

4232 § 18. (1) As estações costeiras que funcionam nas faixas autorizadas entre 405 kHz e 535 kHz devem estar em condições de utilizar, pelo menos, uma frequência além da frequência de 500 kHz. Uma dessas

---

(*) Isto permite a recepção automática de sinais radiotelegráficos de alarme.
(**) Isto permite a recepção automática de sinais radiotelegráficos de alarme e a chamada selectiva.

frequências adicionais, impressas em normando na nomenclatura das estações costeiras, é a frequência normal de trabalho da estação.

4233 (2) Além da sua frequência normal de trabalho, as estações costeiras podem utilizar, nas faixas autorizadas, frequências suplementares, mencionadas na nomenclatura das estações costeiras em caracteres ordinários. Todavia a faixa 405-415 kHz é atribuída à radiogoniometria e só poderá ser utilizada pelo serviço móvel marítimo nas condições fixadas no capítulo III.

4234 (3) As frequências de trabalho das estações costeiras devem ser escolhidas de modo a evitar interferir as estações vizinhas.

4235 (4) Convém que, nas regiões de tráfego intenso, as estações costeiras e as estações de navio usem emissões de classe A1A nas suas frequências de trabalho.

4236 § 19. Por exemplo às disposições dos n.os **2970, 4219, 4220** e **4221** e com a condição de não interferir os sinais de perigo, de urgência, de segurança, de chamada e de resposta, a frequência de 500 kHz pode utilizar-se com discrição, para a radiogoniometria, foras das regiões de tráfego intenso.

4237 § 20. (1) As estações de navio que funcionam nas faixas autorizadas entre 405 kHz e 535 kHz devem utilizar frequências de trabalho escolhidas entre as seguintes: 425 kHz, 454 kHz, 468 kHz, 480 kHz e 512 kHz, excepto nos casos em que são satisfeitas as condições especificadas no n.° **961**.

4238 (2) Nenhuma estação costeira é autorizada a emitir nas frequências de trabalho reservadas ao uso das estações de navio no mundo inteiro.

4239 (3) As estações de navio podem utilizar a frequência de 512 kHz como frequências de chamada suplementar quando se esteja a utilizar a frequência de 500 kHz para o serviço de perigo.

4240 (4) Durante esses períodos as estações costeiras podem:

4241 *a*) Utilizar a frequência de 512 kHz como frequência suplementar de chamada e de resposta; *ou*

4242 *b*) Aplicar, para a chamada e a resposta, outras disposições, que devem ser especificadas na Nomenclatura das estações costeiras.

4243 (5) Quando a frequência de 500 kHz for utilizada para o serviço de perigo, as estações de navio não deverão empregar a frequência de 512 kHz como frequência de trabalho nas zonas em que ela é utilizada como frequência de chamada suplementar.

4244 C) Faixas compreendidas entre 1605 kHz e 4000 kHz

C1) Região 2

4245 § 21. Na Região 2, as frequências da faixa 2068,5-2078,5 kHz são consignadas às estações de navio equipadas com sistemas telegráficos de faixa larga, fac-símile e sistemas especiais de transmissão. São aplicáveis as disposições do n.° **4254**.

C2) Disposições suplementares aplicáveis somente nas zonas da Região 3 situadas ao norte do Equador

4246 § 22. (1) A faixa 2089,5-2092.5 kHz é a faixa das frequências de chamada e de segurança em radiotelegrafia nas faixas compreendidas entre 1605 kHz e 2850 kHz em que é admitida a radiotelegrafia.

4247 (2) As frequências da faixa 2089,5-2092,5 kHz podem ser utilizadas para a chamada, a resposta e a segurança. Essas frequências podem também ser utilizadas para a transmissão de mensagens precedidas dos sinais de urgência ou de segurança.

4248 (3) Qualquer estação costeira que utilize a faixa de chamada 2089,5-2092,5 kHz deve, tanto quanto possível, assegurar a escuta nessa faixa durante as suas horas de serviço.

4249 (4) As estações costeiras que utilizam frequências da faixa 2089,5-2092,5 kHz para a chamada devem estar em condições de utilizar, pelo menos, uma outra frequência escolhida nas faixas compreendidas entre 1605 kHz e 2850 kHz em que é admitida a radiotelegrafia.

4250 (5) Uma dessas frequências, impressa em normando na nomenclatura das estações costeiras, é a frequência normal de trabalho da estação. As frequências suplementares eventuais figuram em caracteres ordinários.

4251 (6) As frequências de trabalho das estações costeiras devem ser escolhidas de modo a evitar interferir outras estações.

4252 D) Faixas compreendidas entre 4000 kHz e 27 500 kHz

D1) Generalidades

4253 § 23. (1) As estações de navio equipadas para trabalhar em radiotelegrafia nas faixas especificadas nos n.os **4204** e **4206** devem efectuar unicamente emissões de telegrafia morse da classe A1A com uma velocidade de modulação que não ultrapasse 40 bauds. As estações de engenho de salvamento podem efectuar nessas faixas emissões da classe A2A ou H2A (v. os n.os **3002** e **3005**).

4254 (2) As estações de navio equipadas com sistemas telegráficos de faixa larga, com fac-símile ou com sistemas especiais de transmissão podem empregar nas faixas reservadas para esse efeito qualquer classe de emissão, desde que as suas emissões possam ficar contidas nas vias de faixa larga indicadas no apêndice 31. Todavia, não podem utilizar nem a telegrafia morse de classe A1A nem a telefonia, excepto para permitir o ajuste dos circuitos.

4255 (3) Sob reserva das disposições do n.º **4376.1**, as estações costeiras radiotelegráficas que funcionam nas faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz não devem fazer transmissões do tipo 2 (v. o n.º **4216**).

4256 (4) As estações costeiras radiotelegráficas que efectuem emissões da classe A1A ou F1B a uma só via e que funcionem nas faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz não devem, em qualquer caso, utilizar uma potência média superior aos valores seguintes:

Faixas	Potência média máxima
4 Mhz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
22 MHz	15 kW

4257 (5) As estações costeiras radiotelegráficas que efectuem emissões telegráficas multiviais e que funcionem nas faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz não devem utilizar, em qualquer caso, uma potência média superior a 2,5 kW por 500 Hz de largura de faixa.

4258 § 24. Os n.os **4200** a **4209** e as colunas correspondentes do apêndice 31 indicam quais as partes das faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz que se destinam a ser utilizadas para a radiotelegrafia pelas estações costeiras e pelas estações de navio.

D) Chamada e resposta

4259 § 25. (1) Para entrar em comunicação com uma estação costeira, qualquer estação de navio empregará uma frequência de chamada apropriada compreendidas numa das faixas indicadas no n.º **4204**.

4260 (2) As frequências das faixas de chamada em telegrafia morse da classe A1A são consignadas a cada estação de navio de acordo com as disposições dos n.os **4277** a **4285**.

4261 § 26. A fim de reduzir as interferências, as estações de navio devem, de acordo com os meios de que disponham, esforçar-se por escolher para a chamada a faixa cujas frequências apresentam as características de propagação mais favoráveis para estabelecer uma comunicação satisfatória. Na falta de dados mais precisos, qualquer estação de navio deve, antes de emitir uma chamada, escutar os sinais da estação com a qual deseja entrar em comunicação. A intensidade e a inteligibilidade dos sinais recebidos fornecerão então elementos úteis sobre as condições de propagação e indicarão em que faixa é preferível efectuar a chamada.

4262 § 27. A fim de reduzir as interferências nas vias de chamada comum, estas só devem ser utilizadas quando um navio não puder utilizar uma frequência de chamada do grupo apropriado designado como via de recepção para a estação costeira com a qual o navio deseja entrar em comunicação, ou quando a estação costeira tenha indicado que só assegura a escuta nas vias de chamada comuns.

4263 § 28. (1) Uma estação costeira utilizará para a chamada, em cada uma das faixas em que o seu equipamento lhe permite trabalhar, a sua frequência normal de trabalho indicada em normando na nomenclatura das estações costeiras (v. os n.os **4207** e **4209**).

4264 (2) Quando for praticável, uma estação costeira transmitirá as suas chamadas a horas determinadas, sob a forma de listas de chamadas, na ou nas indicadas na nomenclatura das estações costeiras (v. os n.os **4722** e **4726**).

4265 § 29. As frequências exclusivas para a chamada selectiva numérica compreendidas nas faixas indicadas no n.º **4208** (v. o n.º **4684**) podem consignar-se a qualquer estação costeira. Essas frequências serão utilizadas de acordo com as disposições do n.º **4681**.

4266 § 30. A menos que a estação que chama tenha indicado outra, a frequência de resposta a uma chamada é:

4267 *a*) Para uma estação de navio, uma das frequências de chamada que lhe foram consignadas na mesma faixa, tendo em conta as disposições do n.º **4262**;

4268 *b*) Para uma estação costeira, a sua frequência normal de trabalho da faixa em que foi chamada.

4269 § 31. As administrações indicarão, para cada estação costeira, quais são as faixas de chamada de navios e as vias de recepção de estações costeiras em que essa estação fará a escuta e, tanto quanto possível, o horário aproximado dessa escuta em tempo universal coordenado (UTC). Essas indicações serão inseridas na nomenclatura das estações costeiras.

4270 § 32. Excepcionalmente, uma estação costeira poderá indicar que faz a escuta em frequências de chamada diferentes das fixadas como suas frequências de recepção próprias.

4271 § 33. A fim de reduzir as interferências nas frequências de chamada, as estações costeiras devem tomar as medidas necessárias para assegurar, em condições normais, a recepção rápida das chamadas (v. o n.º **4755**).

D3) Tráfego

4272 § 34. (1) Uma estação de navio, depois de ter estabelecido a comunicação numa frequência de chamada (v. o n.º **4259**), passará a uma frequência de trabalho para transmitir o seu tráfego. As frequências das faixas de chamada não deverão ser utilizadas para outras emissões diferentes da chamada.

4273 (2) As frequências de trabalho são consignadas às estações de navio de acordo com as disposições dos n.os **4288** a **4306**, inclusive.

4274 § 35. (1) Uma estação costeira transmitirá o seu tráfego na sua frequência normal de trabalho ou nas outras frequências de trabalho que lhe estão consignadas.

4275 (2) Convém que os países que partilham uma via numa das faixas exclusivas atribuídas ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz dêem atenção especial àqueles que não disponham de outra via nessa faixa e se esforcem por utilizar a sua via principal na maior medida possível, a fim de permitir que esses últimos satisfaçam as necessidades mínimas da sua exploração.

4276 ### E) Consignação de frequências às estações de navio

E1) Frequência de chamada das estações de navio

4277 § 36. Cada uma das faixas de chamada compreendidas entre 4000 kHz e 23 000 kHz e indicadas no n.º **4204** divide-se em quatro grupos de vias e duas vias comuns. A faixa de 25 MHz divide-se em três vias, uma das quais é uma via comum (v. o apêndice 34).

4278 § 37. (1) As estações costeiras, quando assegurem um serviço internacional indicado na nomenclatura das estações costeiras, devem manter-se em escuta nas vias de chamada comuns de cada faixa durante o período de tempo em que estejam em serviço nessa faixa e na via ou vias correspondentes ao seu grupo durante os períodos de tráfego intenso. Os períodos durante os quais a escuta será feita na via ou vias do grupo são indicadas, para cada país, na nomenclatura das estações costeiras.

4279 (2) Se necessário, as estações costeiras indicarão nas suas emissões as vias nas quais asseguram a escuta.

4280 § 38. Nas faixas compreendidas entre 4000 kHz e 23 000 kHz, a administração de que depende uma estação de navio consigna-lhe, pelo menos, duas frequências de chamada em cada uma das faixas que a estação pode utilizar ([1]). Em cada faixa, uma das frequências de chamada deve estar compreendida numa das vias comuns de recepção das estações costeiras cuja lista figura no apêndice 34; outra deve ser escolhida entre as outras vias cuja lista figura no apêndice 34, tendo em conta a via ou vias de recepção da estação costeira com a qual a estação de navio comunica mais frequentemente. Na faixa dos 25 MHz, as administrações consignam às estações de navio sob a sua jurisdição uma frequência na via comum. Nesta faixa, uma outra frequência de chamada deve ser escolhida na via A ou B do apêndice 34, tendo em conta a via de recepção da estação costeira com a qual a estação de navio comunica mais frequentemente.

4281 § 39. Sempre que possível, convém consignar a uma estação de navio frequências de chamada suplementares (v. o n.º **4262**).

4282 § 40. A fim de se obter uma repartição uniforme das chamadas, as administrações que não tencionem assegurar a escuta em todas as vias de recepção do respectivo grupo fixarão a via ou vias nas quais assegurarão a escuta, mas somente após coordenação, na medida do possível, com as outras administrações que pertencem ao mesmo grupo (v. a Resolução n.º 312).

4283 § 41. As administrações que consignem às suas estações de navio frequências em várias vias de chamada do respectivo grupo tomarão as medidas necessárias para repartir esses consignações uniformemente pelas vias que utilizam.

4284 § 42. A fim de assegurar uma repartição uniforme das chamadas nas vias de chamada comuns, convém que as administrações consignem, tanto quanto possível, frequências de cada uma das duas vias a um número igual de estação de navio.

4285 § 43. As administrações devem assegurar, tanto quanto possível, que as estações de navio sob a sua jurisdição sejam capazes de manter as respectivas emissões entre os limites da via que lhes está consignada (v. o apêndice 7).

4286 § 44. As frequências exclusivas para a chamada selectiva numérica compreendidas nas faixas indicadas no n.º **4205** (v. o n.º **4683**) podem ser consignadas a qualquer estação de navio; essas frequências devem ser utilizadas de acordo com as disposições do n.º **4681**.

4280.1 ([1]) Até 1 de Janeiro de 1980, às estações de navio cujos emissores só podem utilizar três frequências em cada uma das faixas compreendidas entre 4000 kHz e 23 000 kHz pode, excepcionalmente, ser consignada uma só frequência de chamada em cada umas das faixas em que podem emitir. Esta excepção só poderá verificar-se se a administração interessada considerar que é necessária a consignação à estação de navio de, pelo menos, duas frequências de trabalho em cada faixa para assegurar o seu serviço.

E2) Frequência de trabalho das estações de navios

4287 *a) Espaçamento das vias e consignação das frequências:*

4288 § 45. Em todas as faixas, as frequências de trabalho das estações de navio equipadas com sistemas telegráficos de faixa larga, com fac-símile ou com sistemas especiais de transmissão, são espaços de 4 kHz. As frequências a consignar estão indicadas no apêndice 31.

4289 § 46. Em todas as faixas, as frequências a consignar para as transmissões de dados oceanográficos são espaçadas de 0,3 kHz. As frequências a consignar estão indicadas no apêndice 31.

4290 § 47. Em todas as faixas, as frequências de trabalho das estações de navio que utilizam sistemas de faixa estreita de telegrafia com impressão directa e de transmissões de dados, com velocidades de modelação não superiores a 100 bauds, incluindo as frequências emparelhadas com as frequências de trabalho a consignar às estações costeiras (v. o n.º **4207**), são espaçadas de 0,5 kHz. As frequências a consignar às estações de navio e emparelhadas com as frequências utilizadas pelas estações costeiras estão indicadas no apêndice 32 (v., também, o n.º **4202**). As frequências a consignar às estações de navio e não emparelhadas com as frequências utilizadas pelas estações costeiras estão indicadas no apêndice 33 (v., também, o n.º **4203**).

4291 § 48. Em todas as faixas,excepto na dos 6 MHz, as frequências de trabalho das estações de navio que utilizam a telegrafia morse da classe A1A com velocidades de modulação não superiores a 40 bauds são espaçadas de 0,5 kHz; na faixa dos 6 MHz, são espaçadas de 0,75 kHz [v., também, a nota *e*) do apêndice 31]. As frequências extremas a consignar em cada uma destas faixas estão indicadas no apêndice 31.

4292 § 49. Nas faixas dos 4, 6, 8, 12 e 16 MHz há um certo número de frequências em relação harmónica, como é indicado no apêndice 35.

4293 *b) Frequência de trabalho das estações de navio equipadas com sistemas telegráficos de faixa larga, com fac-símile ou com sistemas especiais de transmissão:*

4294 § 50. (1) Cada administração consigna a cada uma das estações de navio sob a sua autoridade e que empreguem sistemas especiais de transmissão, de fac-símile ou sistemas telegráficos de faixa larga pelo menos uma série de frequências de trabalho reservadas para esse fim (v. o apêndice 31). O número de séries a consignar a cada navio deve ser determinado em função das necessidades do seu tráfego.

4295 (2) Às estações de navio equiparadas com sistemas especiais de transmissão, com fac-símile ou com sistemas telegráficos de faixa larga, a que não forem consignadas todas as frequências de trabalho de uma faixa, as administrações interessadas consignarão frequências de trabalho segundo um sistema ordenado de permuta, de modo que todas as frequências seja consignadas aproximadamente o mesmo número de vezes.

4296 (3) Todavia, nos limites das faixas especificadas no n.º **4200**, as administrações podem, para satisfazer as necessidades de sistemas especiais, consignar frequências diferentes das indicadas no apêndice 31. Contudo, as administrações respeitarão, na medida do possível, as disposições do apêndice 31 relativas á distribuição das vias e ao espaçamento de 4 kHz.

4297 *c) Frequências de trabalho das estações de dados oceanográficos:*

4298 § 51. As faixas de frequências indicadas no n.º **4201** podem igualmente ser utilizadas pelas estações de bóia para as transmissões de dados oceanográficos e pelas estações que interroguem essas bóias.

4299 § 52. Cada administração pode consignar a cada uma das estações dos tipos indicados nos n.os **4201** e **4298** dependentes da sua autoridade uma ou várias das frequências a considerar indicadas no apêndice 31.

4300 *d) Frequências de trabalho (empenhadas com as indicações no n.º* **4207** *das estações de navio que utilizam sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação não superiores a 100 bauds:*

4301 § 53. As frequências emparelhadas a consignar às estações costeiras e às estações de navio que utilizam sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados estão indicados no apêndice 32.

4302 § 54. Ao consignarem as frequências indicadas no apêndice 32 para a telegrafia com impressão directa de faixa estreita e para a transmissão de dados, as administrações aplicam o procedimento descrito na Resolução n.º 300.

4303 *e) Frequências de trabalho (não emparelhadas) das estações de navio que utilizam sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados com velocidades de modulação não superiores a 100 bauds:*

4304 § 55. Ao consignarem as frequências indicadas no apêndice 33 para sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, as administrações devem ter devidamente em conta as informações inscritas no ficheiro de referência, em aplicação do procedimento de notificação descrito na Resolução n.º 301.

4305 *f) Frequências de trabalho das estações de navio que utilizam a telegrafia Morse de classe A1A:*

4306 § 56. Cada administração consignará a cada uma das estações de navio que dependem da sua autoridade frequências de trabalho escolhidas nas faixas dos 4, 6, 8, 12, 16, 22 e 25 MHz, em número suficiente para satisfazer as necessidades do navio. Em cada faixa assim utilizada convém consignar, de preferência, pelo menos, duas frequências de trabalho a cada navio. As administrações devem assegurar repartição uniforme das consignações em todas as faixas.

4307 § 57. Para o fim exclusivo de comunicações com estações do serviço móvel marítimo, podem ser consignadas a uma estação de aeronave uma ou várias frequências de trabalho nas faixas indicadas no n.º **4206**. A consignação destas frequências efectuar-se-á segundo o mesmo princípio de repartição uniforme aplicável às estações de navio.

4308 *g) Abreviaturas para indicação das frequências de trabalho:*

4309 § 58. Nas faixas compreendidas entre 4000 kHz e 27 500 kHz podem-se utilizar as seguintes abreviaturas para designar uma frequência de trabalho:

4310 *a)* Se a frequência, expressa em kHz, não contiver decimais, transmitem-se os três últimos algarismos;

4311 *b)* Se a frequência, expressa em kHz, não contiver decimais, transmitem-se os três últimos algarismos da sua parte inteira, seguidos do primeiro algarismo decimal.

SECÇÃO III

Utilização das frequências em telegrafia de faixa estreita com impressão directa

4312 A) Generalidades

4313 § 59. As frequências consignadas às estações costeiras estão indicadas na nomenclatura das estações costeiras (lista IV). Esta nomenclatura contém, além disso, todas as informações úteis relativas ao serviço assegurado por cada uma dessas estações.

4314 B) Faixas compreendidas entre 405 kHz e 535 kHz

4315 § 60. (1) Todas as estações de navio equipadas com aparelhos de telegrafia de faixa estreita com impressão directa destinadas a funcionar nas faixas autorizadas compreendidas entre 405 kHz e 535 kHz devem poder efectuar e receber emissões da classe F1B em, pelo menos, duas frequências de trabalho (v. o n.º **4237**) (1).

4316 (2) A telegrafia de faixa estreita com impressão directa é proibida na faixa 490-510 kHz.

4317 C) Faixas compreendidas entre 1605 kHz e 4000 kHz

4318 § 61. (1) todas as estações de navio equipadas com aparelhos de telegrafia de faixa estreita com impressão directa destinadas a funcionar nas faixas autorizadas compreendidas entre 1605 kHz e 4000 kHz devem poder efectuar e receber emissões da classe F1B em, pelo menos, duas frequências de trabalho.

4319 (2) A telegrafia de faixa estreita com impressão directa é proibida na faixa 2170-2194 kHz.

4320 D) Faixas compreendidas entre 4000 kHz e 27 500 kHz

4321 § 62. Todas as estações de navio equipadas com aparelhos de telegrafia de faixa estreita com impressão directa destinadas a funcionar nas faixas autorizadas compreendidas entre 4000 kHz e 27 500 kHz devem poder efectuar e receber emissões da classe F1B em, pelo menos, duas frequências de cada faixa necessária à execução do seu serviço. As frequências a consignar estão indicadas nos apêndices 32 e 33.

4322 E) Faixas compreendidas entre 156 MHz e 174 MHz

4323 § 63. Todas as estações de um navio equipadas com aparelhos de telegrafia de faixa estreita com impressão directa podem funcionar nas faixas autorizadas compreendidas entre 156 MHz e 174 MHz de acordo com as disposições do apêndice 18.

4315.1 (1) Na zona europeia marítima, a utilização das emissões da classe F1B está subordinada a acordos particulares entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

SECÇÃO IV

Utilização das frequências em radiotelefonia

4324 A) Generalidades

4325 § 64. Excepto no que respeita às disposições do artigo 12 relativas à notificação e registo de frequências, as frequências destinadas às emissões radiotelefónicas de faixa lateral única devem sempre ser designadas pela frequência portadora. A frequência consignada é determinada em conformidade com as disposições do n.º **4194.**

4326 § 65. As estações costeiras não devem ocupar vias radiotelefónicas livres com a emissão de sinais de identificação produzidos, por exemplo, por anéis ou fitas de chamada. A título excepcional e a pedido de uma estação de navio, uma estação costeira pode, com o fim de estabelecer uma comunicação radiotelefónica, emitir sinais de ajuste de receptor por um período não superior a dez segundos.

4327 § 66. A nomenclatura das estações costeiras mencionará as frequências de emissão (e de recepção, quando essas frequências são associadas por pares, como no caso da radiotelefonia dúplex) consignadas a cada estação costeira. Ela dará, além disso, todas as outras informações convenientes sobre o serviço assegurado por cada estação costeira.

4328 § 67. Os aparelhos de faixa lateral única das estações radiotelefónicas do serviço móvel marítimo que funcionem nas faixas atribuídas a este serviço entre 1605 kHz e 4000 kHz e nas faixas atribuídas em exclusivo a este mesmo serviço entre 4000 kHz e 23 000 kHz devem satisfazer as condições técnicas e de exploração especificadas no apêndice 17 e na Resolução n.º 307.

4329 § 68. Quando forem utilizados sistemas de compressores e expansores acoplados, as suas características deverão estar de acordo com as especificações da alínea *a*) do apêndice 40.

4330 § 69. As características dos aparelhos de faixa lateral única associados a sistemas de compressores e expansores acoplados deverão estar de acordo com as especificações do apêndice 17. Convém igualmente que estejam de acordo com as especificações do apêndice 17. Convém igualmente que estejam de acordo com as especificações da alínea *b*) do apêndice 40.

4331 B) Faixas compreendidas entre 1605 kHz e 4000 kHz

B1) Modo de funcionamento das estações

4332 § 70. (1) Excepto nos casos especificados nos n.os **2973, 4127** e **4342,** as classes de emissão a utilizar nas faixas compreendidas entre 1605 kHz e 4000 kHz são:

4333 *a*) A classe A3E; *ou*

4334 *b*) As classes H3E, R3E e J3E.

4335 Todavia, salvo especificações contrárias contidas no presente Regulamento (v. os n.os **2973, 3004, 4127, 4342** e **4354**):

4336 A classe de emissão A3E não deve ser utilizada pelas estações costeiras; e

4337 A partir de 1 de Janeiro de 1982, a classe de emissão H3E deixa de ser autorizada para as estações costeiras e as classes de emissão A3E e H3E deixam de ser autorizadas para as estações de navio.

4338 (2) A potência de ponta das estações costeiras radiotelefónicas que funcionam nas faixas autorizadas compreendidas entre 1605 kHz e 4000 kHz não deve exceder os valores seguintes:

4339 5 kW para as estações situadas ao norte do paralelo 32° N.;

4340 10 kW para as estações situadas ao sul do paralelo 32° N.

4341 (3) O modo normal de funcionamento de cada estação costeira é indicado na nomenclatura das estações costeiras.

4342 (4) As emissões nas faixas 2170-2173,5 kHz e 2190,5-2194 kHz efectuadas, respectivamente, nas frequências portadoras de 2170,5 kHz e de 2191 kHz são limitadas às classes de emissão R3E e J3E e a uma potência de pontas de 400 W.

Todavia, a frequência de 2170,5 kHz é igualmente utilizada, com o mesmo limite de potência, pelas estações costeiras para emissões de classe H2B, quando se utiliza o sistema de chamada selectiva definido no apêndice 39 e, além disso, a título excepcional, nas Regiões 1 e 3 e na Gronelândia, para emissões de classe H3E, a fim de transmitir mensagens de segurança.

B2) Chamada e resposta

4343 § 71. (1) A frequência de 2182 kHz (1) é a frequência internacional de perigo em radiotelefonia (v. o n.º **2973** para os pormenores da sua utilização para as comunicações de perigo de urgência e de segurança e para as chamadas de radiobalizas de localização de sinistros). A classe de emissão a utilizar em radiotelefonia na frequência de 2182 kHz é a classe A3E ou H3E (v. o n.º **4127**).

4344 (2) A frequência de 2182 kHz poderá ser igualmente utilizada:

4345 *a*) Para a chamada e a resposta, segundo as disposições do artigo 65;

4346 *b*) Pelas estações costeiras para anunciar a emissão das suas linhas de chamadas numa outra frequência (v. os n.os **4925** a **4929**).

4347 (3) Além disso, qualquer administração pode consignar às suas estações outras frequências para utilização para a chamada e a resposta.

4348 § 72. A fim de facilitar a recepção das chamadas de perigo, deverão ser reduzidas ao mínimo todas as emissões na frequência de 2182 kHz.

4349 § 73. Convém que as estações de navio abertas à correspondência pública assegurem, tanto quanto possível, a escuta na frequência de 2182 kHz durante o seu horário de serviço.

4350 § 74. (1) Antes de emitir na frequência portadora de 2182 kHz, uma estação deve escutar essa frequência durante um espaço de tempo suficiente a fim de se certificar de que não está em curso qualquer tráfego de perigo (v. o n.º **4915**).

4351 (2) As disposições do n.º **4350** não se aplicam às estações em perigo.

B3) Tráfego

4352 § 75. (1) As estações costeiras que utilizam para a chamada a frequência de 2182 kHz deverão estar em condições de usar, pelo menos, uma outra frequência escolhida nas faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz.

4353 (2) As estações costeiras autorizadas a efectuar emissões radiotelefónicas numa ou em várias frequências diferentes da frequência 2882 kHz nas faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz deverão poder efectuar, nessas frequências, emissões da classe A3E ou emissões das classes H3E, R3E e J3E. Todavia, a partir de 1 de Janeiro de 1982, as emissões da classe H3E deixam de estar autorizadas, excepto na frequência de 2182 kHz (v., igualmente, o n.º **4342**).

4354 (3) As estações costeiras abertas ao serviço de correspondência pública numa ou em várias frequências compreendidas entre 1605 kHz e 2850 kHz devem, além disso, poder efectuar emissões da classe H3E na frequência portadora de 2182 kHz e recebe emissões das classes A3E e H3E na frequência portadora de 2182 kHz.

4355 (4) Uma das frequências que as estações costeiras deverão estar em condições de utilizar em conformidade com o n.º **4352** é impressa em normando na nomenclatura das estações costeiras, para indicar que ela é a frequência normal de trabalho da estação. As frequências suplementares eventuais são indicadas em caracteres normais.

4356 (5) As frequências de trabalho das estações costeiras devem ser escolhidas de modo a evitar interferências com outras estações.

B4) Disposições adicionais aplicáveis à Região 1

4357 § 76. A potência de ponta dos emissores das estações radiotelefónicas de navio que funcionam nas faixas autorizadas compreendidas entre 1605 kHz e 2850 kHz não deverá exceder 400 W.

4358 § 77. (1) Convém que todas as estações de navio que efectuam viagens internacionais estejam em condições de utilizar:

4359 *a*) As frequências de trabalho navio-estação costeira seguintes, se as necessidades do seu serviço o exigirem:

4360 A frequência portadora de 2046 kHz (frequência consignada de 2047, 4 kHz) e a frequência portadora de 2049 kHz (frequência consignada de 2050,4 kHz) para emissões das classes R3E e J3E;

4361 A frequência portadora de 2020 kHz igualmente para emissões das classes A3E e H3E até 1 de Janeiro de 1982;

4343.1 (1) Quando as administrações asseguram, através das suas estações costeiras, a escuta em 2128 kHz para receber emissões das classes R3E e J3E, assim como emissões das classes A3E e H3E as estações de navio que se encontrem para além da distância em que conseguiriam comunicar com essas estações costeiras por meio de emissões das classes A3E ou H3E podem, para fins de segurança, chamar as estações costeiras utilizando a classe de emissão R3E ou J3E. Esta utilização só é autorizada se as chamadas feitas com emissões das classes A3E e H3E não tiverem resultado.

4362 *b*) As frequências navio-navio seguintes, se as necessidades do seu serviço o exigirem:

4363 A frequência portadora de 2053 kHz (frequência consignada de 2054,4 kHz) e a frequência portadora de 2056 kHz (frequência consignada de 2057,4 kHz) para emissões das classes R3E e J3E;

4364 A frequência portadora de 2056 kHz igualmente para emissões das classes A3E e H3E até 31 de Janeiro de 1982.

4365 Estas frequências podem ser utilizadas como frequências suplementares navio-estação costeira.

4366 (2) Essas frequências não serão utilizadas para o tráfego entre estações de uma mesma nacionalidade.

4367 § 78. (1) Os navios que permutam frequentemente correspondência com uma estação costeira de nacionalidade diferente da sua poderão utilizar as mesmas frequências que os navios da nacionalidade dessa estação, quando as administrações interessadas assim tiverem acordado.

4368 (2) Em circunstâncias excepcionais, se a utilização das frequências de acordo com as disposições dos n.os **4358** a **4365** ou o n.º **4367** se revelar impossível, uma estação de navio pode utilizar uma das frequências navio-estação costeira que lhe estão consignadas à escala nacional para comunicar com uma estação costeira de outra nacionalidade, sob reserva expressa de a estação costeira, bem como a estação de navio, em aplicação das disposições do n.º **4915**, tomar as precauções necessárias para que a utilização da referida frequência não cause interferências prejudiciais ao serviço para o qual está autorizado o seu emprego.

B5) Disposições adicionais aplicáveis às Regiões 2 e 3

4369 § 79. Convém que todas as estações de navio que efectuam viagens internacionais estejam em condições de utilizar, se as necessidades do seu serviço o exigirem, as seguintes frequências portadoras navio-navio:

2635 kHz (frequência consignada de 2636,4 kHz);
2638 kHz (frequência consignada de 2639,4 kHz).

As condições de utilização destas frequências são especificadas no n.º **4193.**

4370 ### C) Faixas compreendidas entre 4000 kHz e 23 000 kHz

C1) Modo de funcionamento das estações

4371 § 80. (1) As classes de emissão a utilizar para a radiotelefonia nas faixas compreendidas entre 4000 kHz e 23 000 kHz são as classes H3E (1), R3E e J3E.

4372 (2) O modo de funcionamento normal de cada estação costeira é indicado na nomenclatura das estações costeiras.

4373 (3) As estações costeiras radiotelefónicas que utilizam as classes de emissão H3E (1), R3E ou J3E nas faixas compreendidas entre 4000 kHz e 23 000 kHz devem ter a potência mínima necessária para cobrir a respectiva zona de serviço e não devem, em caso algum, ter uma potência de ponta superior a 10 kW por via.

4374 (4) As estações radiotelefónicas de navio que utilizam as classes de emissão H3E (1), R3E ou J3E nas faixas compreendidas entre 4000 kHz e 23 000 kHz não devem, em caso algum, ter uma potência de ponta que exceda 1,5 kW por via.

C2) Chamada e resposta

4375 § 81. (1) As estações de navio podem utilizar para a chamada em radiotelefonia as seguintes frequências portadoras:

4125 kHz (2) (3);
6215,5 kHz (4);
8257 kHz;
12 392 kHz;
16 522 kHz;
22 062 kHz.

4371.1 / 4373.1 / 4374.1 (1) Para a utilização da classe de emissão H3E v. os n.os **2982** e **2986.**

4375.1 (2) Nos Estados Unidos e no Canadá é igualmente autorizada a utilização em comum da frequência portadora de 4125 kHz pelas estações costeiras e pelas estações de navio para a radiotelefonia *simplex* em faixa lateral única, com a condição de a potência de ponta dessas estações não exceder 1 kW (v., também, o n.º **4376.2**).

4375.2 (3) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N. é igualmente autorizada a utilização em comum da frequência portadora de 4125 kHz pelas estações costeiras e pelas estações de navio para a radiotelefonia *simplex* de faixa lateral única para a chamada, a resposta e a segurança, com a condição de a potência de ponta dessas estações não exceder 1 kW. Nessas zonas não é autorizada a utilização da frequência portadora de 4125 kHz como frequência de trabalho (v., também, os n.os **2982, 3030** e **4375.1**).

4375.3 (4) Na zona da Região 3 situada ao sul so paralelo 25° N. é igualmente autorizada a utilização em comum da frequência portadora de 6215,5 kHz pelas estações costeiras e pelas estações de navio para a radiotelefonia *simplex* de faixa lateral única para a chamada, a resposta e a segurança com a condição de a potência de ponta dessas estações não exceder 1 kW. Nessa zona não é autorizada a utilização da frequência de 6215,5 kHz como frequência de trabalho (v., também, o n.º **2986**).

4376 (2) As estações costeiras podem utilizar para a chamada em radiotelefonia as seguintes frequências portadoras (1):

4419,4 kHz (2);
6521,9 kHz (2);
8780,9 kHz;
13 162,8 kHz;
17 294 kHz;
22 658 kHz.

4377 § 82. As estações de navio e as estações costeiras que utilizem a chamada selectiva númerica mencionada no n.º **4681** podem utilizar as frequências indicadas nos n.os **4683** e **4684,** respectivamente.

4378 § 83. As horas de serviço das estações costeiras abertas à correspondência pública e a ou as frequências em que é mantida a escuta são indicadas na nomenclatura das estações costeiras.

4379 § 84. (1) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., antes de emitir na frequência portadora de 4125 kHz ou de 6215,5 kHz, qualquer estação deve manter-se em escuta nessa frequência durante um espaço de tempo suficiente a fim de se certificar de que não há em curso qualquer tráfego de perigo (v. o n.º **4915**).

4380 (2) As disposições do n.º **4379** não se aplicam às estações em perigo.

C3) Tráfego

4381 § 85. (1) Para exploração em radiotelefonia dúplex, as frequências de emissão das estações costeiras e das estações de navio que se correspondem com elas são emparelhadas, como se indica no apêndice 16, excepto, provisoriamente, quando as condições de trabalho impeçam a utilização de frequências emparelhadas para satisfazer as necessidades de exploração.

4382 (2) A secção B do apêndice 16 indica as frequências a utilizar para a exploração em radiotelefonia *simplex*. Neste caso, a potência de ponta dos emissores das estações costeiras não deve exceder 1 kW.

4383 (3) As frequências indicadas no apêndice 16 para a emissão das estações de navio podem ser utilizadas pelos navios de todas as categorias, segundo as necessidades de tráfego.

4384 (4) As características técnicas dos emissores utilizados para a radiotelefonia nas faixas compreendidas entre 4000 kHz e 23 000 kHz estão especificadas no apêndice 17.

4385 ### D) Faixas compreendidas entre 156 MHz e 174 MHz

D1) Chamada e resposta

4386 § 86. (1) A frequência de 156,8 MHz é a frequência internacional de perigo, de segurança e de chamada em radiotelefonia para as estações que utilizam frequências das faixas autorizadas compreendidas entre 156 MHz e 174 MHz (v. o n.º **2994** para os pormenores da sua utilização). A classe de emissão a utilizar para a radiotelefonia na frequência de 156,8 MHz é a classe G3E (v. o apêndice 19).

4387 A frequência de 156,8 MHz pode também ser utilizada:

4388 *a*) Pelas estações costeiras e pelas estações de navio para a chamada e a resposta, em conformidade com as disposições dos artigos 62 e 65;

4389 *b*) Pelas estações costeiras para anunciar a emissão, numa outra frequência, das suas listas de chamadas e de informações marítimas importantes (v. os n.os **4925** a **4929**).

4390 (3) A frequência de 156,8 MHz pode ser utilizada pelas estações de navio e pelas estações costeiras para a chamada selectiva.

4391 (4) As administrações poderão, se o desejarem, utilizar para a chamada uma das vias de correspondência pública designadas no apêndice 18. Será nesse caso feita menção disso na nomenclatura das estações costeiras.

4392 (5) As estações costeiras e de navio do serviço de correspondência poderão utilizar para a chamada uma frequência de trabalho nas condições prescritas nos artigos 62 e 65.

4393 (6) É proibido na faixa 156,725-156,875 MHz (3) qualquer emissão que possa causar interferências prejudiciais às emissões autorizadas das estações do serviço móvel marítimo em 156,8 MHz.

4394 (7) A fim de facilitar a recepção das chamadas de perigo, todas as emissões na frequência de 156,8 MHz devem ser reduzidas ao mínimo e não devem ultrapassar um minuto.

4376.1 (1) Estas frequências podem, além disso, ser utilizadas pelas estações costeiras para emissões da classe H2B, quando se utiliza o sistema de chamada selectiva definido no apêndice 39.

4376.2 (2) Nas Regiões 2 e 3 é igualmente autorizada a utilização em comum das frequências portadoras de 4419,4 kHz e de 6521,9 kHz pelas estações costeiras e pelas estações de navio para a radiotelefonia *simplex* de faixa lateral única, com a condição de a potência de ponta dessas estações não exceder 1 kW. Convém que a utilização para tal fim da frequência portadora de 6521,9 kHz fique limitada às horas do dia (v., também, o n.º **4375.1**).

4393.1 (3) A partir de 1 de Janeiro de 1983 esta faixa passará a 156,7625-156,8375 MHz (v. a Resolução n.º 308).

4395 (8) Antes de emitir na frequência de 156,8 MHz uma estação deve escutar essa frequência durante um espaço de tempo suficiente a fim de se certificar de que não está em curso qualquer tráfego de perigo (v. o n.º **4915**).

4396 (9) As disposições do n.º **4395** não se aplicam às estações em perigo.

D2) Vigília

4397 § 87. (1) Convém que, além da escuta prescrita no n.º **3057,** as estações costeiras abertas ao serviço internacional de correspondência pública assegurem, durante o seu horário de serviço, a escuta na sua frequência de recepção ou nas frequências que estão indicadas na nomenclatura das estações costeiras.

4398 (2) A escuta na ou nas frequências de trabalho não deverá ser menos eficaz do que a escuta assegurada por um operador.

4399 (3) Convém que as estações de navio, quando se encontrem na zona de serviço de estações costeiras do serviço móvel marítimo radiotelefónico nas faixas compreendidas entre 156 MHz e 174 MHz, assegurem a escuta na frequência de 156,8 MHz, sempre que isso lhes seja possível na prática. Convém que aquelas que só estejam equipadas com aparelhos radiotelefónicos a funcionar nas faixas autorizadas compreendidas entre 156 MHz e 174 MHz assegurem, quando no mar, a escuta na frequência de 156,8 MHz.

4400 (4) Quando estejam em ligação com uma estação portuária, as estações de serviço de navio podem, a título excepcional e sob reserva de acordo da administração interessada, continuar a manter a escuta apenas na frequência prevista para as operações portuárias, com a condição de a estação portuária manter a escuta na frequência de 156,8 MHz.

4401 (5) Quando as estações de navio estão em ligação com uma estação costeira de serviço de movimento de navios podem, sob reserva de acordo das administrações interessadas, continuar a manter a escuta apenas na frequência apropriada do serviço de movimento de navios, desde que essa estação costeira mantenha a escuta na frequência de 156,8 MHz.

4402 § 88. As estações costeiras do serviço de operações portuárias situadas numa zona em que a frequência de 156,8 MHz seja temporariamente utilizada para comunicações de perigo, de urgência ou de segurança assegurarão, durante o seu horário de serviço, uma escuta suplementar das chamadas emitidas na frequência de 156,6 MHz ou em qualquer outra frequência do serviço de operações portuárias que figure em normando na nomenclatura das estações costeiras.

4403 § 89. As estações costeiras do serviço de movimento de navios situadas numa zona em que a frequência de 156,8 MHz seja utilizada para o perigo, a urgência e a segurança assegurarão, durante o seu horário de serviço, uma escuta suplementar nas frequências do serviço de movimento de navios que figurem em normando na nomenclatura das estações costeiras.

D3) Tráfego

4404 § 90. (1) Quando for praticável, as estações costeiras abertas ao serviço internacional de correspondência pública deverão poder funcionar em dúplex ou semidúplex com as estações de navio equipadas para tal.

4405 (2) Convém que nos serviços internacionais se utilize o modo de trabalho (a uma frequência ou a duas frequências) especificando para cada via no apêndice 18 (v. a Resolução n.º 308).

4406 § 91. As mensagens permutadas no serviço de operações portuárias devem limitar-se às relativas à manutenção, movimento e segurança dos navios e, em caso de urgência, à salvaguarda das pessoas. Excluem-se deste serviço as mensagens que têm o carácter de correspondência pública.

4407 § 92. As mensagens permutadas no serviço de movimento de navios devem limitar-se às relativas ao movimento de navios. Excluem-se deste serviço as mensagens com carácter de correspondência pública.

4408 § 93. As estações costeiras que utilizam a frequência de 156,8 MHz para a chamada deverão poder utilizar, pelo menos, outra via autorizada para o serviço móvel marítimo radiotelefónico internacional na faixa 156-174 MHz.

4409 (2) Quando foi praticável, as administrações consignam às estações costeiras e às estações de navio, para os serviços internacionais que julguem necessários, frequências da faixa 156-174 MHz, de acordo com o quadro das frequências de emissão que figura no apêndice 18 (v. a Resolução n.º 308).

4410 (3) A ordem normal pela qual convém que sejam postas em serviço as vias na faixa 156-174 MHz é indicada pelos números inscritos nas colunas correspondentes do apêndice 18.

4411 (4) Convém que as administrações procedam, tanto quanto possível, de modo que as estações de navio que dispõe das vias correspondentes aos números dentro de círculos do quadro de apêndice 18 possam obter uma utilização razoavelmente suficiente dos serviços disponíveis.

4412 (5) Ao consignarem frequências às suas estações costeiras, convém que as administrações cooperem nos casos em que sejam de recear interferências prejudiciais.

4413 (6) As vias são designadas por números no quadro das frequências de emissão que figura no apêndice 18 (v. a Resolução n.º 308).

4414 § 94. (1) Ao consignante frequências às estações de serviços diferentes do serviço móvel marítimo, as administrações deverão evitar causar interferências ao serviço marítimo internacional nas faixas compreendidas entre 156 MHz e 174 MHz.

4415 (2) A utilização das vias pelo serviço móvel marítimo para fins diferentes dos indicados no quadro das frequências de emissão contido no apêndice 18 deverá ser de modo a não provocar qualquer interferência prejudicial aos serviços que funcionam em conformidade com esse quadro e não deverá causar qualquer prejuízo ao desenvolvimento desses serviços (v. a Resolução n.° 308).

4416 § 95. A potência da onda portadora dos emissores das estações de navio não devem exceder 25 W para os aparelhos postos em serviço depois de 1 de Janeiro de 1970.

4417 a 4440 *(Não atribuídos.)*

ARTIGO 61

Ordem de prioridade das comunicações no serviço móvel marítimo e no serviço móvel marítimo por satélite

4441 A ordem de prioridade das comunicações (1) no serviço móvel marítimo e no serviço móvel marítimo por satélite deverá ser a seguinte, salvo impossibilidade prática num sistema inteiramente automatizado. Todavia, mesmo neste caso deverá ser dada prioridade às comunicações da primeira categoria:

1) Chamadas de perigo, mensagens de perigo e tráfego de perigo;
2) Comunicações precedidas do sinal de urgência;
3) Comunicações precedidas do sinal de segurança;
4) Comunicações relativas aos azimutes radiogoniométricos;
5) Comunicações relativas à navegação e à segurança dos movimentos das aeronaves que participem em operações de busca e salvamento;
6) Comunicações relativas à navegação, aos movimentos e às necessidades dos navios e das aeronaves e mensagens de observação meteorológica destinadas a um serviço meteorológico oficial;
7) ETATPRIORITENATIONS — radiotelegramas relativos à aplicação da Carta das Nações Unidas;
8) ETATPRIORITE — radiotelegramas de Estado com prioridade e comunicações de Estado para as quais se pediu expressamente o direito de prioridade;
9) Comunicações de serviço relativas ao funcionamento do serviço de telecomunicações ou a comunicações anteriormente escoadas;
10) Comunicações de Estado diferentes das indicadas na alínea 8) anterior, comunicações particulares ordinárias, radiotelegramas RTC (1) e radiotelegramas noticiosos.

4442 a 4664 *(Não atribuídos.)*

ARTIGO 62

Procedimento relativo à chamada selectiva no serviço móvel marítimo

SECÇÃO I

Generalidades

4665 § 1. (1) Na faixa 1605-4000 kHz, a chamada selectiva pode ser emitida em frequências de trabalho apropriadas à radiotelefonia nos sentidos estação costeira-navio e navio-estação costeira e entre navios.

4666 (2) Podem ser emitidas chamadas selectivas na frequência de 156,8 MHz e em frequências de trabalho apropriadas à radiotelefonia nos sentidos estação costeira-navio e navio-estação costeira e entre navios.

SECÇÃO II

Sistema sequencial a uma frequência

4667 A) Generalidades

4668 § 2. As caraterísticas do sistema internacional de chamada selectiva sequencial a uma frequência devem estar de acordo com as disposições do apêndice 39.

4441.1 (1) O termo «comunicações» empregado no presente artigo engloba os radiotelegramas, as conversas radiotelefónicas, assim como as comunicações radiotelex.

4441.1 (2) RCT (Red Cross Telegrams — Telegramas da Cruz Vermelha): telegramas relativos às pessoas protegidas em tempo de guerra pelas Convenções de Genebra de 12 de Agosto de 1949.

4669 B) Método de chamada

4670 § 3. (1) A chamada compõe-se:

4671 *a*) Do número de chamada selectiva ou do número ou sinal de identificação da estação chamada, seguido

b) Do número de chamada selectiva ou do número ou sinal de identificação da estação que chama.

4672 Todavia, em ondas métricas, quando a chamada é feita por uma estação costeira, o número da via a utilizar para a resposta e para o tráfego pode substituir o número ou sinal de identificação da estação costeira.

Esta chamada é transmitida duas vezes.

4673 (2) Se uma estação chamada não responder, convém normalmente esperar, pelo menos, cinco minutos antes de repetir a chamada; em seguida, convém aguardar ainda quinze minutos antes de renovar a chamada.

4674 (3) A utilização de uma «chamada a todos os navios» é limitada aos casos de perigo e urgência nas faixas das ondas hectométricas, assim como ao anúncio de aviso de grande importância para a navegação emitido nessa faixas. Além disso, pode ser utilizada para fins de segurança na faixa de ondas métricas. A «chamada a todos os navios» só pode ser utilizada para completar, se for caso disso, os procedimentos de perigo especificados nos n.os **3101, 3102, 3110** e **3117** e não deve, em caso algum, substituir esses procedimentos, nomeadamente os sinais de alarme mencionados nos n.os **3268** e **3270**.

4675 C) Respostas às chamadas

4676 § 4. A resposta às chamadas deve fazer-se:

4677 *a*) Em radiotelegrafia, de acordo com as disposições dos n.os **4767 e 4769;**

4678 *b*) Em radiotelefonia, de acordo com as disposições dos n.os **4982** a **5002.**

4679 D) Frequências a utilizar

4680 § 5. Convém que as chamadas selectivas sejam emitidas numa ou em várias das seguintes frequências portadoras:

500 kHz;
2170,5 kHz (1);
4125 kHz;
4419,4 kHz;
6521,9 kHz;
8780,9 kHz;
13 162,8 kHz;
17 249,9 kHz;
22 658 kHz;
156,8 MHz (2).

SECÇÃO III

Sistema de chamada selectiva numérica

4681 § 6. É possível utilizar um sistema de chamada selectiva numérica que esteja totalmente de acordo com as disposições dos pareceres pertinentes da CCIR, tendo em conta todos os aspectos técnicos, de exploração e de compatibilidade envolvidos.

4682 § 7. As frequências que podem ser consignadas às estações de navio e às estações costeiras para a chamada selectiva numérica são as seguintes:

4683 *a*) Estações de navio:

4187,6 kHz;
6281,4 kHz;
8375,2 kHz;
12 562,3 kHz;
12 562,8 kHz;
16 479,9 kHz;
16 750,4 kHz;
22 248 kHz;
22 248,5 kHz;

4680.1 (1) Esta frequência substitui a frequência portadora de 2182 kHz para a chamada selectiva, sob reserva das disposições do n.º **2976.**

4680.2 (2) Normalmente, convém que a chamada relativa nesta frequência se faça somente no sentido costeira-navio ou entre navios e que as chamadas selectivas de navio para a estação costeira sejam sempre que possível emitidas noutras frequências apropriadas que figuram no apêndice 18.

4684 *a*) Estações costeiras:

4357 kHz;
6506 kHz;
8718,5 kHz;
13 100 kHz;
13 100,5 kHz;
17 232 kHz;
17 232,5 kHz;
22 595 kHz;
22 595,5 kHz.

4685 a 4709 *(Não atribuídos.)*

ARTIGO 63

Procedimento geral radiotelegráfico no serviço móvel marítimo

SECÇÃO I

Disposições gerais

4710 § 1. É obrigatório o procedimento pormenorizado no presente artigo, excepto nos casos de perigo, de urgência ou de segurança, a que se aplicam as disposições do capítulo IX.

4711 § 2. É obrigatório o emprego dos sinais do código Morse que figura nas instruções para a exploração do serviço telegráfico público internacional. Todavia, não se exclui a utilização de outros sinais para as radiocomunicações de carácter especial.

4712 § 3. Devem ser utilizadas as abreviaturas regulamentares definidas no apêndice 14.

SECÇÃO II

Operações preliminares

4713 § 4. (1) Antes de emitir, uma estação toma as precauções necessárias para se assegurar de que as suas emissões não interferirão transmissões em curso; se for provável uma tal interferência, a estação esperará uma paragem oportuna da transmissão que ela poderia interferir. Esta obrigação não se aplica às estações que podem funcionar sem vigilância, por meios automáticos (v. o n.° **3863**), em frequências destinadas aos sistemas de faixa estreita de telegrafia com impressão directa.

4714 (2) No caso em que, mesmo procedendo assim, a emissão dessa estação venha interferir uma transmissão já em curso, aplicar-se-ão as regras seguintes:

4715 *a*) A estação de navio cuja emissão interfere a comunicação entre uma estação móvel e uma estação costeira deve deixar de emitir ao primeiro pedido da estação costeira;

4716 *b*) A estação de navio cuja emissão interfere as comunicações entre estações móveis deve deixar de emitir ao primeiro pedido de uma qualquer dessas estações;

4717 *c*) A estação que solicita essa paragem deve indicar a duração aproximada da espera imposta à estação cuja emissão ela suspende.

SECÇÃO III

Chamadas em radiotelegrafia

4718 A) Generalidades

4719 § 5. As disposições da presente secção não são aplicáveis ao serviço móvel marítimo por satélite.

4720 § 6. (1) Como regra geral, incumbe à estação de navio estabelecer a comunicação com a estação costeira. Para este efeito a estação de navio só poderá chamar a estação costeira após ter entrado na zona de serviço desta, isto é, na zona em que, utilizando uma frequência apropriada, a estação de navio pode ser escutada pela estação costeira.

4721 (2) Contudo, uma estação costeira que tenha tráfego para uma estação de navio pode chamar esta estação se tiver razões para supor que ela se encontra na sua zona de serviço e está à escuta.

4722 § 7. (1) Além disso, as estações costeiras devem tanto quanto possível, na prática transmitir as suas chamadas sob a forma de listas de chamadas, constituídas pelos indicativos de chamada, classificados por ordem alfabética, das estações de navio para as quais tenham tráfego pendente. Essas chamadas far-se-ão em momentos determinados estabelecidos por acordos entre as administrações interessadas e espaçados de, pelo menos, duas horas e, no máximo, de quatro horas, durante o horário de serviço da estação costeira.

4723 (2) Todavia, nas faixas compreendidas entre 4000 e 27 500 kHz, as listas de chamadas podem ser transmitidas com intervalos de, pelo menos, uma hora.

4724 (3) Convém que as estações costeiras evitem repetir contínua ou frequentemente o seu indicativo de chamada ou o sinal CQ (v. os n.os **1799** a **1803**).

4725 (4) Todavia, nas faixas compreendidas entre 4000 kHz e 27 500 kHz, uma estação costeira pode transmitir de vez em quando o seu indicativo de chamada utilizando emissões do tipo A1A, a fim de permitir às estações de navio escolher para a chamada a faixa cujas frequências apresentem as características de propagação mais favoráveis para estabelecer uma comunicação satisfatória (v. o n.º **4261**).

4726 (5) As estações costeiras transmitem essas listas de chamadas, nas suas frequências normais de trabalho, nas faixas apropriadas. Essa transmissão é precedida de uma chamada geral a todas as estações (CQ).

4727 (6) A chamada geral a todas as estações para anunciar a lista de chamadas pode ser emitida numa frequência de chamada, sob a forma seguinte:

CQ (três vezes no máximo);
A palavra DE;
Três vezes, no máximo, o indicativo de chamada da estação que chama;
QSW seguido da indicação da ou das frequências de trabalho na qual ou nas quais se vai transmitir imediatamente a seguir a lista de chamadas.

Em nenhum caso este preâmbulo poderá ser repetido.

4728 (7) As disposições do n.º **4727**:

4729 *a*) São obrigatórias quando se utiliza a frequência de 500 kHz;

4730 *b*) Não se aplicam quando se tratar de frequências das faixas compreendidas entre 4000 kHz e 27 500 kHz.

4731 (8) Deverão mencionar-se na nomenclatura das estações costeiras as horas a que as estações costeiras transmitem as suas listas de chamadas, bem como as frequências e as classes de emissão que utilizam para esse efeito.

4732 (9) Convém que as estações de navio escutem, tanto quanto possível, as emissões das listas de chamadas das estações costeiras. Quando ouvirem o seu indicativo numa lista de chamadas deverão responder logo que possam.

4733 (10) Quando não se possa escoar imediatamente o tráfego, a estação costeira indicará a cada estação de navio interessada a hora provável a que o trabalho poderá começar, bem como, se isso for necessário, a frequência e a classe de emissão que serão utilizadas.

4734 § 8. Quando uma estação costeira receber praticamente ao mesmo tempo chamadas de várias estações de navio, decidirá a ordem pela qual essas estações poderão transmitir-lhe o seu tráfego. Essa decisão basear-se-á na ordem de prioridade (v. o n.º **4441**) dos radiotelegramas pendentes nas estações de navio e na necessidade de permitir a cada uma das estações que chamam escoar o maior número possível de comunicações.

4735 § 9. (1) Quando uma estação chamada não responder á chamada emitida três vezes com intervalos de dois minutos, a chamada deverá cessar e não deverá ser renovada antes de quinze minutos.

4736 (2) Quando se trate de uma comunicação entre uma estação do serviço móvel marítimo e uma estação de aeronave, a chamada poderá ser renovada cinco minutos depois, apesar das disposições do n.º **4735**.

4737 (3) Antes de renovar a chamada, a estação que chama deverá certificar-se de que a estação chamada não está em comunicação com outra estação.

4738 (4) Se não houver razão para recear interferências prejudiciais às comunicações em curso, não se aplicam as disposições dos n.os **4146** e **4735**. Nesse caso, a chamada, emitida três vezes com intervalos de dois minutos, pode ser renovada depois de um intervalo de duração inferior a quinze minutos, mas pelo menos igual a três minutos.

4739 § 10. As estações de navio não devem emitir a sua onda portadora entre as chamadas.

4740 § 11. Quando o nome e o endereço da administração ou da exploração particular de que depende uma estação de navio não vêm mencionados na nomenclatura apropriada ou não estão de acordo com as indicações desta, é dever da estação de navio, como regra de procedimento, fornecer à estação costeira a que transmite tráfego todos os esclarecimentos necessários nesse sentido.

4741 § 12. (1) A estação costeira pode, por meio da abreviatura TR, pedir à estação de navio que lhe dê as indicações seguintes:

4742 *a*) Posição e, tanto quanto possível, rota e velocidade;

4743 *b*) Próximo ponto de escala

4744 (2) Convém que as informações indicadas nos n.os **4741** a **4743**, precedidas da abreviatura TR, sejam fornecidas pelas estações de navio, sempre que pareça apropriado e sem pedido prévio da estação costeira. Essas informações só são prestadas mediante autorização prévia do comandante ou da pessoa responsável pelo navio ou por qualquer outra embarcação em que se encontre a estação.

4745 B) Chamadas a várias estações

4746 § 13. As disposições da presente secção não se aplicam ao serviço móvel marítimo por satélite.

4747 § 14. Reconhecem-se dois tipos de sinais de chamada «a todos»:

4748 *a*) Chamada CQ seguida da letra K (v. os n.os **4750** e **4751**);

4749 *b*) Chamada CQ não seguida da letra K (v. o n.º **4752**).

4750 § 15. As estações que desejarem entrar em comunicação com estações do serviço móvel marítimo sem todavia conhecerem o nome das estações que estações que estão na sua zona de serviço podem empregar o sinal de pesquisa CQ para substituir, na chamada, o indicativo da estação chamada. A chamada deverá então ser seguida da letra K (chamada geral a todas as estações do serviço móvel marítimo, com pedido de resposta).

4751 § 16. É proibido o emprego da chamada CQ seguida da letra K nas regiões de tráfego intenso. Excepcionalmente, poderá utilizar-se com sinais de urgência.

4752 § 17. A chamada CQ não seguida da letra K (chamada geral a todas as estações sem pedido de resposta) utiliza-se antes da transmissão de informações de qualquer natureza destinadas a serem lidas ou utilizadas por quem quer que as possa captar.

4753 § 18. A chamada CP seguida de dois ou mais indicativos de chamada ou de uma palavra convencional (chamada a certas estações receptoras sem pedido de resposta) só se utiliza para a transmissão de informações de qualquer natureza destinadas a serem lidas ou utilizadas pelas pessoas autorizadas.

Secção IV

Método de chamada, resposta à chamada e sinais preparatórios do tráfego

4754 A) Método de chamada — Telegrafia morse

4755 § 19. (1) A chamada é constituída como segue:

Duas vezes, no máximo, o indicativo de chamada de estação chamada;
A palavra DE;
Duas vezes, no máximo, o indicativo de chamada da estação que chama;
As informações pedidas no n.º **4761** e, eventualmente, nos n.os **4764** e **4765**;
A letra K.

4756 (2) Para a chamada normal, quando tenham sido satisfeitas as condições do n.º **4261**, a chamada prevista no n.º **4755** pode transmitir-se segunda vez, após um intervalo de, pelo menos, um minuto, depois do que não deverá ser renovada antes de três minutos.

4757 B) Frequência a utilizar para a chamada e sinais preparatórios

4758 § 20. (1) Para fazer a chamada, assim como para transmitir os sinais preparatórios, a estação que chama utiliza uma frequência na qual a estação chamada assegura a escuta.

4759 (2) Uma estação de navio que chama uma estação costeira numa das faixas de frequências situadas entre 4000 kHz e 27 500 kHz deve utilizar uma frequência da faixa de chamada especialmente reservada para esse fim.

4760 C) Indicação da frequência a utilizar para o tráfego

4761 § 21. (1) A chamada, tal como se indica no n.º **4755**, deve incluir a abreviatura regulamentar indicando a frequência de trabalho e, se for útil, a classe de emissão que a estação que chama se propõe utilizar para transmitir o tráfego.

4762 (2) Quando a chamada emitida por uma estação costeira não incluir a indicação da frequência a utilizar para o tráfego, isso significa que essa estação se propõe utilizar para o tráfego a sua frequência normal de trabalho indicada na nomenclatura das estações costeiras.

4763 D) Indicação de prioridade, do motivo de chamada e da transmissão dos radiogramas por séries

4764 § 22. (1) A estação que chama transmite a abreviatura regulamentar depois dos sinais preparatórios acima referidos, para indicar que se trata de uma mensagem prioritária diferente de uma mensagem de perigo, de urgência ou de segurança (v. o n.º **4441**) e indicar o motivo da chamada.

4765 (2) Além disso, quando a estação que chama deseja transmitir os seus radiotelegramas por séries, indica-o acrescentando a abreviatura regulamentar para pedir o assentimento da estação chamada.

4766 E) Fórmula da resposta à chamada

4767 § 23. A resposta à chamada é constituída como segue:

Duas vezes, no máximo, o indicativo de chamada da estação que chama;
A palavra DE;
Uma vez somente o indicativo de chamada da estação chamada.

4768 F) Frequência de resposta

4769 § 24. Salvo indicação contrária no presente Regulamento, para transmitir a resposta às chamadas e aos sinais preparatórios, a estação chamada utiliza a frequência em que escuta a estação que chama, a não ser que esta haja designado uma outra frequência para a resposta.

4770 G) Acordo sobre a frequência a utilizar para o tráfego

4771 § 25. (1) Se a estação chamada estiver de acordo com a estação que chama, transmite:

4772 *a*) A resposta à chamada;
4773 *b*) A abreviatura regulamentar que indica que a partir desse momento ela escuta na frequência de trabalho anunciada pela estação que chama;
4774 *c*) Eventualmente, as indicações previstas no n.º 4783;
4775 *d*) Se for útil, a abreviatura regulamentar e o número que indique a intensidade e ou a inteligibilidade dos sinais recebidos (v. o apêndice 14);
4776 *e*) A letra K, se a estação chamada está pronta a receber o tráfego da estação que chama.

4777 (2) Se a estação chamada não estiver de acordo com a estação que chama sobre a frequência de trabalho a empregar, transmite:

4778 *a*) A resposta à chamada;
4779 *b*) A abreviatura regulamentar que indique a frequência de trabalho a utilizar pela estação que chama e, se para tanto houver lugar, a classe de emissão;
4780 *c*) Eventualmente, as indicações previstas no n.º 4783;

4781 (3) Realizado acordo relativamente à frequência de trabalho que a estação que chama deve utilizar para o seu tráfego, a estação chamada transmite a letra K a seguir às indicações contidas na sua resposta.

4782 H) Resposta ao pedido de transmissão por séries

4783 § 26. A estação chamada, ao responder a uma estação que chama e que pediu para transmitir os seus telegramas por séries (v. o n.º 4765), indica, por meio da abreviatura regulamentar, a sua aceitação ou a sua recusa. No primeiro caso especifica, se necessário, o número de radiotelegramas que está pronta a receber numa série.

4784 I) Dificuldades de recepção

4785 § 27. (1) Se a estação chamada estiver impedida de receber o tráfego imediatamente, responde à chamada como preceituam os n.os 4771 a 4776, mas substitui a letra K pelo sinal . — ... (espera) seguido do número que indique em minutos a duração provável da espera. Se essa duração provável ultrapassar dez minutos (cinco minutos no caso de uma estação de aeronave em comunicação com uma estação do serviço móvel marítimo), deverá justificar-se o motivo da espera.

4786 (2) Quando uma estação recebe uma chamada sem ter a certeza de que se lhe destina, não deve responder sem que essa chamada se repita e seja compreendida. Quando, por outro lado, uma estação recebe uma chamada que se lhe destina mas tem dúvidas sobre o indicativo de chamada da estação que chama, deve responder imediatamente, utilizando a abreviatura regulamentar em substituição do indicativo de chamada desta última estação.

Secção V

Escoamento do tráfego

4787 A) Frequência de tráfego

4788 § 2. (1) Como regra geral, uma estação do serviço móvel marítimo transmite o seu tráfego utilizando uma das suas frequências de trabalho da faixa em que se efectuou a chamada.

4789 (2) Além da sua frequência normal de trabalho, impressa em normando na nomenclatura das estações costeiras, cada estação costeira pode utilizar uma ou várias frequências suplementares da mesma faixa, de acordo com as disposições do artigo 60.

4790 (3) Com excepção do tráfego de perigo (v. o capítulo IX), é proibido para o tráfego o emprego das frequências reservadas para a chamada.

4791 (4) Se a transmissão de um radiotelegrama se fizer numa outra frequência e ou numa outra classe de emissão diferente das empregadas para a chamada, essa transmissão será precedida:

Do indicativo de chamada da estação chamada, duas vezes no máximo;
Da palavra DE;
Do indicativo de chamada da estação que chama, uma vez somente.

4792 (5) Se a transmissão se fizer na mesma frequência e classe de emissão que a chamada, a transmissão do radiotelegrama será precedida, se necessário:

Do indicativo de chamada da estação chamada;
Da palavra DE;
Do indicativo de chamada da estação que chama.

4793 B) Numeração por séries quotidianas

4794 § 29. (1) Como regra geral, os radiotelegramas de qualquer natureza transmitidos pelas estações de navio serão numerados por séries quotidianas, dando-se o n.° 1 ao primeiro radiotelegrama transmitido em cada dia a cada estação diferente.

4795 (2) Convém que uma série de números começada em radiotelegrafia seja continuada em radiotelefonia e inversamente.

4796 C) Radiotelegramas extensos

4797 § 30. (1) No caso em que duas estações estão providas de dispositivos que lhes permitem passar da emissão à recepção sem manobra de comutação, a estação emissora pode prosseguir a sua transmissão até ao fim da mensagem ou até que a estação receptora a interrompa por meio da abreviatura regulamentar BK. As duas estações pôr-se-ão, em geral, antecipadamente de acordo sobre um tal método de trabalho, utilizando a abreviatura regulamentar QSK.

4798 (2) Se não puder ser empregado este método de trabalho, os radiotelegramas extensos, tanto em linguagem clara como em linguagem secreta, serão, como regra geral, transmitidos por partes, contendo cada parte 50 palavras no caso de linguagem clara e 20 palavras ou grupos no caso de linguagem secreta.

4799 (3) No fim de cada parte transmitir-se-á o sinal .. ——.. (?), que significa «recebeu o radiotelegrama até aqui?». Se essa parte se recebeu correctamente, a estação receptora responde transmitindo a letra K e prossegue-se na transmissão do radiotelegrama.

4800 D) Suspensão do tráfego

4801 § 31. Quando uma estação de navio transmite numa frequência de trabalho de uma estação costeira e interfere as emissões da referida estação costeira, deve suspender o seu trabalho ao primeiro pedido desta última.

Secção VI

Fim do tráfego e do trabalho

4802 A) Sinal de fim de transmissão

4803 § 32. (1) A transmissão de um radiotelegrama terminará pelo sinal .—.—. (fim de transmissão) seguida da letra K

4804 (2) No caso de uma transmissão por séries, indica-se o fim de cada radiotelegrama pelo sinal .—.—. (fim de transmissão) e o fim de cada série pela letra K.

4805 B) Entendido

4806 § 33. (1) Dá-se o entendido de um radiotelegrama ou de uma série de radiotelegramas pela seguinte forma:

O indicativo de chamada da estação emissora;
A palavra DE;
O indicativo de chamada da estação receptora;
A letra R seguida do número do radiotelegrama; *ou*
A letra R seguida do número do último radiotelegrama de uma série.

4807 (2) A estação receptora transmite o entendido na frequência de tráfego (v. os n.os **4788** e **4789**).

4808 C) Fim do trabalho

4809 § 34. (1) O fim do trabalho entre duas estações é indicado por cada uma delas por meio do sinal ... ___ . ___ (fim do trabalho).

4810 (2) O sinal ... ___ . ___ (fim do trabalho) utiliza-se também:

No fim de qualquer transmissão de radiotelegramas de informação geral, de avisos gerais de segurança e de informações meteorológicas;
No fim da transmissão no serviço das radiocomunicações a grande distância, com entendido diferido ou sem entendido.

SECÇÃO VII

Direcção do trabalho

4811 § 35. As disposições da presente secção não se aplicam aos casos de perigo, urgência e segurança (v. o n.º **4710**).

4812 § 36. Nas comunicações entre estação costeira e estação de navio, a estação de navio seguirá as instruções dadas pela estação costeira em tudo o que se refere à ordem e hora de transmissão, escolha da frequência e da classe de emissão, duração e suspensão do trabalho.

4813 § 37. Nas comunicações entre estações de navio, incumbe à estação chamada a direcção do trabalho segundo as indicações do n.º **4812**. Contudo, se uma estação costeira julgar necessário intervir, as estações de navio seguirão as suas instruções.

SECÇÃO VIII

Ensaios

4814 § 38. Quando for necessário a uma estação de navio emitir sinais de ensaio ou de afinação susceptíveis de interferir o trabalho de estações costeiras vizinhas, deverá obter-se o assentimento dessas estações antes de se efectuarem tais emissões.

4815 § 39. Quando for necessário a uma estação do serviço móvel marítimo efectuar sinais de ensaio, quer para regulação do emissor antes de transmitir uma chamada, quer para regulação de um receptor, esses sinais não devem durar mais de dez segundos. Devem ser constituídos por uma série de «VVV» seguida do indicativo de chamada da estação que emite para ensaios.

4816 a **4840** *(Não atribuídos.)*

ARTIGO 64

Procedimentos gerais aplicáveis à telegrafia com impressão directa de faixa estreita no serviço móvel marítimo (1)

SECÇÃO I

Generalidades

4841 § 1. As estações que utilizam a telegrafia com impressão directa de faixa estreita devem satisfazer às disposições dos artigos 59 e 60.

4842 § 2. Convém que sejam aplicados os procedimentos especificados no presente artigo, excepto nos casos de perigo, de urgência ou de segurança.

A.64 (1) Podem igualmente ser consultados os pareceres pertinentes da CCIR.

4843 § 3. (1) O tráfego pode ser permutado com ou sem a utilização de dispositivos de correcção de erros.

4844 (2) Nas comunicações entre duas estações convém utilizar o modo «correcção de erros com circuito de retorno» (ARQ) quando as duas estações funcionem segundo esse modo.

4845 (3) Nas transmissões de uma estação ou de uma estação de serviço com destino a várias outras estações convém utilizar o modo «correcção de erros sem circuito de retorno» quando as estações em causa funcionem segundo esse modo.

4846 § 4. Os serviços assegurados por cada estação aberta à correspondência pública devem ser indicados na nomenclatura das estações costeiras e na nomenclatura das estações de navio, assim como as informações relativas à taxação.

4847 § 5. Sempre que a transmissão se faça através das vias de telecomunicação abertas à correspondência pública, com exclusão das vias de telecomunicação do serviço móvel e do serviço móvel por satélite e as suas ligações de conexão, convém ter em conta as disposições do Regulamento Telegráfico e os pareceres pertinentes da CCITT.

SECÇÃO II

Procedimentos aplicáveis à exploração manual

4848 A) Generalidades

4849 § 6. No caso de utilização de sistemas de telegrafia com impressão directa ou de sistemas semelhantes numa faixa de frequência atribuída ao serviço móvel marítimo, a chamada pode ser emitida, por acordo prévio, numa frequência de trabalho disponível para esses sistemas.

4850 B) Sentido navio-estação costeira

4851 § 7. O operador da estação de navio estabelece a comunicação com a estação costeira por telegrafia morse da classe A1A, por telefonia ou por outro meio, utilizando os procedimentos normais de chamada. O operador pede, em seguida, à estação costeira uma comunicação com impressão directa, troca com ela informações sobre as frequências a utilizar e, se for caso disso, indica-lhe o número de chamada selectiva da estação de navio para a impressão directa, atribuído de acordo com as disposições do apêndice 38.

4852 (2) O operador da estação costeira estabelece então a comunicação com impressão directa na frequência escolhida de comum acordo utilizando a identificação apropriada do navio.

4853 § 8. (1) O operador da estação de navio pode igualmente recorrer ao equipamento de impressão directa para chamar a estação costeira numa frequência de recepção predeterminada desta. Utiliza então o sinal de identificação da estação costeira atribuído de acordo com as disposições do apêndice 38.

4854 (2) O operador da estação costeira estabelece então a comunicação com impressão directa na frequência de emissão corresponde da sua estação.

4855 C) Sentido estação costeira-navio

4856 § 9. (1) O operador de estação costeira chama a atenção de navio por telegrafia morse da classe A1A, por telefonia ou por outro meio, utilizando os procedimentos normais de chamada.

4857 (2) O operador da estação de navio aplica então os procedimentos descritos nos n.os **4851** ou **4853**.

4858 D) Comunicações entre navios

4859 § 10. (1) O operador de situação de navio que chama estabelece a comunicação com a estação de navio chamada por telegrafia morse da classe A1A, por telefonia ou por outro meio, aplicando os procedimentos normais de chamada. Pede-lhe, em seguida, uma comunicação com impressão directa, troca informações sobre as frequências a utilizar e, se for caso disso, indica o número de chamada selectiva da sua estação a utilizar para a impressão directa, atribuído de acordo com as disposições do apêndice 38.

4860 (2) O operador de estação de navio chamada estabelece então a comunicação com impressão directa na frequência escolhida de comum acordo utilizando a identificação apropriada do navio que chama.

SECÇÃO III

Procedimentos aplicáveis à exploração automática

4861 A) Sentido navio-estação costeira

4862 § 11. (1) A estação de navio chama a estação costeira numa frequência de recepção predeterminadas da estação costeira recorrendo ao equipamento de impressão directa e utilizando o sinal de identificação atribuído à estação costeira, de acordo com as disposições do apêndice 38.

4863 (2) O equipamento de impressão directa da estação costeira detecta a chamada e a estação costeira responde directamente, quer automaticamente, quer manualmente, na frequência da emissão correspondente.

4864 B) Sentido estação costeira-navio

4865 § 12. (1) A estação costeira chama a estação de navio numa frequência de emissão predeterminada da estação costeira recorrendo ao equipamento de impressão directa e utilizando o número de chamada selectiva para impressão directa da estação de navio, atribuído de acordo com as disposições do apêndice 38.

4866 (2) O equipamento de impressão directa da estação de navio, sintonizado para receber a frequência de emissão predeterminadas da estação costeira, detecta a chamada; a estação de navio responde então utilizando um dos métodos seguintes:

4867 *a*) Responde ou imediatamente na frequência de recepção correspondente da estação costeira ou após um certo espaço de tempo, aplicando o procedimento indicado no n.º **4853**; *ou*

4868 *b*) O emissor da estação de navio é ligado automaticamente na frequência de recepção correspondente da estação costeira; o equipamento de impressão directa do navio emite então sinais apropriados para indicar que está pronto a receber o tráfego por via automática.

SECÇÃO IV

Forma das mensagens

4869 § 13. Quando a estação costeira dispõe de instalações apropriadas, o tráfego pode fazer-se através da rede telex:

4870 *a*) Quer pelo modo «conversação»; as estações interessadas são então ligadas automática ou manualmente;

4871 *b*) Quer pelo modo «registo e retransmissão»; as mensagens são então armazenadas numa memória na estação costeira até ser possível estabelecer um circuito, automaticamente ou por comando manual, com a estação chamada.

4872 § 14. No sentido estação costeira-navio, convém que a forma das mensagens esteja de acordo com a que é normalmente utilizada na rede telex.

4873 § 15. No sentido navio-estação convém que a forma das mensagens esteja de acordo com a que é normalmente utilizadas na rede telex, com a adição de um preâmbulo como segue:

4874 *a*) No modo «conversação», o preâmbulo é composto pelos caracteres DIRTLXyz + transmitidos em sequência e precedidos de, pelo menos, um sinal de «retorno do carreto» e de um sinal de «mudança de linha», representando «y» o código telex de destino, de acordo com os pareceres pertinentes da CCITT, representando «z» o número telex do assinante em terra, e indicando «+» o fim da sequência;

4875 *b*) No modo «registo e retransmissão», o preâmbulo é composto pelos caracteres TLXyz + transmitidos em sequência e precedidos de, pelo menos, um sinal de «retorno do carreto» e de um sinal de «mudança de linha», representando «y» o código telex de destino, de acordo com os pareceres pertinentes da CCITT, representado «z» o número telex do assinante em terra e indicando «+» o fim da sequência.

SECÇÃO V

Procedimentos aplicáveis à exploração com «correcção de erros sem circuito de retorno»

4876 § 16. Quando existem acordos prévios nesse sentido, as mensagens podem ser transmitidas a partir de uma estação costeira ou de uma estação de navio com destino a uma ou mais estações de navio segundo o modo «correcção de erros sem circuito de retorno», nos seguintes casos:

4877 *a*) A estação de navio que deve receber a mensagem não está em condições de utilizar o seu emissor ou não está autorizada a fazê-lo;

4878 *b*) A mensagem é destinada a vários navios;

4879 *c*) É necessário efectuar a recepção sem vigilância segundo o modo «correcção de erros sem circuito de retorno» e não é exigido o recebido automático.

4880 § 17. Convém que todas as mensagens transmitidas segundo o modo «correcção de erros sejam precedidas dos sinais «retorno do carreto» e «mudança de linha», transmitidos pelo menos uma vez.

4881 § 18. As estações de navio podem dar o recebido das mensagens transmitidas segundo o modo «correcção de erros sem circuito de retorno» por telegrafia morse da classe A1A, por telefonia ou por qualquer outro meio.

4882 a 4902 *(Não atribuídos.)*

ARTIGO 65

Procedimento geral radiofónico no serviço móvel marítimo

SECÇÃO I

Disposições gerais

4903 § 1. O procedimento pormenorizado no presente artigo é aplicável às estações radiotelefónicas, excepto nos casos de perigo, de urgência ou de segurança, a que se aplicam as disposições do capítulo IX.

4904 § 2. (1) O serviço das estações radiotelefónicas de navio deverá ser assegurado por um operador que satisfaça as condições fixadas no artigo 55.

4905 (2) Para os indicativos de chamada ou outros meios de identificação das estações radiotelefónicas costeiras ou de navio (v. o artigo 25).

4906 § 3. Convém que o serviço radiotelefónico aberto à correspondência pública a bordo dos navios seja, se possível, explorado em dúplex.

4907 § 4. (1) Poderão utilizar-se dispositivos que emitam um sinal que indique a ocupação de uma via desde que não causem interferência prejudicial ao serviço assegurado pelas estações costeiras.

4908 (2) Não é autorizada a utilização de dispositivos que emitam sinais de chamada ou de identificação contínuos ou repetidos.

4909 (3) Uma estação não pode emitir informações idênticas simultaneamente em várias frequências quando estiver a comunicar com uma só estação.

4910 (4) As estações não devem emitir onda portadora entre as chamadas.

4911 (5) Convém que as estações radiotelefónicas estejam, tanto quanto possível, equipadas com dispositivos que lhes permitam passar instantaneamente da emissão para a recepção e vice-versa. Estes dispositivos serão necessários em todas as estações que assegurem comunicações entre os navios e os assinantes da rede telefónica terrestre.

4912 § 5. (1) As estações equipadas para a radiotelefonia podem transmitir e receber os radiotelegramas em radiotelefonia. As estações costeiras que assegurem um tal serviço e que estejam abertas à correspondência pública devem estar assinaladas na nomenclatura das estações costeiras.

4913 (2) Para facilitar as radiocomunicações podem ser utilizadas as abreviaturas de serviço indicadas no apêndice 14.

4914 (3) Se for necessário soletrar certas expressões, palavras difíceis, abreviaturas de serviço, algarismos, etc., utilizar-se-ão os quadros de soletração fonética do apêndice 24.

SECÇÃO II

Operações preliminares

4915 § 6. (1) Antes de emitir, uma estação tomará as precauções necessárias para se certificar de que as suas emissões não interferirão transmissões em curso. Se tal interferência for provável, a estação esperará uma paragem oportuna da transmissão que poderia interferir.

4916 (2) No caso em que, mesmo seguindo este procedimento, a emissão dessa estação interfira uma transmissão já em curso aplicar-se-ão as seguintes regras:

4917 *a*) A estação de navio cuja emissão interfere a comunicação entre uma estação móvel e uma estação costeira deverá deixar de emitir ao primeiro pedido da estação costeira;

4918 *b*) A estação de navio cuja emissão interfere as comunicações entre estações móveis deve suspender a emissão ao primeiro pedido de uma qualquer dessas estações;

4919 *c*) A estação que pede essa suspensão deve indicar a duração aproximada da espera imposta à estação cuja emissão faz suspender.

SECÇÃO III

Chamadas em radiotelefonia

4920 § 7. (1) As disposições da presente secção relativas aos intervalos entre as chamadas não se aplicam a uma estação a operar em condições de perigo, de urgência ou de segurança.

4921 (2) As disposições da presente secção não se aplicam ao serviço móvel marítimo por satélite.

4922 § 8. (1) Como regra geral, compete à estação de navio estabelecer a comunicação com a estação costeira. Para isso a estação de navio só pode chamar a estação costeira depois de ter entrado na sua zona de serviço, quer dizer, na zona em que, utilizando uma frequência apropriada, a estação de navio poderá ser ouvida pela estação costeira.

4923 (2) Todavia, uma estação costeira que tenha tráfego para uma estação de navio poderá chamar essa estação se tiver razões para supor que ela se encontra na sua zona de serviço e mantém escuta.

4924 § 9. (1) Além, disso, cada estação costeira deverá, tanto quanto for praticável, transmitir as suas chamadas sob forma de «listas de chamadas» formadas com os indicativos de chamada ou outros meios de identi-

ficação, classificados por ordem alfabética, das estações de navio para que tem tráfego pendente. Essa chamadas serão efectuadas em momentos determinados por acordos concluídos entre as administrações interessadas, espaçados pelo menos de duas horas e no máximo de quatro horas, durante as horas de serviço da estação costeira.

4925 (2) As estações costeiras transmitirão essas listas de chamadas nas suas frequências normais de trabalho nas faixas apropriadas. Esta transmissão é precedida de uma chamada geral a todas as estações.

4926 (3) A chamada geral a todas as estações, anunciando a lista de chamadas, pode ser feita numa frequência de chamada sob a forma seguinte:

Três vezes, no máximo, «Chamada a todos os navios» ou CQ (soletrado utilizando as palavras de código CHARLIE QUEBEC);
A palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
Três vezes, no máximo, «... Rádio»;
«Escutem a minha lista de chamadas em ... kHz.»

Em nenhum caso será repetido este preâmbulo.

4927 (4) Todavia, nas faixas compreendidas entre 156 MHz e 174 MHz, a chamada descrita no n.º **4926** poderá, quanto o contacto for fácil de estabelecer, ser substituída pela chamada descrita a seguir:

Uma vez «Chamada a todos os navios» ou CQ (soletrado utilizando as palavras de código CHARLIE QUEBEC);
A palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
Duas vezes, «... Rádio»;
«Escutem a minha lista de chamadas na via ... »

Em nenhum caso será repetido este preâmbulo.

4928 (5) As disposições do n.º **4926** são obrigatórias quando se utilizarem as frequências de 2182 kHz e de 156,8 MHz.

4929 (6) As horas a que as estações costeiras transmitem as suas listas de chamadas, bem como as frequências e as classes de emissão que utilizam para esse fim, deverão ser mencionadas na nomenclatura das estações costeiras.

4930 (7) Convém que as estações de navio escutem, em toda a medida do possível, as emissões das listas de chamadas das estações costeiras. Quando ouvirem o seu indicativo de chamada ou o seu sinal de identificação numa lista, deverão responder logo que possam.

4931 (8) Quando o tráfego não puder ser imediatamente escoado, a estação costeira indicará a cada estação de navio interessada a hora provável a que poderá começar o trabalho, assim como, se for necessário, a frequência e a classe de emissão a utilizar.

4932 § 10. Quando uma estação costeira receber praticamente ao mesmo tempo chamadas de várias estações de navio, decidirá a ordem pela qual essas estações lhe poderão transmitir o seu tráfego. A sua decisão será baseada na ordem de prioridade (v. o n.º **4441**) dos radiotelegramas ou das conversações radiotelefónicas pendentes nas estações de navio e na necessidade de permitir a cada uma das estações que chama o escoamento do maior número possível de comunicações.

4933 § 11. (1) Quando uma estação chamada não responder à chamada emitida três vezes com intervalos de dois minutos, a chamada deverá cessar.

4934 (2) Todavia, quando uma estação chamada não responder, a chamada poderá ser repetida com intervalos de 3 minutos.

4935 (3) Nas zonas em que seja possível, na prática, estabelecer, em ondas métricas, ligações seguras com as estações costeiras, a estação de navio que chama poderá repetir a chamada depois de se ter certificado de que a estação costeira deixou de escoar tráfego.

4936 (4) Quando se tratar de uma comunicação entre uma estação do serviço móvel marítimo e uma estação de aeronave, a chamada poderá recomeçar cinco minutos mais tarde.

4937 (5) Antes de renovar a chamada, a estação que chama deverá certificar-se de que a estação chamada não está em comunicação com outra estação.

4938 (6) Se não houver motivo para recear que interferências prejudiciais afectem as comunicações em curso, não serão aplicáveis as disposições do n.º **4936**. Nesses casos, a chamada, emitida três vezes com intervalos de dois minutos, poderá ser renovada após um intervalo, pelo menos, igual a três minutos.

4939 (7) Todavia, antes de renovar a chamada, a estação que chama deverá certificar-se de que não há o risco de uma nova chamada causar interferências a outras comunicações em curso e de que a estação chamada não está em comunicação com uma outra estação.

4940 (8) As estações de navio não devem transmitir a sua onda portadora entre as chamadas.

4941 § 12. Quando o nome e o endereço da administração ou da exploração particular de que depende uma estação de navio não estiverem mencionados na nomenclatura apropriada ou já não estiverem em conformidade com as indicações desta, é dever da estação de navio, como regra de procedimento, fornecer à estação costeira a que transmite o tráfego todos os esclarecimentos necessários a esse respeito.

4942 § 13. (1) A estação costeira pode, por meio da abreviatura TR (soletrada as palavras de código TANGO ROMEO), pedir à estação de navio que lhe forneça as informações seguintes:

4943 *a*) Posição e, tanto quanto possível, rumo e velocidade;

4944 *b*) Próximo ponto de escala.

4945 (2) Convém que as informações referidas nos n.os **4942** a **4944**, precedidas da abreviatura TR, sejam fornecidas pelas estações de navio, sempre que apropriado, sem pedido prévio da estação costeira. Essas informações só serão fornecidas após autorização do comandante ou da pessoa responsável pelo navio.

Secção IV

Método de chamada, resposta à chamada e sinais preparatórios do tráfego

4946 A) Método de chamada

4947 § 14. (1) A chamada é constituída como segue:

Três vezes, no máximo, o indicativo de chamada ou qualquer outro sinal de identificação da estação chamada;
A palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
Três vezes, no máximo, o indicativo de chamada ou qualquer outro sinal de identificação da estação que chama.

4948 (2) Todavia, nas faixas compreendidas entre 156 MHz e 174 MHz, a chamada descrita no n.º **4947** poderá, quando o contacto for fácil de estabelecer ser substituída pela chamada descrita a seguir:

Uma vez o indicativo de chamada da estação chamada;
A palavra AQUI (ou De soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
Duas vezes o indicativo de chamada ou qualquer outro sinal de identificação da estação que chama.

4949 (3) Quando uma estação de navio chamar numa frequência de trabalho uma estação costeira que funcione em várias vias em ondas métricas, convém que inclua na sua chamada o número da via utilizada.

4950 (4) Depois do estabelecimento do contacto, o indicativo de chamada ou qualquer outro sinal de identificação só pode ser emitido uma vez.

4951 (5) Se a estação costeira estiver munida de um dispositivo de chamada selectiva e se a estação de navio estiver munida de um dispositivo de recepção das chamadas selectivas, a estação costeira chamará o navio emitindo os sinais de código apropriados e a estação de navio chamará vocalmente a estação costeira, segundo o procedimento indicado no n.º **4947** (v., também, o artigo 62).

4952 § 15. As chamadas para as comunicações internas a bordo dos navios que se encontrem nas águas territoriais são constituídas como segue:

4953 *a*) Chamadas provenientes da estação principal:

Três vezes, no máximo, o nome do navio, seguido de uma única letra (ALFA, BRAVO, CHARLIE, etc.) que indique a subestação;
A palavra AQUI;
O nome do navio, seguido da palavra CONTROLE;

4954 *b*) Chamadas provenientes da subestação:

Três vezes, no máximo, o nome do navio, seguido da palavra CONTROLE;
A palavra AQUI;
O nome do navio, seguido de uma única letra (ALFA, BRAVO, CHARLIE, etc.) que indique a subestação.

4955 B) Frequência a utilizar para a chamada e os sinais preparatórios

4956 **B1) Faixas compreendidas entre 1605 kHz e 4000 kHz**

4957 § 16. (1) Quando uma estação radiotelefónica de navio chame uma estação costeira convém que utilize para a chamada, por ordem de preferência:

4958 *a*) Uma frequência de trabalho em que a estação costeira assegure a escuta;

4959 *b*) A frequência portadora de 2182 kHz;

4960 *c*) Nas Regiões 1 e 3 e na Gronelândia, a frequência portadora de 2191 kHz (frequência consignada de 2192,4 kHz), quando a frequência portadora de 2182 kHz é utilizada para o perigo.

4961 (2) Quando uma estação radiotelefónica de navio chama uma outra estação de navio convém que utilize para a chamada:

4962 *a*) A frequência portadora de 2182 kHz;

4963 *b*) Uma frequência navio-navio onde e quando a densidade do tráfego for elevada e quando tiver sido possível combinação prévia para tal.

4964 (3) Sob reserva das disposições do n.º **4967** e segundo as disposições regulamentares do seu país, as estações costeiras chamam as estações de navio da sua própria nacionalidade quer numa frequência de trabalho quer, quando se trate de chamadas individuais a navios determinados, na frequência portadora de 2182 kHz.

4965 (4) Todavia, no caso em que uma estação de navio mantenha simultaneamente escuta na frequência portadora de 2182 kHz e numa frequência de trabalho, convém chamá-la nessa frequência de trabalho.

4966 (5) Como regra geral, convém que as estações costeiras utilizem a frequência portadora de 2182 kHz para chamar as estações radiotelefónicas de navio de nacionalidade diferente da sua.

4967 (6) As estações costeiras podem chamar as estações de navio equipadas para receber sinais de chamada selectiva de acordo com as disposições do artigo 62.

4968 **B2) Faixas compreendidas entre 4000 kHz e 23 000 kHz**

4969 § 17. (1) Quando uma estação de navio chamar uma estação costeira em radiotelefonia, utilizará quer uma das frequências de chamada mencionadas no n.º **4375**, quer a frequência de trabalho associada, conforme a secção A do apêndice 16, à da estação costeira.

4970 (2) Quando uma estação costeira chamar em radiotelefonia uma estação de navio, utilizará para esse fim uma das frequências de chamada mencionadas no n.º **4376**, uma das suas frequências de trabalho indicadas na nomenclatura das estações costeiras ou uma das duas frequências portadoras 4125 kHz e 6215,5 kHz, de acordo com as disposições dos n.os **4375.2** e **4375.3**.

4971 (3) As operações preliminares do estabelecimento das comunicações radiotelefónicas poderão efectuar-se igualmente em radiotelegrafia, seguindo o procedimento próprio da radiotelegrafia (v. os n.os **4758** e **4759**).

4972 (4) As disposições dos n.os **4969** e **4970** não se aplicam às comunicações entre estações de navio e estações costeiras nas frequências para a exploração *simplex* especificadas na secção B do apêndice 16.

4973 **B3) Faixas compreendidas entre 156 MHz e 174 MHz**

4974 § 18. (1) Nas faixas compreendidas entre 156 MHz e 174 MHz convém que, como regra geral, a chamada entre as estações de navio e a chamada no sentido estação costeira-estação de navio se efectue na frequência de 156,8 MHz. Todavia, a chamada no sentido estação costeira-estação de navio pode ser efectuada numa via de trabalho ou numa via de duas frequências destinada à chamada que tenha sido posta em serviço de acordo com o n.º **4391**. Excepto para as comunicações de perigo, urgência ou segurança, para as quais convém utilizar a frequência de 156,8 MHz, a chamada no sentido estação de navio-estação costeira deve, sempre que possível, ser efectuadas numa via de trabalho ou numa via de duas frequências destinada à chamada que tenha sido posta em serviço de acordo com o n.º **4391**. Convém que os navios que desejem participar no serviço de operações portuárias ou no serviço de movimento de navios chamem numa frequência de trabalho destinada ao serviço de operações portuárias ou ao serviço de movimento de navios, indicada em normando na nomenclatura das estações costeiras.

4975 (2) Se a frequência de 156,8 MHz estiver a ser utilizada para comunicações de perigo, urgência ou segurança, uma estação de navio que deseje participar no serviço de operações portuárias poderá estabelecer contacto em 156,6 MHz ou utilizando uma outra frequência do serviço de operações portuárias, impressa em normando na nomenclatura das estações costeiras.

4976 **B4) Procedimento a aplicar para chamar uma estação que assegure um serviço de pilotagem**

4977 § 19. Quando uma estação radiotelefónica de navio chama uma estação que assegura um serviço de pilotagem, convém que utilize para a chamada, por ordem de preferência:

4978 *a*) Uma via apropriada das faixas compreendidas entre 156 MHz e 174 MHz;

4979 *b*) Uma frequência de trabalho seleccionada nas faixas compreendidas entre 1605 kHz e 4000 kHz;

4980 *c*) A frequência portadora de 2182 kHz, mas então só para designar a frequência de trabalho a utilizar.

4981 C) Fórmula da resposta à chamada

4982 § 20. A resposta à chamada é constituída como segue:

Três vezes, no máximo, o indicativo de chamada ou qualquer outro sinal de identificação da estação que chama;
A palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);
Três vezes, no máximo, o indicativo de chamada ou qualquer outro sinal de identificação chamada.

4983 D) Frequência de resposta

4984 D1) Faixas compreendidas entre 1605 kHz e 4000 kHz

4985 § 21. (1) Quando uma estação de navio for chamada na frequência portadora de 2182 kHz, convém que responda nessa mesma frequência portadora, a não ser que tenha sido indicada pela estação que chama uma outra frequência para esse fim.

4986 (2) Quando uma estação de navio for chamada por meio da chamada selectiva, deverá responder numa frequência em que a estação costeira assegure a escuta.

4987 (3) Quando uma estação de navio for chamada numa frequência de trabalho por uma estação costeira da sua nacionalidade, deverá responder na frequência de trabalho normalmente associada à frequência utilizada pela estação costeira para a chamada.

4988 (4) Ao chamar uma estação costeira ou uma estação de navio, uma estação de navio deverá indicar a frequência em que lhe deve ser transmitida a resposta, a menos que essa frequência seja a que está normalmente associada à frequência utilizada para a chamada.

4989 (5) Uma estação de navio que permuta frequentemente tráfego com uma estação costeira de nacionalidade diferente da sua poderá, quando as administrações interessadas estiverem de acordo neste particular, utilizar o mesmo procedimento para a resposta que os navios da nacionalidade da estação costeira.

4990 (6) Como regra geral, uma estação costeira deverá responder:

4991 *a*) Na frequência portadora de 2182 kHz, às chamadas transmitidas nessa mesma frequência portadora, a não ser que tenha sido indicada pela estação que chama uma outra frequência para esse fim;

4992 *b*) Numa frequência de trabalho, às chamadas transmitidas numa frequência de trabalho;

4993 *c*) Nas Regiões 1 e 3 e na Gronelândia, numa frequência de trabalho, às chamadas feitas na frequência portadora de 2191 kHz (frequência consignada de 2192,4 kHz).

4994 D1) Faixas compreendidas entre 4000 kHz e 23 000 kHz

4995 § 22. (1) Uma estação de navio chamada por uma estação costeira responderá quer numa das frequências de chamada mencionadas no n.º **4375**, quer na frequência de trabalho associada à da estação costeira, de acordo com a secção A do apêndice 16.

4996 (2) Uma estação costeira chamada por uma estação de navio responderá utilizando uma das frequências de chamada mencionadas no n.º **4376** ou uma das suas frequências de trabalho indicadas na Nomenclatura das estações costeiras.

4997 (3) Na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., quando uma estação for chamada na frequência portadora de 4125 kHz, convém que responda nessa mesma frequência portadora, a não ser que tenha sido indicada pela estação que chama uma outra frequência para esse fim.

4998 (4) Na zona da Região 3 situada ao sul do paralelo 25° N., quando uma estação for chamada na frequência portadora de 6215,5 kHz, convém que responda nessa mesma frequência portadora, a não ser que tenha sido indicada pela estação que chama uma outra frequência para esse fim.

4999 (5) As disposições dos n.os **4995** e **4996** não se aplicam às comunicações entre estações de navio e estações costeiras nas frequências para a exploração *simplex* especificadas na secção B do apêndice 16.

5000 D3) Faixas compreendidas entre 156 MHz e 174 MHz

5001 § 23. (1) Quando uma estação for chamada na frequência de 156,8 MHz, convém que responda nesta frequência, a não ser que tenha sido indicada pela estação que chama uma outra frequência para esse fim.

5002 (2) Quando uma estação costeira aberta à correspondência pública chama uma estação de navio, quer vocalmente, quer por chamada selectiva, numa via a duas frequências, a estação de navio responderá vocalmente na frequência associada à da estação costeira; inversamente, uma estação costeira responderá a uma chamada de uma estação de navio na frequência associada à da estação de navio.

5003 E) Indicação da frequência a utilizar para o tráfego

5004 **E1) Faixas compreendidas entre 1605 kHz e 4000 kHz**

5005 § 24. Se for estabelecido o contacto na frequência portadora de 2182 kHz, a estação costeira e a estação de navio devem passar para uma das frequências de trabalho a fim de permutar o tráfego.

5006 **E2) Faixas compreendidas entre 4000 kHz e 23 000 kHz**

5007 § 25. Depois do estabelecimento do contacto entre uma estação de navio e uma estação costeira ou outra estação de navio, na frequência de chamada da faixa escolhida, o tráfego deve ser permutado nas frequências de trabalho respectivas dessas estações.

5008 **E3) Faixas compreendidas entre 156 MHz e 174 MHz**

5009 § 26. Uma vez estabelecido o contacto entre uma estação costeira do serviço de correspondência pública e uma estação de navio, na frequência de 156,8 MHz ou, quando for o caso, na via de chamada a duas frequências (v. o n.º **4392**), as duas estações passam para um dos seus pares de frequências normais de trabalho para permutar o tráfego. Convém que a estação que chama indique a via para onde pretende passar, identificando essa via pela frequência expressa em megahertz ou, de preferência, pelo número que designa a via.

5010 (2) Uma vez estabelecido o contacto na frequência de 156,8 MHz entre uma estação costeira do serviço de operações portuárias e uma estação de navio, convém que a estação de navio indique a natureza do serviço que deseja (informações sobre a navegação, instruções relativas ao movimento nas docas, etc.); a estação costeira indicará então a via a empregar para a permuta do tráfego, identificando essa via pela frequência expressa em megahertz ou, de preferência, pelo número que designa a via.

5011 (3) Uma vez estabelecido o contacto na frequência de 156,8 MHz entre uma estação costeira do serviço de movimento de navios e uma estação de navio, a estação costeira indica a via a utilizar para a permuta do tráfego, identificando essa via pela frequência expressa em megahertz ou, de preferência, pelo número que designa a via.

5012 (4) Convém que depois de ter estabelecido o contacto com uma outra estação de navio na frequência de 156,8 MHz uma estação de navio comunique a via navio-navio que ela pretende utilizar para a permuta do tráfego, identificando essa via pela frequência expressa em megahertz ou, de preferência, pelo número que designa a via.

5013 (5) Todavia, uma breve permuta de tráfego, que não deve durar mais de um minuto, relativa à segurança da navegação pode não ser efectuada numa frequência de trabalho, quando for importante que todos os navios que se encontram na zona de serviço recebam a emissão.

5014 (6) As estações que ouvirem uma emissão relativa à segurança da navegação devem escutar a mensagem até que tenham adquirido a certeza de que tal mensagem não lhe diz respeito. Não devem efectuar qualquer emissão susceptível de interferir a mensagem.

5015 F) Acordo sobre a frequência a utilizar para o tráfego

5016 § 27. Se a estação chamada estiver de acordo com a estação que chama, transmite:

5017 *a*) A indicação de que a partir desse momento escutará na frequência ou via de trabalho anunciada pela estação que chama;

5018 *b*) A indicação de que está pronta a receber o tráfego da estação que chama.

5019 (2) Se a estação chamada não estiver de acordo com a estação que chama sobre a frequência ou a via de trabalho a empregar, transmitirá a indicação de trabalho ou da via que propõe.

5020 (3) Numa ligação entre uma estação costeira e uma estação de navio, a estação costeira decide finalmente a frequência ou a via a utilizar.

5021 (4) Efectuado o acordo sobre a frequência ou a via de trabalho que a estação que chama deverá empregar para o tráfego, a estação chamada anuncia que está pronta a receber o tráfego.

5022 G) Indicação do tráfego

5023 § 28. Quando a estação que chama desejar escoar várias comunicações radiotelefónicas ou transmitir mais de um radiotelegrama, convém que indique o facto depois de estabelecer contacto.

5024 H) Dificuldades de recepção

5025 § 29. (1) Se a estação não estiver em condições de receber imediatamente o tráfego, convém que responda à chamada como se indica no n.º **4982** e que faça seguir a sua resposta da expressão «espere ... minutos» [ou AS soletrado, utilizando as palavras de código ALFA SIERRA ... (minutos) em caso de dificuldades linguísticas], precisando a duração provável da espera em minutos. Se essa duração provável ultrapassar dez minutos, a espera deverá ser justificada. Em vez deste procedimento, a estação chamada pode indicar por um meio apropriado que não está em condições de receber imediatamente o tráfego.

5026 (2) Quando uma estação receber uma chamada sem ter a certeza de lhe ser destinada, não deverá responder antes de a chamada ter sido repetida e compreendida.

5027 (3) Quando uma estação receba uma chamada que lhe é destinada mas tenha dúvidas quanto à identificação da estação que chama, deverá responder imediatamente pedindo a esta que repita o seu indicativo de chamada ou qualquer outro sinal de identificação que use.

Secção V

Escoamento do tráfego

5028 A) Frequência do tráfego

5029 § 30. (1) Convém que cada estação utilize para o escoamento do seu tráfego (comunicações radiotelefónicas e radiotelegramas) uma das suas frequências de trabalho da faixa em que se efectuou a chamada.

5030 (2) Além da sua frequência normal de trabalho, impressa em normando na nomenclatura das estações costeiras, cada estação costeira poderá empregar uma ou várias frequências suplementares da mesma faixa, em conformidade com as disposições do artigo 60.

5031 (3) Com excepção do tráfego de perigo (v. o capítulo IX), é proibido o emprego para o tráfego das frequências reservadas à chamada.

5032 (4) Quando tiver sido estabelecido contacto na frequência a utilizar para o tráfego, a transmissão de um radiotelegrama ou de uma comunicação radiotelefónica é precedida:

5033 Do indicativo de chamada ou de qualquer outro sinal de identificação da estação chamada;

5034 Da palavra AQUI (ou DE soletrada, utilizando as palavras de código DELTA ECHO em caso de dificuldades linguísticas);

5035 Do indicativo de chamada de qualquer outro sinal de identificação da estação que chama.

5036 (5) Não é necessário que o indicativo de chamada ou qualquer outro sinal de identificação seja emitido mais de uma vez.

5037 B) Estabelecimento das comunicações radiotelefónicas e transmissão dos radiotelegramas

5038 B1) Estabelecimento das comunicações radiotelefónicas

5039 § 31. (1) Para escoar uma comunicação radiotelefónica convém que a estação costeira estabeleça, tão depressa quanto possível, a ligação com a rede telefónica. Durante esse espaço de tempo a estação de navio deverá manter a escuta na frequência de trabalho indicada pela estação costeira.

5040 (2) Todavia, se a ligação não puder ser estabelecida rapidamente, a estação costeira deverá informar a estação de navio. Neste caso, esta última poderá:

5041 *a*) Ou manter a escuta na frequência apropriada até que se possa estabelecer a ligação;

5042 *b*) Ou tornar a estabelecer contacto com a estação costeira no momento combinado.

5043 (3) Quando se tiver escoado uma comunicação radiotelefónica, é aplicável o procedimento indicado no n.º **5054**, salvo se estiverem pendentes outras comunicações numa das duas estações.

5044 B2) Transmissão dos radiotelegramas

5045 § 32. (1) Convém que a transmissão de um radiotelegrama se efectue do modo seguinte:

O radio telegrama começa: de ... (nome do navio ou da aeronave);
N.º... (número de série do radiotelegrama);
Número de palavras ...;
Data ...;
Hora ... (hora a que o radiotelegrama foi aceite bordo do navio ou da aeronave);
Indicações de serviço, se existirem;
Endereço ...;
Texto ...;
Assinatura ... (se houver);
Terminada a transmissão do radiotelegrama, escuto.

5046 (2) Como regra geral, os radiotelegramas de qualquer natureza transmitidos pelas estações de navio serão numerados por séries quotidianas, dando-se o n.º 1 ao primeiro radiotelegrama transmitido em cada dia para cada estação diferente.

5047 (3) Convém que uma série de números começada em radiotelegrafia continue em radiotelefonia e inversamente.

5048 (4) Cada radiotelegrama será transmitido uma única vez pela estação emissora. Todavia, em caso de necessidade, poderá ser repetido integralmente ou em parte pela estação receptora ou pela estação emissora.

5049 (5) Quando se transmitem grupos de algarismos, cada algarismo será transmitido separadamente e a transmissão de cada grupo ou série de grupos deverá ser precedida das palavras «em algarismos».

5050 (6) Os números escritos por extenso serão pronunciados como se escrevem, fazendo preceder a sua transmissão pelas palavras «por extenso».

5051 **B3) Entendido**

5052 § 33. (1) O entendido de um radiotelegrama ou de uma série de radiotelegramas é dado pelas seguinte forma:

O indicativo de chamada ou qualquer outro sinal de identificação da estação emissora;
A palavra AQUI (ou De soletrada, utilizando as letras de código DELTA ECHO em cado de dificuldades linguísticas);
O indicativo de chamada ou qualquer outro sinal de identificação da estação receptora;
«Recebido o seu n.º ... , escuto» [ou R soletrado, utilizando a palavra de código ROMEO... (número), K soletrado, empregando a palavra de código KILO em caso de dificuldades linguísticas]; ou
«Recebidos os seus n.º... a n.º..., escuto» [ou R soletrado, empregando a palavra de código ROMEU ... (número), K soletrado, empregando a palavra de código KILO em caso de dificuldades linguísticas].

5053 (2) Não se deverá considerar terminada a transmissão de um radiograma ou série de radiotelegramas sem que o entendido tenha sido devidamente recebido.

5054 (3) O fim do trabalho entre duas estações será indicado, por cada uma delas, por meio da palavra «terminado» (ou $\overline{VA}$ soletrada, utilizando as palavras de código VICTOR ALFA em caso de dificuldades.

SECÇÃO VI

Duração e orientação do trabalho

5055 § 34. (1) A transmissão da chamada e dos sinais preparatórios do tráfego na frequência portadora de 2182 kHz ou na frequência de 156,8 MHz não deverá exceder um minuto, excepto nos casos de perigo, de urgência ou de segurança, aos quais se aplicam as disposições do capítulo IX.

5056 (2) Nas comunicações entre estação costeira e estação de navio a estação de navio seguirá as instruções dadas pela estação costeira em tudo o que diga respeito à ordem e hora de transmissão, escolha da frequência, duração e suspensão do trabalho.

5057 (3) Nas comunicações entre estações de navio, a estação chamada orientará o trabalho nas condições indicadas no n.º **5056**. Todavia, se uma estação costeira julgar necessário intervir, as estações de navio seguirão as suas instruções.

SECÇÃO VII

Ensaios

5058 § 35. Quando for necessária a uma estação de navio emitir sinais de ensaio ou de regulação susceptíveis de interferir o trabalho das estações costeira vizinhas, deverá obter-se o consentimento dessas estações antes de efectuar tais emissões.

5059 § 36. (1) Quando for necessário a uma estação emitir sinais de ensaio, quer para regular um emissor antes de transmitir uma chamada, quer para regular um receptor, esse sinais não deverão durar mais de dez segundos e devem incluir o indicativo de chamada ou qualquer outro sinal de identificação da estação que emite para ensaios; esse indicativo ou esse sinal de identificação deverá ser pronunciado lenta e distintamente.

5060 (2) As emissões de ensaio devem ser reduzidas ao mínimo, especialmente:

Na frequência portadora de 2182 kHz;
Na frequência de 156,8 MHz;
Na frequência portadora de 4125 kHz na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N.;
Na frequência portadora de 6215,5 kHz na zona da Região 3 ao sul do paralelo 25° N.

5061 (3) É proibido fazer emissões de ensaio do sinal de alarme radiotelefónico na frequência portadora de 2182 kHz e na frequência de 156,8 MHz, excepto se se tratar de um equipamento de emergência que só possa emitir nessas frequências: neste caso, deverão ser tomadas as medidas necessárias para evitar a radiação. É necessário igualmente tomar medidas para evitar a radiação proveniente dos ensaios do sinal de alarme radiotelefónico em frequências diferentes de 2182 kHz e de 156,8 MHz.

5062 a 5084 *(Não atribuídos.)*

ARTIGO 66

Correspondência pública no serviço móvel marítimo e no serviço móvel marítimo por satélite (1)

SECÇÃO I

Generalidades

5085 § 1. As disposições do Regulamento Telegráfico e as do Regulamento Telefónico, tendo em conta os pareceres da CCITT, são aplicáveis às radiocomunicações, excepto quando o presente Regulamento dispuser de outro modo.

SECÇÃO II

Autoridade responsável pela contabilidade

5086 § 2. Em princípio, e em conformidade com a legislação e a prática nacionais, as taxas das radiocomunicações no sentido navio-terra devem ser cobradas ao detentor da licença de estação móvel marítima:

5087 *a*) Pela administração que concedeu a licença; *ou*
5088 *b*) Por uma exploração particular reconhecida; *ou*
5089 *c*) Por qualquer (ou quaisquer outro(s) organismo(s) designado(s) pela administração mencionada no n.° **5087**.

5090 § 3. No presente artigo, a administração ou a exploração particular reconhecida ou o(os) organismo(s) designado(s) são denominados «autoridade responsável pela contabilidade».

5091 § 4. O(s) nome(s) e endereço(s) da(s) autoridade(s) responsável(eis) pela contabilidade devem ser notificados ao Secretário-Geral, a fim de serem publicados na nomenclatura das estações de navio. O número desses nomes e endereços deve ser tão reduzido quanto possível, tendo em conta os pareceres da CCITT.

SECÇÃO III

Contabilidade

5092 § 5. A permuta e a verificação das contas devem ser efectuadas em conformidade com o Regulamento Telegráfico e o Regulamento Telefónico, tendo em conta os pareceres da CCITT.

5093 § 6. As contas serão enviadas tão rapidamente quanto possível e, em qualquer caso, antes do fim do 3.° mês a seguir a que se referem.

5094 § 7. Em princípio, uma conta deve ser considerada aceite sem que seja necessária a notificação explícita do aceite à administração (ou à exploração particular reconhecida) que a apresentou.

5095 § 8. Contudo, qualquer autoridade responsável pela contabilidade tem o direito de contestar os elementos de uma conta durante o prazo de seis meses a contar da data de envio.

5096 § 9. Todas as contas radiomarítimas devem ser pagas sem demora pela autoridades responsável pela contabilidade e, o mais tardar, seis meses após o envio da conta.

5097 § 10. Se as contas radiomarítimas internacionais não forem pagas no fim de seis meses, a administração que concedeu licença à estação móvel deve, a pedido, e dentro dos limites da legislação nacional em vigor, tomar todas as medidas possíveis para obter do detentor da licença a regularização das contas por liquidar.

A.66 (1) V. a Resolução n.° 201.

5098 § 11. No caso previsto no n.º 5095 se a conta sofrer um atraso importante no encaminhamento, convém que a autoridade responsável pela contabilidade, e que espera a conta, informe imediatamente a administração (ou a exploração particular reconhecida) de origem de que os eventuais pedidos de informações e a regularização são susceptíveis de sofrer atrasos. Todavia, o atraso não deverá exceder três meses a contar da data de recepção da conta.

5099 § 12. A autoridade debitadora responsável pela contabilidade poderá recusar a regularização e a rectificação das contas apresentadas mais de 18 meses depois da data de aceitação dos radiotelegramas ou depois da data de estabelecimento das comunicações radiotelefónicas ou das comunicações radiotelex a que essas contas se referem.

SECÇÃO IV

Pagamento dos saldos

5100 § 13. O pagamento dos saldos deve ser efectuado em conformidade com o Regulamento Telegráfico e o Regulamento Telefónico, tendo em conta os pareceres pertinentes da CCITT.

SECÇÃO V

Arquivos

5101 § 14. Os originais dos radiotelegramas e os documentos que lhe dizem respeito, assim como os que se referem às comunicações radiotelefónicas e às comunicações radiotelex, devem ser conservados pelas administrações (ou explorações particulares reconhecidas), com todas as precauções necessárias à salvaguarda do sigilo, até à liquidação das contas que a eles se referem e, em qualquer caso, durante seis meses a contar do mês em foram enviadas as contas. As administrações (ou explorações particulares reconhecidas) podem conservar essas informações por qualquer outro meio, tal como registos magnéticos ou electrónicos.

5102 § 15. Todavia, se uma administração (ou exploração particular reconhecida) considerar útil destruir os originais dos radiotelegramas ou de qualquer outro documento ou registo mencionados no n.º 5101 antes de expirarem os prazos indicados acima e se, por causa disso, ficar impossibilitada de efectuar um inquérito relativo a serviços por que for responsável, essa administração (ou exploração particular reconhecida) deverá suportar todas as consequências, tanto no que respeita ao reembolso das taxas como às diferenças que possam verificar-se nas contas em causa.

5103 a 5127 *(Não atribuídos.)*

CAPÍTULO XII

Serviço móvel terrestre

ARTIGO 67

Condições a que devem satisfazer as estações móveis do serviço móvel terrestre

5128 § 1. As estações móveis terrestres devem ser estabelecidas de modo que satisfaçam às disposições do capítulo III no que respeita às frequências e classes de emissão.

5129 § 2. As frequências de emissão das estações móveis terrestres devem ser verificadas o maior número de vezes possível pelo serviço de inspecção de que dependem.

5130 § 3. A energia radiada pelos aparelhos receptores deve ser tão reduzida quanto possível e não deverá causar interferência prejudicial às outras estações.

5131 § 4. As administrações tomam todas as medidas práticas necessárias para que o funcionamento dos aparelhos eléctricos ou electrónicos de qualquer natureza instalados nas estações móveis terrestres não cause interferência prejudicial aos serviços radioeléctricos essenciais dessas estações, quando funcionam de acordo com as disposições do presente Regulamento.

5132 § 5. (1) As mudanças de frequência nos aparelhos emissores e receptores de qualquer estação móvel terrestre deverão poder efectuar-se tão rapidamente quanto possível.

5133 (2) As instalações de qualquer estação móvel terrestre devem permitir, uma vez estabelecida a comunicação, passar da emissão à recepção e vice-versa, num tempo tão curto quanto possível.

5134 a 5158 *(Não atribuídos.)*

ARTIGO 68

Procedimentos gerais aplicáveis à radiotelefonia no serviço móvel terrestre — Chamadas

5159 § 1. (1) Uma estação móvel terrestre só pode chamar uma estação terrestre depois de ter entrado na sua zona de serviço, quer dizer, na zona em que, utilizando uma frequência apropriada, a estação móvel terrestre poderá ser ouvida pela estação terrestre.

5160 (2) Uma estação terrestre que tenha tráfego para uma estação terrestre poderá chamar essa estação se tiver razões para supor que a dita estação móvel terrestre se encontra na sua zona de serviço e mantém escuta.

5161 § 2. As estações móveis terrestres não deverão emitir a sua onda portadora entre as chamadas.

5162 a 5186 *(Não atribuídos.)*

CAPÍTULO XIII

ARTIGO 69

Entrada em vigor do Regulamento das Radiocomunicações

5187 § 1. O presente Regulamento das Radiocomunicações, anexo à Convenção Internacional das Telecomunicações, entrará em vigor em 1 de Janeiro de 1982, com excepção das disposições dos n.os **5188** e **5189.**

5188 § 2. O artigo 25 e o apêndice 43 — mas não os apêndices 42 e 44 relativos a este artigo — e o artigo 66 do presente Regulamento entrarão em vigor em 1 de Janeiro de 1981.

5189 § 3. O Plano de adjudicação de frequências para o serviço móvel aeronáutico (R), bem como as disposições do apêndice 27 Aer2 (*) ao presente Regulamento que se lhe referem directamente, entrarão em vigor às 00.01 horas UTC de 1 de Fevereiro de 1983.

5190 § 4. À data de entrada em vigor do artigo 25 e do artigo 66 do presente Regulamento, indicada no n.° **5188** (1 de Janeiro de 1981), as disposições revistas do Regulamento das Radiocomunicações (Genebra, 1959):

a) Artigo 19, com excepção das disposições dos n.os **745** a **747** e dos apêndices que se lhe referem; e

b) Os artigos 38, 39, 40 e 40-A, incluindo os apêndices 21, 21-A e 22 que se lhes referem, bem como o Regulamento Adicional das Radiocomunicações,

ficam revogadas e são substituídas, respectivamente, pelas disposições dos artigos 25 e 26 do presente Regulamento.

5191 § 5. À data indicada no n.° **5187** (1 de Janeiro de 1982) todas as outras disposições do Regulamento das Radiocomunicações (Genebra, 1959), revistas em parte pela:

a) Conferência Administrativa Extraordinária das Radiocomunicações Encarregada de Atribuir Faixas de Frequências às Radiocomunicações Espaciais (Genebra, 1963);

b) Conferência Administrativa Extraordinária das Radiocomunicações Encarregada de Elaborar Um Plano de Adjudicação Revisto para o Serviço Móvel Aeronáutico (R) (Genebra, 1966);

c) Conferência Administrativa Mundial das Radiocomunicações encarregada de tratar questões relacionadas com o serviço móvel marítimo (Genebra, 1967);

d) Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971);

e) Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974);

f) Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978),

ficam revogadas e são substituídas pelas disposições do presente Regulamento.

5192 § 6. De acordo com o convite formulado pela Conferência Administrativa Mundial das Radiocomunicações Encarregada de Estabelecer Um Plano para o Serviço de Radiodifusão por Satélite nas Faixas de Frequências 11,7-12,2 GHz (Regiões 2 e 3) e 11,7-12,5 GHz (Região 1) (Genebra, 1977), as disposições e o plano associado adoptados por essa Conferência ficam anexos, sob forma apropriada, que não altera o seu conteúdo nem a sua integridade, como apêndice 30 ao presente Regulamento, de que constituem parte integrante.

(*) Nota do Secretário-Geral: v. o n.° **1314** e a Resolução n.° 400.

APÊNDICE 1

(V. o artigo 12)

Introdução — O apêndice 1 é constituído por seis secções e um anexo:

Secção A — Características fundamentais a fornecer no caso de uma notificação nos termos dos n.os **1214** a **1217** do Regulamento das Radiocomunicações;

Secção B — Características fundamentais a fornecer no caso de uma notificação nos termos do n.º **1219** do Regulamento das Radiocomunicações;

Secção C — Características fundamentais a fornecer no caso de uma notificação nos termos dos n.os **1223** a **1227** do Regulamento das Radiocomunicações;

Secção D — Informações a comunicar para uma notificação nos termos do n.º **1218** do Regulamento das Radiocomunicações;

Secção E — Modelo de ficha de notificação;

Secção F — Instruções gerais:

I. Notas gerais;

II. Notas relativas às informações a inserir na ficha com vista à sua inscrição nas diversas colunas do ficheiro de referência;

Anexo — Mapa das zonas geográficas para a radiodifusão.

SECÇÃO A

Características fundamentais a fornecer no caso de uma notificação nos termos dos n.os 1214 a 1217 do Regulamento das Radiocomunicações

Coluna 1 Frequência consignada.

Coluna 2c Data de entrada em serviço.

Coluna 3 Indicativo de chamada (sinal de identificação).

Não é uma característica fundamental no caso das estações a que se refere o n.º **2055.1.**

Coluna 4a Nome da estação de emissão.

Coluna 4b País ou zona geográfica onde se situa a estação de emissão.

Coluna 4c Longitude e latitude da localização do emissor.

Coluna 5a Nome da estação de recepção.

Não é uma característica fundamental no caso das estações de radiodifusão, das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização, das estações de frequências padrão e de sinais horários e das estações de terra do serviço dos auxiliares da meteorologia.

Coluna 5b País ou zona geográfica onde se situa a estação de recepção.

Não é uma característica fundamental no caso das estações de radiodifusão, das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização, das estações de frequências padrão e de sinais horários e das estações de terra do serviço dos auxiliares da meteorologia.

Coluna 5c Longitude e latitude da localização da estação de recepção.

Não é uma característica fundamental no caso das estações de radiodifusão, das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização das estações de frequências padrão e de sinais horários e das estações de terra do serviço dos auxiliares da meteorologia.

Coluna 5d Localidade ou zonas(s) onde se situam as estações de recepção.

Só é uma característica fundamental no caso das estações de radiodifusão, das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização e das estações de frequências padrão e de sinais horários.

Colunas 5e e 5f A utilizar somente se a zona não estiver suficientemente bem definida na coluna 5d.

Coluna 5e Longitude e latitude do centro da zona circular de recepção.

Só é uma característica fundamental no caso das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização e das estações de frequências padrão e de sinais horários.

A utilizar somente se a zona não estiver suficientemente bem definida na coluna 5d.

Coluna 5f Raio nominal (km) da zona circular de recepção.

Só é uma característica fundamental no caso das estações terrestres, das estações terrestres de radionavegação, das estações terrestres de radiolocalização e das estações de frequências padrão e de sinais horários.

A utilizar somente se a zona não estiver suficientemente bem definida na coluna 5d.

Coluna 6 Classe da estação e natureza do serviço efectuado.

Coluna 7a Classe de emissão, largura de faixa necessária e natureza da transmissão.

Coluna 7b Classe de funcionamento da consignação.

Só é uma característica fundamental no caso das consignações às estações do serviço fixo nas faixas atribuídas a este serviço entre 3000 kHz e 27 500 kHz.

Coluna 8 Potência (dBW).

Coluna 9a Azimute da radiação máxima.

Coluna 9b Ângulo de elevação de directividade máxima.

Só é uma característica fundamental para as estações que funcionam nas faixas superiores a 1 GHz atribuídas numa base de partilha aos serviços de radiocomunicação espacial e aos serviços de radiocomunicação de Terra. Deverá ser fornecido com uma precisão de um décimo de grau (1).

Coluna 9c Ângulo de abertura do lóbulo principal da radiação.

Não é uma característica fundamental se forem indicados os dados da coluna 9j.

Coluna 9d Polarização.

Só é uma característica fundamental para as estações que funcionam nas faixas superiores a 1 GHz atribuídas numa base de partilha aos serviços de radiocomunicação espacial e de radiocomunicação de Terra e para as estações de radiodifusão que funcionam nas faixas de ondas métricas e decimétricas, nas zonas africana e europeia de radiodifusão.

Coluna 9e Altura da antena (metros) para uma antena vertical simples.

Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas, na Região 1 e nas faixas de ondas hectométricas na Região 3.

Coluna 9f Altura equivalente máxima da antena.

Esta informação é uma característica fundamental para as estações de radiodifusão de ondas métricas e decimétricas nas zonas africana e europeia de radiodifusão e vem definida nos actos finais das conferências apropriadas.

Esta informação é uma característica fundamental para as estações de Terra que funcionam nas faixas superiores a 1 GHz partilhadas entre serviços espaciais e serviços de Terra e deverá ser indicada em metros acima do nível médio do mar.

Coluna 9g Ganho máximo de antena (isotrópico, em relação a uma antena vertical curta ou em relação a um dipolo de meia onda, consoante o caso).

Não é uma característica fundamental se a potência aparente radiada, ou a p. i. r. e., for notificada na coluna 8 ou se forem indicados os dados da coluna 9j.

Coluna 9h Azimutes que definem os sectores de radiação limitada, em graus (no sentido do movimento dos ponteiros do relógio), em relação ao norte verdadeiro.

Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas, na Região 1, e nas faixas de ondas hectométricas, na Região 3.

Coluna 9i Radiação máxima admitida nos sectores.

Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas, na Região 1 e nas faixas de ondas hectométricas na Região 3.

---

(1) Esta informação só será fornecida com uma precisão de 0,1° se a estação estiver situada na zona de coordenação de uma estação terrena ou se a direcção da radiação máxima não se afastar de mais de 3° da órbita dos satélites geostacionários.

Coluna 9j Tipo de antena (v. o manual da CCIR, intitulado *Diagramas de Antenas*).

Não é uma característica fundamental se forem indicados os dados das colunas 9c e 9g.

Coluna 10b Horário normal (UTC) de funcionamento da consignação de frequência.
Coluna 11 Coordenação com outras administrações.

Esta informação é uma característica fundamental para as faixas e serviços concernentes.

Informações suplementares:

a) Indicar a ou as *frequências de referência* sempre que uma determinada emissão as incluir; por exemplo, a frequência da onda portadora reduzida de uma emissão de faixa lateral única, ou de faixas laterais independentes, ou as frequências das ondas portadoras do som e da imagem de uma emissão de televisão;
b) Qualquer coordenação pedida nos termos dos n.os **1148 a 1154;**
c) Nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento e o conteúdo desse acordo.

SECÇÃO B

Características fundamentais a fornecer no caso de uma notificação, nos termos do n.º 1219 do Regulamento das Radiocomunicações

Coluna 1 Frequência consignada.
Coluna 2c Data de entrada em serviço.
Coluna 4a Nome da estação de emissão: inscrever a letra «M» (para móvel).
Coluna 4b Indicar o país ou a zona geográfica onde se situam as estações móveis de emissão.
Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) do centro da zona circular da emissão.
Coluna 4d Indicar o raio nominal (quilómetros) da zona circular de emissão.
Coluna 4e Indicar uma zona para a qual exista uma definição normalizada, utilizando símbolos contidos nas referências normalizadas,por exemplo, ZLAMP, ZLARN, zonas geográficas, etc. (v., igualmente, o prefácio da Lista Internacional das Frequências).
Coluna 5a Nome da estação de recepção.
Coluna 5b País ou zona geográfica onde se situa a estação de recepção.
Coluna 5c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) da localização da estação de recepção.
Coluna 6 Classe das estações móveis e natureza do serviço efectuado.
Coluna 7a Classe de emissão das estações móveis, largura de faixa necessária e natureza da transmissão.
Coluna 8 Potência (dBW).
Coluna 10b Horário normal (UTC) de funcionamento da consignação de frequência.

Informações suplementares:

a) Qualquer coordenação pedida nos termos dos n.os **1148 a 1154;**
b) Nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento, e conteúdo desse acordo.

SECÇÃO C

Características fundamentais a fornecer no caso de uma notificação nos termos dos n.os 1223 a 1227 do Regulamento das Radiocomunicações

Coluna 1 Frequência consignada.
Coluna 2c Data de entrada em serviço.
Coluna 4b Indicar o país ou a zona geográfica onde se situa a estação de emissão.

Para o resto da coluna *4* quer *4e* somente, quer *4c* e *4d*.

Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) do centro da zona circular de emissão.
Coluna 4d Indicar o raio nominal (quilómetros) da zona circular de emissão.
Coluna 4e Indicar uma zona para a qual exista uma definição normalizada, utilizando os símbolos indicados na prefácio da Lista Internacional das Frequências.
Coluna 6 *Classe* da estação e natureza do serviço efectuado.
Coluna 7a Classe de emissão, largura de faixa necessária e natureza da transmissão.

Coluna 8 *Potência* (dBW).
Coluna 10b Horário normal (UTC) de funcionamento da consignação de frequência.

Informações suplementares:

Nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento, e conteúdo desse acordo.

SECÇÃO D

Informações a comunicar para qualquer notificação, nos termos do n.º 1228 do Regulamento das Radiocomunicações

1. *Instruções gerais:*

a) A assistência da IFRB refere-se à escolha de uma ou de várias frequências para qualquer consignação a uma estação do serviço fixo, nas faixas frequências compreendidas entre 3000 kHz e 27 500 kHz atribuídas a esse serviço;
b) A administração fornecerá:

Uma descrição geral das dificuldades encontradas;
As informações técnicas e quaisquer outras que possam orientar as pesquisas ulteriores da IFRB;

c) Poderão igualmente aplicar-se as instruções dadas na secção F.

2. *Informações a fornecer pela administração:*

Coluna 1 Frequência.

1) Deixar esta coluna em branco ou indicar a faixa preferida se o pedido for referente à escolha de uma frequência ou de um jogo de frequências para a ligação em causa;
2) Se o pedido se referir a uma frequência determinada, especificar essa frequência.

Coluna 2c Data de entrada em serviço.

Indicar a data proposta para a entrada em serviço da consignação de frequência.

Coluna 3 Indicativo de chamada (sinal de identificação).
Coluna 4 Características da estação de emissão.
Coluna 4a Indicar o nome da localização por que se designa ou onde está situada a estação.
Coluna 4b Indicar o país ou a zona geográfica onde se situa a estação. Para isso convirá utilizar os símbolos que figuram no prefácio da Lista Internacional das Frequências.
Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) da localização do emissor.
Coluna 5 Características da estação de recepção.
Coluna 5a Nome da estação de recepção. Indicar o nome da localidade pelo qual é designada a estação de recepção ou na qual ela se situa. Desde que, numa dada zona, a zona de recepção seja bem definida e suficientemente reduzida para se prever facilmente as condições de utilização da frequência no que se refere à propagação, bastará notificar um número de estações suficiente para delimitar a zona de recepção.
Coluna 5b País ou zona geográfica onde se situa a estação de recepção.
Coluna 5c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) da localização da estação de recepção.
Coluna 6 Classe da estação e natureza do serviço efectuado.

Utilizando os símbolos que figuram no apêndice 10, indicar a classe da estação e a natureza do serviço efectuado.

Coluna 7a Classe de emissão, largura de faixa necessária e natureza da transmissão.

Indicar, para cada uma das localidades ou zonas de recepção mencionadas na coluna 5a, a classe de emissão, a largura da faixa necessária e a natureza da transmissão, em conformidade com o artigo 4 e com o apêndice 6.

Coluna 8 Potência (dBW).

1) Conforme a classe de emissão, indicar do modo seguinte a potência fornecida à linha de alimentação da antena (dBW):

a) Potência média (PY), se se tratar de uma emissão de modulação de amplitude com onda portadora completa não manipulada ou de uma emissão de modulação de frequência (v. n.° **152**);

b) Potência de ponta (PX), se se tratar de uma emissão diferente das referidas acima na alínea *a*) (v. n.º **151**);
c) Deixar em branco se a potência for para o IFRB calcular;

2) Indicar a potência normalmente utilizada na direcção de cada uma das localidades ou zonas de recepção mencionadas na coluna *5*.

Coluna Característica da antena de emissão (indicar todas as informações disponíveis).

Coluna 9a Azimute da radiação máxima.

1) Se se utilizar uma antena direccional de emissão, indicar, em graus, o azimute da radiação máxima dessa antena, a partir do norte verdadeiro, no sentido do movimento dos ponteiros do relógio;
2) Se se utilizar uma antena não direccional de emissão, inscrever «ND» nesta coluna.

Coluna 9c Se as características de radiação da antena respectiva diferirem das características recomendadas pela CCIR, inscrever as informações pedidas nas colunas *9c* e *9g*. Quando as características de radiação se encontrarem no manual *Diagramas de Antenas* da CCIR, indicar a referência na coluna *9j*.

Coluna 9c Ângulo de abertura do lóbulo principal de radiação.

Convém indicar, em graus, o ângulo total medido em projecção horizontal num plano que contém a direcção da radiação máxima e no interior do qual a potência radiada em qualquer direcção não é mais de 3 dB inferior à potência radiada na direcção da radiação máxima.

Coluna 9g Ganho de antena.

Convém indicar o ganho relativo da antena na direcção de radiação máxima para a frequência consignada (v. n.º **154**).

Coluna 9j Tipo de antena (v. o manual *Diagramas de Antenas* da CCIR).

Indicar a referência apropriada do *Diagramas de Antenas* da CCIR. V. as colunas *9c* e *9g* acima.

Coluna 10 Horário de funcionamento.

Coluna 10a Horário máximo (UTC) de funcionamento da ligação para cada localidade ou zona.

A título de informação suplementar, indicar pela letra «I» os períodos em que o funcionamento da ligação for intermitente.

Coluna 10b Horário normal (UTC) de funcionamento da consignação de frequência.

Indicar o horário em tempo universal coordenado (UTC), utilizando um grupo de quatro algarismos (00.00 a 23.59). Senão, indicar as horas de funcionamento diurno (HJ), nocturno (HN) ou o horário de serviço em período de transição (HT).

Coluna 11 Coordenação com outras administrações.

Se for caso disso, indicar o país ou a zona geográfica com que a coordenação pertinente foi efectuada com êxito.

Coluna 12a Administração ou companhia exploradora.

Coluna 12b Endereço postal e endereço telegráfico da administração de que depende a estação.

Informações suplementares:

Indicar todas as informações disponíveis relativas à antena de recepção.

SECÇÃO E

Modelo de ficha de notificação

A Comissão elabora e mantém em dia um modelo de ficha de notificação de modo a respeitar a totalidade das disposições regulamentares do presente apêndice e as decisões sobre o assunto tomadas por futuras conferências.

SECÇÃO F

Instruções gerais

1. Deverá ser enviada à Comissão Internacional do Registo de Frequência uma ficha distinta para notificar:

Cada nova consignação de frequência:

Qualquer modificação das características de uma consignação de frequência inscrita no Ficheiro de Referência Internacional das Frequências, denominado daqui em diante «Ficheiro de referência»;

Qualquer anulação total de uma consignação de frequência inscrita no Ficheiro de referência.

2. Quando uma consignação de frequência for utilizada por uma estação para assegurar diferentes serviços, deverá ser enviada uma ficha distinta para cada tipo de serviço (por exemplo, FA, FB, FC, FX, etc.).

3. Não serão objecto de notificação as frequências prescritas neste Regulamento para serem utilizadas em comum de acordo com o prefácio da Lista Internacional das Frequências (v. o n.º **1220**).

4. Nas colunas *5a* a *10* convém inscrever separadamente as características, quando não forem válidas para a totalidades da consignação, por exemplo, quanto a classe de emissão ou a potência diferirem segundo as localidades ou zonas de recepção.

5. Pelo que respeita às estações de televisão da Região 1 deverão ser apresentadas fichas de notificação distintas para a via de som e para a via de imagem. Nesse caso, as frequências a indicar serão as das ondas portadoras do som e da imagem.

I. Notas gerais

a) Indicar o nome da administração donde provém o ficha de notificação.

b) Inscrever a letra «X» neste Rectângulo quando a ficha se referir:

A primeira utilização de uma frequência por uma estação;

A primeira utilização de uma frequência suplementar por uma estação.

c) Inscrever a letra «X» neste rectângulo quando a ficha se referir a uma modificação das características de uma consignação de frequência inscrita no ficheiro de referência.

1) No caso de haver alteração das características existentes (incluindo a frequência), convém indicar, no espaço apropriado, as novas características, sublinhá-las e mencionar, por baixo ou ao lado, entre parênteses, as características originais que foram modificadas;
2) No caso de a modificação consistir numa adjunção às características existentes, convém indicar, no espaço apropriado, as características adicionadas e sublinhá-las;
3) No caso de a modificação consistir na anulação de uma ou várias características, convém indicar isto com um traço no espaço apropriado e mencionar por baixo ou ao lado desse traço, entre parênteses, a ou as características anuladas.

d) Inscrever a letra «X» neste rectângulo quando a ficha se referir à anulação da totalidade das características notificadas de uma consignação.

e) O número de série da ficha e a data do seu envio à Comissão deverão ser indicados aqui.

II. Notas relativas às informações a incluir na ficha para serem inscritas nas diversas colunas do ficheiro de referência

Coluna 1 Frequência consignada.

1) Indicar a frequência consignada (1) (2) (3) tal como é definida no artigo 1: em kHz até 28 000 kHz, inclusive, em MHz acima de 28 000 kHz e até 10 500 MHz, inclusive, e em GHz acima de 10 500 MHz;
2) *Esta informação é uma característica fundamental.*

Coluna 2c Data de entrada em serviço.

1) No caso de uma nova consignação, indicar a data de entrada em serviço efectiva ou prevista, segundo o caso, da consignação de frequência;

---

(1) No que se refere às estações de televisão da Região 1, as frequências a notificar são as das ondas portadoras do som e da imagem.
(2) No que se refere às estações radiofónicas do serviço móvel marítimo, v. o n.º **4194**.
(3) No que se refere às estações do serviço móvel aeronáutico (R), v. o n.º **27/72** revisto do apêndice 27 Aer2.

2) Quando da modificação de qualquer das características fundamentais de uma consignação, tais como definidas no presente apêndice, excepto das que figuram nas colunas *3*, *4a*, *10a* ou *11*, a data a inscrever nesta coluna deverá ser a da última modificação efectiva ou prevista, conforme o caso;
3) *Esta informação é uma característica fundamental.*

Coluna 3 Indicativo de chamada (sinal de identificação).

1) Inscrever o indicativo de chamada ou qualquer outro sinal de identificação utilizado nos termos do artigo 25;
2) *Esta informação é uma característica fundamental, excepto nos casos de que tratam os n.os* **1224** *a* **1227** *e* **2055.1.** *ou quando se tratar de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º* **1219.**

Coluna 4 Características da estação de emissão.

Se a consignação de frequência for utilizada nas circunstâncias especificadas nos n.os **1214** *a* **1217**, *as características fundamentais a inscrever na coluna 4 são as seguintes:*

Coluna 4a Indicar o nome da localidade por que se designa ou onde está situada a estação de emissão.

Coluna 4b Indicar o país ou a zona geográfica onde está situada a estação. Convém, para esse fim, utilizar os símbolos que figuram no prefácio da Lista Internacional das Frequências.

Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) da localização do emissor. Quando se trate de consignações de frequência acima de 1 GHz nas faixas partilhadas pelos serviços de radiocomunicações de Terra e de radiocomunicação espacial, indicar as coordenadas geográficas (longitude e latitude em graus, minutos e segundos com uma precisão de um décimo de minuto (1), também se pode indicar a longitude e a latitude em graus e minutos e, na coluna *9a*, o azimute da radiação máxima da antena com uma precisão de um 0,1º).

Se a consignação de frequência for utilizada na recepção nas circunstâncias especificadas no n.º **1219**, *as características fundamentais a inscrever na coluna 4 são as seguintes:*

Coluna 4a Nome da estação de emissão: inscrever a letra M (para móvel).

Coluna 4b Indicar o país ou a zona geográfica onde estão situadas as estações de emissão móvel. Se as estações não estiverem situadas num país, indicar o país responsável. Convém que para isso se utilizem os símbolos que figuram no prefácio da Lista Internacional das Frequências.

Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) do centro da zona circular de emissão.

Coluna 4d Indicar o raio nominal (quilómetro) da zona circular de emissão.

Coluna 4e Indicar uma zona para a qual exista uma definição normalizada, utilizando símbolos contidos nas referências normalizadas, por exemplo, ZLAMP, ZLARN, zonas geográficas, etc. (v., igualmente, o prefácio da Lista Internacional das Frequências).

Se a consignação de frequência for utilizada nas circunstâncias especificadas nos n.os **1223** a **1227**, *as características fundamentais a inscrever na coluna 4 são as seguintes:*

Coluna 4b Indicar o país ou a zona geográfica onde está situada a estação. Convém, para esse fim, utilizar os símbolos que figuram no prefácio da Lista Internacional das Frequências. O resto da coluna 4 é constituído quer por *4e* somente, quer por *4c* e *4d*.

Coluna 4c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) do centro da zona circular de emissão.

Coluna 4d Indicar o raio nominal (quilómetros) da zona circular de emissão.

Coluna 4e Indicar uma zona para as qual exista uma definição normalizada, utilizando os símbolos que figuram no prefácio da Lista Internacional das Frequências.

Coluna 4e Indicar uma zona para a qual exista uma definição normalizada, utilizando os símbolos que figuram no prefácio da Lista Internacional das Frequências.

Coluna 5 Características da estação de recepção.

Se a consignação de frequência for utilizada nas circunstâncias especificadas nos n.os **1214** *a* **1217**, *as características fundamentais a inscrever na coluna 5 são as seguintes:*

Coluna 5a Nome da estação de recepção. Indicar o nome da localidade pelo qual a estação de recepção é designada ou na qual ela está situada.

1) Desde que, no serviço fixo, a zona de recepção seja bem definida e suficientemente reduzida para prever facilmente as condições de utilização da frequência no que se refere à propagação, bastará notificar um número de estações suficiente para demilitar a zona de recepção;

---

(1) Os segundos só serão notificados com uma precisão de um décimo de minuto no caso em que a estação esteja situada na zona de coordenação de uma estação terrena.

2) Todavia, no caso de estações de radiodifusão, de estações terrestres, de estações terrestres de radionavegação, de estações terrestres de radiolocalização, de estações de frequências padrão e de sinais horários e de estações de Terra do serviço dos auxiliares da meteorologia, não é necessário inscrever seja o que for nesta coluna;
3) No caso de uma rede de estações que comuniquem entre si na mesma frequência, inscrever na coluna 5a o símbolo ZN. Quando a mesma frequência for utilizada por várias redes dependentes da mesma administração, convém designar cada rede por uma letra distinta colocada a seguir ao símbolo ZN, por exemplo ZN-A, ZN-B, etc.;
4) No caso de uma rede, assim como no caso de numerosas estações dependentes da mesma administração utilizarem a mesma frequência numa determinada zona é necessário notificar apenas um número de estações suficientes para delimitar a zóna de utilização da frequência, desde que esta zona seja bem definida e suficientemente reduzida para que, tendo em conta as condições de propagação, se possam prever facilmente as condições de utilização da frequência.

Coluna 5b País ou zona geográfica onde está situada a estação de recepção. Convém, para esse fim, utilizar os símbolos que figuram no prefácio à Lista Internacional das Frequências.

Todavia, no caso de estações de radiodifusão, de estações terrestres, de estações terrestres de radionavegação, de estações de frequências padrão e de sinais horários e de estações de Terra do serviço dos auxiliares da meteorologia, não é necessário inscrever seja o que for nesta coluna.

Coluna 5c Indicar as coordenadas geográficas (longitude e latitude em graus e em minutos) da localização da estação de recepção.

Contudo, no caso de estações de radiodifusão, de estações terrestres, de estações terrestres de radiolocalização, de estações de frequências padrão e de sinais horários e de estações de Terra do serviço dos auxiliares da meteorologia, não é necessário inscrever seja o que for nesta coluna.

Coluna 5d Localidade ou zona(s) em que a(s) estação(ões) de recepção está (estão) situada(s).

1) Para as estações de radiodifusão, convém indicar a zona de recepção. Cada zona deverá ser caracterizada do seguinte modo:

Interior (INTR):
Ou símbolos que designe um país ou países ou zona(s) geográfica(s) (prefácio à Lista Internacional das Frequências);
Ou uma das zonas geográficas delimitadas no mapa anexo ao presente apêndice. Se a zona de recepção não puder ser definida do modo acima indicado, será necessário preencher as colunas *5e* e *5f*.

Não é uma característica fundamental no caso das estações de radiodifusão que funcionam nas faixas de ondas quilométricas/hectométricas ou métricas/decimétricas, salvo especificação num acordo regional pertinente;

2) Para as estações terrestres, as estações terrestres de radionavegação, as estações terrestres de radiolocalização, as estações de frequências padrão e de sinais horários e as estações de Terra do serviço dos auxiliares da meteorologia, só se indicará uma zona de recepção se ela for objecto de uma descrição normalizada. Se não for esse o caso, inscrevem-se as informações relativas a essa zona nas colunas *5e* e *5f*.

Coluna 5e Longitude e latitude do centro da zona circular de recepção.

1) Indicar as coordenadas geográficas (graus e minutos);
2) Esta coluna não é para utilizar se a zona de recepção estiver suficientemente bem definida na coluna *5d*. Se for utilizada a coluna *5e*, deve ser feita na coluna *5f* uma inscrição correspondente.

Coluna 5f Raio nominal da zona circular de recepção.

1) Indicar o raio (quilómetros) da zona circular de recepção;
2) Esta coluna não é para utilizar se a zona de recepção estiver bem definida na coluna *5d*. Se for utilizada a coluna *5f*, deve ser feita na coluna *5e* uma inscrição correspondente.

Se a consignação de frequência for utilizada nas circunstâncias especificadas no n.º **1219**, *as características fundamentais a inscrever na coluna 5 são as seguintes:*

Coluna 5a Nome da estação de recepção. Indicar o nome da localidade por que se designe ou onde está situada a estação de recepção.

Coluna 5b *País* ou zona geográfica onde se situa a estação de recepção. Convém, para esse fim, utilizar os símbolos que figuram no prefácio da Lista Internacional das Frequências.

Coluna 5c Indicar as coordenadas geográficas (longitude e latitude em graus e minutos) da localização da estação de recepção.

Se a consignação de frequência for utilizada nas circunstâncias especificadas nos n.os **1223** *a* **1227**, *não é necessário inscrever seja o que for na coluna 5.*

Coluna 6 Classe da estação e natureza do serviço efectuado.

1) Utilizando os símbolos que figuram no apêndice 10, indicar a classe da estação e a natureza do serviço efectuado;
2) Quando se tratar de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º **1219**, é a classe das estações móveis e a natureza do serviço que elas efectuam que convém indicar;
3) *Estas informações são características fundamentais.*

Coluna 7 Classe de emissão e classe de funcionamento.

Coluna 7a Classe de emissão, largura de faixa necessária e natureza da transmissão.

1) Indicar para cada uma das localidades ou zonas de recepção mencionadas na coluna *5a*, a classe de emissão, a largura de faixa necessária e a natureza da transmissão, de acordo com o artigo 4 e o apêndice 6;
2) Quando se tratar de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º **1219**, as características a indicar são as das estações móveis;
3) *Estas informações são características fundamentais.*

Coluna 7b Classe de funcionamento da consignação.

Esta informação é uma característica fundamental. Para as consignações a estações do serviço fixo nas faixas de frequências atribuídas a este serviço entre 3000 kHz e 27 500 kHz, indicar a classe de funcionamento da consignação utilizando os símbolos A, B ou C como segue:

Símbolo A — consignação destinada a ser utilizada para exploração regular que não seja assegurada por outro meio satisfatório de telecomunicação;

Símbolo B — consignação destinada a ser utilizada como consignação de reserva para qualquer outro meio de telecomunicação;

Símbolo C — consignação de reserva para utilização ocasional que não exija protecção internacional reconhecida contra interferências prejudiciais.

Coluna 8 Potência (dBW).

1) Segundo a classe de emissão, indicar do seguinte modo a potência, em dBW, fornecida à linha de alimentação da antena:
   a) Potência da portadora (PZ), se se tratar de uma emissão de radiodifusão sonora de classe A3E (v. o n.º **153**);
   b) Potência média (PY), se se tratar de uma emissão de modulação de amplitude de onda portadora completa não manipulada diferente de uma emissão de radiodifusão sonora, ou de uma emissão de modulação de frequência (v. o n.º **152**);
   c) Potência de ponta (PX), se se tratar de uma emissão diferente das referidas nas alíneas *a*) e *b*) anteriores, incluindo as emissões de televisão (imagem) da classe C3F (v. o n.º **151**).
2) Nas faixas superiores a 28 000 kHz que não sejam atribuídas em base de partilha aos serviços de radiocomunicação espacial e aos serviços de radiocomunicações de Terra, exceptuando as fichas de notificação indicadas nos n.os **1223** a **1227**, convém notificar a potência aparente radiada (v. o n.º **156**);
3) Nas faixas superiores a 1 GHz, atribuídas em base de partilha aos serviços de radiocomunicação espacial e aos serviços de radiocomunicação de Terra, convém notificar a potência isotrópica radiada equivalente (p. i. r. e.) (v. o n.º **155**);
4) O símbolo apropriado (PZ, PY ou PX) deverá seguir a indicação do valor da potência. Tratando-se da potência aparente radiada, esse símbolo deverá ser seguido da letra «e». Se se tratar da p. i. r. e., esse símbolo deverá ser seguido da letra «i»;
5) Indicar a potência normalmente utilizada para cada uma das localidades ou zonas de recepção;
6) Quando se tratar de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º **1219**, convém indicar a potência das estações móveis. Se estas não forem todas da mesma potência, convém indicar a mais elevada;
7) *Esta informação é uma característica fundamental.*

Coluna 9 Características da antena de emissão.

Coluna 9a Azimute da radiação máxima.

1) Se se utilizar uma antena direccional de emissão, indicar, em graus, o azimute da radiação máxima dessa antena, a partir do norte verdadeiro, no sentido do movimento dos ponteiros do relógio;
2) Se se utilizar uma antena não direccional de emissão, inscrever «DN» nesta coluna;
3) Para as consignações de frequência superiores a 1 GHz nas faixas partilhadas entre serviços de radiocomunicação de Terra e serviços de radiocomunicação espacial, indicar o azimute com uma precisão de um décimo de grau (1) nos casos em que a precisão com que devem ser indicadas as coordenadas geográficas [um décimo de minuto (2)] não foi especificada na coluna *4c;*
4) *Esta informação é uma característica fundamental, excepto quando se trate de estações referidas nos n.os* **1223** *a* **1227** *ou de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º* **1219.**

Coluna 9b Ângulo de elevação para o qual a directividade é máxima.

Só é uma característica fundamental para as estações que funcionem nas faixas superiores a GHz atribuídas em base de partilha aos serviços de radiocomunicação espacial e aos serviços de radiocomunicação de Terra. Deverá ser fornecido com uma precisão de um décimo de grau (1).

Coluna 9c Se as características da radiação da antena em causa diferirem das características recomendadas pela CCIR, inscrevem-se as informações pedidas nas colunas *9c* e *9g*. Quando as características de radiação se encontram no manual da CCIR intitulado *Diagramas de Antenas,* indicar a referência na coluna *9j*.

Coluna 9c Ângulo de abertura do lóbulo principal de radiação.

Convém indicar, em graus, o ângulo total medido em projecção horizontal num plano que contenha a direcção da radiação máxima e no interior do qual a potência radiada em qualquer direcção não seja mais de 3 dB inferior à potência radiada na direcção da radiação máxima.

Coluna 9d Polarização.

Esta informação é uma característica fundamental para as estações que funcionam nas faixas superiores a 1 GHz atribuídas em base de partilha aos serviços de radiocomunicação espacial e de radiocomunicação de Terra e para as estações de radiodifusão que funcionam nas faixas de ondas métricas e decimétricas, nas zonas africana e europeia de radiodifusão.

Coluna 9e Altura de antena (metros) para uma antena vertical simples.

Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas na Região 1 e nas faixas de ondas hectométricas na Região 3.

Coluna 9f Altura equivalente máxima da antena.

Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas métricas e decimétricas nas zonas africana e europeia de radiodifusão. Esta altura está definida nos actos finais das conferências correspondentes;

Esta informação é uma característica fundamental para as estações de Terra que funcionam nas faixas superiores a 1 GHz partilhadas entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra. Esta altura deve ser indicada em metros acima do nível médio do mar.

Coluna 9g Ganho máximo de antena (isotrópico, em relação a uma antena vertical curta ou em relação a um dipolo de meia onda, segundo o caso).

1) Convém indicar o ganho relativo da antena na direcção da radiação máxima para a frequência consignada (v. o n.º **154**).
2) *Não é uma característica fundamental se a potência aparente radiada ou a p. i. r. e. estiver notificada na coluna 8.*

---

(1) Esta informação só será fornecida com uma precisão de 0,1° se a estação estiver situada na zona de coordenação de uma estação terrena ou se a direcção da radiação máxima não se afastar mais de 3° da órbita dos satélites geostacionários.

(2) Os segundos só serão notificados com uma precisão de um décimo de minuto no caso em que a estação esteja situada na zona de coordenação de uma estação terrena.

Coluna 9h Azimutes que definem, em graus, os sectores de radiação limitada a partir do Norte verdadeiro no sentido do movimento dos ponteiros do relógio.

1) Indicar os azimutes que definem, em graus, os sectores de radiação limitada a partir do Norte verdadeiro no sentido do movimento dos ponteiros do relógio;
2) *Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas na Região 1 e nas faixas de ondas hectométricas na Região 3.*

Coluna 9i Radiação máxima admitida nos sectores.

1) Indicar, em dB, a radiação máxima admitida no sector em relação a uma força cimomotriz (f. c. m.) de 300 V ou a uma potência aparente radiada por uma antena vertical curta (p. a. r. v.) de 1 kW determinada segundo a potência nominal do emissor e o ganho teórico da antena, sem margem para as diversas perdas;
2) *Esta informação é uma característica fundamental para as estações de radiodifusão que funcionam nas faixas de ondas quilométricas e hectométricas na região 1 e nas faixas das ondas hectométricas na Região 3.*

Coluna 9j Tipo de antena (v. manual *Diagramas de Antenas* da CCIR).

Indicar a referência apropriada do manual *Diagramas de Antenas* da CCIR. V. as colunas *9c* e *9g* anteriores.

Coluna 10 Horário de funcionamento.
Coluna 10a Horário máximo (UTC) de funcionamento da ligação para cada localidade ou zona.

1) No caso de se tratar de uma frequência utilizada na recepção nas circunstâncias especificadas no n.º **1219**, o horário máximo de funcionamento a indicar é o das estações móveis;
2) A título de informação suplementar, indicar com a letra «I» os períodos em que o funcionamento da ligação é intermitente;
3) *Não é uma característica fundamental.*

Coluna 10b Horário normal (UTC) de funcionamento da consignação de frequência.

1) Indicar, se for conhecido, o horário normal (UTC) de funcionamento da consignação de frequência. No caso de se desconhecer esse horário, indicar o horário de funcionamento como segue: serviço de dia (HJ), serviço de noite (HN) ou serviço de transição (HT);
2) *Esta informação é uma característica fundamental.*

Coluna 11 Coordenação com outras administrações.

1) Indicar o país ou a zona geográfica com que a coordenação foi efectuada com êxito e indicar a disposição que exige essa coordenação (número do Regulamento das Radiocomunicações, acordo regional ou outro);
2) *Esta informação é uma característica fundamental para as faixas e os serviços abrangidos.*

Coluna 12a Administração ou companhia exploradora (1).

Esta informação não é uma característica fundamental, mas é recomendável que seja fornecida quando se tratar de uma organização que explore estações em vários países.

Coluna 12b Endereço postal e endereço telegráfico da administração de que depende a estação.

1) Estes endereços são aqueles para onde convirá enviar qualquer comunicação urgente respeitante a interferências, qualidade das emissões e questões relativas à exploração técnica da ligação (v. artigo 22);
2) *Esta informação não é uma característica fundamental.*

Informações suplementares:

Qualquer informação suplementar fornecida pela administração deverá figurar na parte da ficha a isso destinada.

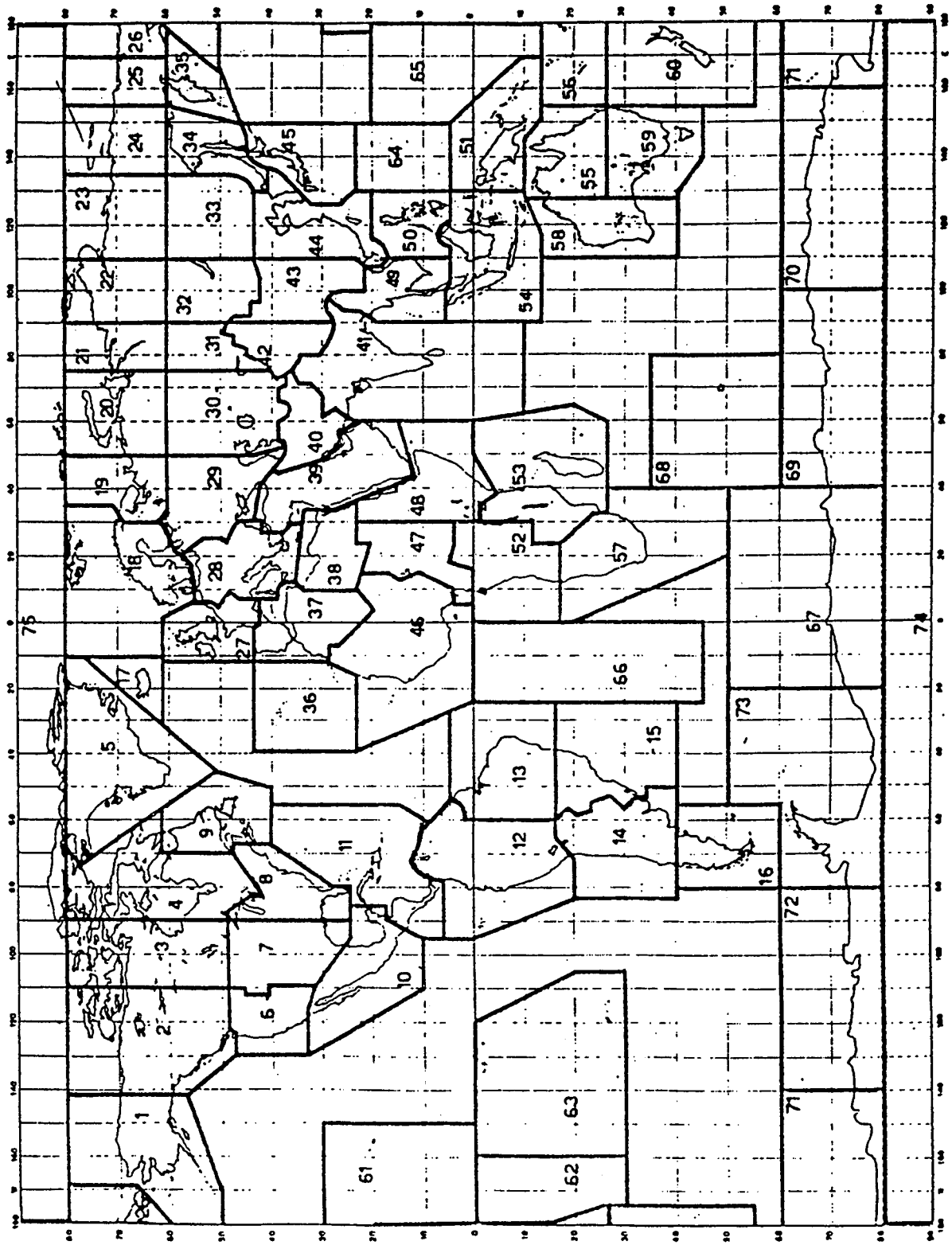
1) Se a consignação for feita em execução de um acordo regional ou de serviço, mencionar esse acordo no espaço apropriado da ficha; caso contrário, inscrever a indicação «NIL»;

---

(1) Quando estas informações constarem já do prefácio da Lista Internacional das Frequências, convém utilizar o número ou a letra de referência apropriados.

2) Indicar a seguir ao símbolo «COORD» o nome de qualquer administração com a qual tenha sido efectuada coordenação para utilização da frequência; se não tiver havido qualquer coordenação, inscrever a indicação «NIL». No caso de uma notificação nos termos dos n.os **1223** a **1227** numa faixa de frequências acima de 28 000 kHz, indicar, se for caso disso, a ou as zonas em que ficou acordado, em resultado da coordenação, que a frequência em causa seria utilizada;
3) Indicar a ou as frequências de referência sempre que determinada emissão as contenha; por exemplo, a frequência da onda portadora reduzida de uma emissão em faixa lateral única, ou em faixas laterais independentes, ou as frequências das ondas portadoras do som e da imagem de uma emissão de televisão. Pelo que respeita às estações de televisão da Região 1, cada ficha de notificação deverá indicar, a título de informação suplementar, simultaneamente a frequência da outra onda portadora e a frequência consignada;
4) Acrescentar qualquer outra informação que a administração julgue oportuna; por exemplo, a indicação de que a consignação em causa será utilizada em conformidade com o n.° **342** do presente Regulamento ou então esclarecimentos acerca da utilização da frequência notificada, se essa utilização for restrita ou se a frequência não for utilizada durante todo o tempo em que tal seria possível segundo as condições de propagação;
5) *Apenas as informações especificadas no § 3 acima são consideradas características fundamentais, mas é recomendável dar as indicadas nos n.os 1 e 2 acima. Todavia, no caso das estações dos serviços de radiocomunicação de Terra referidas nos n.os* **1148** *a* **1154** *são características fundamentais o nome de qualquer administração junto da qual foi procurada uma coordenação com vista à utilização da frequência e o nome de qualquer administração com a qual tenha sido efectuada essa coordenação.*

ANEXO AO APÊNDICE I



Zonas geográficas para a radiodifusão

APÊNDICE 2

(V. o artigo 17)

BC

SECÇÃO A

Modelo de ficha (*)

A utilizar para apresentar à Comissão Internacional do Registo de Frequências um horário periódico de radiodifusão em ondas decamétricas ou uma modificação a esse horário

(V. o artigo 17)

(a) Administração notificadora.

6 Classe da estação

(e) Ficha n.º _____
Data _____

(b) Consignação para o período em causa. ☐

(c) Modificação das características de uma consignação para o período. ☐

(d) Anulação de uma consignação para o período. ☐

1a Frequência consignada. ____ kHz

1b Outra frequência proposta. ____ kHz

1c Baixa de frequências *desejada*. ____ kHz

2c Data de entrada em serviço durante o período.

Período: Março ☐ Maio ☐ Setembro ☐ Novembro ☐

Ano:

Outra data:

3 Indicativo de chamada (sinal de identificação).

4a Nome da estação de emissão.

4b País.

4c Longitude e latitude da localização do emissor.

Zona(s) ou região(ões) de recepção 5a	Classe de emissão e largura de faixa necessária 7	Potência (em kW) 8	Características da antena de emissão: Azimute da radiação máxima 9a	Ângulo de abertura do lóbulo principal de radiação 9b	Ganho da antena (db) 9c	Ângulo de elevação 9d	Tipo de antena 9e	Horário de funcionamento (T. M. G.) 10	Outras frequências utilizadas simultaneamente para o mesmo programa destinado à(s) mesma(s) região(ões) 11	Informações *suplementares*

12b _____ Nome e endereço postal
_____ Endereço telegráfico .... } da administração (artigo 22).

(*) Compete a cada administração determinar a dimensão da ficha.

COORD / _____

Outras informações:

SECÇÃO B

Instruções gerais

1. Deverá ser enviada à IFRB uma ficha distinta para notificar:

Cada consignação de frequência para entrar em serviço durante determinado período;
Qualquer modificação das características de uma consignação de frequência que figure no horário de radiodifusão em ondas decamétricas de um período;
Qualquer anulação de uma consignação de frequência que figure no horário de radiodifusão em ondas decamétricas de um período.

2. Nas colunas *5a* e *8* a *11*, convém inscrever separadamente as características quando não são válidas para a totalidade da consignação; por exemplo, quando a potência, as características da antena ou o horário de funcionamento diferirem segundo as zonas ou regiões de recepção.

I. Notas gerais

a) Indicar o nome da administração notificadora.

b) Inscrever a letra «X» neste rectângulo quando a ficha se referir à primeira utilização de uma frequência por uma estação durante um dado período.

c) Inscrever a letra «X» neste rectângulo quando a ficha se referir a uma modificação das características de uma consignação de frequência inscrita no horário de radiodifusão em ondas decamétricas de um período.

1) No caso de serem modificadas características existentes, convém indicar, no espaço apropriado, as novas características, sublinhá-las e mencionar por baixo ou ou lado, entre parêntesis, as características originais que se modificaram;
2) No caso em que a modificação consista num aditamento feito às características existentes, convém indicar, no espaço apropriado, as características aditadas e sublinhá-las;
3) No caso em que a modificação consista na anulação de uma ou mais características, convém indicar o facto por um traço no espaço apropriado e mencionar por baixo ou ao lado desse traço, entre parêntesis, a ou as características anuladas.

d) Inscrever a letra «X» neste rectângulo quando a ficha se referir à anulação, durante o período, da totalidade das características notificadas de uma consignação.

e) O número de série da ficha e a data do seu envio à Comissão deverão ser aqui indicados.

II. Notas sobre as informações a inserir nas várias colunas da ficha

Coluna 1 Frequência.

Coluna 1a Indicar a frequência consignada, em kHz, de acordo com a definição que figura no artigo 1.

Coluna 1b Indicar qualquer outra frequência proposta, em kHz.

Coluna 1c Ou então a faixa de frequências desejada, em MHz, se nenhuma frequência for indicada nos termos dos *§§ 1a* e *1b* acima.

Coluna 2c Data de entrada em serviço durante o período.

1) Se a consignação for para entrar em serviço na data de entrada em vigor do horário periódico, inscrever os dois últimos algarismos do ano no ou nos rectângulos que correspondem aos períodos durante os quais será utilizada a consignação;
2) Se a consignação for para entrar em serviço ou for modificada numa data que não seja a da entrada em vigor do horário periódico, essa data deverá ser inscrita no espaço a isso destinado.

Coluna 3 Indicativo de chamada (sinal de identificação).

Inscrever o indicativo de chamada ou qualquer outro sinal de identificação utilizado nos termos do artigo 25.

Coluna 4 Nome e localização da estação de emissão.

Coluna 4a Indicar o nome da localidade por que se designa ou onde está situada a estação de emissão.

Coluna 4b Indicar o país onde está situada a estação. Convém, para esse fim, utilizar os símbolos contidos no prefácio da Lista Internacional das Frequências.

Coluna 4c Indicar as coordenadas geográficas (em graus e minutos) da localização do emissor.

Coluna 5a Zona(s) ou região(ões) de recepção.

1) Indicar a ou as zonas de recepção, tais como delimitadas no mapa anexo ao apêndice 1;

2) Se a região de recepção for menos extensa que a totalidade de uma zona, convém que corresponda a um país ou a uma parte de um país e que seja designada, na medida do possível, por meio de símbolos contidos no prefácio das Lista Internacional de Frequências;
3) Indicar, a título de informação suplementar, a distância máxima de serviço, em quilómetros, quando esta informação for julgada necessária.

Coluna 7 Classe de emissão e largura de faixa necessária.

Indicar a classe de emissão e largura de faixa necessária, em conformidade com o artigo 4 e o apêndice 6.

Coluna 8 Potência (kV).

Indicar a potência da onda portadora fornecida pelo emissor à linha de alimentação da antena.

Características da antena de emissão:

Coluna 9a Azimute de radiação máxima.

1) Se se utilizar uma antena direccional de emissão, indicar, em graus, a azimute de radiação máxima dessa antena, a partir do norte verdadeiro, no sentido do movimento dos ponteiros do relógio;
2) Se se utilizar uma antena não direccional de emissão, inscrever «ND» nesta coluna.

Coluna 9b Ângulo de abertura do lóbulo principal de radiação.

Convém indicar, em graus, o ângulo total em projecção no plano horizontal, no interior do qual a potência radiada em qualquer direcção não seja inferior de mais de 6 dB à potência radiada na direcção da radiação máxima.

Coluna 9c Ganho de antena (dB).

Convém indicar o ganho relativo da antena na direcção máxima para a frequência consignada.

Coluna 9d Ângulo de elevação.

Convém indicar, em graus, o ângulo da direcção da radiação máxima com o plano horizontal.

Coluna 9e Tipo de antena.

Utilizar, quando for possível, a nomenclatura de *Diagramas de Antenas* da CCIR. Os diferentes tipos de antena estão indicados no final das presentes instruções (v. a subsecção III da presente secção).

Coluna 10 Horário de funcionamento (UTC).
Coluna 11 Outras frequências utilizadas simultaneamente para o mesmo programa destinado à(s) mesma(s) região(ões).

1) Se a frequência notificada for a única frequência utilizada para o horário em causa, inscrever «NIL» nesta coluna.
2) Caso contrário, indicar as outras frequências utilizadas simultaneamente para o mesmo programa destinado à mesma região.

Coluna 12b Endereço postal e endereço telegráfico da administração de que depende a estação (1).

Estes endereços são aqueles para onde convirá enviar qualquer comunicação urgente respeitante a interferências, qualidade das emissões e questões relativas à exploração técnica (v. o artigo 22).

Informações suplementares:

Qualquer informação suplementar fornecida pela administração deverá figurar na parte da ficha a isso destinada:

1) Indicar a seguir ao símbolo «COORD» o nome de qualquer administração com a qual se tenha efectuado coordenação para a utilização da frequência; se não tiver sido efectuada qualquer coordenação, inscrever a indicação «NIL»;

(1) Quando estas informações constatarem já do prefácio da Lista Internacional de Frequências, utilizar o número ou a letra de referência apropriados.

2) Acrescentar qualquer outra informação que a administração julge oportuna; por exemplo, a distância máxima de serviço, quando for inferior a 2000 km, ou esclarecimentos acerca da utilização da frequência notificada, se essa utilização for restrita ou se a frequência não for utilizada durante todo o horário indicado na coluna 10, ou só for utilizada em certos dias da semana, ou se for aplicada a técnica da sincronização.

III. Símbolos correspondentes aos diferentes tipos de antena

HOR	Antena horizontal não direccional.
VER	Antena vertical não direccional.
DP	Dipolo.
H	Horizontal.
V	Vertical.
R	Com reflector.

(Exemplo: DPHR significa dipolo horizontal com reflector.)

H	Antena de cortina com dipolos horizontais.
R	Com reflector.
S	Antena deslocada.
/..	Número de elementos de meia onda por fila horizontal.
/..	Número de elementos de meia onda por fila vertical.
/..	Altura acima do solo da fila de elementos mais baixa (em comprimentos de onda).
S..	Ângulo de deslocamento, havendo-o.

(Exemplo: HRS/4/3/2S significa sistema horizontal com reflector, 4 filas horizontais, 3 filas verticais de dipolos, fila horizontal inferior situada a 2 comprimentos de onda acima do solo, deslocamento 15°.)

RHO	Antena rômbica.
/..	Comprimento do lado do losango (em comprimentos de onda).
/..	Altura do losango acima do solo (em comprimentos de onda).
/..	Metade do ângulo interior do losango.

(Exemplo: RHO/2,5/0,4/65 significa antena rômbica, comprimento de um lado 2,5 comprimentos de onda, altura acima do solo 0,4 comprimentos de onda, semiângulo interior 65°.)

TRO	Antena para a radiodifusão na zona tropical.
/..	Número de filas.
/..	Altura acima do solo (em comprimentos de onda).

[Exemplo: TRO/4/0,2 significa antena para a radiodifusão tropical de 4 filas (e 4 dipolos por fila), a uma altura de 0,2 comprimentos de onda acima do solo.]

APÊNDICE 3

Fichas de notificação relativas às estações de radiocomunicação espacial e de radioastronomia

(V. os artigos 11 e 13)

SECÇÃO A

Instruções gerais

1. Deverá ser enviada à Comissão Internacional do Registo de Frequências uma ficha de notificação distinta, para notificar:

Cada nova consignação de frequência a uma estação terrena, para a emissão ou a recepção, ou a uma estação espacial, para a emissão ou a recepção;

Qualquer modificação das características de uma consignação de frequência inscrita no ficheiro de referência internacional das frequências, denominado daqui em diante ficheiro de referência;

Qualquer anulação total de uma consignação de frequência inscrita no ficheiro de referência.

2. No que respeita às consignações de frequência às estações terrenas e espaciais notificadas nos termos dos n.os **1488** a **1491**, consoante se trate de frequências de emissão ou de recepção, deverá ser apresentada à Comissão uma ficha de notificação distinta para cada consignação a uma estação terrena ou espacial. Em cada um destes casos, quando são

idênticas as características fundamentais, excepto a frequência, poderá ser apresentada uma única ficha de notificação, indicando essa ficha todas as características fundamentais e dando a lista das frequências consignadas. No caso de um sistema de satélites reflectores, deverão ser objecto de notificação apenas as consignações às estações terrenas para a emissão e a recepção.

3. No caso de um sistema de satélites que comporte várias estações espaciais com as mesmas características gerais, deverá ser apresentada à Comissão uma ficha distinta para cada estação espacial, para as consignações de frequência de emissão e de recepção:

Se ela estiver colocada a bordo de um satélite geostacionário;

Se estiver colocada a bordo de um satélite não geostacionário, excepto se vários satélites tiverem as mesmas características quanto às frequências radioeléctricas e as mesmas características de órbita (com exclusão da posição do nodo ascendente); nesse caso, poderá ser apresentada à Comissão uma ficha única válida para todas essas estações espaciais.

4. Cada ficha de notificação deverá conter as informações de base seguintes:

a) O número de série da ficha e a data do seu envio à Comissão;
b) O nome da administração donde provém;
c) Informações suficientes para permitir identificar a rede de satélite particular na qual funcionará a estação terrena ou espacial, incluindo a posição orbital no caso de um satélite geostacionário;
d) A indicação de que a ficha se refere:

1) A primeira utilização de uma frequência por uma estação;
2) A uma modificação das características de uma consignação de frequência inscrita no ficheiro de referência (indicar se esta notificação constitui uma substituição, uma adição ou uma anulação das características existentes);
3) A anulação da totalidade das características notificadas de uma consignação;

e) Uma referência à circular semanal da IFRB que contém a publicação antecipada exigia nos termos do n.º **1042**.
f) As características fundamentais definidas nas secções B, C, D, E ou F, consoante o caso;
g) Qualquer outra informação que a administração julgue oportuna, por exemplo, qualquer factor tomado em consideração quando da aplicação das disposições do apêndice 28 para determinar a zona de coordenação, bem como a indicação eventual de que a consignação será utilizada de acordo com o n.º **342**, informações relativas à utilização da frequência notificada, no caso de essa utilização ser restrita ou, quando se trate de uma ficha de notificação relativa a uma estação espacial, se as emissões desta forem definitivamente interrompidas ao fim de um período determinado.

SECÇÃO B

Características fundamentais a fornecer no caso da notificação de uma frequência de emissão de uma estação terrena

Ponto 1 Frequência(s) consignada(s).

Indicar a(s) freguesia(s) consignada(s) tal como definida(s) no artigo 1 (v. o n.º **142**), em kHz, até 28 000 kHz, inclusive, em MHz, acima de 28 000 kHz e até 10 500 MHz, inclusive, em GHz, acima de 10 500 MHz.

Ponto 2 Faixa de frequências consignada.

Indicar a largura da faixa de frequências consignada, em kHz (v. o n.º **141**).

Ponto 3 Data de entrada em serviço.

a) No caso de uma nova consignação, indicar a data de entrada em serviço efectiva ou prevista, consoante o caso, da consignação de frequência;
b) Quando da modificação de uma qualquer das características fundamentais de uma consignação, tais como especificadas na presente secção, com excepção da que figura no ponto 4, alínea *a*), a data a indicar deverá ser a da última modificação efectiva ou prevista, consoante o caso.

Ponto 4 Identidade e localização da estação terrena de emissão.

a) Indicar o nome por que é designada a estação ou o nome da localidade onde ela se situa;
b) Indicar o país ou a zona geográfica onde se situa a estação. Convém utilizar para esse fim os símbolos que figuram no prefácio da Lista Internacional das Frequências;
c) Indicar as coordenadas geográficas da localização do emissor (longitude e latitude, em graus e minutos). Indicar igualmente os segundos (1) com uma precisão de um décimo de minuto.

(1) Esta informação só é necessária se a zona de coordenação da estação terrena se estender sobre o território de outra administração.

Ponto 5 Estação(ões) com a qual (quais) a comunicação deve ser estabelecida.

Indicar a identidade da (ou das) estação(ões) espacial(ais) de recepção associada(s) com a estação terrena, fazendo referência às notificações a elas relativas ou por qualquer outro modo apropriado, ou então, no caso de um satélite reflector, a identidade do satélite e a localização da (ou das) estação(ões) terrena(s) de recepção que lhe está(ão) associada(s). No caso de um satélite geostacionário, indicar também a sua posição orbital.

Ponto 6 Classe da estação e natureza do serviço.

Utilizando os símbolos que figuram no apêndice 10, indicar a classe da estação e a natureza do serviço efectuado.

Ponto 7 Classe de emissão, largura de faixa necessária e natureza da transmissão.

De acordo com o artigo 4 e o apêndice 6:

a) Indicar a classe de emissão;
b) Indicar a(s) frequência(s) portadora(s) de emissão (1);
c) Indicar, para cada portadora, a classe de emissão, a largura de faixa necessária e a natureza da transmissão (1);
d) Indicar, para a portadora com a mais pequena largura de faixa das consignações do sistema, a classe de emissão, a largura de faixa necessária e a natureza da transmissão (1).

Ponto 8 Características de potência da emissão.

a) Indicar, para cada portadora, a potência de ponta (dBW) fornecida à entrada da antena (1);
b) Indicar a potência total de ponta (dBW) e a densidade máxima de potência por Hz [dB(W/Hz)] (2) fornecida à entrada da antena (valor médio calculado na faixa de 4 kHz, mais desfavorecida para as portadoras inferiores a 15 GHz, ou na faixa de 1 MHz, mais desfavorecida para as portadoras superiores a 15 GHz);
c) Indicar, para cada portadora, o valor mínimo da potência de ponta fornecida à entrada da antena (1).

Ponto 9 Características da antena de emissão.

a) Indicar o ganho iostrópico ou absoluto (dB) da antena na direcção máxima (v. o n.º **154**);
b) Indicar, em graus, o ângulo formado pelas direcções nas quais a potência fica reduzida a metade (dar uma descrição pormenorizada se o diagrama de radiação não for simétrico);
c) Juntar à ficha o diagrama de radiação da antena, medida tomando como referência a direcção da radiação máxima, ou indicar o diagrama de radiação de referência a utilizar para a coordenação;
d) Juntar à ficha um gráfico que indique o ângulo de elevação do horizonte em cada azimute à volta da estação terrena;
e) Indicar, em graus, em relação ao plano horizontal, o ângulo mínimo de elevação, previsto em exploração, da direcção da radiação máxima da antena;
f) Indicar, em graus, a partir do norte verdadeiro, no sentido do movimento dos ponteiros do relógio, os limites entre os quais o azimute da direcção da radiação máxima da antena pode variar durante a exploração;
g) Indicar o tipo de polarização da onda emitida na direcção da radiação máxima; indicar, também, o sentido da polarização, caso esta seja circular, e o plano da polarização, no caso de ser linear (v. os n.os **148** e **149**) (1);
h) Indicar, em metros, a altitude da antena acima do nível do mar.

Ponto 10 Características de modulação (1).

Para cada portadora, consoante a natureza do sinal que modula a portadora e consoante o tipo de modulação, indicar as seguintes características:

a) Portadora modulada em frequência por uma faixa de base telefónica multivia de divisão em frequência (MRF/MF) ou por um sinal que pode ser representado por uma faixa de base telefónica multivia de divisão em frequência: indicar as frequências inferior e superior da faixa de base e o desvio de frequência eficaz do tom de ensaio em função da frequência da faixa de base;

---

(1) Esta informação só é necessária se serviu de base para efectuar a coordenação com uma outra administração.
(2) Convém utilizar a versão mais recente do Relatório n.º 792 da CCIR, na medida em que se aplique ao cálculo da densidade máxima de potência por hertz.

b) Portadora modulada em frequência por um sinal de televisão; indicar a norma do sinal de televisão (incluindo, se for caso disso, a norma utilizada para a cor), o desvio de frequência para a frequência de referência da características de pré-acentuação, e esta característica de pré-acentuação; indicar igualmente, se for caso disso, as características de multiplexagem do sinal imagem com o(s) som (sons) ou outros sinais;

c) Portadora modulada por variação de fase por um sinal de modulação por impulsos codificados (MIC/MDP): indicar o débito binário e número de fases;

d) Portadora modulada em amplitude (incluindo em faxia lateral única): indicar com toda a precisão possível a natureza do sinal modulante e o tipo de modulação de amplitude utilizado;

e) Para todos os outros tipos de modulação, fornecer as informações que possam ser úteis para um estudo de interferência;

f) Qualquer que seja o tipo de modulação utilizado, indicar as características de dispersão da energia, tais como o desvio ponta de frequência (MHz) e a frequência de varrimento (kHz) da onda de dispersão.

Ponto 11 Horário normal de funcionamento.

Indicar o horário normal de funcionamento (UTC) na frequência de cada portadora.

Ponto 12 Coordenação.

Indicar o nome de qualquer administração com a qual tenha sido coordenada com êxito a utilização da frequência, em conformidade com os n.^{os} **1060** e **1107**, e, se tanto for o caso, o nome de qualquer administração junto da qual tenha sido tentada mas não efectuada a coordenação da utilização da frequência.

Ponto 13 Acordos.

Indicar, se for caso disso, o nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento, assim como o conteúdo desse acordo.

Ponto 14 Administração ou companhia exploradora.

Indicar o nome da administração ou da companhia exploradora e os endereços postal e telegráfico da administração à qual convém enviar qualquer comunicação urgente relativa às interferências, à qualidade das emissões e às questões relacionadas com a exploração técnica das estações (v. o artigo 22).

SECÇÃO C

Características fundamentais a fornecer no caso da notificação de uma frequência de recepção de uma estação terrena

Ponto 1 Frequência(s) consignada(s).

Indicar a ou as frequências consignadas da emissão a receber, tal como definida(s) no artigo 1 (v. o n.º **142**), em kHz, até 28 000 kHz, inclusive, em MHz, acima de 28 000 kHz e até 10 500 MHz, inclusive, em GHz, acima de 10 500 MHz.

Ponto 2 Faixa de frequências consignada.

Indicar a largura da faixa de frequências consignada, em kHz (v. o n.º **141**).

Ponto 3 Data de entrada em serviço.

a) No caso de uma nova consignação, indicar a data efectiva ou prevista, consoante o caso, em que começa a recepção na frequência consignada;

b) Quando de uma modificação de qualquer das características fundamentais de uma consignação, tais como especificadas na presente secção, com excepção da que figura no ponto 4, alínea *a*), a data a indicar deve ser a da última modificação efectiva ou prevista, consoante o caso.

Ponto 4 Identidade e localização da estação terrena de recepção.

a) Indicar o nome por que é designada a estação terrena de recepção ou o nome da localidade em que ela se situa;

b) Indicar o país ou a zona geográfica onde se situa a estação terrena de recepção. Convém utilizar para esse fim os símbolos que figuram no prefácio da Lista Internacional das Frequências;

c) Indicar as coordenadas geográficas da localização do receptor (longitude e latitude, em graus e minutos). Indicar igualmente os segundos (1) com uma precisão de um décimo de minuto.

Ponto 5 Estação(ões) com a qual (as quais) a comunicação deve ser estabelecida.

Indicar a identidade da (ou das) estação(ões) espacial(ais) de emissão associada(s) à estação terrena, fazendo referência às notificações a ela(s) relativas ou por qualquer outro modo apropriado, ou então, no caso de um satélite reflector, a identidade do satélite e da (ou das) estação(ões) terrena(s) de emissão que lhe está (estão) associada(s). No caso de um satélite geostacionário, indicar também a sua posição orbital.

Ponto 6 Classe da estação e natureza do serviço.

Utilizando os símbolos que figuram no apêndice 10, indicar a classe da estação e a natureza do serviço efectuado.

Ponto 7 Classe de emissão, largura de faixa necessária e natureza da transmissão a receber.

Em conformidade com o artigo 4 e o apêndice 6:

a) Indicar a classe de emissão da transmissão a receber;
b) Indicar a (ou as) frequência(s) portadora(s) da transmissão a receber (2);
c) Indicar, para cada frequência portadora a receber, a classe de emissão, a largura de faixa necessária e a natureza da transmissão (2).

Ponto 8 Características da antena de recepção da estação terrena.

a) Indicar, o ganho isotrópico ou absoluto (dB) da antena na direcção da radiação máxima (v. o n.º **154**);
b) Indicar, em graus, o ângulo formado pelas direcções nas quais a potência fica reduzida a metade (dar uma descrição pormenorizada se o diagrama de radiação não for simétrico);
c) Juntar à ficha o diagrama de radiação da antena medida tomando como referência a direcção da radiação máxima ou indicar o diagrama da radiação de referência a utilizar para a coordenação;
d) Juntar à ficha um gráfico que indique o ângulo de elevação do horizonte em cada azimute à volta da estação terrena;
e) Indicar, em graus, em relação ao plano horizontal, o ângulo de elevação mínima, previsto em exploração, da direcção, da radiação, máxima da antena;
f) Indicar, em graus, a partir do norte verdadeiro e no sentido do movimento dos ponteiros do relógio, os limites entre os quais pode variar o azimute da direcção da radiação máxima da antena durante a exploração;
g) Indicar, em metros, a altitude da antena acima do nível médio do mar;
h) Indicar o tipo de polarização da antena. No cado de polarização, indicar o sentido dela (v. os n.ºs **148** e **149**). No caso de polarização rectilínea, indicar o plano de polarização. Indicar igualmente se é dada autorização para a utilização geral desta informação, a fim de determinar a necessidade de coordenação com outras redes de satélite em conformidade com o apêndice 29 (2).

Ponto 9 Temperatura de ruído, temperatura de ruído da ligação e ganho de transmissão.

a) Indicar, em graus Kelvin, a mais baixa temperatura de ruído do sistema de recepção total relativa à saída da antena de recepção da estação terrena nas condições de «céu calmo». Este valor deve ser indicado para o valor nominal do ângulo de elevação no caso em que a estação de emissão associada esteja colocada a bordo de um satélite geostacionário e, nos outros casos, para o valor mínimo do ângulo de elevação;
b) Quando sejam utilizados a bordo da estação espacial associada simples repetidores-conversores de frequência, indicar as mais baixas temperatura de ruído equivalentes da ligação por satélite nas condições do ponte 9. alínea *a*), acima para a consignação (v. o n.º **168**);
c) Indicar o valor do ganho de transmissão associado a cada temperatura de ruído equivalente da ligação por satélite dada no ponto 9, alínea *b*), acima. O ganho de transmissão avalia-se entre a saída da antena de recepção da estação espacial e a saída da antena de recepção da estação terrena.

---

(1) Esta informação só é necessária se a zona de coordenação da estação terrena se estender sobre o território de outra administração.
(2) Esta informação só é necessária se serviu de base para efectuar a coordenação com outra administração.

Ponto 10 Horário normal de recepção.

Indicar, em tempo UTC, o horário normal de recepção na frequência de cada portadora.

Ponto 11 Coordenação.

Indicar o nome de qualquer administração com a qual tenha sido coordenada com êxito a utilização da frequência, em conformidade com os n.os **1060** e **1107**, e, se tanto for o caso, o nome de qualquer administração junto da qual tenha sido tentada mas não efectuada a coordenação da utilização da frequência.

Ponto 12 Acordos.

Indicar, se for caso disso, o nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento, assim como o conteúdo desse acordo.

Ponto 13 Administração ou companhia exploradora.

Indicar o nome da administração ou da companhia exploradora e os endereços postal e telegráfico da administração à qual convém enviar qualquer comunicação urgente relativa às interferências, e às questões relacionadas com a exploração técnica das estações (v. o artigo 22).

SECÇÃO D

Características fundamentais a fornecer no caso da notificação de uma frequência de emissão de estações espaciais

Ponto 1 Frequência(s) consignada(s).

Indicar a (ou as) frequência(s) consignada(s) tal como definida(s) no artigo 1 (v. o n.º **142**), em kHz, até 28 000 kHz, inclusive, em MHz, acima de 28 000 kHz e até 10 500 MHz, inclusive, em GHz, acima de 10 500 MHz. Convém que cada feixe de radiação de antena seja objecto de, pelo menos, uma ficha de notificação distinta.

Ponto 2 Faixa de frequências consignada.

Indicar a largura da faixa de frequências consignada, em kHz (v. o n.º **141**).

Ponto 3 Data de entrada em serviço ([1]).

a) No caso de uma nova consignação, indicar a data de entrada em serviço efectiva ou prevista, consoante o caso, da consignação de frequência;

b) Quando da modificação de uma qualquer das características fundamentais de uma consignação, tais como especificadas na presente secção, com excepção da que figura no ponto 4, a data a indicar deverá ser a da última modificação efectiva ou prevista, consoante o caso.

Ponto 4 Identidade da (ou das) estação(ões) espacial(ais).

Indicar a identidade da (ou das) estação(ões) espacial(ais).

Ponto 5 Informações relativas à órbita.

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário, indicar a longitude geográfica nominal a órbita dos satélites geostacionários, assim como a tolerância de longitude e a variação de inclinação previstas. Indicar igualmente, no caso em que esteja previsto que um satélite geostacionário comunique com uma estação terrena:

1) O arco da órbita dos satélites geostacionários sobre o qual a estação espacial é visível sob o ângulo de elevação de, pelo menos, 10° a partir das estações terrenas ou zonas de serviço que lhes estão associadas;
2) O arco da órbita dos satélites geostacionários ao longo do qual a estação espacial pode assegurar o serviço exigido com as estações terrenas ou zonas de serviço que lhe estão associadas;
3) Se o arco a que se refere a alínea 2) anterior for mais pequeno do que aquele a que se refere a alínea 1) precedente, indicar as razões dessa diferença;

Nota. — Os arcos a que se referem as alíneas 1) e 2) devem ser definidos pela longitude geográfica das suas extremidades sobre a órbita dos satélites geostacionários.

([1]) V., também, a Resolução n.º 4.

b) No caso de uma ou de várias estações espaciais situadas a bordo de um ou de vários satélites não geostacionários, indicar a inclinação da órbita, o período e as altitudes (em quilómetros) do apogeu e do perigeu da (ou das) estação(ões) espacial(ais), assim como o número de satélites utilizados.

Ponto 6 Zonas(s) de serviço ou estação(ões) de recepção.

a) No caso de as estações de recepção associadas serem estações terrenas, indicar a (ou as) zonas(s) de serviço prevista(s) sobre a Terra ou o nome da localidade e do país ou a zona geográfica onde se situa cada estação de recepção;

b) No caso de as estações de recepção associadas serem estações espaciais, indicar a identidade de cada uma delas fazendo referência às notificações que lhes são relativas ou por qualquer outro modo apropriado.

Ponto 7 Classe da estação e natureza do serviço.

Utilizando os símbolos que figuram no apêndice 10, indicar a classe da (ou das) estação(ões) e a natureza do serviço efectuado.

Ponto 8 Classe de emissão, largura de faixa necessária e natureza da transmissão.

Em conformidade com o artigo 4 e o apêndice 6:

a) Indicar a classe de emissão da transmissão;

b) Indicar a (ou as) frequência(s) portadora(s) da transmissão (1);

c) Indicar, para cada portadora, a classe de emissão, a largura de faixa necessária e a natureza da transmissão (1);

d) Indicar, para a portadora que tem a mais pequena largura de faixa das consignações do sistema, a classe de emissão, a largura de faixa necessária e a natureza da transmissão (1).

Ponto 9 Características de potência da emissão.

a) Indicar, para cada portadora, a potência de ponta (dBW) fornecida à entrada da antena (1);

b) Indicar a potência total de ponta (dBW) e a densidade máxima de potência por Hz [dB(W/Hz)] (2) fornecida à entrada da antena (valor médio calculado na faixa de 4 kHz, mais desfavorecida para as portadoras inferiores a 15 GHz, ou na faixa de 1 MHz, mais desfavorecida para as portadoras superiores a 15 GHz);

c) Indicar, para cada portadora, o valor mínimo da potência de ponta fornecida à entrada da antena (1).

Ponto 10 Características da antena de emissão da estação espacial.

Para cada zona de serviço ou cada feixe de radiação da antena:

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário e destinada a comunicar com uma estação terrena, indicar o ganho máximo da antena de emissão da estação espacial e os contornos de ganho traçados sobre um mapa de superfície terrestre, de preferência numa projecção radial a partir do satélite e num plano perpendicular ao eixo que liga o centro da Terra ao satélite. Indicar o ganho isotrópico ou absoluto em cada contorno que corresponde a um ganho inferior 2 dB, 4 dB, 6 dB, 10 dB e 20 dB ao valor máximo, e assim por diante, de 10 dB em 10 dB, se necessário. Sempre que possível, os contornos do ganho da antena de emissão da estação espacial deveriam igualmente ser indicados na forma de uma equação numérica ou na forma de um quadro;

b) No caso de uma estação espacial situada a bordo de um satélite geostacionário e cujo feixe de radiação da antena dirigido para um outro satélite, ou no caso de uma estação espacial colocada a bordo de um satélite não geostacionário, indicar o ganho isotrópico ou absoluto da antena de emissão da estação espacial na direcção de radiação máxima e o diagrama de radiação dessa antena, tomando como referência o ganho na direcção de radiação máxima;

c) Indicar o tipo de polarização da radiação emitida pela antena. No caso de polarização circular, indicar o sentido da polarização (v. os n.os **148** e **149**). No caso de polarização

(1) Esta informação só é necessária se serviu de base para efectuar a coordenação com outra administração.

(2) Convém utilizar a versão mais recente do Relatório n.º 792 da CCIR, na medida em que se aplique ao cálculo da densidade máxima de potência por Hz.

rectilínea, indicar, em graus, o ângulo medido no sentido inverso do movimento dos ponteiros do relógio, no plano normal ao eixo do feixe desde o plano equatorial até ao vector eléctrico da onda visto do satélite (1);

d) No caso de um satélite geostacionário, indicar a precisão de orientação da antena;

e) No caso de uma estação espacial situada a bordo de um satélite geostacionário e que funcione numa faixa atribuída no sentido Terra-espaço e no sentido espaço-Terra, indicar também o ganho da antena de emissão da estação espacial na direcção das partes da órbita dos satélites geostacionários não ocultas pela Terra, por meio de um diagrama que indique o ganho de antena estimado em função da longitude orbital.

Ponto 11 Características de modulação (1).

Para cada frequência portadora, segundo a natureza do sinal que modula a portadora e segundo o tipo de modulação, indicar as características seguintes:

a) Portadora modulada em frequência por uma faixa de base telefónica multivia de divisão em frequência (MDF/MF) ou por um sinal que pode ser representado por uma faixa de base telefónica multivia de divisão em frequência: indicar as frequências inferior e superior da faixa de base e o desvio de frequência eficaz do tom de ensaio em função da frequência da faixa de base;

b) Portadora modulada em frequência por um sinal de televisão: indicar a norma do sinal de televisão (incluindo, se for caso disso, a norma utilizada para a cor), o desvio de frequência para a frequência de referência da características de pré-acentuação, e esta característica de pré-acentuação; indicar igualmente, se for caso disso, as características de multiplexagem do sinal imagem com o(s) som (sons) ou outros sinais;

c) Portadora modulada por variação de fase por um sinal de modulação por impulsos codificados (MIC/MDP): indicar o débito binário e número de fases;

d) Portadora modulada em amplitude (incluindo a de faixa lateral única): indicar, de forma tão precisa quanto possível a natureza do sinal modulador e o tipo de modulação de amplitude utilizado;

e) Para todos os outros tipos de modulação, fornecer as informações que possam ser úteis para um estudo de interferência;

f) Qualquer que seja o tipo de modulação utilizado: indicar, se for caso disso, as características de dispersão da energia.

Ponto 12 Horário normal de funcionamento.

Indicar o horário normal (UTC) de funcionamento na frequência de cada portadora.

Ponto 13 Coordenação.

Indicar o nome de qualquer administração ou grupo de administrações com as quais foi coordenada com êxito a utilização da rede de satélite a que pertence a estação espacial, em conformidade com o n.º **1060**.

Ponto 14 Acordos.

Indicar, se for caso disso, o nome de qualquer administração com a qual tenha sido concluído um acordo com vista a ultrapassar os limites prescritos no presente Regulamento, assim como o conteúdo desse acordo.

Ponto 15 Administração ou companhia exploradora.

Indicar o nome da administração ou da companhia exploradora e os endereços postal e telegráfico da administração à qual convém enviar qualquer comunicação urgente relativa às interferências, à qualidade das emissões e às questões relacionadas com a exploração das estações (v. o artigo 22).

SECÇÃO E

Características fundamentais a fornecer no caso da notificação de uma frequência de emissão de estações espaciais

Ponto 1 Frequência(s) consignada(s).

Indicar a (ou as) frequência(s) consignada(s) tal como definida(s) no artigo 1 (v. o n.º **142**), em kHz, até 28 000 kHz, inclusive, em MHz, acima de 28 000 kHz e até 10 500 MHz, inclusive, em GHz,

(1) Esta informação só é necessária se serviu de base para efectuar a coordenação com outra administração.

acima de 10 500 MHz. Convém que cada feixe de radiação de antena seja objecto de, pelo menos, uma ficha de notificação distinta.

Ponto 2 Faixa de frequências consignada.

Indicar a largura da faixa de frequências consignada, em kHz (v. o n.º **141**).

Ponto 3 Data de entrada em serviço ([1]).

a) No caso de uma nova consignação, indicar a data efectiva ou prevista, consoante o caso, em que começa a recepção na frequência consignada;

b) Quando de uma modificação de qualquer das características fundamentais de uma consignação, tais como especificadas na presente secção, com excepção da que figura no ponto 4, a data a indicar deverá ser a da última modificação efectiva ou prevista, consoante o caso.

Ponto 4 Identidade da (ou das) estação(ões) espacial(ais) de recepção.

Indicar a identidade da (ou das) estação(ões) espacial(ais) de recepção.

Ponto 5 Informações relativas à órbita.

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário, indicar a longitude geográfica nominal sobre a órbita dos satélites geostacionários, assim como a tolerância de longitude e a variação de inclinação previstas. Indicar igualmente, no caso em que esteja previsto que um satélite geostacionário comunique com uma estação terrena:

1) O arco da órbita dos satélites geostacionários sobre o qual a estação espacial é visível sob o ângulo de elevação de, pelo menos, 10° a partir das estações terrenas ou zonas de serviço que lhes estão associadas;
2) O arco da órbita dos satélites geostacionários ao longo do qual a estação espacial pode assegurar o serviço exigido com as estações terrenas ou zonas de serviço que lhe estão associadas;
3) Se o arco a que se refere a alínea 2) anterior for mais pequeno do que aquele a que se refere a alínea 1) precedente, indicar as razões dessa diferença;

Nota. — Os arcos a que se referem as alíneas 1) e 2) devem ser definidos pela longitude geográfica das suas extremidades sobre a órbita dos satélites geostacionários.

b) No caso de uma ou de várias estações espaciais situadas a bordo de um ou de vários satélites não geostacionários, indicar a inclinação da órbita, o período e as altitudes (em quilómetros) do apogeu e do perigeu da (ou das) estação(ões) espacial(ais), assim como o número dos satélites utilizados.

Ponto 6 Estação(ões) terrena(s) ou especial(ais) de emissão associada(s).

Indicar a identidades da (ou das) estação(ões) terrena(s) ou espacial(ais) de emissão associada(s) à(s) estação(ões) espacial(ais), fazendo referência às notificações a elas relativas ou de qualquer outro modo apropriado.

Ponto 7 Classe de estação e natureza do serviço.

Utilizando os símbolos que figuram no apêndice 10, indicar a classe da (ondas) estação(ões) e a natureza do serviço efectuado.

Ponto 8 Classe de emissão, largura de faixa necessária e natureza da (ou das) transmissão(ões) a receber.

Em conformidade com o artigo 4 e o apêndice 6:

a) Indicar a classe de emissão da (ou das) transmissão(ões) a receber;
b) Indicar a (ou as) frequência(s) portadora(s) da (ou das) transmissão(ões) ou receber ([2]);
c) Indicar, para cada frequência portadora a receber, a classe de emissão, a largura de faixa necessária e a natureza da (ou das) transmissão(ões) a receber ([2]).

Ponto 9 Características da antena de recepção da estação espacial.

Para cada feixe de antena de recepção:

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário e destinada a comunicar com uma estação terrena, indicar o ganho máximo da antena de emissão

---

([1]) V., também, a Resolução n.º 4.
([2]) Esta informação só é necessária se serviu de base para efectuar a coordenação com outra administração.

da estação espacial e os contornos de ganho traçados sobre um mapa de superfície terrestre, de preferência numa projecção radial a partir do satélite e num plano perpendicular ao eixo que liga o centro da Terra ao satélite. Indicar o ganho isotrópico ou absoluto em cada contorno que corresponde a um ganho inferior 2 dB, 4 dB, 6 dB, 10 dB e 20 dB ao valor máximo, e assim por diante, de 10 dB em 10 dB, se necessário. Sempre que possível, os contornos do ganho da antena de emissão da estação espacial deveriam igualmente ser indicados na forma de uma equação numérica ou na forma de um quadro;

b) No caso de uma estação espacial situada a bordo de um satélite geostacionário e cujo feixe de radiação da antena esteja dirigido para um outro satélite, ou no caso de uma estação espacial colocada a bordo de um satélite não geostacionário, indicar o ganho isotrópico ou absoluto da antena de emissão da estação espacial na direcção de radiação máxima e o diagrama de radiação dessa antena, tomando como referência o ganho na direcção de radiação máxima;

c) Indicar o tipo de polarização da radiação emitida pela antena. No caso da polarização circular, indicar o sentido dela (v. os n.^{os} **148** e **149**). No caso de polarização rectilínea, indicar, em graus, o ângulo medido no sentido inverso do movimento dos ponteiros do relógio, no plano normal ao eixo do feixe desde o plano equatorial até ao vector eléctrico da onda visto do satélite. Indicar igualmente se foi dada autorização para a utilização geral desta informação a fim de determinar a necessidade da coordenação com outras redes de satélite em coformidade com o apêndice 29 ([1]);

d) No caso de um satélite geostacionário, indicar a precisão de orientação da antena;

e) No caso de uma estação espacial situada a bordo de um satélite geostacionário e que funcione numa faixa atribuída no sentido Terra-espaço e no sentido espaço-Terra, indicar também o ganho da antena de recepão da estação espacial na direcção das partes da órbita dos satélites geostacionários não ocultas pela Terra por meio de um diagrama que indique o ganho de antena estimado em função da longitude orbital.

Ponto 10 Temperatura de ruído.

Indicar, em graus Kelvin, a temperatura de ruído do conjunto do sistema de recepção à saída da antena de recepção da estação espacial.

Ponto 11 Horário normal de recepção.

Indicar, em tempo UTC, o horário normal de recepção na frequência de cada portadora.

Ponto 12 Coordenação.

Indicar o nome de qualquer administração ou grupo de administrações com que tenha sido coordenada com êxito a utilização da rede de satélite a que pertence a estação espacial, em conformidade com o n.º **1060**.

Ponto 13 Acordos.

Indicar, se tanto for o caso, o nome de qualquer administração com a qual tenha sido concluído um acordo para ultrapassar os limites prescritos no presente Regulamento, assim como o conteúdo desse acordo.

Ponto 14 Administração ou companhia exploradora.

Indicar o nome da administração ou da companhia exploradora e os endereços postal e telegráfico da administração à qual convém enviar qualquer comunicação urgente relativa às interferências e às questões relacionadas com a exploração das estações (v. o artigo 22).

SECÇÃO F

Características fundamentais a fornecer no caso da notificação de uma frequência de recepção de estações de radioastronomia

Ponto 1 Frequência observada.

Indicar o centro da faixa de frequência observada, em kHz, até 28 000 kHz, inclusive, em MHz, acima de 28 000 kHz e até 10 500 MHz, inclusive, e em GHz, acima de 10 500 MHz.

([1]) Esta informação só é necessária se serviu de base para efectuar a coordenação com outra administração.

Ponto 2 Data de entrada em serviço.

a) Indicar a data efectiva ou prevista, consoante o caso, em que começa a recepção na faixa de frequências;

b) Quando de uma modificação de qualquer das características fundamentais especificadas na presente secção, com excepção da que figura no ponto 3, alínea *b*), a data a indicar deverá ser a da última modificação efectiva ou prevista, consoante o caso.

Ponto 3 Nome e localização da estação.

a) Indicar as letras «RA»;

b) Indicar o nome por que é designada a estação ou o nome da localidade em que ela se situa, ou então esses dois nomes;

c) Indicar o país ou a zona geográfica onde se situa a estação. Para esse fim convém utilizar os símbolos que figuram no prefácio da Lista Internacional das Frequências;

d) Indicar as coordenadas geográficas da localização da estação (longitude e latitude em graus e minutos).

Ponto 4 Largura de faixa.

Indicar a largura da faixa de frequências (em kHz) na qual se efectuam as observações.

Ponto 5 Características da antena.

Indicar o tipo e as dimensões da antena, a sua superfície efectiva e os limites entre os quais podem variar o seu azimute e o seu ângulo de elevação.

Ponto 6 Horário normal de recepção.

Indicar o horário normal (UTC) de recepção na frequência observada.

Ponto 7 Temperatura de ruído.

Indicar, em graus Kelvin, a temperatura de ruído do conjunto do sistema de recepção referida à saída da antena de recepção.

Ponto 8 Classe das observações.

Indicar a classe das observações efectuadas na faixa de frequência indicada no ponto 4. As observações da classe A são aquelas em que a sensibilidades dos aparelhos não é um factor essencial. As observações da classe B são as que se não podem efectuar senão com receptores de pequeno ruído muito aperfeiçoados.

Ponto 9 Administração ou companhia exploradora.

Indicar a classe das observações efectuadas na faixa de frequência indicada no ponto 4. As obsfico da administração à qual convém enviar qualquer comunicação urgente relativa às interferências e às questões relacionadas com a exploração técnica das estações (v. o artigo 22).

SECÇÃO G

Modelos de ficha de notificação (estação terrena)

A Comissão elabora e mantém em dia modelos de ficha de notificação de forma a respeitar a totalidade das disposições regulamentares do presente apêndice e as decisões conexas de conferências futuras.

SECÇÃO H

Modelos de ficha de notificação (estação espacial)

A Comissão elabora e mantém em dia modelos de ficha de notificação de forma a respeitar a totalidade das disposições regulamentares do presente apêndice e as decisões conexas de conferências futuras.

ANEXO AO APÊNDICE 3

Informações minimamente necessárias à coordenação em conformidade com as disposições dos n.os 1060 e 1107

Informações gerais:

a) Para a coordenação em conformidade com as disposições do n.º **1060**:

No caso da coordenação da utilização de uma ou de várias consignações de frequência a uma estação espacial, as informações a fornecer de acordo com a secção B ou C do

apêndice 3 são as características da estação terrena real associadas da rede, se essas características forem conhecidas, ou as características de uma estação terrena tipo;

No caso da coordenação da utilização de uma ou de várias consignações de frequência a uma estação terrena, são fornecidas as informações referidas no ponto 4, alíneas *c*) e *e*) da secção A do apêndice 3, se não tiver sido efectuada qualquer modificação às características fundamentais da consignação ou das consignações à estação espacial para ter em consideração as necessidades da estação terrena (ou das estações terrenas). Nos outros casos é necessária a coordenação da consignação (das consignações) de frequência à estação espacial;

b) Para a coordenação em conformidade com as disposições do n.º **1107** são apenas necessárias as informações indicadas nas colunas 9 e 10 do quadro junto;

c) Um X numa coluna do quadro indica que é necessária a informação em questão.

Informações relacionadas com o título do apêndice 3 — *Título de coordenação requerida*

Títulos das colunas

1 — Consignações a uma estação terrena de emissão dotadas de um simples repetidor-conversor de frequência a bordo do satélite, em conformidade com as disposições do n.º **1060**.

2 — Como em 1, nos casos que necessitem de um tratamento separado da ligação ascendente e da ligação descendente (por exemplo: telemedida, telecomando.

3 — Consignações a uma estação terrena de recepção dotada de um simples repetidor-conversor de frequência a bordo do satélite, em conformidade com as disposições do n.º **1060**.

4 — Como em 3, nos casos que necessitem de um tratamento separado da ligação ascendente e da ligação descendente (por exemplo: telemedida, telecomando).

5 — Consignações a uma estação espacial de emissão dotada de um simples repetidor-conversor de frequência a bordo do satélite, em conformidade com as disposições do n.º **1060**.

6 — Como em 5, nos casos que necessitem de um tratamento separado da ligação ascendente e da ligação descendente (por exemplo: telemedida, telecomando).

7 — Consignações a uma estação espacial de recepção dotada de um simples repetidor-conversor de frequência a bordo do satélite, em conformidade com as disposições do n.º **1060**.

8 — Como em 7, nos casos que necessitem de um tratamento separado da ligação ascendente e da ligação descendente (por exemplo: telemedida, telecomando).

9 — Consignações a uma estação terrena de emissão, em conformidade com as disposições do n.º **1107**.

10 — Consignações a uma estação terrena de recepção, em conformidade com as disposições do n.º **1107**.

Pontos números	1	2	3	4	5	6	7	8	9	10	Pontos números
Secção B											**Secção B**
1 + 2	×	×			×				×		1 + 2
3a + 3b									×		3a + 3b
4a + 4b + 4c	×	×			×				×		4a + 4b + 4c
5	×	×			×						5
7a + 8b (*) + 9a + 9b	×	×			×				×		7a + 8b (*) 9a + 9c
9d + 9e + 9f									×		9d + 9e + 8f
Secção C											**Secção C**
1 + 2			×	×			×			×	1 + 2
3a + 3b										×	3a + 3b
4a + 4b + 4c			×	×			×			×	4a + 4b + 4c
5			×	×			×				5
7a + 8a + 8c			×	×			×			×	7a + 8a + 8c
8d + 8e + 8f										×	8d + 8e + 8f

Pontos números	1	2	3	4	5	6	7	8	9	10	Pontos números
9a				×						×	9a
9b + 9c			×				×			×	9b + 9c
Secção D 1 + 2 + 4 + 5a + 5a 1 + 5a 2 + 5a 3 + 6a + 6b + 8a + 9b (*) + 10a + + 10b (**) + 10d + 10e (**)	×				×	×					**Secção D** 1 + 2 + 4 + 5a + 5a 1 + 5a 2 + 5a 3 + 6a + 6b + 8a + 9b (*) + 10a + + 10b (**) + 10d + 10e (**)
Secção E 1 + 2 + 4 + 5a + 5a 1 + 5a 2 + 5a 3 + 6 + 8a + 9b (**) + 9d + 9e (**)			×				×	×			**Secção E** 1 + 2 + 4 + 5a + 5a 1 + 5a 2 + 5a 3 + 6 + 8a + 9b (**) + 9d + 9e (**)
10			×					×			10

(*) Somento densidade de potência.
(**) Pode nem sempre ser aplicável.

APÊNDICE 4

Informações a fornecer para a publicação antecipada relativa a uma rede de satélite

(V. o artigo 11)

SECÇÃO A

Instruções gerais

Ponto 1 As informações são fornecidas separadamente para cada rede de satélite.

Ponto 2 As informações a fornecer por cada rede de satélite compreende as características gerais (secção B) e, consoante o caso, as características para o sentido Terra-espaço (secção C), as características para o sentido espaço-Terra (secção D) e as características para as ligações espaço-espaço (secção E). Além disso, a administração ou uma administração agindo em nome de um grupo de administrações, expressamente nomeadas, que forneça as informações para a publicação antecipada poderá fornecer, a título de informações suplementares, dados relativos ao cálculo das interferências, tendo em vista a coordenação entre redes (secção F).

SECÇÃO B

Características gerais a fornecer para uma rede satélite

Ponto 1 Identidade da rede de satélite.

Indicar a identidade da rede de satélite por meio de informações suficientes para evitar qualquer ambiguidade e, se for caso disso, a identidade do sistema de satélites de que a rede constituirá um elemento.

Ponto 2 Data de entrada em serviço ([1]).

Indicar a data prevista para a primeira entrada em serviço da rede de satélite.

Ponto 3 Administração ou grupo de administrações que fornece as informações para a publicação antecipada.

Indicar o nome da administração (ou os nomes das administrações) do grupo que fornece as informações relativas à rede de satélite com vista á sua publicação antecipada, bem como os endereços postal e telegráfico da(s) administração(ões) a que convém qualquer comunicação.

([1]) V., também, a Resolução n.º 4.

Ponto 4 Informações relativas à órbita da(s) estação(ões) espacial(ais).

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário, indicar a longitude geográfica nominal sobre a órbita dos satélites geostacionários, assim como a tolerância de longitude e o desvio de inclinação previstos, indicando igualmente:

1) O arco da órbita dos satélites geostacionários sobre o qual a estação espacial é visível sob um ângulo de elevação de, pelo menos, 10° a partir das estações terrenas ou zonas de serviço que lhe estão associadas;
2) O arco da órbita dos satélites geostacionários ao longo do qual a estação espacial pode assegurar o serviço necessário com as estações terrenas ou zonas de serviço que lhe estão associadas;
3) Se o arco a que se refere a alínea 2) anterior for mais pequeno do que o referido na alínea 1) precedente, indicar as razões dessa diferença;

Nota. — Os arcos a que se referem as alíneas 1) e 2) devem ser definidos pela longitude geográfica das suas extremidades sobre a órbita dos satélites geostacionários.

b) No caso de uma ou de várias estações espaciais situadas a bordo de um ou de vários satélites não geostacionários, indicar a inclinação da órbita, o período e as altitudes (em quilómetros) do apogeu e do perigeu da(s) estação(ões) espacial(ais), assim como o número de satélites utilizados com as mesmas características.

SECÇÃO C

Características da rede de satélite para o sentido Terra-espaço

Ponto 1 Zona(s) de serviço Terra-espaço.

Para cada antena de recepção da estação espacial, indicar a(s) zona(s) de serviço associada(s) na superfície da Terra.

Ponto 2 Classe das estações e natureza do serviço.

Para cada zona de serviço Terra-espaço, indicar, utilizando os símbolos que figuram no apêndice 10, a classe das estações da rede de satélite e a natureza do serviço a efectuar.

Ponto 3 Faixa de frequências.

Para cada zona de serviço Terra-espaço, indicar a faixa de frequências em que se situarão as portadoras.

Ponto 4 Características de potência da onda emitida.

a) Para cada zona de serviço Terra-espaço, indicar a densidade espectral máxima de potência [dB(W/Hz] (1) fornecida à antena das estações terrenas de emissão (a largura de faixa em que é calculada depende da natureza do serviço de que se trata) para cada dimensão de antena de estação terrena de emissão e, se conhecida, a potência de ponta total (dBW) e a largura de faixa necessária dessa emissão;
b) Se essa informação estiver disponível, indicar, para cada zona de serviço Terra-espaço, tomando por referência o nível isotrópico, o diagrama de radiação real da antena da estação terrena de emissão para o qual a densidade espectral de potência isotrópica radiada equivalente fora do feixe principal é a mais elevada para cada dimensão de antena de estação terrena de emissão;
c) Se essa informação estiver disponível, para as portadoras de televisão e para cada zona serviço Terra-espaço, a potência de ponta fornecida à entrada da antena de emissão da estação terrena;
d) Se essa informação estiver disponível, indicar o valor mínimo da potência da portadora fornecida à antena da estação terrena para portadoras de faixa estreita.

Ponto 5 Características de antenas de recepção da estação espacial.

Para cada zona de serviço Terra-espaço:

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário, indicar o ganho máximo da antena de recepção da estação espacial e os contornos de ganho traçados num mapa da superfície terrestre, de preferência por meio de uma projecção

(1) Convém utilizar a versão mais recente do Relatório n.º 792 da CCIR, na medida em que se aplique ao cálculo da densidade máxima de potência por Hz.

radial a partir do satélite num plano perpendicular ao eixo que liga o centro da Terra ao satélite. Indicar o ganho isotrópico ou absoluto em cada contorno que corresponda a um ganho inferior 2 dB, 4 dB, 6 dB, 10 dB e 20 dB ao valor máximo, e assim por diante, de 10 dB em 10 dB, se necessário. Sempre que possível, os contornos de ganho estimados da antena de recepção da estação espacial deveriam igualmente ser indicados na forma de uma equação numérica ou na forma de um quadro;

b) No caso de uma estação espacial situada a bordo de um satélite não geostacionário, indicar o ganho isotrópico ou absoluto da antena de recepção da estação espacial na direcção de radiação máxima e o diagrama de radiação dessa antena, tomando como referência o ganho na direcção de radiação máxima;

c) Se essa informação estiver disponível, indicar, para cada antena de recepção da estação espacial, o tipo de polarização da antena. No caso de polarização circular, indicar o sentido dela (v. os n.os **148** e **149**);

d) No caso de uma estação espacial situada a bordo de um satélite geostacionário e que funcione numa faixa atribuída na direcção Terra-espaço e na direcção espaço-Terra, indicar igualmente o ganho estimado da antena de recepção da estação espacial na direcção das partes da órbita dos satélites geostacionários que não estão ocultas pela Terra por meio de um diagrama que indique o ganho de antena estimado em relação à longitude da órbita.

Ponto 6 Temperatura de ruído da estação espacial de recepção.

Para cada zona de serviço Terra-espaço, indicar, quando não é usado um simples repetidor-conversor de frequência a bordo da estação espacial, a temperatura de ruído mais baixa do conjunto do sistema de recepção à saída da antena de recepção.

Ponto 7 Largura de faixa necessária.

Se essa informação estiver disponível, indicar, no caso de portadoras de faixa estreita, a largura de faixa necessária.

Ponto 8 Características de modulação.

Se essa informação estiver disponível, no caso de portadoras de televisão, indicar as características de dispersão da energia, tais como o desvio de frequência ponta a ponta (em MHz) e a frequência de varrimento (kHz) da onda de dispersão.

SECÇÃO D

Características da rede de satélite no sentido espaço-Terra

Ponto 1 Zona(s) de serviço espaço-Terra.

Para cada antena de emissão da estação espacial, indicar a(s) zona(s) de serviço associada(s) na superfície da Terra.

Ponto 2 Classe das estações e natureza do serviço.

Para cada zona de serviço espaço-Terra, indicar, utilizando os símbolos que figuram no apêndice 10, a classe das estações da rede de satélite e a natureza do serviço a efectuar.

Ponto 3 Faixa de frequências.

Para cada zona de serviço espaço-Terra, indicar a faixa de frequências em que se situarão as portadoras.

Ponto 4 Características de potência da emissão.

a) Para cada zona de serviço espaço-Terra, indicar a densidade espectral máxima de potência [dB(W/Hz] (1) fornecida à antena de emissão da estação espacial (a largura de faixa em que é calculada depende da natureza do serviço de que se trata) e, se forem conhecidas, a potência de ponta total (dBW) e a largura de faixa necessária dessa emissão;

b) Se essa informação estiver disponível, indicar, para as portadoras de faixa estreita e para as portadoras de televisão, a potência de ponta fornecida à entrada da antena de emissão da estação espacial;

(1) Convém utilizar a versão mais recente do Relatório n.º 792 da CCIR, na medida em que se aplique ao cálculo da densidade máxima de potência por Hz.

c) Se essa informação estiver disponível, indicar o valor mínimo da potência da portadora fornecida à antena da estação espacial, para portadoras de faixa estreita.

Ponto 5 Características das antenas de emissão da estação espacial.

Para cada zona de serviço espaço-Terra:

a) No caso de uma estação espacial situada a bordo de um satélite geostacionário, indicar o ganho máximo da antena de emissão da estação espacial e os contornos de ganho traçados num mapa da superfície terrestre, de preferência numa projecção radial a partir do satélite, num plano perpendicular ao eixo que liga o centro da Terra ao satélite. Indicar o ganho isotrópico ou absoluto em cada contorno que corresponda a um ganho inferior 2 dB, 4 dB, 6 dB, 10 dB e 20 dB ao valor máximo, e assim por diante, de 10 dB em 10 dB, se necessário. Sempre que possível, os contornos de ganho estimados da antena de emissão da estação espacial deveriam igualmente ser indicados na forma de uma equação numérica ou na forma de um quadro;

b) No caso de uma estação espacial situada a bordo de um satélite não geostacionário, indicar o ganho isotrópico ou absoluto da antena de emissão da estação espacial na direcção de radiação máxima e o diagrama de radiação dessa antena, tomando como referência o ganho na direcção de radiação máxima;

c) Se a informação estiver disponível, indicar, para cada antena de emissão da estação espacial, o tipo de polarização da antena. No caso de polarização circular, indicar o sentido dela (v. os n.^{os} **148** e **149**);

d) No caso de uma estação espacial situada a bordo de um satélite geostacionário que funcione numa faixa atribuída no sentido Terra-espaço e no sentido espaço-Terra, indicar igualmente o ganho estimado da antena de emissão da estação espacial na direcção das partes da órbita dos satélites geostacionários que não estão ocultas pela Terra por meio de um diagrama que mostre o ganho de antena estimado em relação à longitude da órbita.

Ponto 6 Características de recepção das estações terrenas.

a) Para cada zona de serviço espaço-Terra, indicar, quando não é usado um simples repetidor-conversor de frequência a bordo da estação espacial, a temperatura de ruído, mais baixa do conjunto do sistema de recepção das estações terrenas à saída da antena de recepção;
Para cada zona de serviço espaço-Terra e para cada utilização ([1]) projectada, indicar, quando são usados simples repetidores-conversores de frequência a bordo da estação espacial:

1) A mais baixa temperatura de ruído equivalente de ligação por satélite e o valor associado do ganho de transmissão;
2) Os valores do ganho de transmissão e da temperatura de ruído equivalente de ligação associada que correspondem à relação mais elevada «ganho de transmissão/temperatura de ruído equivalente de ligação por satélite». O ganho de transmissão avalia-se entre a saída da antena de recepção da estação espacial e a saída da antena de recepção da estação terrena. Para cada utilização projectada, indicar igualmente a que antena(s) de recepção da estação espacial será ligado cada simples repetidor-conversor de frequência;

b) Se essa informação estiver disponível, indicar para cada zona de serviço espaço-Terra, tomando como referência o nível isotrópico, o diagrama de radiação real da antena da estação terrena de recepção cujo nível fora do feixe principal seja o mais elevado para cada dimensão de antena de estação terrena de recepção. Quando se usam simples repetidores-conversores de frequência a bordo da estação espacial, indicar igualmente, se essa informação estiver disponível, o diagrama que está associado a cada uma das estruturas de ruído equivalentes de ligação por satélite indicadas acima.

Ponto 7 Largura de faixa necessária.

Se essa informação estiver disponível, indicar, no caso de portadoras de faixa estreita, a largura de faixa necessária.

Ponto 8 Características de modulação.

Se essa informação estiver disponível, no caso de portadoras de televisão, indicar as características de dispersão da energia, tais como o desvio de frequência ponta a ponta (MHz) e a frequência de varrimento (kHz) da onda de dispersão.

([1]) Considerar-se-á que se trata de utilizações diferentes quando se usam tipos diferentes de portadora (pela sua densidade espectral máxima de potência ou de tipos diferentes de estações terrenas de recepção (pelo seu ganho de antena de recepção).

SECÇÃO E

Características a fornecer para as ligações espaço-espaço

Se a rede de satélite estiver ligada a uma ou várias outras redes de satélite por meio de ligações espaço-espaço, indicar:

a) A entidade da(s) rede(s) de satélite(s) à(s) qual(ais) está ligada a rede de satélite considerada;
b) As faixas de frequência de emissão e de recepção;
c) As classes de emissão;
d) As potências isotrópicas radiadas equivalentes (p. i. r. e.) nominais no eixo dos feixes de antena.

SECÇÃO F

Informações suplementares (se disponíveis)

Ponto 1 Generalidades.

Uma administração ou uma administração agindo em nome de um grupo de administrações, expressamente nomeadas, que o deseje poderá fornecer informações suplementares. Essas informações poderão servir para os cálculos de interferência relativos ao processo de publicação antecipada. Podem compreender todos ou parte dos dados indicados nos pontos seguintes, cuja lista não é limitativa, mas dão uma indicação do tipo de informações que podem ser dadas.

Ponto 2 Sentido Terra-espaço.

Para cada zona de serviço Terra-espaço, podem fornecer-se as informações seguintes:

a) Classe de emissão, largura de faixa necessária e características de modulação (inclusive, se for caso disso, a dispersão da energia) para cada tipo de portadora emitida;
b) P. i. r. e. da estação terrena para cada tipo de portadora associada a cada tipo e diâmetro de antena de estação terrena;
c) A descrição técnica e as características do sistema de telecomando (excepto para os dados de código).

Ponto 3 Sentido espaço-Terra.

Para cada zona de serviço espaço-Terra, podem fornecer-se as informações seguintes:

a) Classe de emissão, largura de faixa necessária e características de modulação (inclusive, se for caso disso, a dispersão da energia) para cada tipo de portadora;
b) Potência de emissão do satélite fornecida à antena de emissão desse satélite para cada tipo de portadora;
c) A descrição técnica e as características do sistema de emissões de seguimento e de telemedida (excepto para os dados de código).

Ponto 4 Qualquer outra informação que possa ser útil.

APÊNDICE 5

Informações a fornecer em conformidade com as disposições dos n.os 1682 a 1684

(V. o artigo 16)

Adjudicação inicial	Adjudicação adicional	Adjudicação de substituição (n.º 1721)

1. País ou zona de adjudicação.....

2.2.1. Frequência proposta ..... { Frequência portadora ... kHz. / Frequência consignada ... kHz.
2.2. Outra frequência proposta ..... { Frequência portadora ... kHz. / Frequência consignada ... kHz.
2.3. Frequência a substituir (n.º 1721) ..... { Frequência portadora ... kHz. / Frequência consignada ... kHz.

3.3.1. Zona de serviço principal ...
3.2. Comprimento máximo da ligação (em km)...
4. Natureza do serviço (por exemplo: CP, CO, CV ou OT) ...

5. Classe de emissão ...
6. Potência de ponta (em kW) ...
7. Características da antena de emissão (v. pormenores no apêndice 1):
7.1 Se se tratar de uma antena não direccional, inscrever o símbolo «ND» ...
7.2 Se se trata de uma antena direccional, indicar:

a) O azimute da radiação máxima ...
b) O ângulo de abertura do lóbulo principal ...
c) O ganho relativo da antena, em dB ...

8. Horário de utilização previsto da frequência proposta ... às ... h (UTC).
9. Indicar, se possível:

a) As horas de ponta do tráfego (estimativa) ... às ... h (UTC);
b) O volume diário do tráfego em minutos (estimativa) ...

10. Data prevista para a primeira utilização da via ... (mês) ... (ano).

APÊNDICE 6

Características adicionais para a classificação das emissões; determinação das larguras de faixa necessárias, exemplos de cálculo da largura de faixa necessária e exemplos conexos de designação das emissões

(V. o artigo 4)

PARTE A

Características adicionais para a classificação das emissões

O artigo 4 do presente Regulamento descreve, empregando três símbolos, as características fundamentais para a classificação das emissões. Para uma descrição mais pormenorizada das emissões convém recorrer a duas características adicionais facultativas.

Essas características adicionais facultativas (v., também, a Recomendação n.º 62) são as seguintes:

Quarto símbolo — pormenores relativos ao sinal (ou aos sinais);
Quinto símbolo — natureza da multiplexagem.

Se não se utilizar o quarto nem o quinto símbolos, convém mencionar esse facto por um traço colocado no lugar onde cada símbolo deveria figurar.

1. *Quarto símbolo* — pormenores relativos ao sinal (ou aos sinais):

1.1 Código bivalente com elementos de sinal que diferem quer em número quer em duração	A
1.2 Código bivalente, com elementos de sinal idênticos em número e em duração, sem correcção de erros	B
1.3 Código bivalente, com elementos de sinal idênticos em número e em duração, sem correcção de erros	C
1.4 Código quadrivalente, no qual cada estado representa um elemento de sinal (de um ou vários bits)	D
1.5 Código plurivalente, no qual cada estado representa um elemento de sinal (de um ou vários bits)	E
1.6 Código plurivalente, no qual cada estado ou combinação de estados representa um carácter	F
1.7 Som de qualidade radiofónica (monofónico)	G
1.8 Som de qualidade radiofónica (estereofónico ou quadrifónico)	H
1.9 Som de qualidade comercial (com exclusão das categorias indicadas em 1.10 e 1.11)	J
1.10 Som de qualidade comercial com emprego da inversão das frequências ou do corte da faixa	K
1.11 Som de qualidade comercial, com sinais separados modulados em frequência para comandar o nível do sinal desmodulado	L
1.12 Imagem em preto e branco	M
1.13 Imagem em cor	N
1.14 Combinação dos casos acima	W
1.15 Outros casos	X

2. *Quinto símbolo* — natureza da multiplexagem:

2.1 Sem multiplexagem	N
2.2 Multiplexagem por divisão do código (*)	C
2.3 Multiplexagem por divisão em frequência	F

(*) Compreende as técnicas de expansão da largura de faixa.

2. 4 Multiplexagem por divisão no tempo ..... T
2. 5 Combinação da multiplexagem por divisão em frequência e da multiplexagem por divisão no tempo ..... W
2. 6 Outros tipos de multiplexagem X

PARTE B

Determinação das larguras de faixa necessárias, exemplos de cálculo da largura de faixa necessária e exemplos conexos de designação das emissões

Para designar completamente uma emissão é preciso acrescentar, imediatamente antes dos símbolos de classificação, a largura de faixa necessária, indicada por quatro carecteres. Quando utilizada, a largura de faixa necessária deve ser determinada por um dos métodos seguintes:

1) Utilização das fórmulas contidas no quadro seguinte, que contém igualmente exemplos de larguras de faixa necessárias e de designação das emissões correspondentes;
2) Cálculo baseado nos pareceres da CCIR (1);
3) Medida, nos casos não previstos nas alíneas 1) e 2) anteriores.

Contudo, a largura de faixa necessária assim determinada não é a única característica de uma emissão que convém tomar em consideração quando se trata de avaliar a interferência que essa emissão é susceptível de causar.

Na redacção do quadro foram utilizadas as seguintes notações:

B_m = Largura de faixa necessária, em hertzs;
B = Velocidade de modulação, em bauds;
N = Número máximo possível de elementos «pretos mais brancos» a transmitir por segundo no caso do fac-símile;
M = Frequência máxima de modulação, em hertzs;
C = Frequência da subportadora em hertzs;
D = Desvio de ponta, quer dizer, metade da diferença entre os valores máximo e mínimo da frequência instantânea. A frequência instantânea em hertzs obtém-se dividindo a velocidade de variação da fase, em radianos, por 2π;
t = Duração do impulso, em segundos, em meia amplitude;
t_c = Tempo de subida do impulso, em segundos, entre 10 % e 90 % de amplitude;
K = Factor numérico geral, que varia segundo a emissão e que depende da distorção admissível do sinal;
N_c = Número de vias na faixa de base nos sistemas radioeléctricos *multiplex* de várias vias;
f_p = Frequência da subportadora piloto de continuidade, em hertz (sinal contínuo utilizado para controlar a qualidade de funcionamento dos sistemas de multiplexagem por divisão em frequência).

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
I. Nenhum sinal modular			
Onda persistente pura	—	—	Não
II. Modulação de amplitude			
1. Sinal contendo informação quantificada ou numérica			
Telegrafia por ondas persistentes, código Morse.	$B = BK$. $K = 5$ para as ligações afectadas de desvanecimento. $K = 3$ para as ligações sem desvanecimento.	25 palavras por minuto. $B = 20$, $K = 5$. Largura de faixa: 100 Hz	100HA1AAN
Telegrafia de manipulação por tudo ou nada de uma portadora modulada por uma frequência audível, código Morse.	$B = BK + 2M$. $K = 5$ para as ligações afectadas de desvanecimento. $K = 3$ para as ligações sem desvanecimento.	25 palavras por minuto. $B = 20$, $M = 100$. $K = 5$. Largura de faixa: 2100 Hz = 2,1 kHz ..	2K10A2AAN

(1) V., igualmente, a Recomendação n.º 63.

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
Sinal de chamada selectiva com emprego de um código sequencial a uma única frequência, faixa lateral única, onda portadora completa.	$B_n = M$. $M = \frac{B}{2}$.	Frequência máxima do código: 2110 Hz. M = 2110. Largura de faixa: 2110 Hz = 2,11 kHz	2K11H2BFN
Telegrafia com impressão directa, com emprego de uma suportadora modulante por variação de frequência, correcção de erros, faixa lateral única, onda portadora suprimida (uma única via).	$B_n = 2M + 2DK$.	B = 50. D = 35 Hz (deslocamento 70 Hz). K = 1,2. Largura de faixa: 134 Hz	134HJ2BCN
Telegrafia harmónica multivia com correcção de erros, algumas vias são multiplexadas por divisão no tempo, faixa lateral única, onda portadora reduzida.	B_n = frequência central mais elevada + $M + DK$. $M = \frac{B}{2}$.	15 vias, frequência central mais elevada = 2805 Hz. B = 100. D = 42,5 Hz (deslocamento 85 Hz). K = 0,7. Largura de faixa: 2885 Hz = 2,885 kHz	2K89R7BCW

2. Telefonia (qualidade comercial)

Telefonia, dupla faixa lateral (uma única via.	$B_n = 2M$.	M = 3000. Largura de faixa: 6000 Hz = 6 kHz	6K00A3EJN
Telefonia, faixa lateral única, onda portadora completa (uma única via).	$B_n = M$.	M = 3000. Largura de faixa: 3000 Hz = 3 kHz	3K00H3EJN
Telefonia, faixa lateral única, onda portadora suprimida (uma única via).	$B_n = M$ — a mais baixa frequência de modulação.	M = 3000. Frequência de modulação mais baixa = 300 Hz. Largura de faixa: 2700 Hz = 2,7 kHz ..	2K70J3EJN
Telefonia com sinais distintos modelados em frequência para regular o nível do sinal vocal desmodulado, faixa lateral única, onda portadora reduzida (Lincompex) (uma única via).	$B_n = M$.	Frequência máxima de ajuste: 2990 Hz. M = 2990. Largura de faixa: 2990 Hz = 2,99 kHz	2K99R3ELN
Telefonia com dispositivo de segredo, faixa lateral única, onda portadora suprimida (duas vias ou mais).	$B_n = NM$ — a mais baixa frequência de modulação.	N = 2. M = 3000, a mais baixa frequência de modulação: 250 Hz. Largura de faixa: 5750 Hz = 5,75 kHz	5K75J8EKF
Telefonia, faixa lateral independente (duas via ou mais).	B_n = soma de M para cada faixa lateral.	2 vias. M = 3000. Largura de faixa: 6000 Hz = 6 kHz	6K00B8EJN

3. Radiodifusão sonora

Radiodifusão sonora, faixa lateral dupla.	$B_n = 2M$. M pode variar entre 4000 e 10 000, segundo a qualidade desejada.	Palavra e música, M = 4000. Largura de faixa: 8000 Hz = 8 kHz	8K00A3EGN
Radiodifusão sonora, faixa lateral única, onda portadora reduzida (uma única via).	$B_n = M$. M pode variar entre 4000 e 10 000, segundo a qualidade desejada.	Palavra e música, M = 4000. Largura de faixa: 4000 Hz = 4 kHz	4K00R3EGN
Radiodifusão sonora, faixa lateral única, onda portadora suprimida.	$B_n = M$ — a mais baixa frequência de modulação.	Palavra e música, M = 4500, a mais baixa frequência de modulação = 50 Hz. Largura de faixa: 4450 Hz = 4,45 kHz	4K45J3EGN

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
4. Televisão			
Televisão, imagem e som.	Para as larguras de faixa comummente utilizadas para os sistemas de televisão, v. os documentos correspondentes da CCIR.	Número de linhas: 625. Largura de faixa vídeo nominal: 5 MHz. Portadora sonora em relação à portadora imagem: 5,5 MHz. Largura de faixa total para a imagem: 6,25 MHz ..... Largura de via de transmissão sonora modulada em frequência, incluindo as faixas de guarda: 750 kHz ..... Largura de faixa da via nas frequências radioeléctricas: 7 MHz.	6M25C3F – – 750KF3EGN
5. Fac-símile			
Fac-símile analógico por modulação em frequência da subportadora de uma emissão de faixa lateral única, onda portadora reduzida, preto e branco.	$B_n = C + \frac{N}{2} + DK.$ $K = 1,1.$ (Valor tipo.)	N = 1100, correspondente a um módulo de cooperação de 352 e a uma velocidade de rotação do ciclindro de 60 voltas por minuto. O módulo de cooperação é o produto do diâmetro do cilindro pelo número de linhas por unidade de comprimento. C = 1900, D = 400 Hz. Largura de faixa: 2890 Hz = 2,89 kHz	2H89R3CMN
Fac-símile analógico; modulação em frequência de uma subportadora audiofrequência modulando a portadora principal, faixa lateral única, onda portadora suprimida.	$B_n = 2M + 2DK.$ $M = \frac{N}{2}$ $K = 1,1.$ (Valor tipo.)	N = 1100. D = 400 Hz. Largura de faixa: 1980 Hz = 1,98 kHz	1K98J3C – –
6. Emissões compósitas			
Dupla faixa lateral, feixe hertziano de televisão.	$B_n = 2C + 2M + 2D.$	Frequências vídeo limitadas a 5 MHz, som na subportadora 6,5 MHz, modulada em frequência com desvio de 50 kHz: $C = 6,5 \times 10^6$; $D = 50 \times 10^3$ Hz; M = 15 000. Largura de faixa: 13,13 x 10^6 Hz = 13,13 MHz	13M1A8W – –
Dupla faixa lateral, feixe hertziano, multiplexagem por divisão em frequência.	$B_n = 2M.$	10 vias telefónicas, ocupando a faixa de base 1-164 kHz. M = 164 000. Largura de faixa: 328 000 Hz = 328 kHz	328KA8E – –
Dupla faixa lateral de VOR com telefonia (VOR = radiofarol de alinhamento equidireccional VHF).	$B_n = 2C_{mod} + 2M + 2DK.$ $K = 1.$ (Valor tipo.)	A portadora principal é modulada por: Uma subportadora de 30 Hz; Uma portadora resultante de uma tonalidade de 9960 Hz, modula em frequência por uma tonalidade de 30 Hz; Uma via telefónica; Uma tonalidade de 1020 Hz, manipulada para identificação contínua em morse. C_{mod} = 9960. M = 30. D = 480 Hz. Largura de faixa: 20 940 Hz = 20,94 kHz	20K9A9WWF

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
Faixas laterais independentes; várias vias telegráficas com correcção de erros, assim como várias vias telefónicas com dispositivo de segredo; multiplexagem por divisão em frequência.	B_n = soma de M para cada faixa lateral.	Normalmente, os sistemas compósitos são explorados em conformidade com as disposições normalizadas das vias (por exemplo: parecer n.º 348-2 da CCIR). Para 3 vias telefónicas e 15 vias telegráficas a largura de faixa necessária é de 12 000 Hz = 12 kHz	12K0B9WWF

III-A. Modulação de frequência

1. Sinal contendo informação quantificada ou numérica

Telegrafia sem correcção de erros (uma única via).	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valor tipo.)	$B = 100$. $D = 85$ Hz (deslocamento 170 Hz). Largura de faixa: 304 Hz	304HF1BBN
Telegrafia com impressão directa de faixa estreita, com correcção de erros (uma única via).	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valor tipo.)	$B = 100$. $D = 85$ Hz (deslocamento 170 Hz). Largura de faixa: 304 Hz	304HF1BCN
Sinal de chamada selectiva.	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valor tipo.)	$B = 100$. $D = 85$ Hz (deslocamento 170 Hz). Largura de faixa: 304 Hz	304HF1BCN
Telegrafia dúplex a quatro frequências.	$B_n = 2M + 2DK$. B = velocidade de modulação em bauds da via mais rápida. Se as vias forem sincronizadas: $M = \frac{B}{2}$ (se não o forem: $M = 2B$). $K = 1,1$. (Valor tipo.)	Espaçamento entre frequências adjacentes = 400 Hz. Vias sincronizadas: $B = 100$; $M = 50$; $D = 600$ Hz. Largura de faixa: 1420 Hz = 1,42 kHz	1K42F7BDX

2. Telefonia (qualidade comercial)

Telefonia comercial.	$B = 2M + 2DK$. $K = 1$. (Valor tipo, mas em determinadas condições podem ser necessários valores maiores de K.)	Caso médio de telefonia comercial. $D = 5000$ Hz. $M = 3000$. Largura de faixa: 16 000 Hz = 16 kHz	16K0F3EJN

3. Radiodifusão sonora

Radiodifusão sonora.	$B_n = 2M + 2DK$. $K = 1$. (Valor tipo.)	Monofónica. $D = 75\,000$ Hz. $M = 15\,000$. Largura de faixa: 180 000 Hz = 180 kHz	180KF3EGN

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
4. Fac-símile			
Fac-símile por modulação directa em frequência da portadora; preto e branco.	$B_n = 2M + 2DK$. $M = \frac{N}{2}$. $K = 1,1$. (Valor tipo.)	N = 1100 elementos por segundo; D = 400 Hz. Largura de faixa: 1980 Hz = 1,98 kHz	1K98F1C--
Fac-símile analógico.	$B_n = 2M + 2DK$. $M = \frac{N}{2}$. $K = 1,1$. (Valor tipo.)	N = 1100 elementos por segundo; D = 400 Hz. Largura de faixa: 1980 = 1,98 kHz	1K98F3C--
5. Emissões compósitas (v. o quadro III-B)			
Feixe hertziano, multiplexagem por divisão em frequência.	$B_n = 2f_p + 2DK$. $K = 1$. (Valor tipo.)	60 vias telefónicas ocupando a faixa de base 60-300 kHz; desvio efectivo por via: 200 kHz; a frequência piloto de continuidade (331 kHz) dá lugar a um desvio efectivo da portadora principal de 100 kHz. $D = 200 \times 10^3 \times 3,76 \times 2,02 = 1,52 \times 10^6$ Hz. $f_p = 0,331 \times 106$ Hz. Largura de faixa : 3,702 × 106 Hz = 3,702 MHz	3M70F8EJF
Feixe hertziano, multiplexagem por divisão em frequência.	$B_n = 2M + 2DK$. $K = 1$. (Valor tipo.)	960 vias telefónicas ocupando a faixa de base 60-4028 kHz; desvio efectivo por via: 200 kHz; a frequência piloto de continuidade (4715 kHz) dá lugar a um desvio efectivo da portadora principal de 140 kHz. $D = 200 \times 10^3 \times 3,76 \times 5,5 = 4,13 \times 10^6$ Hz. $M = 4,028 \times 10^6$. $f_p = 4,715 \times 10^6$: $(2M + 2DK) > 2 f_p$. Largura de faixa: $16,32 \times 10^6$ Hz = 16,32 MHz	16M3F8EJF
Feixe hertziano, multiplexagem por divisão em frequência.	$B_n = 2f_p$.	600 vias telefónicas ocupando a faixa de base 60-2540 kHz; desvio efectivo por via: 200 kHz; a frequência piloto de continuidade (8500 kHz) dá lugar a um desvio efectivo da portadora principal de 140 kHz. $D = 200 \times 10^3 \times 3,76 \times 4,36 = 3,28 \times 10^6$ Hz. $M = 2,54 \times 10^6$. $K = 1$. $f_p = 8,5 \times 10^6$; $(2M + 2DK) < 2 f_p$. Largura de faixa: 17×10^6 Hz = 17 MHz.	17M0F8EJF
Radiodifusão sonora estereofónica com subportadora subsidiária de telefonia multiplexada.	$B_n = 2M + 2DK$. $K = 1$. (Valor tipo.)	Sistema com frequência piloto. M = 75 000. D = 75 000 Hz. Largura de faixa: 300 000 Hz = 300 kHz	300 KF8EHF

III-B. Factores de multiplicação a utilizar para calcular *D*, desvio de frequência de ponta, nas emissões multivias de modulação de frequência e multiplexagem por divisão em frequência (MF/MRF)

Para os sistemas MF/MRF, a largura de faixa necessária é:

$$B_n = 2M + 2DK$$

Calcula-se o valor de *D*, ou de desvio de frequência de ponta, nas fórmulas para B_n, multiplicando o valor efectivo de desvio por via pelo factor multiplicativo apropriado indicado abaixo.

No caso de uma onda piloto de continuidade de frequência f_p estar presente acima da frequência máxima de modulação *M*, a fórmula geral toma a seguinte forma:

$$B_n = 2f_p + 2DK$$

No caso de o índice de modulação da portadora principal produzido pela onda piloto ser inferior a 0,25 e de valor efectivo do desvio de frequência da portadora principal produzido pela onda piloto ser inferior ou igual a 70 % do valor efectivo do desvio por via, a fórmula geral é aquela das duas seguintes que dê o maior valor:

$$B_n = 2f_p \quad \text{ou} \quad B_n = 2M + 2DK$$

Número de vias telefónicas N_c	Factor multiplicativo (*a*)
	(Factor de ponta) × antilog $\left[\frac{\text{Valor de dB acima do nível de modulação de referência}}{20}\right]$
$3 < N_c < 12$	4,47 × antilog $\left[\frac{\text{Um valor em dB especificado pelo construtor do equipamento ou pelo explorador da estação, sob reserva da aprovação da administração}}{20}\right]$
$12 \leq N_c < 60$	3,76 × antilog $\left[\frac{2{,}6 - 2 \log N_c}{20}\right]$

(*a*) Neste quadro, os factores multiplicativos 3,76 e 4,47 correspondem, respectivamente, a factores de ponta de 11,5 dB e 13 dB.

Número de vias telefónicas N_c	Factor multiplicativo (*a*)
	(Factor de ponta) × antilog $\left[\frac{\text{Valor de dB acima do nível de modulação de referência}}{20}\right]$
$60 \leq N_c < 240$	3,76 × antilog $\left[\frac{-1 - 4 \log N_c}{20}\right]$
$N_c \geq 240$	3,76 × antilog $\left[\frac{-15 - 10 \log N_c}{20}\right]$

(*a*) Neste quadro, o factor multiplicativo 3,76 corresponde a um factor de ponta de 11,5 dB.

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	

IV. Modulação por impulsos

1. Radar

Emissão de impulsos não modulados.	$B_n = \frac{2k}{t}$. *K* depende da relação entre a duração do impulso e o tempo de subida do impulso. O seu valor situa-se geralmente entre 1 e 10 e em numerosos casos o seu valor não necessita de exceder 6.	Radar primário. Poder separador em distância: 150 m. $K = 1{,}5$ (impulso triangular em que $t = t_r$, sendo tomadas em consideração só as componentes mais fortes até 27 dB). Donde $t = \frac{2 \text{ (poder separador em distância)}}{\text{Velocidade da luz}} = \frac{2 \times 150}{3 \times 10^8} = 1 \times 10^{-6}$ segundo. Largura de faixa: 3×10^6 Hz = 3 MHz	3M00P0NAN

Descrição da emissão	Largura de faixa necessária		Designação da emissão
	Fórmula	Exemplo de cálculo	
2. Emissões compósitas			
Feixe hertziano.	$B_n = \frac{2k}{t}$ $K = 1,6$	Impulsos modulados em posição por uma faixa de base de 36 vias telefónicas. Duração do impulso em meia amplitude = 0,4 μs. Largura de faixa: 8×10^6 Hz = 8 MHz (Largura de faixa independente do número de vias telefónicas.)	8M00M7EJT

APÊNDICE 7

Quadro das tolerâncias de frequência dos emissores

(V. o artigo 5)

§ 1. A tolerância de frequência vem definida no artigo 1 e, salvo indicação contrária, exprime-se em milionésimas.

§ 2. A potência indicada para as diversas categorias de estações é, salvo indicação contrária, a potência de ponta dos emissores de faixa lateral única e a potência média para todos os outos emissores. O termo «potência de um emissor radioeléctrico» vem definido no artigo 1.

§ 3. Por razões técnicas ou de exploração certas categorias de estações podem necessitar tolerâncias mais apertadas do que as especificadas no quadro.

Faixas de frequência (limite inferior excluído, limite superior incluído) e categorias de estações	Tolerâncias aplicáveis até 1 de Janeiro de 1990 aos emissores actualmente em serviço e àqueles que foram instalados antes de 2 de Janeiro de 1985.	Tolerâncias aplicáveis aos novos emissores instalados depois de 1 de Janeiro de 1985 e a todos os emissores depois de 1 de Janeiro de 1990.
1	2	3
Faixa: de 9 kHz a 535 kHz		
1. *Estações fixas:*		
De 9 kHz a 50 kHz	1000	100
De 50 kHz a 535 kHz	200	50
2. *Estações terrestres:*		
a) Estações costeiras	–	(1) 100
De potência inferior ou igual a 200 W	(2) 500	–
De potência superior a 200 W	(2) 200	–
b) Estações aeronáuticas	100	100
3. *Estações móveis:*		
a) Estações de navio	(3) 1000	(4) 200
b) Emissões de socorro de navio	5000	(5) 500
c) Estações de engenho de salvamento	5000	500
d) Estações de aeronave	500	100
4. *Estações de radiodeterminação*	100	100
5. *Estações de radiodifusão*	10 Hz	10 Hz
Faixa: de 535 kHz a 1606,5 kHz (1605 kHz, Região 2)		
Estações de radiodifusão	(6) 10 Hz	(6) 10 Hz

Faixas de frequência (limite inferior excluído, limite superior incluído) e categorias de estações	Tolerâncias aplicáveis até 1 de Janeiro de 1990 aos emissores actualmente em serviço e àqueles que foram instalados antes de 2 de Janeiro de 1985.	Tolerâncias aplicáveis aos novos emissores instalados depois de 1 de Janeiro de 1985 e a todos os emissores depois de 1 de Janeiro de 1990.
1	2	3
Faixa: de 1606,5 kHz (1605 kHz, Região 2) a 4000 kHz		
1. *Estações fixas:*		
De potência inferior ou igual a 200 W	100	(7) (8) 100
De potência superior a 200 W	50	(7) (8) 50
2. *Estações terrestres:*		
De potência inferior ou igual a 200 W	(2) (9) (10) 100	(1) (7) (10) 100
De potência superior a 200 W	(2) (9) (10) 50	(1) (7) (10) 50
3. *Estações móveis:*		
a) Estações de navio	(3) (11) 200	(12) 40 Hz
b) Estações de engenho de salvamento	300	100
c) Radiobalizas de localização de sinistros	300	100
d) Estações de aeronave	(10) 100	(10) 100
e) Estações móveis terrestres	200	(13) 50
4. *Estações de radiodeterminação:*		
De potência inferior ou igual a 200 W	100	(14) 20
De potência superior a 200 W	50	(14) 10
5. *Estações de radiodifusão*	20	(15) 10 Hz
Faixa: de 4 MHz a 29,7 MHz		
1. *Estações fixas:*		
De potência inferior ou igual a 500 W	50	–
De potência superior a 500 W	15	–
a) Emissões de faixa lateral única e faixa lateral independente:		
De potência inferior ou igual a 500 W	–	50 Hz
De potência superior a 500 W	–	20 Hz
b) Emissões de classe FIB	–	10 Hz
c) Outras classes de emissão:		
De potência inferior ou igual a 500 W	–	20
De potência superior a 500 W	–	10
2. *Estações terrestres:*		
a) Estações costeiras	–	(1) (16) 20 Hz
De potência inferior ou igual a 500 W	(2) (9) 50	–
De potência superior a 500 W e inferior ou igual a 5 kW	(2) (9) 30	–
De potência superior a 5 kW	(2) (9) 15	–
b) Estações aeronáuticas:		
De potência inferior ou igual a 500 W	(10) 100	(10) 100
De potência superior a 500 W	(10) 50	(10) 50
c) Estações de base	–	(7) 20
De potência inferior ou igual a 500 W	100	–
De potência superior a 500 W	50	–
3. *Estações móveis:*		
a) Estações de navio:		
1) Emissões de classe A1A	(17) (18) 50	10
2) Emissões de classe diferente de A1A	(3) (11) 50	(4) (19) 50 Hz
b) Estações de engenho de salvamento	200	50
c) Estações de aeronave	(10) 100	(10) 100
d) Estações móveis terrestres	200	(20) 40
4. *Estações de radiodifusão*	15	(15) (21) 10 Hz
5. *Estações espaciais*	–	20
6. *Estações terrenas*	–	20

Faixas de frequência (limite inferior excluído, limite superior incluído) e categorias de estações	Tolerâncias aplicáveis até 1 de Janeiro de 1990 aos emissores actualmente em serviço e àqueles que foram instalados antes de 2 de Janeiro de 1985.	Tolerâncias aplicáveis aos novos emissores instalados depois de 1 de Janeiro de 1985 e a todos os emissores depois de 1 de Janeiro de 1990.
1	2	3
Faixa: de 29,7 MHz a 100 MHz		
1. *Estações fixas:*		
De potência inferior ou igual a 200 W	50	–
De potência superior a 200 W	30	–
De potência inferior ou igual a 50 W	–	30
De potência superior a 50 W	–	20
2. *Estações terrestres*	–	20
De potência inferior ou igual a 15 W	50	–
De potência superior a 15 W	20	–
3. *Estações móveis*	–	(22) 20
De potência inferior ou igual a 15 W	100	–
De potência superior a 5 W	50	–
4. *Estações de radiodeterminação*	200	50
5. *Estações de radiodifusão (diferentes de televisão)*	–	(23) 2 000 Hz
De potência inferior ou igual a 50 W	50	–
De potência superior a 50 W	20	–
6. *Estações de radiodifusão (televisão, som e imagem)*	–	(24) (25) 500 Hz
De potência inferior ou igual a 50 W	100	–
De potência superior a 50 W	1000 Hz	–
7. *Estações espaciais*	–	20
8. *Estações terrenas*	–	20
Faixa: de 100 MHz a 470 MHz		
1. *Estações fixas:*		
De potência inferior ou igual a 50 W	50	(26) 20
De potência superior a 50 W	20	10
2. *Estações terrestres:*		
a) Estações costeiras	(27) 20	10
b) Estações aeronáuticas	50	(28) 20
c) Estações de base:		
De potência inferior ou igual a 5 W	50	–
De potência superior a 5 W	20	–
Na faixa 100-235 MHz	–	(29) 15
Na faixa 235-401 MHz	–	(29) 7
Na faixa 401-470 MHz	–	(29) 5
3. *Estações móveis:*		
a) Estações de navio e estações de engenho de salvamento:		
Na faixa 156-174 MHz	(27) 20	10
Fora da faixa 156-174 MHz	(30) (31) 50	(31) 50
b) Estações de aeronave	50	(28) 30
c) Estações móveis terrestres:		
De potência inferior ou igual a 5 W	50	–
De potência superior a 5 W	20	–
Na faixa 100-235 MHz	–	(29) 15
Na faixa 235-401 MHz	–	(29) (32) 7
Na faixa 401-470 MHz	–	(29) (32) 5
4. *Estações de radiodeterminação*	(30) (33) 50	(33) 50
5. *Estações de radiodifusão (diferentes de televisão)*	20	(23) 2 000 Hz
6. *Estações de radiodifusão (televisão, som e imagem)*	–	(24) (25) 500 Hz
De potência inferior ou igual a 100 W	100	–
De potência superior a 100 W	1 000 Hz	–
7. *Estações espaciais*	–	20
8. *Estações terrenas*	–	20

Faixas de frequência (limite inferior excluído, limite superior incluído) e categorias de estações	Tolerâncias aplicáveis até 1 de Janeiro de 1990 aos emissores actualmente em serviço e àqueles que foram instalados antes de 2 de Janeiro de 1985.	Tolerâncias aplicáveis aos novos emissores instalados depois de 1 de Janeiro de 1985 e a todos os emissores depois de 1 de Janeiro de 1990.
1	2	3
Faixa: de 470 MHz a 2450 MHz		
1. *Estações fixas:*		
De potência inferior ou igual a 100 W	(34) 300	100
De potência superior a 100 W	(35) 100	50
2. *Estações terrestres*	300	(36) 20
3. *Estações móveis*	300	(36) 20
4. *Estações de radiodeterminação*	(33) 500	(33) 500
5. *Estações de radiodifusão (diferentes de televisão)*	100	100
6. *Estações de radiodifusão (televisão, som e imagem)* na faixa de 470 MHz a 960 MHz	–	(24) (25) 500 Hz
De potência inferior ou igual a 100 W	100	–
De potência superior a 100 W	1 000 Hz	–
7. *Estações espaciais*	–	20
8. *Estações terrenas*	–	20
Faixa: de 2450 MHz a 10 500 MHz		
1. *Estações fixas:*		
De potência inferior ou igual a 100 W	(34) 300	200
De potência superior a 100 W	(35) 100	50
2. *Estações terrestres*	300	100
3. *Estações móveis*	300	100
4. *Estações de radiodeterminação*	(33) 2 000	(33) 1 250
5. *Estações espaciais*	–	50
6. *Estações terrenas*	–	50
Faixa: de 10,5 GHz a 40 GHz		
1. *Estações fixas*	500	300
2. *Estações de radiodeterminação*	(33) 7 500	(33) 5 000
3. *Estações de radiodifusão*	–	100
4. *Estações espaciais*	–	100
5. *Estações terrenas*	–	100

Notas relativas ao quadro das tolerâncias de frequência dos emissores

(1) Para os emissores de estação costeira utilizados para a telegrafia com impressão directa ou para a transmissão de dados a tolerância é de 15 Hz.

(2) Para os emissores de estação costeira utilizados para a telegrafia com impressão directa ou para a transmissão de dados a tolerância é de 15 Hz. Esta tolerância é aplicável aos aparelhos instalados depois de 1 de Janeiro de 1976 e à totalidade dos aparelhos a partir de 1 de Janeiro de 1985. Para os aparelhos instalados antes de 2 de Janeiro de 1976, a tolerância é de 40 Hz.

(3) Para os emissores de estação de navio utilizados para a telegrafia com impressão directa ou para a transmissão de dados a tolerância é de 40 Hz. Esta tolerância é aplicável aos aparelhos instalados depois de 1 de Janeiro de 1976 e à totalidade dos aparelhos depois de 1 de Janeiro de 1985. Para os aparelhos instalados antes de 2 de Janeiro de 1976 esta tolerância é de 100 Hz (com desvio máximo de 40 Hz para curtos períodos, da ordem dos quinze minutos).

(4) Para os emissores de estações de navio utilizados para a telegrafia com impressão directa ou para a transmissão de dados a tolerância é de 40 Hz.

(5) Se o emissor de socorro servir de emissor de reserva para substituir, quando necessário, o emissor principal, é aplicável a tolerância prevista para os emissores das estações de navio.

(6) Nos países em que está em vigor o Acordo Regional de Radiodifusão da América do Norte (NARBA) poder-se-á continuar a aplicar a tolerância de 20 Hz.

(7) Para os emissores de radiotelefonia de faixa lateral única a tolerância é:

Nas faixas 1606,5 (1605 kHz, Região 2)-4000 kHz e 4-29,7 MHz, para potências de ponta de 200 W ou menos e 500 W ou menos, respectivamente: 50 Hz;

Nas faixas 1606,5 (1606 kHz, Região 2)-4000 kHz e 4-29,7 MHz, para potências de ponta superiores a 200 W e 500 W, respectivamente: 20 Hz;

(8) Para os emissores de radiotelegrafia com manipulação por variação de frequência a tolerância é de 10 Hz.

(9) Para os emissores de estações costeiras radiotelefónicas de faixa lateral única a tolerância é de 20 Hz.

(10) Para os emissores de faixa lateral única que funcionam nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 1606,5 kHz (1605 kHz, Região 2) e 4000 kHz e entre 4 MHz e 29,7 MHz, a tolerância na frequência portadora (frequência de referência) é:

a) Para todas as estações aeronáuticas: 10 Hz;

b) Para todas as estações de aeronave que funcionam nos serviços internacionais: 20 Hz;
c) Para as estações de aeronave que funcionam exclusivamente em serviços nacionais: 50 Hz (*).

([11]) Para os emissores das estações radiotelefónicas de navio de faixa lateral única a tolerância é:

a) Nas faixas compreendidas entre 1606,5 kHz (1605 kHz, Região 2) e 4000 kHz:

100 Hz para os emissores em serviço ou instalados antes de 2 de Janeiro de 1982;
50 Hz para os emissores instalados depois de 1 de Janeiro de 1982, mas antes de 1 de Janeiro de 1985;

b) Nas faixas compreendidas entre 4000 KHz e 23 000 KHz:

100 Hz para os emissores em serviço instalados antes de 2 de Janeiro de 1978;
50 Hz para os emissores instalados após 1 de Janeiro de 1978. (V. igualmente o apêndice 17.)

([12]) Para os emissões de classe A1A a tolerância é de 50 milionésimas.
([13]) Para os emissores utilizados em radiotelefonia de faixa lateral única ou em radiotelegrafia com manipulação por variação de frequência a tolerância é de 40 Hz.
([14]) Para os emissores de radiobaliza na faixa 1606,5 (1605 kHz, Região 2)-1800 kHz a tolerância é de 50 milionésimas.
([15]) Para as emissões de classe A3E, de potência de portadora inferior ou igual a 10 kW, efectuadas nas faixas de 1606,5 (1605 kHz, Região 2)-4000 kHz e 4-29,7 MHz, a tolerância é, respectivamente, de 20 milionésimas e de 15 milionésimas.
([16]) Para os emissões de classe A1A a tolerância é de 10 milionésimas.
([17]) Nas faixas de frequências de trabalho em telegrafia morse de classe A1A pode ser aplicada aos emissores existentes uma tolerância de frequência de 200 milionésimas, sob reserva de que as emissões se mantenham no interior dessas faixas.
([18]) Nas faixas de frequências de chamada em telegrafia morse de classe A1A são recomendadas, na medida do possível, tolerâncias de frequência de 40 milionésimas nas faixas compreendidas entre 4 MHz e 23 MHz e de 30 milionésimas na faixa de 25 MHz.
([19]) Para os emissores de estações de navio de pequena tonelagem de potência de portadora igual ou inferior a 5 W, funcionando nas águas costeiras ou na vizinhança destas e utilizando emissões de classe A3E ou F3E e G3E na faixa 26 175-27 500 kHz, a tolerância é de 40 milionésimas.
([20]) A tolerância é de 50 Hz para os emissores de radiotelefonia de faixa lateral única, excepto para os emissores que funcionam na faixa 26 175-27 500 kHz cuja potência de ponte não ultrapasse 15 W. Para estes últimos, a tolerância de base aplicável é de 40 milionésimas.
([21]) Sugere-se que as administrações evitem diferenças de frequência portadora da ordem de alguns hertzes que causem degradações análogas às dos desvanecimentos periódicos. Convém, para esse efeito, que a tolerância de frequência seja de 0,1 Hz. Esta tolerância conviria igualmente para as emissões de faixa lateral única.
([22]) Para os equipamentos portáteis não montados em veículos e cuja potência média de emissão não exceda 5 W a tolerância é de 40 milionésimas.
([23]) Para os emissores de potência média inferior ou igual a 50 W que funcionam em frequências inferiores a 108 MHz é aplicável uma tolerância de 3000 Hz.
([24]) No caso de estações de radiodifusão (televisão):

De potência de ponta de imagem inferior ou igual a 50 W na faixa 29,7-100 MHz;
De potência de ponta de imagem inferior ou igual a 100 W na faixa 100-960 MHz,

e que recebam as suas emissões de outras estações de televisão ou que sirvam pequenas localidades isoladas, pode ser impossível, por razões de exploração, respeitar esta tolerância. Para estas estações a tolerância é de 2000 Hz. Para estações de potência de ponta de imagem inferior ou igual a 1 W esta tolerância pode ser de:

5 kHz na faixa 100-470 MHz;
10 kHz na faixa 470-960 MHz.

([25]) Para os emissores que utilizam o sistema M (NTSC) a tolerância é de 1000 Hz. Todavia, para os emissores de pequena potência que utilizam este sistema é aplicável a nota (24).
([26]) Para os sistemas de feixes hertzianos de vários saltos que empregam a conversão directa de frequência a tolerância é de 30 milionésimas.
([27]) Para os emissores de estação costeira e de estação de navio que funcionam na faixa 156-174 MHz e que entraram em serviço depois de 1 de Janeiro de 1973 a tolerância de frequência é de 10 milionésimas. Esta tolerância é aplicável a todos os emissores, incluindo os das estações de engenhos de salvamento, a partir de 1 de Janeiro de 1983.
([28]) Para um espaçamento entre vias de 50 kHz a tolerância é de 50 milionésimas.
([29]) Estas tolerâncias são aplicáveis para espaçamentos entre vias iguais ou superiores a 20 kHz.
([30]) Esta tolerância não é aplicável às estações de engenho de salvamento que funcionam na frequência de 243 MHz.
([31]) Para os emissores utilizados pelas estações de comunicações de bordo a tolerância de frequência é de 5 milionésimas.
([32]) Para os equipamentos portáteis não instalados em veículos e cuja potência média de emissão não exceda 5 W a tolerância é de 15 milionésimas.
([33]) Quando não estiverem consignadas frequências determinadas às estações de radar, a largura de faixa ocupada pelas suas emissões deve manter-se totalmente no interior da faixa atribuída a este serviço e não lhes é aplicável a tolerância mencionada.
([34]) Para os emissores que utilizam a multiplexagem por divisão no tempo, a tolerância de 300 milionésimas pode ser elevada para 500 milionésimas.
([35]) Esta tolerância aplica-se unicamente às emissões cuja largura de faixa necessária seja no máximo igual a 3000 kHz. Para as emissões cuja largura de faixa seja superior a 3000 kHz a tolerância é elevada para 300 milionésimas.
([36]) Ao aplicarem esta tolerância, convém que as administrações se refiram aos pareceres pertinentes mais recentes da CCIR.

APÊNDICE 8

Quadro dos níveis de potência máximos tolerados das radiações não essenciais

(V. o artigo 5)

1. O quadro seguinte indica os níveis máximos tolerados das radiações não essenciais em termos de nível de potência média de qualquer componente não essencial fornecida por um emissor à linha de alimentação da antena.

(*) Para obter a máxima inteligibilidade sugere-se às administrações que encoragem a redução desta tolerância a 20 Hz.

2. Nenhuma radiação não essencial proveniente de qualquer parte da instalação que não seja a antena e a sua linha de alimentação deve ter efeito superior ao que se produziria se este sistema radiante fosse alimentado com a potência máxima tolerada na frequência dessa radiação não essencial.

3. Todavia, esses níveis não se aplicam às radiobalizas de localização de sinistros, aos emissores de localização de urgência, aos emissores de socorro de navio, aos emissores de salva-vidas, ás estações de engenho de salvamento nem aos emissores de navio, quando sejam utilizados em caso de sinistro.

4. Por razões técnicas ou de exploração, certos serviços poderão ter necessidade de níveis mais estritos do que os especificados no quadro. Os níveis aplicáveis a esses serviços devem ser os que foram adoptados pela conferência administrativa mundial das radiocomunicações competente. Os níveis mais estritos podem ser igualmente fixados por acordo específico entre as administrações interessadas.

5. No caso das estações de radiodeterminação, enquanto se não dispuser de métodos de medida aceitáveis, convém que a potência das radiações não essenciais seja tão fraca quanto praticamente possível.

Faixas de frequências em que se situa a consignação (limite inferior excluído, limite superior incluído)	Para qualquer componente não essencial, a atenuação (potência média no interior da largura de faixa necessária em relação à potência média da componente não essencial considerada) deverá ter pelo menos o valor específico nas colunas A e B abaixo e os níveis absolutos de potência média dados não devem ser excedidos [nota (1)].	
	A	B
	Níveis aplicáveis até 1 de Janeiro de 1994 aos emissores actualmente em serviço e àqueles que forem instalados antes de 2 de Janeiro de 1985.	Níveis aplicáveis a qualquer emissor instalado a partir de 1 de Janeiro de 1985 e a todos os emissores a partir de 1 de Janeiro de 1994.
kHz a 30 MHz	40 dB 50 mW [Notas (2), (3) e (4)]	40 dB 50 mW [Notas (4), (7) e (8)]
30 MHz a 235 MHz:		
Potência média superior a 25 W	60 dB 1 mW [Nota (3)]	60 dB 1 mW [Nota (8)]
Potência média igual ou inferior a 25 W	40 dB 25 μW [Notas (3) e (6)]	40 dB 25 μW
235 MHz a 960 MHz:	Não é indicado qualquer nível para os emissores que funcionam em frequências consignadas superiores a 235 MHz. Para esses emissores, a potência das radiações não essenciais deverá ser tão fraca quanto possível na prática.	
Potência média superior a 25 W		60 dB 20 mW [Notas (10) e (11)]
Potência média igual ou inferior a 25 W		40 dB 25 μW [Notas (10) e (11)]
960 MHz a 17,7 GHz:		
Potência média superior a 25 W		50 dB 100 mW [Nota (10), (11), (12) e (13)]
Potência média igual ou inferior a 25 W		100 μW [Nota (10), (11), (12) e (13)]
Acima de 17,7 GHz		Tendo em conta a natureza diversa das técnicas aplicadas pelos serviços que funcionam acima de 17,7 GHz, é necessário que a CCIR continue os seus trabalhos antes de se especificarem os níveis. Na medida do possível, os valores que se deverá respeitar serão aqueles que indicarem os pareceres pertinentes da CCIR e enquanto não forem elaborados esses pareceres aplicar-se-ão os valores mais fracos que seja possível obter (v. a Recomendação n.º 66).

Notas relativas ao quadro dos níveis de potência máximos tolerados das radiações não essenciais

(1) Para adquirir a certeza de que as disposições do quadro estão a ser aplicadas, dever-se-á verificar se a largura das faixas do aparelho de medida é bastante grande para cobrir todas as componentes significativas da radiação não essencial em causa.

(2) Para os emissores cuja potência média é superior a 50 kW e que funcionam abaixo de 30 MHz numa faixa de frequência de cerca de uma oitava ou mais não é obrigatória uma redução para menos de 50 mW. Todavia, deverá ser obtida uma atenuação de 60 dB, no mínimo, e procurar-se-á atingir o nível de 50 mW.

(3) Para os aparelhos portáteis cuja potência média é inferior a 5 W e que funcionam abaixo de 30 MHz, a atenuação deve ser de, pelo menos, 30 dB. Contudo, procurar-se-á atingir a atenuação de 40 dB.

(4) Para os emissores móveis que funcionam abaixo de 30 MHz, qualquer componente não essencial deve ter uma atenuação de, pelo menos, 40 dB, sem exceder o valor de 200 mW. Contudo, sempre que praticável, procurar-se-á atingir o nível de 50 mW.

(5) Para os aparelhos de radiotelefonia de modulação de frequência do serviço móvel marítimo que funcionam acima de 30 MHz, a potência média de qualquer radiação não essencial devida a produtos de modulação em qualquer outra via do serviço móvel marítimo internacional não deve exceder um nível de 10 μW e a potência média de qualquer outra radiação não essencial em qualquer frequência discreta da faixa do serviço móvel marítimo internacional não deve exceder um nível de 2,5 μW. Nos casos excepcionais em que se utilizem emissores de mais de 20 W de potência média, poderão aumentar-se estes últimos níveis proporcionalmente à potência média do emissor.

(6) Para os emissores cuja potência média é inferior a 100 mW não é obrigatório atingir o nível de acentuação de 40 dB, desde que o nível da potência média não exceda 10 μW.

(7) Para os emissores cuja potência média é superior a 50 kW e que podem funcionar em várias frequências cobrindo uma faixa de frequência de cerca de uma oitava ou o mais não é obrigatória uma redução para menos de 50 mW. Contudo, deverá ser obtida uma atenuação mínima de 60 dB.

(8) Para os aparelhos portáteis cuja potência média é inferior a 5 W a atenuação deverá ser de 30 dB. Todavia, sempre que isso seja praticável. procurar-se-á atingir a atenuação de 40 dB.

(9) As administrações podem adoptar um nível de 10 mW, com condição de evitarem qualquer interferência prejudicial.

(10) Quando diversos emissores utilizem uma antena comum ou antenas muito pouco espaçadas em frequências vizinhas, procurar-se-á, sempre que isso seja praticável, atingir os níveis especificados.

(11) Visto que pode acontecer que estes níveis não assegurem protecção suficiente às estações de recepção do serviço de radioastrononia e dos serviços espaciais, poder-se-ia considerar, em cada caso específico, níveis mais estritos, tendo em conta a situação geográfica das estações interessadas.

(12) Estes níveis não se aplicam aos sistemas que utilizam as técnicas de modulação digital, mas podem servir de guia. Para os valores aplicáveis a esses sistemas, poderão observar-se os pareceres pertinentes da CCIR, quando houver (v. a Recomendação n.º 66).

(13) Estes níveis não se aplicam às estações dos serviços espaciais, mas convém que os níveis de radiações não essenciais dessas estações sejam reduzidos aos valores mais fracos possíveis compatíveis com os condicionamentos técnicos e económicos impostos ao material. Para valores aplicáveis a esses sistemas, poderão observar-se os pareceres pertinentes da CCIR, quando os houver (v. a Recomendação n.º 66).

APÊNDICE 9

Documentos de serviço (1)

(V. os artigos 10, 12, 13, 17 e 26)

LISTA I

Lista Internacional das Frequências

A IFRB estabelece e mantém em dia os títulos das colunas da Lista Internacional das Frequências de modo a respeitar a totalidade das disposições regulamentares dos apêndices 1 e 3, assim como as decisões pertinentes de futuras conferências. Por outro lado, a IFRB introduzirá na referida lista as melhorias necessárias sob o ponto de vista da apresentação, sem modificar seja de que maneira for os dados fundamentais especificados no Regulamento das Radiocomunicações.

LISTA II

Nomenclatura das estações fixas que asseguram ligações internacionais

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação da emissão	Indicativo de chamada (sinal de identificação)	Frequência consignada (kHz ou MHz)	Localidade(s) ou zona(s) com que a(s) comunicação(ões) é (são) estabelecida(s)	Observações
1	2	3	4	5

(1) A forma destes documentos pode ser modificada se a situação o exigir.

LISTA IV

Nomenclatura das estações costeiras

PARTE I

Quadros de interesse geral ou particular

PARTE II

Índice alfabético das estações costeiras

Nome da estação	V. parte III, p. ...	Nome da estação	V. parte III, p.	Nome da estação	V. parte III, p. ...

PARTE III

Estados sinaléticos das estações costeiras

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação (1)	Indicativo de chamada (2) e (3)	Emissão			Serviço			Taxas (4) e (5)	Coordenadas geográficas da antena de emissão (longitude e latitude, em graus, minutos e segundos).	Observações (6) e (7)
		Frequência (kHz ou MHz)		Classe	Potência (kW) (8)	Natureza (9) e (8)	Horas de abertura (UTC)			
1	2	3a (8)	3b (8)	4	5	6	7	8	9	10

(1) Para cada país indica-se a ou as estações costeiras para as quais é necessário dirigir os radiotelegramas destinados a ser transmitidos em ondas decamétricas com destino aos navios.

(2) Indicar se a estação tem uma identidade no serviço móvel marítimo.

(3) O indicativo de chamada da estação é seguido, se for caso disso, entre parêntesis, da identidade do serviço móvel marítimo ou do número ou do sinal de chamada selectiva que a estação utiliza.

(4) Frequência de emissão. A frequência normal de trabalho é impressa em normando.

(5) Frequência ou vias de escuta e ou de recepção.

(6) No caso de antenas direccionais, convém mencionar, por baixo da indicação da potência, o azimute da direcção ou das direcções do ganho máximo, em graus, a partir do norte verdadeiro, no sentido do movimento dos ponteiros do relógio.

(7) Indicar se a estação utiliza um sistema de chamada selectiva e precisar o sistema utilizado.

(8) Indicar se a estação utiliza um sistema de telegrafia com impressão directa de faixa estreita.

(9) A taxa de linha telegráfica do país de que depende a estação costeira e a taxa aplicada por este país aos telegramas com destino aos países limítrofes são indicados na parte IV da Nomenclatura das estações costeiras.

(10) Se as contas das taxas forem liquidadas por uma exploração particular, convém indicar, se necessário, o nome e o endereço dessa exploração particular.

(11) Indicar se a estação assegura um serviço de radiodetecção.

(12) Convém que a Nomenclatura contenha as informações relativas às horas de emissão das listas de chamadas, bem como as horas de escuta da estação nas diversas frequências, etc. As estações costeiras ou as estações costeiras terrenas abertas à correspondência pública e que asseguram um serviço de emissão e de recepção de radiotelegramas por radiotelefonia são indicadas na Nomenclatura das estações costeiras.

PARTE IV

Taxas telegráficas internas, limítrofes, etc.

LISTA V

Nomenclatura das estações de navio

Estados sinaléticos das estações de navio

As informações relativas a estas estações são publicadas como se indica a seguir:

Nome do navio	Indicativo de chamada	País	Instalações auxiliares	Classe do navio	Natureza do serviço	Horas de abertura	Taxas das frequências de emissão em telegrafia	Taxas das frequências de emissão em telefonia	Taxa de bordo por palavra aplicável aos radiotelegramas.	Taxa de bordo aplicável a uma conversação radiotelefónica de três minutos.	Observações
1	2	3	4	5	6	7	8	9	10	11	12

Coluna 1 — as estações são classificadas por ordem alfabética dos nomes de navio, sem consideração de nacionalidade. No caso de homonímia, o nome do navio é seguido do indicativo de chamada, sendo o nome e o indicativo separados por um traço de fracção.

Coluna 2 — indicativo de chamada. Esta coluna contém igualmente, se for caso disso, a identidade no serviço móvel marítimo ou o número ou sinal de chamada selectiva.

Coluna 3 — país de que depende a estação (indicação por meio de símbolo apropriado).

Coluna 4 — instalações auxiliares, incluindo informações relativas:

a) Ao número das embarcações de salvamento munidas de aparelhos radioeléctricos instalados a bordo;

b) Ao tipo e ao número das radiobalizas de localização de sinistros (facultativo), sendo a frequência utilizada designada por uma das letras seguintes:

A= 2182 kHz;
B= 121, 5 MHz;
C= 243 MHz.

Um algarismo a seguir à letra indica o número das radiobalizas e a letra «X» substitui esse algarismo quando o mesmo não tenha sido indicado.

Colunas 5 a 7 — em forma de anotações de serviço (v. o apêndice 10). Além disso, a lista dos símbolos utilizados na coluna 5 para designar a classe do navio figura no prefácio da Nomenclatura.

Colunas 8 e 9 — indicação das faixas de frequências e das classes de emissão empregando os símbolos seguintes:

Radiotelegrafia	*Radiotelefonia*
W = 100-150 kHz	T = 1605-4000 kHz
X = 405-535 kHz	U = 4000-27 500 kHz
Y = 1605-3800 kHz	V = 156-174 MHz
Z = 4000-27 5000 kHz	

Estes símbolos são, se necessário, seguidos de notas sucintas, no fim da nomenclatura, que contenham informações de natureza especial e a indicação das frequências para que os emissores estão regulados.

Coluna 10 — taxa de bordo de base aplicável por palavras aos radiotelegramas (1).

Coluna 11 — taxa mínima para uma conversação radiotelefónica de três minutos (1). As informações que figuram nas colunas 10 e 11 são seguidas de uma chamada para designar a administração ou a exploração particular a que se devem enviar as contas das taxas. Em caso de mudança de endereço do explorador, uma segunda chamada depois da taxa indicará o novo endereço e a data a partir da qual entrará em vigor essa alteração.

Coluna 12 — quando várias estações de navio da mesma nacionalidade tiverem o mesmo nome ou quando as contas das taxas devam ser dirigidas directamente ao proprietário do navio, menciona-se nesta coluna o nome da companhia de navegação ou de o armador a que pertence o navio.

Além disso, no caso de falta de espaço na coluna apropriada, podem figurar na coluna 12, por meio de uma chamada, informações suplementares relativas à coluna de 1 a 11. Esta coluna pode conter várias linhas.

Indicar se está prevista a identidade no serviço móvel marítimo.

Indicar se a estação utiliza um sistema de chamada selectiva e precisar o sistema utilizado.

Indicar se a estação utiliza um sistema de telegrafia com impressão directa de faixa estreita.

LISTA VI

Nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais

(Para a navegação, convém utilizar a presente nomenclatura com precaução. V. o artigo 35 do Regulamento das Radiocomunicações.)

PARTE A

Índice alfabético das estações

Nome da estação	Indicativo de chamada	Natureza do serviço	V. parte B, p. ...
1	2	3	4

(1) Estas taxas são fixadas ou aprovadas por cada administração.

PARTE B

Estados sinaléticos das estações

1. Estações radiogoniométricas

Nomes dos países por ordem alfabética das abreviaturas

Nome das estações por ordem alfabética

Nome da estação	Coordenadas geográfics (longitude e latitude, em graus, minutos e segundos): *a*) Da antena de recepção da estação goniométrica; *b*) Da antena de emissão da estação goniométrica; *c*) Da antena do emissor da estação visada na coluna 8.	Indicativo de chamada	Frequências (kHz ou MHz) e classes de emissões			Potência (em kW)	Nome e indicativo de chamada da estação com que deve ser estabelecida comunicação, se a estação goniométrica estiver dotada de emissor.	Taxas	Observações: *a*) Sectores de azimutes normalmente mais seguros e chamadas às publicações nacionais ou internacionais diferentes da presente nomenclatura; *b*) Horas de abertura (UTC), etc.
			Para chamar a estação goniométrica	Para transmitir à estação goniométrica os sinais necessários para que elas tome os azimutes.	Para a transmissão dos azimutes pela estação goniométrica				
1	2	3	4	5	6	7	8	9	10

2. Estações de radiofarol

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Coordenadas geográficas da antena de emissão do radiofarol (longitude e latitude, em graus, minutos e segundos)	Sinal característico do radiofarol	Indicativo de chamada do radiofarol, se existir	Emissão			Alcance normal (em milhas marítimas)	Nome e indicativo de chamada da estação a que se pode pedir uma emissão do radiofarol	Frequência a utilizar para chamar a estação mencionada na coluna 9 (em kHz ou MHz)	Observações: *a*) Sectores de azimutes normalmente mais seguros e chamadas às publicações nacionais ou internacionais diferentes da presente nomenclatura; *b*) Horas de abertura (UTC); *c*) Descrição da emissão; *d*) Taxas, etc.
				Frequência (em kHz ou MHz)	Classe	Frequência de modulação, se existir (em Hz)				
1	2	3	4	5	6	7	8	9	10	11

3. Navios — Estações oceânicas

Regiões oceânicas por ordem alfabética

Nome das estações por ordem alfabética

Nome da estação	Posição geográfica consignada à estação	Indicativo de chamada do navio-estação	Frequência para chamar a estação (em kHz ou MHz)	Radiofarol					Radiogoniometria			Observações: *a*) *Chamadas para publicações nacionais* ou internacionais diferentes da presente nomenclatura; *b*) Horas de abertura (UTC); *c*) Descrição da emissão de radiofarol.
				Sinal característico	Frequência de emissão (em kHz ou MHz)	Classe de emissão	Frequência de modulação, se existir (em Hz)	Alcance normal (em milhas marítimas)	Frequência de emissão dos sinais necessários para que a estação tome azimutes (em kHz ou MHz)	Frequência utilizada pela estação para a transmissão dos azimutes (em kHz ou MHz)	Potência do emissor (em kW)	
1	2	3	4	5	6	7	8	9	10	11	12	13

4. Estações que emitem sinais para a calibração dos goniómetros

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Coordenadas geográficas da antena de emissão (longitude e latitude, em graus, minutos e segundos)	Sinal característico do radiofarol	Indicativo de chamada do radiofarol, se existir	Emissão			Alcance normal (em milhas marítimas)	Nome e indicativo de chamada da estação a que se pode pedir uma emissão	Frequência a utilizar para chamar a estação mencionada na coluna 9 (em kHz ou MHz)	Observações: a) Sectores normalmente mais seguros e chamadas para publicações nacionais ou internacionais diferentes da presente nomenclatura; b) Horas de abertura (UTC); c) Descrição da emissão; d) Taxas, etc.
				Frequência (em kHz ou MHz)	Classe	Frequência de modulação, se existir (em Hz)				
1	2	3	4	5	6	7	8	9	10	11

5. Estações que emitem frequências padrão e sinais horários

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequências (em kHz ou MHz)	Classe de emissão	Horas de emissão (UTC)	Método (*a*)
1	2	3	4	5	6

(*a*) Instruções gerais relativas aos sinais horários.

7. Estações que emitem boletins meteorológicos regulares

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequências (em kHz ou MHz)	Classe de emissão	Horas de emissão (UTC)	Método (*a*)
1	2	3	4	5	6

(*a*) Instruções gerais relativas aos boletins meteorológicos, incluindo o código empregado.

8. Estações que emitem avisos à navegação

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequências (em kHz ou MHz)	Classe de emissão	Horas de emissão (UTC)	Observações
1	2	3	4	5	6

9. Estações que emitem pareceres médicos

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequências (em kHz ou MHz)	Classe de emissão	Horas de emissão (UTC)	Observações
1	2	3	4	5	6

10. Estações que emitem boletins epidemiológicos

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequência (em kHz o MHz)	Classe de emissão	Horas de emissão (UTIC)	Observações
1	2	3	4	5	6

11. Estações que emitem ursigramas

Nomes dos países por ordem alfabética das abreviaturas

Nomes das estações por ordem alfabética

Nome da estação	Indicativo de chamada	Frequência (em kHz o MHz)	Classe de emissão	Horas de emissão (UTIC)	Observações e natureza das informações
1	2	3	4	5	6

12. Estações terrenas fixas do serviço de radionavegação marítima por satélite

Nomes dos países notificadores por ordem alfabética dos símbolos que designam os países

Nomes das estações por ordem alfabética

Nome pelo qual a estação é designada	Coordenadas geográficas (em graus e minutos) da localização da estação	Emissão de informações de radionavegação			Recepção de informações de radionavegação		Identidade da (ou das) estação(ões) especial(ais) associada(s)	Administração ou companhia exploradora	Observações: Métodos especiais de modulação, taxas, etc.
		Frequência (em MHz ou GHz)	Classe de emissão, largura de faixa necessária e natureza da transmissão	Potência (em kW)	Frequência (em MHz ou GHz)	Classe de emissão, largura de faixa necessária e natureza da transmissão			
1	2	3a	3b	3c	4a	4b	5	6	7

13. Estações espaciais do serviço de radionavegação marítima por satélite

Nomes dos países notificados por ordem alfabética dos símbolos que designam os países

Nomes das estações por ordem alfabética

Identidade da estação	Emissão de informações de radionavegação destinadas aos navios			Recepção de informações de radionavegação provenientes dos navios		Zona(s) de serviço na Terra	Nome da localidade e do país onde está (estão) situada(s) a(s) estação(ões) terrena(s) fixa(s) associada(s)	Administração ou companhia exploradora	Observações: Informações relativas à órbita, disposições especiais dos canais, métodos especiais de modulação, taxas, etc.
	Frequência (em MHz ou GHz)	Classe de emissão, largura de faixa necessária e natureza da transmissão	Potência (em watts)	Frequência (em MHz ou GHz)	Classe de emissão, largura de faixa necessária e natureza da transmissão				
1	2a	2b	2c	3a	3b	4	5	6	7

Nota. — O secretário-geral, se julgar necessário, introduzirá nesta nomenclatura secções suplementares relativas a novos sistemas, à medida que o seu emprego se for alargando.

LISTA VIII

Nomenclatura das estações de fiscalização internacional das emissões

(V. o artigo 20)

Nota. — Nesta lista as estações designadas pelas administrações como susceptíveis de participarem no sistema de fiscalização internacional das emissões levam a indicação SCIE.

PARTE I

Organismos centralizadores

Nomes dos países, por ordem alfabética das abreviaturas.

Organismo centralizador nacional (endereços postal e telegráfico, número de telefone e quaisquer outras informações).

PARTE II

Fiscalização das emissões das estações dos serviços de radiocomunicação de Terra

A) Estados sinaléticos das estações de fiscalização que efectuam medidas de frequência

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude e latitude, em graus e minutos).
Horas de serviço (UTC).
Faixas de frequências mensuráveis (em kHz, MHz e GHz).
Precisas das medidas (1).
Observações.

B) Estados sinaléticos das estações de fiscalização que efectuam medidas de intensidade de campo ou de densidade de fluxo de potência

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude e latitude, em graus e minutos).
Horas de serviço (UTC).
Faixas de frequências (em kHz, MHz e GHz).
Valores máximo e mínimo das intensidades de campo ou das densidades de fluxo de potência mensuráveis.
Precisão das medidas, em decibéis (1).
Observações.

C) Estados sinaléticos das estações de fiscalização que efectuam medidas radiogoniométricas

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude, em graus, minutos e segundos).
Horas de serviço (UTC).
Faixas de frequências (em kHz, MHz e GHz).
Tipos de antena utilizadas.
Observações.

D) Estados sinaléticos das estações de fiscalização que efectuam medidas de largura de faixa

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude e latitude, em graus e minutos).
Horas de serviço (UTC).
Faixas de frequências (em kHz, MHz e GHz).
Método(s) de medida (2).
Poder separador a — 60 dB (se apropriado).
Observações.

---

(1) Indicar o máximo de precisão que se pode atingir em cada faixa de frequências.
(2) V. os pareceres e relatórios pertinentes da CCIR.

E) Estados sinaléticos das estações de fiscalização que efectuam registos automáticos do grau de ocupação do espectro

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude e latitude, em graus e minutos).
Horas de serviço (UTC).
Gama de frequências (em kilohertzes, megahertzes ou gigahertzes).
Método(s) utilizado(s).
Observações.

PARTE III

Fiscalização das emissões de estações dos serviços de radiocomunicação espacial

Estados sinaléticos das estações de fiscalização que efectuam medidas referentes às estações dos serviços de radiocomunicação espacial

Nomes dos países, por ordem alfabética das abreviaturas.
Nomes das estações, por ordem alfabética.

Nome e coordenadas geográficas da estação (longitude e latitude, em graus, minutos e segundos).
Horas de serviço (UTC).
Informações sobre as antenas utilizadas (por exemplo: diâmetros ou ganho em função da frequência; se apropriado, velocidade de exploração, etc.).
Gama dos ângulos azimutais e de elevação.
Precisão máxima que se pode atingir na determinação das posições orbitais das estações espaciais.
Informações sobre o sistema de polarização.
Temperatura de ruído do sistema.
Faixas de frequências, com indicação do máximo de precisão de medida de frequência que se pode atingir em cada faixa.
Faixas de frequências em que é possível medir a intensidade de campo ou a densidade de fluxo de potência.
Valor mínimo mensurável da intensidade de campo ou da densidade de fluxo de potência, com indicação da precisão de medida que se pode atingir.
Informações disponíveis para a medida da largura de faixa (1).
Informações disponíveis para a medida da ocupação do espectro.
Informações disponíveis para a medida da ocupação da órbita.
Observações.

LISTA VIII-A

Nomenclatura das estações dos serviços de radiocomunicação espacial e do serviço de radioastronomia

A Comissão estabelece e mantém em dia o conteúdo desta lista, agrupando as suas rubricas de modo que as administrações possam identificar mais facilmente todas as estações pertencentes a uma dada rede de satélite. Além disso, a Comissão introduz as melhorias necessárias à apresentação da lista, sem modificar seja de que maneira for os dados fundamentais especificados no Regulamento das Radiocomunicações.

APÊNDICE 10

Notações utilizadas nos documentos de serviço

(V. o artigo 26 e o apêndice 9)

■	Estação classificada como situada numa região de tráfego intenso (v. o artigo 60) («TI») (2).
O	De dia («HJ») (2).
•	De noite («HN») (2).
[ ]	Navio provido de embarcações de salvamento equipadas com aparelhos radioeléctricos instalados a bordo; o número entre parênteses rectos indica a quantidade dessas embarcações de salvamento («S») (2).
AL	Estação terrestre de radionavegação aeronáutica.
AM	Estação móvel de radionavegação aeronáutica.

(1) V. os pareceres e relatórios pertinentes da CCIR.
(2) O símbolo entre parêntesis pode ser utilizado nas notificações, bem com nos documentos de serviço.

AT	Estação de amador.
AX	Estação fixa aeronáutica.
BC	Estação de radiodifusão sonora.
BT	Estação de radiodifusão, televisão.
C	Exploração contínua durante o período indicado.
CA	Navio de carga.
CO	Estação aberta exclusivamente à correspondência oficial.
CP	Estação aberta à correspondência pública.
CR	Estação aberta à correspondência pública restrita.
CV	Estação aberta exclusivamente à correspondência de uma empresa particular.
D30°	Antena cuja direcção de radiação máxima é 30° (direcção expressa em graus a partir do norte verdadeiro, de 0° a 360°, no sentido do movimento dos ponteiros do relógio).
DR	Antena direccional provida de um reflector.
EA	Estação espacial do serviço de amador por satélite.
EB	Estação espacial do serviço de radiodifusão por satélite (radiodifusão sonora).
EC	Estação espacial do serviço fixo por satélite.
ED	Estação espacial de telecomando espacial.
EG	Estação espacial do serviço móvel marítimo por satélite.
EH	Estação espacial de pesquisa espacial.
EK	Estação espacial de perseguição espacial.
EM	Estação espacial de satélite de meteorologia.
EN	Estação espacial de satélite de radionavegação.
ER	Estação espacial de telemedida espacial.
EV	Estação espacial do serviço de radiodifusão por satélite (televisão).
EX	Estação experimental.
FA	Estação aeronáutica.
FB	Estação de base.
FC	Estação costeira.
FL	Estação terrestre.
FP	Estação das operações portuárias.
FR	Estação exclusivamente receptora, ligada à rede geral das vias de telecomunicação.
FS	Estação terrestre instalada apenas para a segurança da vida humana.
FX	Estação fixa.
GS	Estação a bordo de um navio de guerra ou de uma aeronave do Exército ou da Marinha.
H	Exploração segundo um horário determinado.
H8	Serviço de 8 horas efectuado por uma estação de navio da III categoria.
H16	Serviço de 16 horas efectuado por uma estação de navio da II categoria.
H24	Exploração contínua de dia e de noite.
HJ	Serviço de dia.
HN	Serviço de noite.
HT	Exploração durante os períodos de transição entre o dia e a noite.
HX	Exploração intermitente de dia e de noite ou estação sem horas de serviço determinadas.
I	Exploração intermitente durante o período indicado.
LR	Estação terrestre de radiolocalização.
MA	Estação de aeronave.
ME	Estação espacial.
ML	Estação móvel terrestre.
MO	Estação móvel.
MR	Estação móvel de radiolocalização.
MS	Estação de navio.
ND	Antena não direccional.
NL	Estação terrestre de radionavegação marítima.
OD	Estação de transmissão de dados oceanográficos.
OE	Estação que interroga estações de transmissão de dados oceanográficos.
OT	Estação que escoa exclusivamente o tráfego de serviço do serviço interessado.
PA	Navio de passageiros.
RA	Estação de radioastronomia.
RC	Radiofarol não direccional.
RD	Radiofarol direccional.
RG	Estação radiogoniométrica marítima.
RM	Estação móvel de radionavegação marítima.
RT	Radiofarol rotativo.
SM	Estação do serviço dos auxiliares da meteorologia.
SS	Estação que emite frequências padrão e sinais horários.
TA	Estação terrena de exploração espacial do serviço de amador por satélite.
TC	Estação terrena do serviço fixo por satélite.
TD	Estação terrena de telecomando espacial.

TE Estação terrena de emissão.
TF Estação terrena fixa do serviço de radiodeterminação por satélite.
TG Estação terrena móvel do serviço móvel marítimo por satélite.
TH Estação terrena do serviço de pesquisa espacial.
TI Estação terrena do serviço móvel marítimo por satélite situada num ponto fixo determinado.
TK Estação terrena de perseguição espacial.
TL Estação terrena de móvel do serviço de radiodeterminação por satélite.
TM Estação terrena do serviço de meteorologia por satélite.
TMG Tempo médio de Greenwich.
TN Estação terrena do serviço de radionavegação por satélite.
TP Estação terrena de recepção.
TR Estação terrena de telemedida espacial.
TS Via som (televisão).
TT Estação terrena do serviço de exploração espacial.
TV Via imagem (televisão).
UTC Tempo universal coordenado.

(Os símbolos podem ser modificados segundo as necessidades.)

APÊNDICE 11

Documentos de que devem estar providas as estações de navio e as estações de aeronave

(V. os artigos 24, 26, 44, 46, 49, 55, 57 e 59 e o apêndice 9)

SECÇÃO I

Estações de navio obrigatoriamente providas de uma instalação radiotelegráfica em virtude de um acordo internacional

Estas estações devem estar providas:

1) Da licença previstas no artigo 24;
2) Do certificado de cada operador;
3) Do registo (diário do serviço radioeléctico) em que se anotam, no momento em que se efectuam e com indicação da hora:
   a) Na sua totalidade, todas as comunicações relativas ao tráfego de perigo;
   b) As comunicações de urgência e de segurança;
   c) A escuta assegurada na frequência internacional de perigo durante os períodos de silêncio;
   d) As comunicações entre a estação do navio e as estações terrestres ou móveis;
   e) Os incidentes de serviço de qualquer natureza;
   f) Se o regulamento de bordo o permitir, a posição do navio, pelo menos uma vez por dia;
   g) A abertura e o encerramento da cada período de serviço;
4) Da lista alfabética dos indicativos de chamada das estações utilizadas no serviço móvel marítimo;
5) Da nomenclatura das estações costeiras;
6) Da nomenclatura das estações de navio (é facultativo à estação dispor do suplemento);
7) Da nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais;
8) Do manual para uso dos serviços móvel marítimo e móvel marítimo por satélite;
9) Das tarifas telegráficas dos países para os quais a estação transmite radiotelegramas mais frequentemente.

SECÇÃO II

Outras estações radiotelegráficas de navio

Estas estações devem estar providas dos documentos referidos nas alíneas 1 a 6, inclusive, 8 e 9 da secção I.

SECÇÃO III

Estações de navio obrigatoriamente providas de uma instalação radiotelefónica em virtude de um acordo internacional

Estas devem estar providas:

1) Da licença prevista no artigo 24;
2) Do certificado de cada operador;

3) Do registo (diário do serviço radioeléctico) em que se anotam, no momento em que se efectuam e com a indicação da hora:
   a) Um resumo de todas as comunicações relativas ao tráfego de perigo, de urgência e de segurança;
   b) Um resumo das comunicações entre a estação do navio e as estações terrestres ou móveis;
   c) Uma menção dos incidentes de serviço importantes;
   d) Se o regulamento de bordo o permitir, a posição do navio, pelo menos um vez por dia;

4) De uma lista das estações costeiras com que são susceptíveis de permutar comunicações, mencionando essa lista as horas de vigília, as frequências e as taxas;
5) Das disposições do Regulamento das Radiocomunicações e das resoluções e pareceres da CCITT aplicáveis ao serviço móvel marítimo radiotelefónico, ou do manual para uso dos serviços móvel marítimo por satélite.

SECÇÃO IV

Outras estações radiotelefónicas de navio

Estas estações devem estar providas:

1) Dos documentos referidos nas alíneas 1 e 2 da secção III;
2) Dos documentos referidos nas alíneas 3, 4 e 5 da secção III, segundo as exigências das administrações interessadas.

SECÇÃO V

Estações de navio equipadas com várias instalações

Estas devem estar providas:

1) Para cada instalação, se for necessário, dos documentos referidos nas alíneas 1, 2 e 3 da secção I, ou nas alíneas 1, 2 e 3 da secção III, consoante o caso;
2) Para uma só delas, dos outros documentos referidos nas secções I ou III, consoante o caso.

SECÇÃO VI

Estações de aeronave

Estas estações devem estar providas:

1) Dos documentos referidos nas alíneas 1 e 2 da secção I;
2) Do registo (diário do serviço radioeléctrico) referido na alínea 3 da secção I, a não ser que as administrações interessadas tenham adoptado outras disposições para a inscrição de todas as informações que o dito registo deve mencionar;
3) Dos outros documentos que contenham as informações oficiais relativas às estações a que pode recorrer a estação de aeronave para executar o seu serviço.

APÊNDICE 12

Horas de serviço das estações de navio classificadas na 2.ª ou na 3.ª categoria

(V. os artigos 26 e 58)

SECÇÃO I

(Quadro)

Horas de serviço — Hora local do navio ou hora do fuso horário (V. os n.os 4058 e 4059)	
16 horas (H16)	8 horas (H8)
Das 0 às 4 horas. Das 8 às 12 horas. Das 16 às 18 horas. Das 20 às 22 horas. Mais quatro horas. (V. o n.º 4058.)	Das 8 às 12 horas. Das 18 às 22 horas (*a*). Mais duas horas. (V. o n.º 4059.)

(*a*) Duas horas de serviço contínuo entre as 18 e as 22 horas, hora local do navio ou hora do fuso horário, fixadas pela administração, pelo comandante ou pela pessoa responsável.

SECÇÃO II

Gráfico e mapa-múndi

Nota. — *a*) O gráfico indica os períodos de serviço *fixos* e os períodos de serviço *escolhidos* das estações de navio classificadas na 2.ª ou na 3.ª categoria, conforme os fusos horários. (Os períodos de serviço indicados não compreendem os que são fixados pela administração, pelo comandante ou pela pessoa responsável pelo navio.)

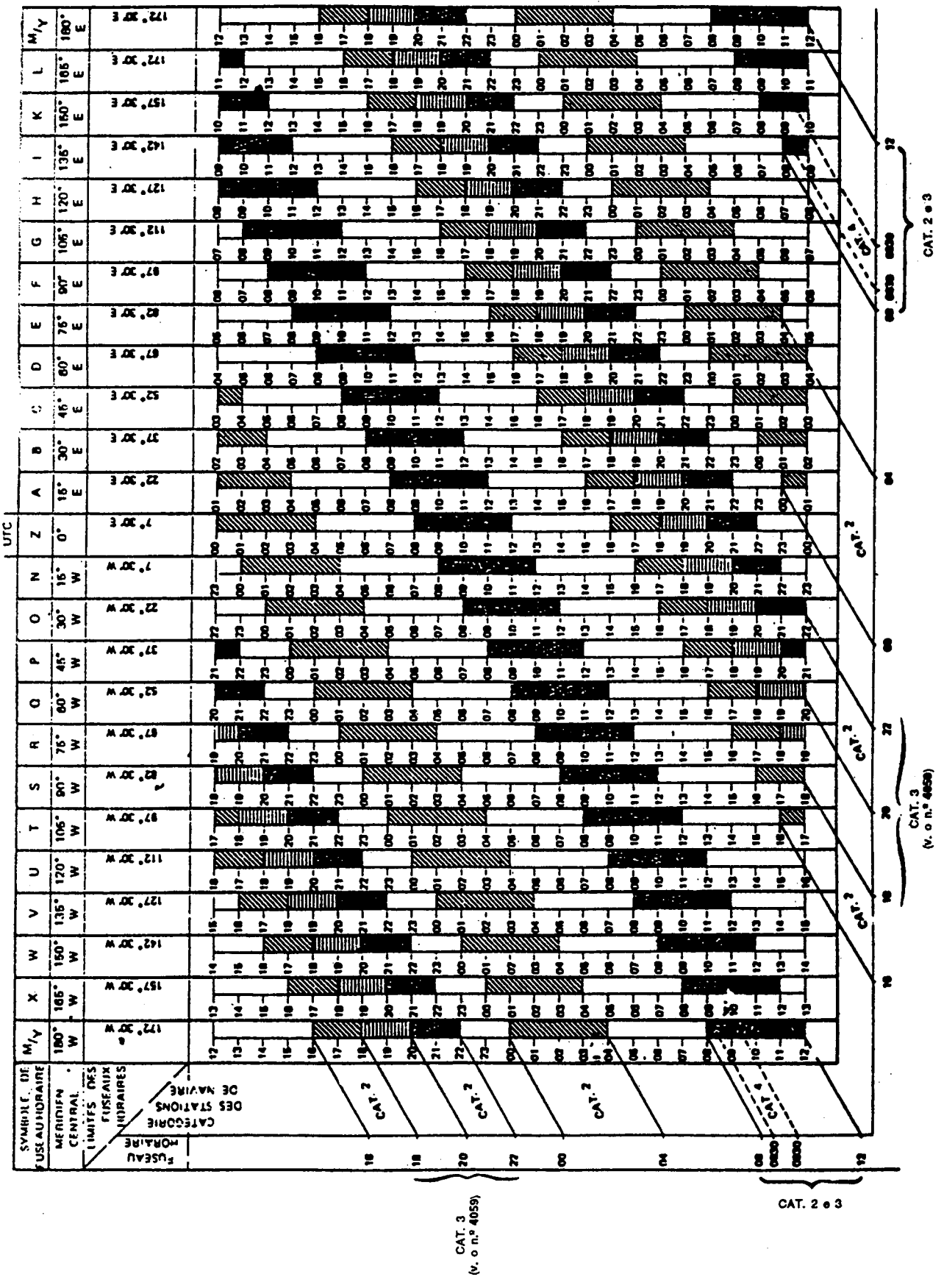
Os períodos de serviço fixos são representados do seguinte modo:

I) Para os navios classificados na 2.ª categoria .....

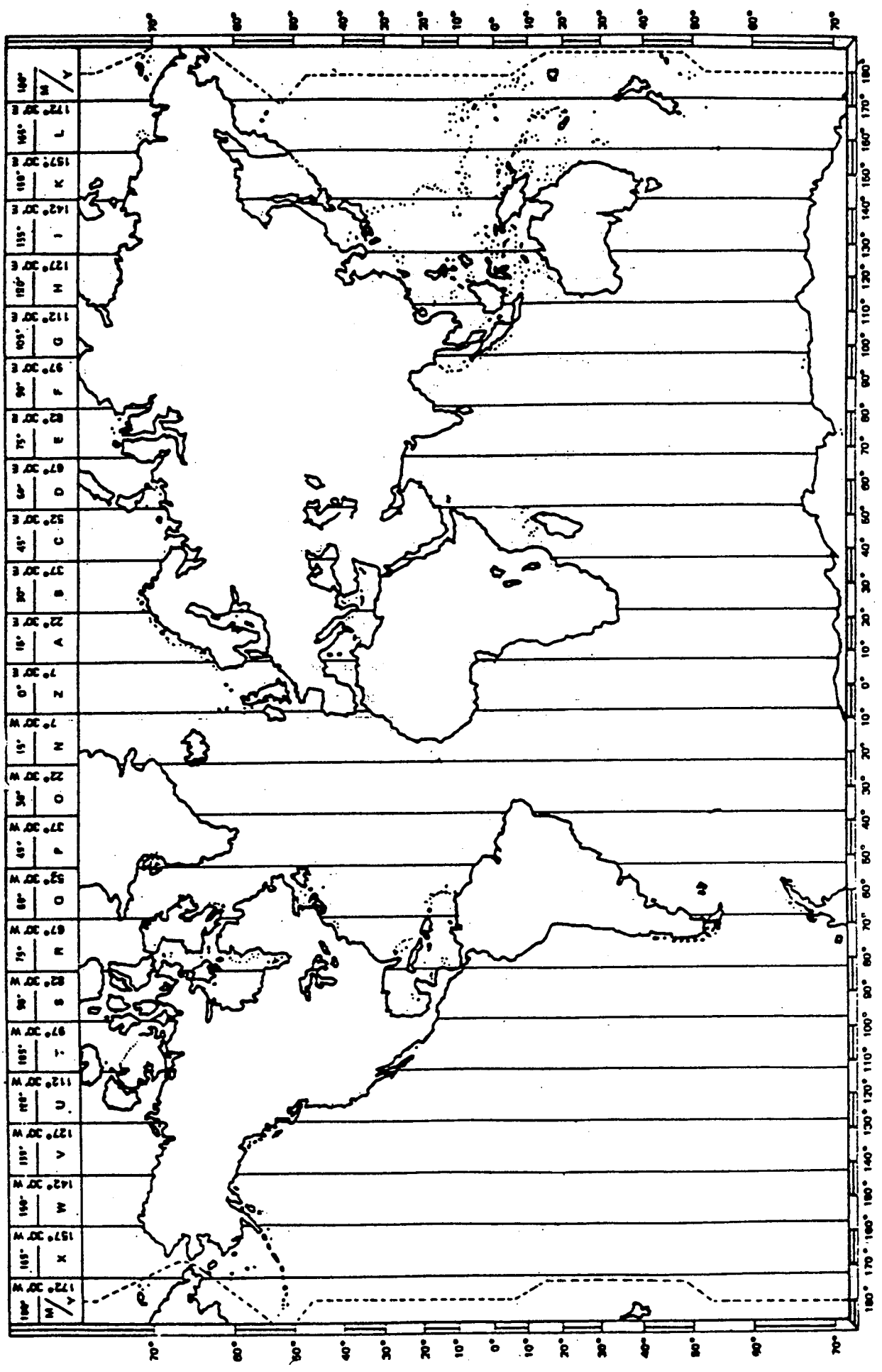
II) Para os navios classificados na 2.ª ou na 3.ª categoria .....

III) Para os navios classificados na 3.ª categoria, período em que se podem escolher as duas horas de serviço contínuo .....

Nota. — *b*) O gráfico indica igualmente (a preto) o período entre as 8 horas e 30 minutos e as 9 horas e 30 minutos, durante o qual se recomenda aos navios classificados na 4.ª categoria que assegurem o serviço (v. o n.º 4062).


UTC
CAT. 2 e 3
CAT. 3
(v. o n.º 4059)
CAT. 2
CAT. 2 e 3

MAPA-MÚNDI (FUSOS HORÁRIOS)



APÊNDICE 13

Abreviaturas e sinais diversos a empregar nas comunicações radiotelegráficas, com excepção das do serviço móvel marítimo

(V. o artigo 52)

SECÇÃO I

Código Q

Introdução

1. As séries de grupos QRA a QUZ, mencionadas seguidamente, são utilizáveis em todos os serviços.

2. As séries QAA a QNZ são reservadas ao serviço aeronáutico e as séries QOA a QQZ são reservadas aos serviços marítimos. Não fazem parte do presente Regulamento (*).

3. Pode dar-se um sentido afirmativo ou negativo a certas abreviaturas do código Q, transmitindo, respectivamente, YES ou NO imediatamente depois da abreviatura.

4. O significado das abreviaturas do código Q pode ser alargado ou completado pela adição apropriada de outras abreviaturas, indicativos de chamada, nomes de locais, algarismos, números, etc. Os espaços em branco contidos entre parêntesis correspondem a indicações facultativas. Essas indicações devem ser transmitidas pela ordem em que se encontram no texto dos quadros seguintes.

5. As abreviaturas do código Q tomam a forma de perguntas quando seguidas por um ponto de interrogação. Quando uma abreviatura empregada como pergunta for seguida de indicações complementares, convém que estas sejam seguidas de ponto de interrogação.

6. As abreviaturas do código Q que comportem várias significações numeradas deverão ser seguidas do número apropriado que precise o sentido escolhido. Este número é transmitido imediatamente a seguir à abreviatura.

7. As horas indicadas em tempo universal coordenado (UTC), a menos que se dêem indicações contrárias nas perguntas ou respostas.

Abreviaturas utilizáveis em todos os serviços

A) Lista das abreviaturas por ordem alfabética

Abreviatura	Pergunta	Resposta ou parecer
QRA	Qual é o nome da sua estação?	O nome da minha estação é ...
QRB	A que distância aproximada se encontra da minha estação?	A distância aproximada entre as nossas estações é ... milhas marítimas (*ou* quilómetros).
QRC	Por que exploração particular (*ou* administração de Estado) se liquidam as contas das taxas da sua estação?	As contas das taxas da minha estação são liquidadas pela exploração particular ... (*ou* pela administração do Estado ...).
QRD	Para onde vai e donde vem?	Vou para ... e venho de ...
QRE	A que horas conta chegar ... (*ou* por cima de ...) *(local)*?	Conto chegar a ... (*ou* por cima de ...) *(local)* às ... horas.
QRF	Volta a ... *(local)*?	Volto a ... *(local)*. *ou* Volte a ... *(local)*.
QRG	Quer indicar-me a minha frequência exacta (*ou* a frequência exacta de ...)?	A sua frequência exacta (ou a frequência exacta de ...) é ... (kHz ou MHz).
QRH	A minha frequência varia?	A sua frequência varia.
QRI	Qual è a tonalidade da minha emissão?	A tonalidade da sua emissão é: 1. Boa; 2. Variável; 3. Má.
QRJ	Quantas chamadas radiotelefónicas tem pendentes?	Tenho ... chamadas radiotelefónicas pendentes.
QRK	Qual é a intelegibilidade dos meus sinais (*ou* dos sinais de ...)?	A inteligibilidade dos seus sinais (ou dos sinais de ...) é: 1. Má; 2. Medíocre; 3. Suficiente; 4. Boa; 5. Excelente.
QRL	Está ocupado?	Estou ocupado (ou estou ocupado com ...). É favor não interferir.

(*) Nota do Secretariado-Geral: as séries QOA a QQZ figuram no apêndice 14.

Abreviatura	Pergunta	Resposta ou parecer
QRM	Está interferido?	Estou interferido ... 1. Não estou interferido; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
QRN	Está sendo perturbado por parasitas?	Estou sendo perturbado por parasitas ... 1. Não estou sendo perturbado por parasitas; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
QRO	Devo aumentar a potência de emissão?	Aumente a potência de emissão.
QRP	Devo diminuir a potência de emissão?	Diminua a potência de emissão.
QRQ	Devo transmitir mais depressa?	Transmita mais depressa (... palavras por minuto).
QRR	Está pronto para o emprego de aparelhos automáticos?	Estou pronto para o emprego de aparelhos automáticos.
QRS	Devo transmitir mais devagar?	Transmita à velocidade de ... palavras por minuto.
QRT	Devo parar a transmissão?	Transmita mais devagar (... palavras por minuto).
QRU	Tem alguma coisa para mim?	Pare a transmissão.
QRV	Está pronto?	Nada tenho para si.
QRW	Devo avisar ... que o chama em ... kHz (*ou* MHz)?	Estou pronto.
QRX	Quando me tornará a chamar?	É favor avisar ... que o chamo em ... kHz (*ou* MHz).
QRY	Qual é minha vez? *(refere-se às comunicações).*	Torno a chamá-lo às ... horas [em ... kHz (*ou* MHz)].
QRZ	Por quem estou sendo chamado?	A sua vez é o n.º... *(ou consoante qualquer outra indicação) (refere-se às comunicações).*
QSA	Qual é a intensidade dos meus sinais (*ou* dos sinais de ...)?	Está sendo chamado por ... [em ... kHz (*ou* MHz)]. A intensidade dos seus sinais (*ou* dos sinais de ...) é: 1. Apenas perceptível; 2. Fraca; 3. Regular; 4. Boa; 5. Muito boa.
QSB	A intensidade dos meus sinais varia?	A intensidade dos seus sinais varia.
QSC	Sois um navio de carga?	Sou um navio de carga.
QSD	É defeituosa a minha manipulação?	É defeituosa a sua manipulação.
QSE	Qual é a deriva estimada do engenho de salvamento?	A deriva estimada do engenho de salvamento é ... *(algarismo e unidade).*
QSF	Efectou o salvamento?	Efectuei o salvamento e dirijo-me para a base de ... (com ... feridos necessitando de ambulância).
QSG	Devo transmitir ... telegramas seguidos?	Transmita ... telegramas seguidos.
QSH	Pode guiar-se pelo seu radiogoniómetro?	Posso guiar-me pelo meu radiogoniómetro (pela estação de ...).
QSI	—	Foi-me impossível interromper a sua transmissão *ou* Queira informar ... *(indicativo de chamada)* de que me foi impossível interromper a sua transmissão [em ... kHz (*ou* MHz)].
QSJ	Qual á a taxa a cobrar para ..., incluída a sua taxa interna?	A taxa a cobrar para ... é de ... francos, incluída a minha taxa interna.
QSK	Pode receber-me entre os seus sinais? Caso afirmativo, posso interrompê-lo na sua transmissão?	Posso recebê-lo entre os meus sinais; pode interromper a minha transmissão.
QSI	Pode dar-me o entendido?	Dou-lhe o entendido.
QSM	Devo repetir o último telegrama que lhe transmiti (*ou* um telegrama precedente)?	Repita o último telegrama que me transmitiu [*ou* o(s) telegrama(s) número(s) ...].
QSN	Ouviu-me (ou ouviu ... *indicativo de chamada*) em ... kHz (*ou* MHz)?	Ouvi-o [ou ouvi ... *(indicativo de chamada)*] em ... kHz (*ou* MHz).
QSO	Pode comunicar com ... directamente (*ou* por *relais*)?	Posso comunicar com ... directamente (*ou* por intermédio de ...).
QSP	Quer retransmitir gratuitamente a ...?	Posso retransmitir gratuitamente a ...
QSQ	Tem um médico [*ou* ... *(nome de uma pessoa)*] a bordo?	Tenho um médico [*ou* ... *(nome de uma pessoa)*] a bordo.
QSR	Devo repetir a chamada na frequência de chamada?	Repita a chamada na frequência de chamada. Não o entendi (*ou* houve interferência).
QSS	Que frequência de trabalho vai utilizar?	Vou utilizar a frequência de trabalho ... kHz *(em regra geral, bastará indicar os três últimos algarismos da frequência).*
QSU	Devo transmitir ou responder na frequência actual [*ou* em ... kHz (*ou* MHz em emissão da classe ...?	Tansmita ou responda na frequência actual [*ou* em ... kHz (*ou* MHz)] em emissão da classe ...
QSV	Devo transmitir uma série de V nesta frequência [*ou* em kHz (*ou* MHz)]?	Transmita uma série de V nesta frequência [*ou* em ... kHz (*ou* MHz)].
QSW	Quer transmitir na frequência actual [ou em ... kHz (ou MHz)] em emissão da classe ...?	Vou transmitir na frequência actual [ou em ... kHz (*ou* MHz)] em emissão da classe ...
QSX	Quer escutar ... [*indicativo de chamada em* ... kHz (*ou* MHz)]?	Escuto ... [*indicativo de chamada em* ... kHz (*ou* MHz)].

Abreviatura	Pergunta	Resposta ou parecer
QSY	Devo passar à transmissão noutra frequência?	Passe à transmissão noutra frequência [ou em ... kHz (*ou* MHz)].
QSZ	Devo transmitir várias vezes cada palavra ou grupo?	Transmita cada palavra ou grupo de duas vezes (ou ... vezes).
QTA	Devo anular o telegrama número ...?	Anule o telegrama número ...
QTB	Está de acordo com a minha contagem de palavras?	Não estou de acordo com a sua contagem de palavras. Repito a primeira letra de cada palavra e o primeiro algarismo de cada número.
QTC	Quantos telegramas tem para transmitir?	Tenho ... telegramas para si (*ou* para ...).
QTD	Que recolheu o navio de salvamento ou a aeronave de salvamento?	... *(identificação)* recolheu: 1. ... *(número)* sobreviventes; 2. Destroços; 3. ... *(número)* cadáveres.
QTE	Qual o meu azimute verdadeiro em relação a si? *ou* Qual o meu azimete verdadeiro em relação a ... (indicativo de chamada)? *ou* Qual o azimute verdadeiro de ... *(indicativo de chamada)* em relação a ... *(indicativo de chamada)*?	O seu azimute verdadeiro em relação a mim é ... graus às ... horas. *ou* O seu azimute verdadeiro em relação a ... *(indicativo de chamada)* era de ... grau às ... horas. *ou* O azimute verdadeiro de ... *(indicativo de chamada)* em relação a ... *(indicativo de chamada)* era de ... grau às ... horas.
QTF	Quer indicar-me a posição da minha estação na base dos azimutes tomados pelas estações radiogoniométricas que essa estação comanda?	A posição da sua estação na base dos azimutes tomados pelas estações radiogoniométricas que comando era ... latitude, ... longitude *(ou outra indicação da posição)*, classe ... às ... horas.
QTG	Quer transmitir dois traços de dez segundos cada um, seguidos do seu indicativo de chamada (repetidos ... vezes) em ... kHz (*ou* MHz)? *ou* Quer pedir a ... que transmita dois traços de dez segundos, seguidos do seu indicativo de chamada (repetidos ... vezes) em ... kHz (*ou* MHz)?	Vou transmitir dois traços de dez segundos cada um, seguidos do meu indicativo de chamada (repetidos ... vezes) e ... kHz (*ou* MHz). *ou* Pedi a ... que transmita dois traços de dez segundos, seguidos do seu indicativo de chamada (repetidos ... vezes) em ... kHz (*ou* MHz).
QTH	Qual é a sua posição em latitude e longitude *(ou consoante qualquer outra indicação)*?	A minha posição é ... latitude, ... longitude *(ou consoante qualquer outra indicação)*.
QTI	Qual o seu caminho verdadeiro?	O meu caminho verdadeiro é de ... graus.
QTJ	Qual a sua velocidade? *(Pede a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente.)*	A minha velocidade é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora). *(Indica a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivametne.)*
QTK	Qual é a velocidade da sua aeronave em relação à superfície terrestre?	A velocidade da minha aeronave é de ... nós (*ou* de ... quilómetros por hora ou de ... milhas terrestres por hora) em relação à superfície terrestre.
QTL	Qual o seu rumo verdadeiro?	O meu rumo verdadeiro é de ... graus.
QTM	Qual é o seu rumo magnético?	O meu rumo magnético é de ... graus.
QTN	A que horas deixou ... *(local)*?	Deixei ... *(local)* às ...
QTO	Saiu da doca (*ou* do porto)? *ou* Descolou?	Saí da doca (*ou* do porto). *ou* Descolei.
QTP	Vai entrar na doca (*ou* no porto)? *ou* Vai amarar (*ou* aterrar)?	Vou entrar na doca (*ou* no porto). *ou* Vou amarar (*ou* aterrar).
QTQ	Pode comunicar com a minha estação por meio do Código Internacional de Sinais?	Vou comunicar com a sua estação por meio do Código Internacional de Sinais.
QTR	Qual é a hora exacta?	A hora exacta é ...
QTS	Quer transmitir o seu indicativo de chamada para regulação ou para permitir a medida da sua frequência agora (*ou* às ... horas) em ... kHz (*ou* MHz)?	Vou transmitir o seu indicativo de chamada para regulação ou para permitir a medida da minha frequência agora (*ou* às ... horas) em ... kHz (*ou* MHz).
QTT	—	O sinal de identificação que se segue está sobreposto a outra emissão.
QTU	Quais as horas em que a sua estação está aberta?	A minha estação está aberta das ... às ... horas.
QTV	Devo tomar a escuta em seu lugar na frequência ... kHz (*ou* MHz) das ... às ... horas?	Tome a escuta em meu lugar na frequência ... kHz (*ou* MHz) das ... às ... horas.
QTW	Qual o estado dos sobreviventes?	Os sobreviventes estão em ... estado e necessitam urgentemente de ...
QTX	Quer deixar a sua estação para comunicar com a minha até novo aviso da minha parte (*ou* até às ... horas)?	A minha estação fica aberta para comunicar com a sua até novo aviso da sua parte (*ou* até às ... horas).
QTY	Dirige-se para o local do acidente e, no caso afirmativo, quando pensa chegar?	Dirigo-me para o local do acidente e penso chegar às ... horas (... *data*).
QTZ	Continua a busca?	Continuo a busca (de ... aeronave, navio, engenho de salvamento, sobreviventes, destroços).
QUA	Tem notícias de ... *(indicativo de chamada)*?	Eis notícias de ... *(indicativo de chamada)*?
QUB	Pode dar-me, pela ordem indicada, informações sobre: a direcção verdadeira e a velocidade do vento à superfície; a visibilidade; o estado do tempo, a grandeza, tipo e altura da base das nuvens por cima de ... *(local de observação)*?	As informações pedidas são: ... *(Convém indicar as unidades utilizadas para as velocidades e distâncias.)*
QUC	Qual o número *(ou outra indicação)* da última mensagem que recebeu de mim [*ou* de ... *(indicativo de chamada)*]?	O número *(ou outra indicação)* da última mensagem que recebi de si [*ou* de ... *(indicativo de chamada)*] é ...

Abreviatura	Pergunta	Resposta ou parecer
QUD	Recebeu o sinal de urgência transmitido por ... *(indicativo de chamada de uma estação móvel)*?	Recebi o sinal de urgência transmitido por ... *(indicativo de chamada de uma estação móvel)* às ... horas.
QUE	Pode telefonar em ... *(língua)*, com intérprete, se necessário? Caso afirmativo, em que frequências?	Posso telefonar em ... *(língua)* em kHz (*ou* MHz).
QUF	Recebeu o sinal de perigo emitido por ... *(indicativo de chamada de uma estação móvel)*?	Recebi o sinal de perigo emitido por ... *(indicativo de chamada de uma estação móvel)* às ... horas.
QUG	Vai ser forçado a amarar (*ou* a aterrar)?	Sou forçado a amarar (*ou* a aterrar) imediatamente ou vou ser forçado a amarar (*ou* a aterrar) em ... *(posição ou local)* às ... horas.
QUH	Quer indicar-me a pressão barométrica actual ao nível do mar?	A pressão barométrica actual ao nível do mar é de ... *(unidades)*.
QUI	Estão acesos os seus faróis de navegação?	Os meus faróis de navegação estão acesos.
QUJ	Quer indicar-me o rumo verdadeiro a seguir para me dirigir para si (*ou* para me dirigir para ...)?	O rumo verdadeiro a seguir para se dirigir para mim (*ou* para se dirigir para ...) é de ... graus às horas.
QUK	Pode indicar-me o estado do mar observado em ... *(local ou coordenadas)*?	Por mar em ... *(local ou coordenadas)* está ...
QUL	Pode indicar-me a ondulação do mar observada em ... *(local ou coordenadas)*?	A ondulação do mar em ... *(local ou coordenadas)* é ...
QUM	Posso recomeçar o trabalho normal?	Pode-se recomeçar o trabalho normal.
QUN	Pede-se aos navios da minha vizinhança imediata *ou* (na vizinhança de ... latitude, ... longitude) *ou* (na vizinhança de ...) que indiquem a sua posição, rumo verdadeiro e velocidade.	A minha posição, rumo verdadeiro e velocidade são ...
QUO	Devo proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou consoante qualquer outra indicação)*?	Queira proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou consoante qualquer outra indicação)*?
QUP	Quer indicar a sua posição por: 1. Projector? 2. Fumo negro? 3. Luzes pirotécnicas?	A minha posição é indicada por: 1. Projector; 2. Fumo negro; 3. Luzes pirotécnicas.
QUQ	Devo dirigir o meu projector verticalmente para uma nuvem, de maneira intermitente, se possível, dirigir em seguida o feixe para a água (*ou* para o solo), contra o vento, quando veja ou ouça a sua aeronave, a fim de facilitar a sua amaragem (*ou* a sua aterragem)?	É favor dirigir o seu projector verticalmente para uma nuvem, de maneira intermitente, se possível, dirigir em seguida o feixe para a água (*ou* para o solo), contra o vento, quando veja ou ouça a minha aeronave, a fim de facilitar a minha amaragem (*ou* a minha aterragem).
QUR	Os sobreviventes: 1. Receberam o equipamento de salvamento? 2. Foram recolhidos por um navio? 3. Foram alcançados pelo grupo de salvamento em terra?	Os sobreviventes: 1. Receberam o equipamento de salvamento lançado por ... 2. Foram recolhidos por um navio; 3. Foram alcançados pelo grupo de salvamento em terra.
QUS	Avistou sobreviventes ou destroços? Na hipótese afirmativa, em que local?	Avistei: 1. Sobreviventes na água; 2. Sobreviventes em jangadas; 3. Destroços; em ... latitude, ... longitude *(ou segundo qualquer outra indicação)*.
QUT	O local do acidente está assinalado?	O local do acidente está assinalado por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositico a especificar)*.
QUU	Devo dirigir o navio ou a aeronave até à minha posição?	Dirija o navio ou a aeronave *(indicativo de chamada)* ... 1. Para a sua posição, transmitindo o vosso indicativo de chamada e traços prolongados em ... kHz (*ou* MHz); 2. Transmitindo em ... kHz (*ou* MHz) o rumo verdadeiro para vos alcançarem.
QUW	Está na zona de busca ... *(símbolo ou latitude e longitude)*?	Estou na zona de busca ... *(designação)*.
QUY	A posição do engenho de salvamento foi assinalada?	A posição do engenho de salvamento foi assinalada às ... horas por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositico a especificar)*.

B) Lista das abreviaturas consoante a natureza das perguntas, respostas ou pareceres

Abreviatura	Pergunta	Resposta ou parecer
	Nome	
QRA	Qual é o nome da sua estação?	O nome da minha estação é ...
	Percurso	
QRD	Para onde vai e donde vem?	Vou para ... e venho de ...
	Posição	
QRB	A que distância aproximada se encontra da minha estação?	A distância aproximada entre as nossas estações é de ... milhas marítimas (*ou* quilómetros).
QTH	Qual é a sua posição em latitude e longitude *(ou consoante qualquer outra indicação)*?	A minha posição é ... latitude ... longitude (*ou consoante qualquer outra indicação*).
QTN	A que horas deixou ... *(local)*?	Deixei... *(local)* às ... horas.
	Qualidade dos sinais	
QRI	Qual é a tonalidade da minha emissão?	A tonalidade da sua emissão é: 1. Boa; 2. Variável; 3. Má.
QRK	Qual é a intelegibilidade dos meus sinais (*ou* dos sinais de ...)?	A intelegibilidade dos seus sinais (*ou* dos sinais de ...) é: 1. Má; 2. Mediocre; 3. Suficiente; 4. Boa. 5. Excelente.
	Intensidade dos sinais	
QRO	Devo aumentar a potência de emissão?	Aumente a potência de emissão.
QRP	Devo diminuir a potência de emissão?	Diminua a potência de emissão.
QSA	Qual é a intensidade dos meus sinais (*ou* dos sinais de ...)?	A intensidade dos seus sinais (*ou* sinais de ...) é: 1. Apenas perceptível; 2. Fraca; 3. Regular; 4. Boa; 5. Muito boa.
QSB	A intensidade dos meus sinais varia?	A intensidade dos seus sinais varia.
	Manipulação	
QRQ	Devo transmitir mais depressa?	Transmita mais depressa (...palavra por minuto).
QRR	Está pronto para o emprego de aparelhos automáticos?	Estou pronto para o emprego de aparelhos automáticos. Transmita à velocidade de ... palavras por minuto.
QRS	Devo transmitir mais devagar?	Transmita mais devagar (... palavras por minuto).
QSD	É defeituosa a minha manipulação?	A sua manipulação é defeituosa.
	Interferências	
QRM	Está interferido?	Estou interferido ... 1. Não estou interferido; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
QRN	Está a ser perturbado por parasitas?	Estou a ser perturbado por parasitas ... 1. Não estou a ser perturbado por parasitas; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.

Abreviatura	Pergunta	Resposta ou parecer
	Regulação da frequência	
QRG	Quer indicar-me a minha frequência exacta (*ou* a frequência exacta de ...)?	A sua frequência exacta (*ou* a frequência exacta de ...) é ... kHz (*ou* MHZ).
QRH	A minha frequência varia?	A sua frequência varia.
QTS	Quer transmitir o seu indicativo de chamada para regulação, ou para permitir a medida da sua frequência, agora (*ou* às ... horas), em ... kHz (*ou* MHz)?	Vou transmitir agora (*ou* às ... horas), em ... kHZ (*ou* MHz), o meu indicativo de chamada para regulação ou para permitir a medida da minha frequência.
	Escolha da frequência e ou da classe de emissão	
QSN	Ouviu-me [*ou* ouviu ... *(indicativo de chamada)*] em kHz (*ou* MHz)?	Ouviu-o [*ou* ouviu ... *(indicativo de chamada)*] em ... kHz (*ou* MHz).
QSS	Que frequência de trabalho vai utilizar?	Vou utilizar a frequência de trabalho ... kHz *(regra geral, bastará indicar os três últimos algarismos da frequência).*
QSU	Devo transmitir ou responder na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Transmita ou responda na frequência actual [*ou* em ... kHz, (*ou* MHz)] (em nissão da classe ...).
QSV	Devo transmitir uma série de V nesta frequência [*ou* em ... kHz (*ou* MHz)]?	Transmita uma série de V nesta frequência [*ou* em ... kHz (*ou* MHz).
QSW	Quer transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Vou transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...).
QSX	Quer escutar ... *(indicativo de chamada)* em ... kHz (*ou* MHz)?	Escuto ... *(indicativo de chamada)* em ... kHz (*ou* MHZ).
	Mudança de frequência	
QSY	Devo passar à transmissão noutra frequência?	Passe à transmissão noutra frequência [*ou* em ... kHz (*ou* MHz)].
	Estabelecimento da comunicação	
QRI	Está ocupado?	Estou ocupado (*ou* estou ocpado com ...). É favor não interferir.
QRV	Está pronto?	Estou pronto.
QRX	Quando me tornará a chamar?	Torno a chamá-lo às ... horas [em ... kHz (*ou* MHz)].
QRY	Qual é a minha vez *(refere-se às comunicações)?*	A sua vez é o número ... *(ou consoante qualquer outra indicação), (refere-se às comunicações).*
QRZ	Por quem estou sendo chamado?	Está sendo chamado por ... [em ... kHz (*ou* MHz)].
QSC	Sois um navio de carga?	Sou um navio de carga.
QSR	Devo repetir a chamada na frequência de chamada?	Repita a chamada na frequência de chamada. Não o entendi (*ou* houve interferência).
QTQ	Pode comunicar com a minha estação por meio do Código Internacional de Sinais?	Vou comunicar com a sua estação por meio do Código Internacional de Sinais.
QUE	Pode telefonar em ... *(língua)*, com um intérprete, se necessário? Caso afirmativo, em que frequências?	Posso telefonar em ... *(língua)*, em ... kHz (*ou* MHz).
	Hora	
QTR	Qual é a hora exacta?	A hora exacta é ...
QTU	Quais as horas em que a sua estação está aberta?	A minha estação está abertas das ... às ... horas.
	Taxas	
QRC	Por que exploração (*ou* administração do Estado) se liquidam as contas das taxas da sua estação?	As contas das taxas da minha estação são liquidadas pela exploração particular ... (*ou* pela administração do Estado ...).
QSJ	Qual é a taxa a cobrar para ..., incluída a sua taxa interna?	A taxa a cobrar para ... é de ... francos, incluída a minha taxa interna.
	Trânsito	
QRW	Devo avisar ... que o chama em ... kHz (*ou* MHz)?	É favor avisar ... que o chamo em ... kHz (*ou* MHz).
QSO	Pode comunicar com ... directamente (*ou* por *relais*)?	Posso comunicar com ... directamente (*ou* por intermédio de ...).
QSP	Quer retransmitir gratuitamente a ...?	Posso retransmitir gratuitamente a ...
QSQ	Tem médico [*ou* ... *(nome de uma pessoa)*] a bordo?	Tenho um médico [*ou* ... *(nome de uma pessoa)*] a bordo.
QUA	Tem notícias de ... *(indicativo de chamada)?*	Eis notícias de ... *(indicativo de chamada).*
QUC	Qual é o número *(ou outra indicação)* da última mensagem que recebeu de mim [*ou* de ... *(indicativo de chamada)*]?	O número (*ou outra indicação*) da última mensagem que recebi de si [*ou* de ... *(indicativo de chamada)*] é ...
	Encaminhamento da correspondência	
QRJ	Quantas chamadas radiotelefónicas tem pendentes?	Tenho ... chamadas radiotelefónicas pendentes.
QRU	Tem alguma coisa para mim?	Nada tenho para si.

Abreviatura	Pergunta	Resposta ou parecer
QSG	Devo transmitir ... telegramas seguidos?	Transmita ... telegramas seguidos.
QSI		Foi-me impossível interromper a sua transmissão. *ou* Queira informar ... *(indicativo de chamada)* de que me foi impossível interromper a sua transmissão [em ... kHz (*ou* MHz)].
QSK	Pode receber-me entre os seus sinais? Caso afirmativo, posso interromper a sua transmissão?	Posso recebê-lo entre os meus sinais. Pode interromper a minha transmissão.
QSL	Pode dar-me o entendido?	Dou-lhe o entendido.
QSM	Devo repetir o último telegrama que lhe transmiti (*ou* um telegrama precedente)?	Repita o último telegrama que me transmitiu [*ou* o(*s*) telegrama(*s*) número(*s*) ...].
QSZ	Devo transmitir várias vezes cada palavra ou grupo?	Transmita cada palavra ou grupo duas vezes (*ou* ... vezes).
QTA	Devo anular o telegrama número ...?	Anule o telegrama número ...
QTB	Está de acordo com a minha contagem de palavras?	Não estou de acordo com a sua contagem de palavras. Vou repetir a primeira letra de cada palavra e o primeiro algarismo de cada número.
QTC	Quantos telegramas tem para transmitir?	Tenho ... telegramas para si (*ou* para ...).
QTV	Devo tomar a escuta em seu lugar na frequência ... kHz (*ou* MHz) (das ... às ... horas)?	Tome a escuta em meu lugar na frequência ... kHz (*ou* MHz) (das ... às ... horas).
QTX	Quer deixar a sua estação aberta para comunicar com a minha até novo aviso da minha parte (*ou* até às ... horas)?	A minha estação fica aberta para comunicar com a sua até novo aviso da sua parte (*ou* até às ... horas).
	Movimento	
QRE	A que horas conta chegar a ... (*ou* por cima de ...) *(local)*?	Conto chegar a ... (*ou* por cima de ...) *(local)* às ... horas.
QRF	Volta a ... *(local)*?	Volto a ... *(local)*. *ou* Volte a ... *(local)*.
QSH	Pode guiar-se pelo seu radiogoniómetro?	Posso guiar-me pelo meu radiogoniómetro (pela estação de ...).
QTI	Qual o seu caminho VERDADEIRO?	O meu caminho VERDADEIRO é de ... graus.
QTJ	Qual é a sua velocidade? *(Pede a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente.)*	A minha velocidade é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora). *(Indica a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente).*
QTK	Qual é a velocidade da sua aeronave em relação à superfície da Terra?	A velocidade da minha aeronave é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora) em relação à superfície da Terra.
QTL	Qual é o seu rumo VERDADEIRO?	O meu rumo VERDADEIRO é de ... graus.
QTM	Qual é o seu rumo MAGNÉTICO?	O meu rumo MAGNÉTICO é de ... graus.
QTN	A que horas deixou ... *(local)*?	Deixei ... *(local)* às ... horas.
QTO	Saiu da doca (*ou* do porto)? *ou* Descolou?	Saí da doca (*ou* do porto). *ou* Descolei.
QTP	Vai entrar na doca (*ou* no porto)? *ou* Vai amarar (*ou* aterrar)?	Vou entrar na doca (*ou* no porto). *ou* Vou amarar (*ou* aterrar).
QUG	Vai ser forçado a amarar (*ou* a aterrar)?	Sou forçado a amarar (*ou* a aterrar) imediatamente. *ou* Vou ser forçado a amarar (*ou* a aterrar) em ... *(posição ou local)* às ... horas.
QUJ	Quer indicar-me o rumo VERDADEIRO a seguir para me dirigir para si (*ou* para me dirigir para ...)?	O rumo VERDADEIRO a seguir para se dirigir para mim (*ou* para se dirigir para ...) é de ... graus às ... horas.
QUN	Pede-se aos navios na minha vizinhança imediata *ou* (na vizinhança de ... latitude, ... longitude) *ou* (na vizinhança de ...) que indiquem a sua posição, rumo VERDADEIRO e velocidade.	A minha posição, meu rumo VERDADEIRO e velocidade são ...
	Meteorologia	
QUB	Pode dar-me, pela ordem indicada, informações sobre a direcção VERDADEIRA e a velocidade do vento à superfície, a visibilidade, estado do tempo, grandeza, tipo e altura da base das nuvens por cima de ... *(local de observação)*?	As informações pedidas são: *(Convém indicar as unidades utilizadas para as velocidades e distâncias.)*
QUH	Quer indicar-me a pressão barométrica actual ao nível do mar?	A pressão barométrica actual ao nível do mar é de ... *(unidades)*.
QUK	Pode indicar-me o estado do mar observado em ... *(local ou coordenadas)*?	O mar em ... *(local ou coordenadas)* está ...
QUL	Pode indicar-me a ondulação do mar observada em ... *(local ou coordenadas)*?	A ondulação em ... *(local ou coordenadas)* é ...

Abreviatura	Pergunta	Resposta ou parecer
	Radiogoniometria	
QTE	Qual o meu azimute VERDADEIRO em relação a si? *ou* Qual o meu azimute VERDADEIRO em relação a ... *(indicativo de chamada)*? *ou* Qual o azimute VERDADEIRO de ... *indicativo de chamada)* em relação a ... *(indicativo de chamada)*?	O seu azimute VERDADEIRO em relação a mim é de ... grau às ... horas. *ou* O seu azimute VERDADEIRO em relação a ... *(indicativo de chamada)* era de ... graus às ... horas. *ou* O azimute VERDADEIRO de ... *(indicativo de chamada)* em relação a ... *(indicativo de chamada)* era de ... graus às ... horas.
QTF	Quer indicar-me a posição da minha estação na base dos azimutes tomados pelas estações radiogoniométricas que essa estação comanda?	A posição da sua estação na base dos azimutes tomados pelas estações radiogoniométricas que comando era ... latitude, ... longitude *(ou outra indicação da posição)*, classe ... às ... horas.
QTG	Quer transmitir dos traços de dez segundos cada um, seguidos do seu indicativo de chamada (repetidos ... vezes) [em ... kHz *(ou* MHz)]? *ou* Quer pedir a ... que transmita dois traços de dez segundos cada um, seguidos do seu indicativo de chamada (repetidos ... vezes) em ... kHz *(ou* MHz)?	Vou transmitir dois traços de dez segundos cada um, seguidos do meu indicativo de chamada (repetidos ... vezes) em ... kHz *(ou* MHz)]. *ou* Pedi a ... que transmita dois traços de dez segundos, seguidos do seu indicativo de chamada (repetidos ... vezes) em ... kHz *(ou* MHz).
	Suspensão do trabalho	
QRT	Devo parar a transmissão?	Pare a transmissão.
QUM	Posso recomeçar o trabalho normal?	Pode-se recomeçar o trabalho normal.
	Urgência	
QUD	Recebeu o sinal de urgência transmitido por ... *(indicativo de chamada de uma estação móvel)*?	Recebi o sinal de urgência transmitido por ... *(indicativo de chamada de uma estação móvel)* às ... horas.
QUG	Vai ser forçado a amarar *(ou* a aterrar)?	Sou forçado a amarar *(ou* a aterrar) imediatamente. *ou* Vou ser forçado a amarar *(ou* a aterrar) em ... *(posição ou local)* às ... horas.
	Perigo	
QUF	Recebeu o sinal de perigo emitido por ... *(indicativo de chamada de uma estação móvel)*?	Recebi o sinal de perigo emitido por ... *(indicativo de chamada de uma estação móvel)* às ... horas.
QUM	Posso recomeçar o trabalho normal?	Pode-se recomeçar o trabalho normal.
	Busca e salvamento	
QSE	Qual é a deriva estimada do engenho de salvamento?	A deriva estimada do engenho de salvamento é ... *(algarismo e unidade)*.
QSF	Efectuou o salvamento?	Efectuei o salvamento e dirijo-me para a base de ... (com ... feridos necessitando de ambulância).
QTD	Que recolheu o navio de salvamento ou a aeronave de salvamento?	... *(identificação)* recolheu: 1. ... *(número)* de sobreviventes; 2. Destroços; 3. ... *(número)* cadáveres.
QTW	Qual é o estado dos sobreviventes?	Os sobreviventes estão em ... estado e necessitam urgentemente de ...
QTY	Dirige-se para o local do acidente e, no caso afirmativo, quando pensa chegar?	Dirijo-me para o local do acidente e penso chegar às ... horas (... data)
QTZ	Continua a busca?	Continuo a busca de ... (aeronave, navio, engenho de salvamento, sobreviventes, destroços).
QUI	Estão acesos os faróis de navegação?	Os meus faróis de navegação estão acesos.
QUN	Pede-se aos navios na minha vizinhança imediata *ou* (na vizinhança de ... latitude ... longitude) *ou* (na vizinhança de ...) que indiquem a sua posição, rumo VERDADEIRO e velocidade.	A minha posição, rumo VERDADEIRO e velocidade são ...
QUO	Devo proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou consoante qualquer outra indicação)*?	Queira proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou consoante qualquer outra indicação)*.

Abreviatura	Pergunta	Resposta ou parecer
QUP	Quer indicar a sua posição por: 1. Projecto? 2. Fumo negro? 3. Luzes pirotécnicas?	A minha posição é indicada por: 1. Projector; 2. Fumo negro; 3. Luzes pirotécnicas.
QUQ	Devo dirigir o meu projector verticalmente para uma nuvem, de maneira intermitente, se possível, dirigir em seguida o feixe para a água (*ou* para o solo), contra o vento, quando veja ou ouça a sua aeronave, a fim de facilitar a sua amaragem (*ou* a sua aterragem)?	É favor dirigir o seu projector verticalmente para uma nuvem, de maneira intermitente, se possível, dirigir em seguida o feixe para a água (*ou* para o solo), contra o vento, quando veja ou ouça a minha aeronave, a fim de facilitar a minha amaragem (*ou* a minha aterragem).
QUR	Os sobreviventes: 1. Receberam o equipamento de salvamento? 2. Foram recolhidos por um navio? 3. Foram alcançados pelo grupo de salvamento em terra?	Os sobreviventes: 1. Receberam o equipamento de salvamento lançado por ... 2. Foram recolhidos por um navio; 3. Foram alcançados pelo grupo de salvamento em terra.
QUS	Avistou sobreviventes ou destroços? Na hipótese afirmativa, em que local?	Avistei: 1. Sobreviventes na água; 2. Sobreviventes em jangadas; 3. Destroços; a ... latitude, ... longitude *(ou consoante qualquer outra indicação).*
QUT	O local do acidente está assinalado?	O local do acidente está assinalado por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
QUU	Devo dirigir o navio ou a aeronave até à minha posição?	Dirija o navio ou a aeronave *(indicativo de chamada)* ... 1. Para a sua posição, transmitindo o vosso indicativo de chamada e traços prolongados em ...kHz (*ou* MHz); 2. Transmitindo em ... kHz (*ou* MHz) o rumo VERDADEIRO a tomar para vos alcançarem.
QUW	Está na zona de busca ... *(símbolo ou latitude e longitude)*	Estou na zona de busca ... *(designação).*
QUY	A posição do engenho de salvamento foi assinalada?	A posição do engenho de salvamento foi assinalada às ... horas por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
	Identificação	
QTT	—	O sinal de identificação que se segue está sobreposto a outra emissão.

SECÇÃO II

Abreviaturas e sinais diversos

Abreviatura ou sinal	Definição
AA	Tudo depois de ... *(a empregar depois de um ponto de interrogação para pedir uma repetição).*
AB	Tudo antes de ... *(a empregar depois de um ponto de interrogação para pedir uma repetição).*
ADS	Endereço *(a empregar depois de um ponto de interrogação para pedir uma repetição).*
AR	Fim de transmissão *(. — . — . a transmitir como um só sinal).*
AS	Espera *(. — ... a transmitir como um só sinal).*
BK	Sinal empregado para interromper uma transmissão em curso.
BN	Tudo entre ... e ... *(a empregar depois de um ponto de interrogação para pedir uma repetição).*
BQ	Resposta a RQ.
CFM	Confirme (*ou* confirmo).
CL	Vou fechar a minha estação.
COL	Confira (*ou* confiro).
CP	Chamada geral a duas ou mais estações específicadas *(v. o artigo 52).*
CQ	Chamada geral a todas as estações *(v. o artigo 52).*
CS	Indicativo de chamada *(empregado para pedir um indicativo de chamada).*
DDD	Utilizado para identificar a transmissão de uma mensagem de perigo por uma estação que não se encontra em perigo *(v. o n.º* **3164**).
DE	De *(utilizado antes do indicativo de chamada da estação que chama).*

Abreviatura ou sinal	Definição
DF	O seu azimute às ... horas era ... graus, no sector duvidoso desta estação, como um erro possível de ... graus.
DO	Azimute duvidoso. Peça um azimute mais tarde (*ou* às ... horas).
E	Este *(ponto cardeal)*.
ER	Aqui ...
ETA	Hora estimada da chegada.
ITP	A pontuação conta.
K	Convite para transmitir.
KMH	Quilómetros por hora.
KTS	Milhas marítimas por hora *(nós)*.
MIN	Minuto (*ou* minutos).
MPH	Milhas terrestres por hora.
MSG	Prefixo que indica uma mensagem com destino ou proveniente do comandante de um navio e relativa à exploração do navio ou à sua navegação.
N	Norte *(ponto cardeal)*.
NIL	Nada tenho para lhe transmitir.
NO	Não *(negação)*.
NW	Agora.
OK	Estamos de acordo (*ou* Está certo).
OL	Carta transoceânica.
P	Prefixo que indica um radiotelegrama particular.
PBL	Preâmbulo *(a empregar depois de um ponto de interrogação para pedir uma repetição)*.
R	Recebido.
REF	Referência a ... (*ou* refira-se a ...).
RPT	Repita (*ou* repito) (*ou* repita ...).
RQ	Indicação de um pedido.
S	Sul *(ponto cardeal)*.
SIG	Assinatura *(a empregar depois de um ponto de interrogação para pedir uma repetição)*.
SLT	Carta radiomarítima.
SOS	Sinal de perigo *(... — — — ... a transmitir com um só sinal)*.
SS	Indicação que precede o nome de uma estação de navio.
SVC	Prefixo que indica um telegrama de serviço.
SYS	Refira-se ao seu telegrama de serviço.
TFC	Tráfego.
TR	Utilizado por uma estação terrestre para pedir a posição e o próximo ponto de escala de uma estação móvel (*v. o n.°* 3691); utilizado igualmente como prefixo à resposta.
TTT	Este grupo, quando transmitido três vezes, constitui o sinal de segurança (*v. o n.°* 3221).
TU	Muito obrigado.
TXT	Texto *(a empregar depois de um ponto de interrogação para pedir uma repetição)*.
VA	Fim do trabalho *(... — . — a transmitir com um só sinal)*.
W	Oeste *(ponto cardeal)*.
WA	Palavra depois de ... *(a empregar depois de um ponto de interrogação para pedir uma repetição)*.
WB	Palavra antes de ... *(a empregar depois de um ponto de interrogação para pedir uma repetição)*.
WD	Palavra(s) [*ou* grupo(s)].
XQ	Prefixo que indica uma comunicação estabelecida no serviço fixo.
XXX	Este grupo, quando transmitido três vezes, constitui o sinal de urgência (*v. o n.°* 3196).
YES	Sim *(afirmação)*.

APÊNDICE 14

Abreviaturas e sinais diversos a utilizar nas radiocomunicações do serviço móvel marítimo

(V. os artigos 37, 63 e 65)

SECÇÃO I

Código Q

Introdução

1. As séries de grupos mencionadas no presente apêndice vão de QOA a QUZ.

2. As séries QOA a QQZ são reservadas ao serviço móvel marítimo.

3. Pode dar-se um sentido afirmativo ou negativo a certas abreviaturas do código Q transmitindo, imediatamente depois da abreviatura, a letra C ou as letras NO (em radiotelefonia, palavra de código CHARLIE ou pronúncia NO).

4. O significado das abreviaturas do código Q pode ser alargado ou completado pela adição apropriada de outras abreviaturas, de indicativos de chamada, de nomes de locais, de algarismos, de números, etc. Os espaços em branco contidos entre parêntesis correspondem a indicações facultativas. Essas indicações são transmitidas pela ordem em que se encontram no texto dos quadros seguintes.

5. As abreviaturas do código Q tomam a forma de perguntas quando seguidas por um ponto de interrogação em radiotelegrafia e por RQ (ROMEO QUEBEC) em radiotelefonia. Quando uma abreviatura empregada como pergunta for seguida de indicações adicionais ou complementares, convém colocar depois destas o ponto de interrogação ou a abreviatura RQ.

6. As abreviaturas do código Q que comportem várias significações numeradas deverão ser seguidas do número apropriado que precise o sentido escolhido. Este número é transmitido imediatamente a seguir à abreviatura.

7. As horas são indicadas em tempo universal coordenado (UTC), a menos que se dêem indicações contrárias nas perguntas ou respostas.

8. Um asterisco (*) colocado depois de uma abreviatura do código Q significa que este sinal tem um significado análogo ao de um sinal que figura no Código Internacional de Sinais.

Abreviaturas utilizadas no serviço móvel marítimo

A) Lista das abreviaturas por ordem alfabética

Abreviatura	Pergunta	Resposta ou parecer
QOA	Pode comunicar em radiotelegrafia (500 kHz)?	Posso comunicar em radiotelegrafia (500 kHz).
QOB	Pode comunicar em radiotelefonia (2182 kHz)?	Posso comunicar em radiotelegrafia (2182 kHz).
QOC	Pode comunicar em radiotelefonia (via 16 — frequência 156,80 MHz)?	Posso comunicar em radiotelefonia (via 16 — frequência 156,80 MHz).
QOD	Pode comunicar comigo em: 0. Holandês? 1. Inglês? 2. Francês? 3. Alemão? 4. Grego? 5. Italiano? 6. Japonês? 7. Norueguês? 8. Russo? 9. Espanhol?	Posso falar consigo em: 0. Holandês; 1. Inglês; 2. Francês; 3. Alemão; 4. Grego; 5. Italiano; 6. Japonês; 7. Norueguês; 8. Russo; 9. Espanhol.
QOE	Recebeu o sinal de segurança transmitido por ... *(nome ou indicativo de chamada ou ambos)?*	Recebi o sinal de segurança transmitido por ... *(nome ou indicativo de chamada ou ambos).*
QOF	Qual a unidade comercial dos meus sinais?	A qualidade dos seus sinais é: 1. Não comercial; 2. Trangencialmente comercial; 3. Comercial.
QOG	Quantas fitas tem para transmitir?	Tenho ... fitas para transmitir.
QOH	Devo transmitir um sinal de ajuste de fase durante ... segundos?	Emita um sinal de ajuste de fase durante ... segundos.
QOI	Devo transmitir a minha fita?	Transmita a sua fita.
QOJ	Quer escutar na frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros?	Escuto na frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros.
QOK	Recebeu na frequência ... kHz (*ou* MHz) os sinais de uma radiobaliza de localização de sinistros?	Recebi na frequência ... kHz (*ou* MHz) os sinais de uma radiobaliza de localização de sinistros.
QOL	O seu navio pode receber chamadas selectivas? Na afirmativa, qual é o seu número ou sinal de chamada selectiva?	O meu navio pode receber chamadas selectivas; o número ou sinal de chamada selectiva é ...
QOM	Quais são as frequências a utilizar para que uma chamada selectiva chegue ao seu navio?	A ou as frequências a utilizar para uma chamada selectiva são as seguintes ... (se necessário, indicar também os períodos de tempo apropriados).
QOT	Está a ouvir a minha chamada? Quanto tempo (em minutos) aproximadamente terei de esperar para podermos permutar tráfego?	Estou a ouvir a sua chamada; a espera é aproximadamente de ... minutos.
QRA	Qual o nome do seu navio (*ou* da sua estação)?	O nome do meu navio (*ou* da minha estação) é ...
QRB	A que distância aproximada se encontra da minha estação?	A distância aproximada entre as nossas estações é de ... milhas marítimas (*ou* quilómetros).
QRC	Por que exploração particular (*ou* administração de Estado) se liquidam as contas das taxas da sua estação?	As contas das taxas da minha estação são liquidadas pela exploração particular ... (*ou* pela administração de Estado ...).
QRD	Para onde vai e donde vem?	Vou para ... e venho de ...
QRE	A que horas conta chegar a ... (*ou* por cima de ...) *(local)?*	Conto chegar a ... (*ou* por cima de ...) *(local)* às ... horas.
QRF	Volta a ... *(local)?*	Volto a ... *(local), ou* Volte a ... *(local).*
QRG	Quer indicar-me a minha frequência exacta (*ou* a frequência exacta de ...)?	A sua frequência exacta (*ou* frequência exacta de ...) é ... kHz (*ou* MHz).
QRH	A minha frequência varia?	A sua frequência varia.
QRI	Qual é a tonalidade da minha emissão?	A tonalidade da sua emissão é ... 1. Boa; 2. Variável; 3. Má.
QRJ	Quantos pedidos de conversação radiotelefónica tem pendentes?	Tenho ... pedidos de conversação radiotelefónica pendentes.
QRK	Qual é a inteligibilidade da minha transmissão [*ou* da transmissão de ... *(nome ou indicativo de chamada ou ambos)*]?	A inteligibilidade da sua emissão [*ou* da transmissão de ... *(nome ou indicativo de chamada ou ambos)*] é ... 1. Má; 2. Medíocre; 3. Suficiente; 4. Boa; 5. Excelente.

Abreviatura	Pergunta	Resposta ou parecer
QRL	Está ocupado?	Estou ocupado [*ou* estou ocupado com ... *(nome ou indicativo de chamada ou ambos)*]. É favor não interferir.
QRM	A minha emissão está interferida?	A sua emissão está interferida: 1. De modo nenhum; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
QRN	Está sendo perturbado pelos atmosféricos?	Estou sendo perturbado pelos atmosféricos: 1. Nada; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
QRO	Devo aumentar a potência de emissão?	Aumente a potência de emissão.
QRP	Devo diminuir a potência de emissão?	Diminua a potência de emissão.
QRQ	Devo transmitir mais depressa?	Transmita mais depressa (...palavras por minuto).
QRR	Está pronto para o emprego de aparelhos automáticos?	Estou pronto para o emprego de aparelhos automáticos. Transmita à velocidade de ... palavras por minuto.
QRS	Devo transmitir mais devagar?	Transmita mais devagar (... palavras por minuto).
QRT	Devo parar a transmissão?	Pare a transmissão.
QRU	Tem alguma coisa para mim?	Nada tenho para *si*.
QRV	Está pronto?	Estou pronto.
QRW	Devo avisar ... que o chamo em ... kHz (*ou* MHz)?	É favor avisar ... que o chamo em ... kHz (*ou* MHz).
QRX	Quando tornará a chamar-me?	Torno a chamá-lo às ... horas em ... kHz (*ou* MHz).
QRY	Qual é a minha vez? *(Refere-se às comunicações.)*	A sua vez é o número ... *(ou consoante qualquer outra indicação) (refere-se às comunicações).*
QRZ	Por quem estou sendo chamado?	Está sendo chamado por ... [em ... kHz (*ou* MHz)].
QSA	Qual é a intensidade dos meus sinais [*ou* dos sinais de ... *(nome ou indicativo de chamada ou ambos)*]?	A intensidade dos seus sinais [*ou* dos sinais de ... *(nome ou indicativo de chamada ou ambos)*] é: 1. Apenas perceptível; 2. Fraca; 3. Regular; 4. Boa; 5. Muito boa.
QSB	A intensidade dos meus sinais varia?	A intensidade dos seus sinais varia.
QSC	Sois uma estação de navio de pequno tráfego?	Sou uma estação de navio de pequeno tráfego.
QSD	Os meus sinais estão mutilados?	Os seus sinais estão mutilados.
QSE *	Qual é a deriva estimada do engenho de salvamento?	A deriva estimada do engenho de salvamento é ... *(algarismo e unidade).*
QSF *	Efectuou o salvamento?	Efectuei o salvamento e dirijo-me para a base de ... (com ... feridos necessitando de ambulância).
QSG	Devo transmitir ... telegramas seguidos?	Transmita ... telegramas seguidos.
QSH	Pode guiar-se pelo seu radiogoniómetro?	Posso guiar-me pelo meu radiogoniómetro [pela estação ... *(nome ou indicativo de chamada ou ambos)*].
QSI	—	Foi-me impossível interromper a sua transmissão. *ou* Queira informar ... *(nome ou indicativo de chamada ou ambos)* de que me foi impossível interromper a sua transmissão [em ... kHz (*ou* MHz)].
QSJ	Qual é a taxa a cobrar ... incluída a sua taxa interna?	A taxa a cobrar para ... é de ... francos, incluída a minha taxa interna.
QSK	Pode receber-me entre os seus sinais? Em caso afirmativo posso interrompê-lo na sua transmissão?	Posso recebê-lo entre os meus sinais; pode interromper a minha transmissão.
QSL	Pode dar-me o entendido?	Dou-lhe o entendido.
QSM	Devo repetir o último telegrama que lhe transmiti (*ou* um telegrama precedente)?	Repita o último telegrama que me transmitiu [*ou* o(s) telegrama(s) número(s) ...].
QSN	Ouviu-me [*ou* ouviu ... *(nome ou indicativo de chamada ou ambos)* em kHz (*ou* MHz)]?	Ouvi-o [*ou* ouvi ... *(nome ou indicativo de chamada ou ambos)* em ... kHz (*ou* MHz)].
QSO	Pode comunicar com ... *(nome ou indicativo de chamada ou ambos)* directamente (*ou* por *relais*)?	Posso comunicar com ... *(nome ou indicativo de chamada ou ambos)* directamente (*ou* por intermédio de ...).
QSP	Quer retransmitir gratuitamente a ... *(nome ou indicativo de chamada ou ambos)*?	Vou retransmitir gratuitamente a ... *(nome ou indicativo de chamada ou ambos).*
QSQ	Tem um médico a bordo [*ou* ... (nome de uma pessoa)]?	Tenho a bordo um médico [*ou* ... (nome de uma pessoa)].
QSR	Devo repetir a chamada na frequência de chamada?	Repita a chamada na frequência de chamada. Não o entendi (*ou* houve interferência).
QSS	Que frequência de trabalho vai utilizar?	Vou utilizar a frequência de trabalho ... kHz (*ou* MHz). *(Em ondas decamétricas bastará, como regra geral, indicar os três últimos algarismos da frequência).*
QSU	Devo retransmitir ou responder na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Transmita ou responda na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...).
QSV	Devo transmitir uma série de V (*ou* de sinais) para ajuste nesta frequência [*ou* em ... kHz (*ou* MHz)]?	Transmita uma série de V (*ou* de sinais) para regulação nesta frequência [*ou* em ... kHz (*ou* MHz)].
QSW	Quer transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Vou transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (emissão da classe ...).

Abreviatura	Pergunta	Resposta ou parecer
QSX	Quer escutar ... *(nome ou indicativo de chamada ou ambos)* em ... kHz (*ou* MHz)?	Escuto ... *(nome ou indicativo de chamada ou ambos)* em ... kHz (*ou* MHz).
QSY	Devo passar à transmissão numa frequência?	Passe à transmissão noutra frequência [*ou* em ... kHz (*ou* MHz)].
QSZ	Devo transmitir cada palavra ou grupo várias vezes?	Transmita cada palavra ou grupo duas vezes (*ou* ... vezes).
QTA	Devo anular o telegrama (*ou* a mensagem) número ...?	Anule o telegrama (*ou* a mensagem) número ...
QTB	Está de acordo com a minha contagem de palavras?	Não estou de acordo com a sua contagem de palavras. Repito a primeira letra de cada palavra e o primeiro algarismo de cada número.
QTC	Quantos telegramas tem para transmitir?	Tenho ... telegramas para si [*ou* para ... *(nome ou indicativo de chamada ou ambos)*].
QTD *	Que recolheu o navio de salvamento ou a aeronave de salvamento?	... *(identificação)* recolheu: 1. ...*(número)* sobreviventes; 2. Destroços: 3. ... *(número)* cadáveres.
QTE	Qual o meu azimute VERDADEIRO em relação a si? *ou* Qual o meu azimute VERDADEIRO em relação a ... *(nome ou indicativo de chamada ou ambos)*? *ou* Qual o azimute VERDADEIRO de ... *(nome ou indicativo de chamada ou ambos)* em relação a ... *(nome ou indicativo de chamada ou ambos)*?	O seu azimute VERDADEIRO em relação a mim é de ... graus às ... horas. *ou* O seu azimute VERDADEIRO em relação a ... *(nome ou indicativo de chamada ou ambos)* era de ... graus às ... horas. *ou* O azimute VERDADEIRO de ... *(nome ou indicativo de chamada ou ambos)* em relação a ... *(nome ou indicativo de chamada ou ambos)* era de ... graus às ... horas.
QTF	Quer indicar-me a posição da minha estação na base dos azimutes tomados pelas estações radiogoniométricas que essa estação comanda?	A posição da sua estação na base dos azimutes tomados pelas estações radiogoniométricas que comando era ... latitude, ... longitude *(ou outra indicação da posição)*, classe ... às ... horas.
QTG	Quer transmitir dois traços de dez segundos cada um (*ou* a onda de suporte durante dois períodos de dez segundos), seguidos do seu indicativo de chamada (*ou* do seu nome) (repetidos ... vezes) em ... kHz (*ou* MHz)? *ou* Quer pedir a ... *(nome ou indicativo de chamada ou ambos)* que transmita dois traços de dez segundos (*ou* a portadora durante dois períodos de dez segundos) em seguida ao seu indicativo de chamada *(ou ao seu nome ou ambos)* (repetidos ... vezes) em ... kHz (*ou* MHz)?	Vou transmitir dois traços de dez segundos cada um (*ou* a onda de suporte durante dois períodos de dez segundos), em seguida o meu indicativo de chamada (*ou* o meu nome) (repetidas ... vezes) em ... kHz (*ou* MHz). *ou* Pedi a ... *(nome ou indicativo de chamada ou ambos)* que transmita dois traços de dez segundos (*ou* a portadora durante dois períodos de dez segundos), em seguida ao seu indicativo de chamada *(ou ao seu nome ou ambos)* (repetidos ... vezes) em ... kHz (*ou* MHz).
QTH	Qual é a sua posição em latitude e em longitude (*ou segundo qualquer outra indicação)?*	A minha posição é ... latitude, ... longitude *(ou segundo qualquer outra indicação).*
QTI *	Qual o seu caminho VERDADEIRO?	O meu caminho VERDADEIRO é de ... graus.
QTJ *	Qual a sua velocidade? *(Pede a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente.)*	A minha velocidade é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora). *(Indica a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente.)*
QTK *	Qual a velocidade da sua aeronave em relação à superfície terrestre?	A velocidade da minha aeronave é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora) em relação à superfície terrestre.
QTL *	Qual o seu rumo VERDADEIRO?	O meu rumo VERDADEIRO é de ... graus.
QTM *	Qual o seu rumo MAGNÉTICO?	O meu rumo MAGNÉTICO é de ... graus.
QTN	A que horas deixou ... *(local)?*	Deixei ... *(local)* às ... horas.
QTO	Saiu da doca (*ou* do porto)? *ou* Descolou?	Daí da doca (*ou* do porto). *ou* Descolei.
QTP	Vai entrar na doca (*ou* no porto)? *ou* Vai amarar (*ou* aterra)?	Vou entrar na doca (*ou* no porto). *ou* Vou amarar (*ou* aterrar).
QTQ	Pode continuar com a minha estação por meio do Código Internacional de Sinais (INTERCO)?	Vou comunicar com a sua estação por meio do Código Internacionalde Sinais (INTERCO).
QTR	Qual é a sua hora exacta?	A hora exacta é ...
QTS	Quer transmitir o seu indicativo da chamada (*ou* o seu nome *ou* ambos) durante ... segundos?	Vou transmitir o meu indicativo de chamada (*ou* o meu nome *ou* ambos) durante ... segundos.
QTT	—	O sinal de identificação que se segue está sobreposto a outra emissão.
QTU	Quais as horas em que a sua estação está aberta?	A minha estação está aberta das ... às ... horas.
QTV	Devo tomar a escuta em seu lugar na frequência ... kHz (*ou* MHz) das ... às ... horas?	Tome a escuta em meu lugar na frequência ... kHz (*ou* MHz) das ... às ... horas.
QTW *	Qual o estado dos sobreviventes?	Os sobreviventes estão em ... estado e necessitam urgentemente de ...
QTX	Quer deixar a sua estação aberta para comunicar com a minha até novo aviso da minha parte (*ou* até às ... horas)?	A minha estação fica aberta para comunicar com a sua até novo aviso da sua parte (*ou* até às ... horas).
QTY *	Dirige-se para o local do acidente e, no caso afirmativo, quando pensa chegar?	Dirijo-me para o local do acidente e penso chegar às ... horas (... *data*).
QTZ *	Continua a busca?	Continuo a busca de ... (aeronave, navio, engenho de salvamento, sobreviventes, destroços).
QUA	Tem notícias de ... *(nome ou indicativo de chamada ou ambos).*	Eis notícias de ... *(nome ou indicativo de chamada ou ambos).*

Abreviatura	Pergunta	Resposta ou parecer
QUB*	Pode dar-me, pela ordem indicada, informações sobre a direcção VERDADEIRA e a velocidade do vento à superfície; a visibilidade, o estado do tempo, a grandeza, tipo e altura da base das nuvens por cima de ... *(local de observação)?*	As informações pedidas são ... *(Convém indicar as unidades utilizadas para as velocidades e as distâncias.)*
QUC	Qual o número *(ou outra indicação)* da última mensagem que recebeu de mim [*ou* de ... *(nome ou indicativo de chamada ou ambos)*]?	O número *(ou outra indicação)* da última mensagem que recebi de si [*ou* de ... *(nome ou indicativo de chamada ou ambos)*] é ...
QUD	Recebeu o sinal de urgência transmitido por ... *(nome ou indicativo de chamada ou ambos)*?	Recebi o sinal de urgência transmitido por ... *(nome ou indicativo de chamada ou ambos)* às ... horas.
QUE	Pode conversar em ... *(língua)*, com um intérprete se necessário? Caso afirmativo em que frequência?	Posso conversar em ... *(língua)* em ... kHz (*ou* MHz).
QUF	Recebeu o sinal de perigo emitido por ... *(nome ou indicativo de chamada ou ambos)*?	Recebi o sinal de perigo emitido por ... *(nome ou indicativo de chamada ou ambos)* às ... horas.
QUH *	Quer indicar-me a pressão barométrica actual ao nível do mar?	A pressão barométrica actual ao nível do mar é de ... *(unidades)*.
QUM	Posso recomeçar o trabalho normal?	Pode-se recomeçar o trabalho normal.
QUN	1. *Feita a todas as estações:* Os navios na minha vizinhança imediata *ou* (na vizinhança de ... latitude, ... longitude) *ou* (na vizinhança de ...) podem indicar-me a sua posição, rumo VERDADEIRO e velocidade?	A minha posição, o meu rumo VERDADEIRO e a minha velocidade são ...
	2. *Feita a uma só estação:* Quer indicar a sua posição, rumo verdadeiro e velocidade?	
QUO *	Devo proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento na vizinhança de ... latitude, ... longitude; *(ou segundo qualquer outra indicação)?*	Queira proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento na vizinhança de ... latitude, ... longitude; *(ou segundo qualquer outra indicação).*
QUP *	Quer indicar a sua posição por: 1. Projector? 2. Fumo negro? 3. Luzes pirotécnicas?	A minha posição é indicada por: 1. Projector; 2. Fumo negro; 3. Luzes pirotécnicas.
QUR *	Os sobreviventes: 1. Receberam o equipamento de salvamento? 2. Foram recolhidos por um navio? 3. Foram alcançados pelo grupo de salvamento no solo?	Os sobreviventes: 1. Receberam o equipamento de salvação lançado por ...; 2. Foram recolhidos por um navio; 3. Foram lançados pelo grupo de salvamento no solo.
QUS *	Avistou sobreviventes ou destroços? Se sim, em que local?	Avistei: 1. Sobreviventes na água; 2. Sobreviventes em jangadas; 3. Destroços em ... latitude, ... longitude *(ou segundo qualquer outra indicação).*
QUT *	O local do acidente está assinalado?	O local do incidente está assinalado por: 1. Facho ou bóia fumígena; 2. Baliza marítima; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
QUU *	Devo dirigir o navio ou a aeronave até à minha posição?	Dirija o navio ou a aeronave ... *(nome ou indicativo de chamadas ou ambos):* 1. Para a sua posição, transmitindo o vosso indicativo de chamada e traços prolongados em ... kHz (*ou* MHz). 2. Transmitindo em ... kHz (*ou* MHz) o rumo VERDADEIRO para para vos alcançarem.
QUW *	Está na zona de busca ... *(símbolo ou latitude e longitude)*?	Estou na zona de busca ... *(designação).*
QUX	Possui alguns avisos relativos à navegação ou a uma tempestade?	Possuo o(s) aviso(s) seguinte(s) relativo(s) à navegação ou a uma tempestade.
QUY *	A posição do engenho de salvamento foi assinalada?	A posição do engenho de salvamento foi assinalada às ... horas por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
QUZ	Posso retomar o funcionamento restrito?	Procedimento de perigo ainda em vigor, pode ser retomado o funcionamento restrito.

B) Lista das abreviaturas consoante a natureza das perguntas, respostas ou pareceres

Abreviatura	Pergunta	Resposta ou parecer
	Nome	
QRA	Qual é o nome do seu navio (*ou* da sua estação)?	O nome do meu navio (*ou* da minha estação) é ...
	Percurso	
QRD	Para onde vai e donde vem?	Vou para ... e venho de ...
	Posição	
QRB	A que distância aproximada se encontra da minha estação?	A distância entre as nossas estações é de ... milhas marítimas (*ou* quilómetros).
QTH	Qual é a sua posição em latitude e longitude (*ou segundo qualquer outra indicação*)?	A minha posição é ... latitude ... longitude (*ou segundo qualquer outra indicação*).
QTN	A que horas deixou ... (*local*)?	Deixei... (*local*) às ... horas.
	Qualidade dos sinais	
QOF	Qual é a qualidade comercial dos meus sinais?	A qualidade dos seus sinais é: 1. Não comercial; 2. Minimamente comercial; 3. Comercial.
QRI	Qual é a tonalidade da minha emissão?	A tonalidade da sua emissão é: 1. Boa; 2. Variável; 3. Má.
QRK	Qual é a inteligibilidade da minha transmissão [*ou* da transmissão de ... (*nome ou indicativo de chamada ou ambos*)]?	A inteligibilidade da sua transmissão [*ou* da transmissão de ... (*nome ou indicativo de chamada ou ambos*)]?: 1. Má; 2. Mediocre; 3. Suficiente; 4. Boa. 5. Excelente.
	Intensidade dos sinais	
QRO	Devo aumentar a potência de emissão?	Aumente a potência de emissão.
QRP	Devo diminuir a potência de emissão?	Diminua a potência de emissão.
QSA	Qual é a intensidade dos meus sinais (*ou* dos sinais de ... (*nome ou indicativo de chamada ou ambos*)]?	A intensidade dos seus sinais (*ou* sinais de ... (*nome ou indicativo de chamada ou ambos*)] é: 1. Apenas perceptível; 2. Fraca; 3. Regular; 4. Boa; 5. Muito boa.
QSB	A intensidade dos meus sinais varia?	A intensidade dos seus sinais varia.
	Manipulação	
QRQ	Devo transmitir mais depressa?	Transmita mais depressa (...palavra por minuto).
QRR	Está pronto para o emprego de aparelhos automáticos?	Estou pronto para o emprego de aparelhos automáticos. Transmita à velocidade de ... palavras por minuto.
QRS	Devo transmitir mais devagar?	Transmita mais devagar (... palavras por minuto).
QSD	Os meus sinais estão mutilados?	Os seus sinais estão mutilados.
	Interferências	
QRM	A minha emissão está interferida?	A sua emissão está interferida ... 1. A sua emissão não está interferida; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.

Abreviatura	Pergunta	Resposta ou parecer
QRN	Está a ser perturbado por atmosféricos?	Estou a ser perturbado por atmosféricos ... 1. Não estou a ser perturbado por atmosféricos; 2. Fracamente; 3. Moderadamente; 4. Fortemente; 5. Muito fortemente.
	Regulação da frequência	
QRG	Quer indicar-me a minha frequência exacta (*ou* a frequência exacta de ...)?	A sua frequência exacta (*ou* a frequência exacta de ...) é ... kHz (*ou* MHZ).
QRH	A minha frequência varia?	A sua frequência varia.
QTS	Quer transmitir o seu indicativo de chamada (*ou* o seu nome *ou ambos*) durante ... segundos?	Vou transmitir o meu indicativo de chamada (*ou* o meu nome *ou ambos*) durante ... segundos.
	Escolha da frequência e ou da classe de emissão	
QSN	Ouviu-me [*ou* ouviu ... *(nome ou indicativo de chamada ou ambos)*] em kHz (*ou* MHz)?	Ouviu-o [*ou* ouvi ... *(nome ou indicativo de chamada ou ambos)*] em kHz (*ou* MHz).
QSS	Que frequência de trabalho vai utilizar?	Vou utilizar a frequência de trabalho ... kHz (*ou* MHz) *(em ondas decamétricas, regra geral, bastará indicar os três últimos algarismos da frequência).*
QSU	Devo transmitir ou responder na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Transmita ou responda na frequência actual [*ou* em ... kHz, (*ou* MHz)] (em emissão da classe ...).
QSV	Devo transmitir uma série de V (*ou* de sinais) para regulação nesta frequência [*ou* em ... kHz (*ou* MHz)]?	Transmita uma série de V (*ou* de sinais) para regulação nesta frequência [*ou* em ... kHz, (*ou* MHz).
QSW	Quer transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...)?	Vou transmitir na frequência actual [*ou* em ... kHz (*ou* MHz)] (em emissão da classe ...).
QSX	Quer escutar ... *(nome ou indicativo de chamada ou ambos)* em ... kHz (*ou* MHz) ou nas faixas .../vias ...?	Escuto ... *(nome ou indicativo de chamada ou ambos)* em ... kHz (*ou* MHz) ou nas faixas .../vias ...
	Mudança de frequência	
QSY	Devo passar à transmissão noutra frequência?	Passe à transmissão noutra frequência [*ou* em ...kHz (*ou* MHz)].
	Estabelecimento da comunicação	
QOA	Pode comunicar em radiotelegrafia (500 kHz)?	Posso comunicar em radiotelegrafia (500 kHz)?
QOB	Pode comunicar em radiotelefonia (2182 kHz)?	Posso comunicar em radiotelefonia (2182 kHz)?
QOC	Pode comunicar em radiotelefonia (via 16 — frequência de 156,80 MHz)?	Posso comunicar em radiotelefonia (via 16 — frequência de 156,80 MHz)?
QOD	Pode comunicar comigo em: 0. Holandês? 1. Inglês? 2. Francês? 3. Alemão? 4. Grego? 5. Italiano? 6. Japonês? 7. Norueguês? 8. Russo? 9. Espanhol?	Posso comunicar consigo em: 0. Holandês; 1. Inglês; 2. Francês; 3. Alemão; 4. Grego; 5. Italiano; 6. Japonês; 7. Norueguês; 8. Russo; 9. Espanhol.
QOT	Está a ouvir a minha chamada? Quanto tempo (em minutos aproximadamente devo esperar antes de podermos permutar tráfego?	Estou a ouvir a sua chamada. Espere ... minutos aproximadamente.
QRL	Está ocupado?	Estou ocupado [*ou* estou ocupado com ...*(nome ou indicativo de chamada ou ambos)*]. É favor não interferir.
QRV	Está pronto?	Estou pronto.
QRX	Quando me tornará a chamar?	Torno a chamá-lo às ... horas [em ... kHz (*ou* MHz)].
QRY	Qual é a minha vez? *(Refere-se às comunicações.)*	O número da sua vez é ... *(ou segundo qualquer outra indicação). (Refere-se às comunicações.)*
QRZ	Por quem estou sendo chamado?	Está sendo chamado por ... [em ... kHz (*ou* MHz)].
QSC	Sois uma estação de navio de tráfego fraco?	Sou uma estação de navio de tráfego fraco.
QSR	Devo repetir a chamada na frequência de chamada?	Repita a chamada na frequência de chamada. Não o ouvi (*ou* houve interferência).
QTQ	Pode comunicar com a minha estação por meio do Código Internacional de Sinais?	Vou comunicar com a sua estação por meio do Código Internacional de Sinais.
QUE	Pode conservar em ... *(língua)*, com intérprete, se necessário? Caso afirmativo, em que frequências?	Posso conversar em ... *(língua)*, em ... kHz (*ou* MHz).

Abreviatura	Pergunta	Resposta ou parecer
	Chamadas selectivas	
QOL	O seu navio pode receber chamadas selectivas? Caso afirmativo, qual é o seu número ou sinal de chamada selectiva?	O meu navio pode receber chamadas selectivas. O seu número ou sinal de chamada selectiva é ...
QOM	Quais as frequências a utilizar para que o seu navio receba uma chamada selectiva?	A ou as frequências a utilizar para uma chamada selectiva são as seguintes ... (se necessário, indicar também os períodos de tempo apropriados).
	Hora	
QTR	Qual é a hora exacta?	A hora exacta é ...
QTU	Quais as horas em que a sua estação está aberta?	A minha estação está abertas das ... às ... horas.
	Taxas	
QRC	Por que exploração (*ou* administração do Estado) se liquidam as contas das taxas da sua estação?	As contas das taxas da minha estação são liquidadas pela exploração particular ... (*ou* pela administração do Estado ...).
QSJ	Qual é a taxa a cobrar para ..., incluída a sua taxa interna?	A taxa a cobrar para ... é de ... francos, incluída a minha taxa interna.
	Trânsito	
QRW	Devo avisar ... que o chama em ... kHz (*ou* MHz)?	É favor avisar ... que o chamo em ... kHz (*ou* MHz).
QSO	Pode comunicar com ... *(nome ou indicativo de chamada ou ambos)* directamente (*ou* por *relais*)?	Posso comunicar com ... *(nome ou indicativo de chamada ou ambos)* directamente (*ou* por *relais* por intermédio de ...).
QSP	Quer retransmitir gratuitamente a ... *(nome ou indicativo de chamada ou ambos)*?	Vou retransmitir gratuitamente a ... *(nome ou indicativo de chamada ou ambos).*
QSQ	Tem médico a bordo [*ou* ... *(nome de uma pessoa)*]?	Tenho um médico a bordo [*ou* ... *(nome de uma pessoa)*].
QUA	Tem notícias de ... *(nome ou indicativo de chamada ou ambos)?*	Eis notícias de ... *(nome ou indicativo de chamada ou ambos).*
QUC	Qual é o número *(ou outra indicação)* da última mensagem que recebeu de mim [*ou* de ... *(nome ou indicativo de chamada ou ambos)*]?	O número (*ou outra indicação*) da última mensagem que recebi de si [*ou* de ... *(nome ou indicativo de chamada ou ambos)*] é ...
	Encaminhamento da correspondência	
QOG	Quantas fitas tem para transmitir?	Tenho ... fitas para transmitir.
QOH	Devo transmitir um sinal de ajuste de fase durante ... segundos?	Emita um sinal de ajuste de fase durante ... segundos.
QOI	Devo transmitir a minha fita?	Transmita a sua fita.
QRJ	Quantos pedidos de conversação radiotelefónica tem pendentes?	Tenho ... pedidos de conversação radiotelefónica pendentes.
QRU	Tem alguma coisa para mim?	Nada tenho para si.
QSG	Devo transmitir ... telegramas seguidos?	Transmita ... telegramas seguidos.
QSI		Foi-me impossível interromper a sua transmissão. *ou* Queira informar ... *(nome ou indicativo de chamada ou ambos)* que me foi impossível interromper a sua transmissão [em ... kHz (*ou* MHz)].
QSK	Pode receber-me entre os seus sinais? Em caso afirmativo, posso interromper a sua transmissão?	Posso recebê-lo entre os meis sinais, pode interromper a minha transmissão.
QSL	Pode dar-me o entendido?	Dou-lhe o entendido.
QSM	Devo repetir o último telegrama que lhe transmitiu (*ou* um telegrama precedente)?	Repita o último telegrama que me transmitiu [*ou* o(s) telegrama(s) número(s) ...].
QSZ	Devo transmitir cada palavra ou grupo várias vezes?	Transmita cada palavra ou grupo duas vezes (*ou* ... vezes).
QTA	Devo anular o telegrama (*ou* a mensagem) número ...?	Anule o telegrama (*ou* mensagem) número ...
QTB	Está de acordo com a minha contagem de palavras?	Não estou de acordo com a sua contagem de palavras. Repito a primeira letra de cada palavra e o primeiro algarismo de cada número.
QTC	Quantos telegramas tem para transmitir?	Tenho ... telegramas para si *ou* para ... *(nome ou indicativo de chamada ou ambos)*].
QTV	Devo tomar a escuta em seu lugar na frequência ... kHz (*ou* MHz) (das ... às ... horas)?	Tome a escuta em meu lugar na frequência ... kHz (*ou* MHz) (das ... às ... horas).
QTX	Quer deixar a sua estação aberta para comunicar com a minha até novo aviso da minha parte (*ou* até às ... horas)?	A minha estação fica aberta para comunicar com a sua até novo aviso da sua parte (*ou* até às ... horas).
	Movimento	
QRE	A que horas conta chegar a ... (*ou* por cima de ...) *(local)*?	Conto chegar a ... (*ou* por cima de ...) *(local)* às ... horas.
QRF	Volta a ... *(local)*?	Volto a ... *(local) ou* volte a ... *(local).*
QSH	Pode guiar-se pelo seu radiogoniómetro?	Posso guiar-me pelo meu radiogoniómetro (por ...) *(nome ou indicativo de chamada ou ambos).*
QTI	Qual o seu caminho VERDADEIRO?	O meu caminho VERDADEIRO é de ... graus.
QTJ *	Qual é a sua velocidade? *(Pede a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente.)*	A minha velocidade é de ... nós (*ou* de ... quilómetros por hora *ou* de ... milhas terrestres por hora). *(Indica a velocidade do navio ou da aeronave em relação à água ou ao ar, respectivamente).*

Abreviatura	Pergunta	Resposta ou parecer
QTK *	Qual é a velocidade da sua aeronave em relação à superfície da Terra?	A velocidade da minha aeronave é de ... nós (*ou* de ... quilómetros por hora, *ou* de ... milhas terrestres por hora) em relação à superfície da Terra.
QTL *	Qual é o seu rumo VERDADEIRO?	O meu rumo VERDADEIRO é de ... graus.
QTM *	Qual é o seu rumo MAGNÉTICO?	O meu rumo MAGNÉTICO é de ... graus.
QTN	A que horas deixou ... *(local)*?	Deixei ... *(local)* às ... horas.
QTO	Saiu da doca (*ou* do porto)? *ou* Descolou?	Saí da doca (*ou* do porto). *ou* Descolei.
QTP	Vai entrar na doca (*ou* no porto)? *ou* Vai amarar (*ou* aterrar)?	Vou entrar na doca (*ou* no porto). *ou* Vou amarar (*ou* aterrar).
QUN	1. *Feita a todas as estações:* Os navios na minha vizinhança imediata *ou* (na vizinhança de ... latitude, ... longitude) *ou* (na vizinhança de ...) podem indicar-me a sua posição, rumo VERDADEIRO e velocidade. 2. *Feita só a uma estação:* Queira indicar-me a sua posição, rumo VERDADEIRO e velocidade.	A minha posição, meu rumo VERDADEIRO e velocidade são ...
	Meteorologia	
QUB *	Pode dar-me, pela ordem indicada, informações sobre a direcção VERDADEIRA, em graus, e a velocidade do vento à superfície; visibilidade, estado do tempo, grandeza, tipo e altura da base das nuvens por cima de ... *(local de observação)*?	As informações pedidas são: *(Convém indicar as unidades utilizadas para as velocidades e distâncias.)*
QUH *	Quer indicar-me a pressão barométrica actual ao nível do mar?	A pressão barométrica actual ao nível do mar é de ... *(unidades)*.
QUX	Possui alguns avisos relativos à navegação ou a uma tempestade?	Possuo o(s) aviso(s) seguinte(s) relativo(s) à navegação ou a uma tempestade ...
	Radiogoniometria	
QTE	Qual o meu azimute VERDADEIRO em relação a si? *ou* Qual o meu azimute VERDADEIRO em relação a ... *(nome ou indicativo de chamada ou ambos)*? *ou* Qual o azimute VERDADEIRO de ... *(nome ou indicativo de chamada ou ambos)* em relação a ... *(nome ou indicativo de chamada ou ambos)*?	O seu azimute VERDADEIRO em relação a mim é de ... graus às ... horas. *ou* O seu azimute VERDADEIRO em relação a ... *(nome ou indicativo de chamada ou ambos)* era de ... graus às ... horas. *ou* O azimute VERDADEIRO de ... *(nome ou indicativo de chamada ou ambos)* era de ... graus às ... horas.
QTF	Quer indicar-me a minha posição na base dos azimutes tomados pelas estações radiogoniométricas que essa estação comanda?	A posição na base dos azimutes tomados pelas estações radiogoniométricas que comando era ... latitude, ... longitude *(ou outra indicação da posição)*, classe ... às ... horas.
QTG	Quer transmitir dois traços de dez segundos cada um (*ou* a portadora durante dois períodos de dez segundos) seguidos do seu indicativo de chamada (*ou* do seu nome) (repetidos ... vezes) [em ... kHz (*ou* MHz)? *ou* Quer pedir a ... *(nome ou indicativo de chamada ou ambos)* que transmita dois traços de dez segundos (*ou* a portadora durante dois períodos de dez segundos) seguidos do seu indicativo de chamada *(ou do seu nome ou de ambos)* (repetidos ... vezes) em ... kHz (*ou* MHz)?	Vou transmitir dois traços de dez segundos cada um (*ou* a portadora durante dois períodos de dez segundos) seguidos do meu indicativo de chamada (*ou* do meu nome) (repetidos ... vezes) em ... kHz (*ou* Mhz)? *ou* Pedi a ... *(nome ou indicativo de chamada ou ambos)* que transmita dois traços de dez segundos (*ou* a portadora durante dois períodos de dez segundos) seguidos do seu indicatuvo de chamada *ou do seu nome ou de ambos)* (repetidos ... vezes) em ... kHz (*ou* MHz)?
	Suspensão dos trabalhos	
QRT	Devo parar a transmissão?	Pare a transmissão.
QUM	Posso recomeçar o trabalho normal?	Pode recomeçar o trabalho normal.
QUZ	Posso retomar o trabalho restrito?	Procedimento de perigo ainda em vigor; pode ser retomado o trabalho restrito.
	Segurança	
QOE	Recebeu o sinal de segurança transmitido por ... *(nome ou indicativo de chamada ou ambos)*?	Recebi o sinal de urgência transmitido por ... *(nome ou indicativo de chamada ou ambos)*.
QUX	Posui alguns avisos relativos à navegação ou a uma tempestade?	Possuo o(s) aviso(o) seguinte(s) relativo(s) à navegação ou a uma tempestade ...

Abreviatura	Pergunta	Resposta ou parecer
	Urgência	
QUD	Recebeu o sinal de urgência transmitido por ... *(nome ou indicativo de chamada ou ambos)*?	Recebi o sinal de urgência transmitido por ... *(nome ou indicativo de chamada ou ambos)* às ... horas.
	Perigo	
QOJ	Quer escutar na frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros?	Escuto a frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros).
QOK	Recebeu na frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros?	Recebi na frequência ... kHz (*ou* MHz) sinais de radiobalizas de localização de sinistros?
QUF	Recebeu o sinal de perigo emitido por ... *(nome ou indicativo de chamada ou ambos)*?	Recebeu o sinal de perigo emitido por ... *(nome ou indicativo de chamada ou ambos)* às ... horas.
QUM	Posso recomeçar o trabalho normal?	Pode-se recomeçar o trabalho normal.
QUZ	Posso retomar o trabalho restrito?	Procedimento de perigo ainda em vigor; pode ser retomado o trabalho restrito.
	Busca e salvamento	
QSE *	Qual é a deriva estimada do engenho de salvamento?	A deriva estimada do engenho de salvamento é ... *(algarismo e unidade)*.
QSF *	Efectuou o salvamento?	Efectuei o salvamento e dirijo-me para a base de ... (com ... feridos necessitando de ambulância).
QTD *	Que recolheu o navio de salvamento *ou* a aeronave de salvamento?	... *(identificação)* recolheu: 1. ... *(número)* de sobreviventes; 2. Destroços; 3. ... *(número)* cadáveres.
QTW *	Qual é o estado dos sobreviventes?	Os sobreviventes estão em ... estado e necessitam urgentemente de ...
QTY *	Dirige-se para o local do acidente e, no caso afirmativo, quando pensa chegar?	Dirijo-me para o local do acidente e penso chegar às ... horas *(... data)*
QTZ *	Continua a busca?	Continuo a busca de ... (aeronave, navio, engenho de salvamento, sobreviventes, destroços).
QUN	1. *Posta a todas as estações:* Os navios na minha vizinhança imediata *ou* (na vizinhança de ... latitude ... longitude *ou* (na vizinhança de ...) podem indicar-me a sua posição, rumo VERDADEIRO e velocidade?	A minha posição, rumo VERDADEIRO e velocidade são ...
	2. *Posta só a uma estação:* Queira indicar-me a sua posição, rumo VERDADEIRO e velocidade.	
QUO *	Devo proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou segundo qualquer outra indicação)*?	Queira proceder à busca de: 1. Uma aeronave; 2. Um navio; 3. Um engenho de salvamento; na vizinhança de ... latitude, ... longitude *(ou segundo qualquer outra indicação)*.
QUP *	Quer indicar a sua posição por: 1. Projecto? 2. Fumo negro? 3. Luzes pirotécnicas?	A minha posição é indicada por: 1. Projector; 2. Fumo negro; 3. Luzes pirotécnicas.
QUR *	Os sobreviventes: 1. Receberam o equipamento de salvamento? 2. Foram recolhidos por um navio? 3. Foram alcançados pelo grupo de salvamento em terra?	Os sobreviventes: 1. Receberam o equipamento de salvamento lançado por ... 2. Foram recolhidos por um navio; 3. Foram alcançados pelo grupo de salvamento em terra.
QUS *	Avistou sobreviventes ou destroços? Na hipótese afirmativa, em que local?	Avistei: 1. Sobreviventes na água; 2. Sobreviventes em jangadas; 3. Destroços em ... latitude, ... longitude *(ou segundo qualquer outra indicação)*.

Abreviatura	Pergunta	Resposta ou parecer
QUT *	O local do acidente está assinalado?	O local do acidente está assinalado por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
QUU *	Devo dirigir o navio ou a aeronave até à minha posição?	Dirija o navio ou a aeronave *(nome ou indicativo de chamada ou ambos)*: 1. Para a sua posição, transmitindo o vosso indicativo de chamada e traços prolongados em ... kHz (*ou* MHz); 2. Transmitindo em ... kHz (*ou* MHz) o rumo VERDADEIRO para vos alcançar.
QUW * QUY *	Está na zona de busca... *(símbolo ou latitude e longitude)*? A posição do engenho de salvamento foi assinalada?	Estou na zona de busca ... *(designação).* A posição do engenho de salvamento foi assinalada às ... horas por: 1. Facho ou bóia fumígena; 2. Bóia; 3. Produto corante; 4. ... *(outro dispositivo a especificar).*
QUZ	Posso retomar o trabalho restrito?	Procedimento de perigo ainda em vigor; pode ser retomado o trabalho restrito.
	Identificação	
QTT	—	O sinal de identificação que se segue está sobreposto a outra emissão.

SECÇÃO II

Abreviaturas e sinais diversos

Abreviatura ou sinal	Definição
AA	Tudo depois de ... *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
AB	Tudo antes de ... *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
ADS	Endereço *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
AR	Fim de transmissão.
AS	Espera.
BK	Sinal empregado para interromper uma transmissão em curso.
BN	Tudo entre ... e ... *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
BQ	Resposta a RQ.
BT	Sinal de separação entre as diferentes partes de uma mesma transmissão.
C	Sim *(resposta afirmativa), ou então:* o grupo que precede deve ser considerado como uma afirmação.
CFM	Confirme (*ou* confirmo).
CL	Vou fechar a minha estação.
COL	Confira (*ou* confiro).
CORRECTION	Anule a minha última palavra *ou* grupo. Dou a seguir a palavra ou grupo correctos *(utilizado em radiotelefonia e pronunciado* KOR-REK-CHÉUN).
CP	Chamada geral a várias estações específicas *(v. o artigo 63).*
CQ	Chamada geral a todas as estações.
CS	Indicativo de chamada *(empregado para pedir o indicativo de chamada).*
DE	De *(utilizado antes do nome ou de qualquer outra identificação da estação que chama).*
DF	O seu azimute às ... horas era de ... graus, no sector duvidoso desta estação, um erro possível de ... graus.

Abreviatura ou sinal	Definição
DO	Azimute duvidoso. Peça um azimute mais tarde (*ou* às ... horas).
E	Este *(ponto cardeal)* (*v. o n.º* **3098**).
ETA	Hora estimada da chegada.
INTERCO	Seguem grupos do Código Internacional de Sinais *(utilizado em radiotelefonia e pronunciado IN-TER-CO).*
K	Convite para transmitir.
KA	Sinal de começo de transmissão.
KTS	Milhas marítimas por hora *(nós).*
MIN	Minuto (*ou* minutos).
MSG	Prefixo que indica uma mensagem com destino ou proveniente do comandante de um navio relativa à exploração do navio ou à sua navegação.
N	Norte *(ponto cardeal)* (*v. o n.º* **3098**).
NIL	Nada tenho para lhe transmitir.
NO	Não *(negação).*
NW	Agora.
NX	Aviso à navegação marítima (*ou* segue aviso à navegação marítima).
OK	Estamos de acordo (*ou* está certo).
OL	Carta transoceânica.
P	Prefixo que indica um radiotelegrama particular.
PBL	Preâmbulo *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
PSE	Por favor.
R	Recebido.
REF	Referência a ... (*ou* refira-se a ...).
RPT	Repita (*ou* repito) (*ou* repitam ...).
RQ	Idicação de um pedido.
S	Sul *(ponto cardeal)* (*v. o n.º* **3098**).
SIG	Assinatura *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
SLT	Carta radiomarítima.
SVC	Prefixo que indica um telegrama de serviço.
SYS	Refira-se ao seu telegrama de serviço.
TFC	Tráfego.
TR	Utilizado por uma estação terrestre para pedir a posição e o próximo porto de escala de uma estação móvel (*v. os n.ºs* **4741** e **4942**); utilizado igualmente como prefixo à resposta.
TU	Muito obrigado.
TXT	Texto *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
VA	Fim do trabalho.
W	Oeste *(ponto cardeal)* (*v. o n.º* **3098**).
WA	Palavra depois de ... *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
WB	Palavra antes de ... *[a empregar depois de um ponto de interrogação em radiotelegrafia ou depois de RQ em radiotelefonia (em caso de dificuldades linguísticas) ou depois de RPT, para pedir uma repetição].*
WD	Palavra(*s*) ou grupo(*s*).
WX	Boletim meteorológico (*ou* segue o boletim meteorológico).
XQ	Prefixo que indica a transmissão de uma nota de serviço.
YZ	As palavras que seguem são em linguagem clara.

Nota. — Em radiotelefonia, um traço horizontal sobre as letras que compõem um sinal significa que essas letras devem ser transmitidas como um só sinal.

APÊNDICE 15

Códigos SINPO e SINPFEMO

(V. o parecer n.º 251 da CCIR)

Código SINPO

Escala	S	I	N	P	O
	Intensidade do sinal	Efeitos prejudiciais			Apreciação de conjunto
		Interferência	Ruído	Perturbações da propagação	
5	Excelente.	Nula.	Nulo.	Nulas.	Excelente.
4	Boa.	Ligeira.	Ligeiro.	Ligeiras.	Bom.
3	Satisfatória.	Moderada.	Moderado.	Moderadas.	Satisfatório.
2	Medíocre.	Severa.	Severo.	Severas.	Medíocre.
1	Dificilmente audível.	Muito grave.	Muito grave.	Muito graves.	Inutilizável.

Código SINPFEMO

Escala	S	I	N	P	F	E	M	O
	Intensidade do sinal	Efeitos prejudiciais			Frequência dos desvanecimentos	Modulação		Apreciação de conjunto
		Interferência	Ruído	Perturbações da propagação		Qualidade	Taxa	
5	Excelente.	Nula.	Nulo.	Nulas.	Nula.	Excelente.	Máxima.	Excelente.
4	Boa.	Ligeira.	Ligeiro.	Ligeiras.	Lenta.	Boa.	Boa.	Boa.
3	Satisfatória.	Moderada.	Moderado.	Moderadas.	Moderada.	Satisfatória.	Satisfatória.	Satisfatória.
2	Medíocre.	Severa.	Severo.	Severas.	Rápida.	Medíocre.	Medíocre ou nula.	Medíocre.
1	Dificilmente audível.	Muito grave.	Muito grave.	Muito graves.	Muito rápida.	Muito medíocre.	Sobremodulada permanentemente.	Inutilizável.

Observações especiais:

a) Uma informação em código será formada pela palavra SINPO ou SINPFEMO seguida de um grupo de 5 ou 8 algarismos, que descrevem, respectivamente, as 5 ou 8 características que figuram no código correspondente;

b) Para as características que não foram avaliadas utilizar-se-á a letra X em vez de um algarismo;

c) Se bem que o código SINPFEMO tenha sido previsto para a radiotelefonia, pode ser utilizado para a radiotelegrafia;

d) A apreciação de conjunto para a radiotelegrafia deve ser interpretada como se indica seguidamente nos quadros I e II:

QUADRO I

Apreciação de conjunto	Telegrafia automática
5. Excelente	*Multiplex*, quatro vias, com repartição no tempo.
4. Bom	*Multiplex*, duas vias, com repartição no tempo.
3. Satisfatório	Quase comercial, em sistema arrítmico, a uma via.
2. Medíocre	BK, XQ e indicativos legíveis.
1. Inutilizável	Ilegível.

QUADRO II

Apreciação de conjunto	Telegrafia morse
5. Excelente	Grande velocidade.
4. Bom	100 palavras por minuto.
3. Satisfatório	50 palavras por minuto.
2. Medíocre	BK, XQ e indicativos legíveis.
1. Inutilizável	Ilegível.

e) A apreciação de conjunto para a telefonia deve ser interpretada como se indica no quadro III:

QUADRO III

Apreciação de conjunto	Condições de recepção	Qualidade
5. Excelente	Sinal sem defeito	Comercial.
4. Bom	Sinal com ligeiros defeitos	
3. Sofrível	Sinal com graves defeitos. Via utilizável por operadores ou por assinantes experientes.	No limite comercial.
2. Medíocre	Via apenas utilizável por operadores	Não comercial.
1. Inutilizável	Via inutilizável por operadores	

APÊNDICE 16

Vias radiotelefónicas nas faixas do serviço móvel marítimo compreendidas entre 4000 kHz e 23 000 kHz

(V. o artigo 60, secção IV)

1. A distribuição das vias radiotelefónicas a utilizar pelas estações costeiras e pelas estações de navio nas faixas atribuídas ao serviço móvel marítimo está indicada nas duas secções seguintes:

Secção A — quadro das frequências de emissão em faixa lateral única para a exploração dúplex (vias a duas frequências), em kHz;

Secção B — quadro das frequências de emissão em faixa lateral única para a exploração *simplex* (vias a uma frequência) e para a exploração de faixas cruzadas entre navios (duas frequências), em kHz.

2. As características técnicas dos emissores de faixa lateral única estão especificadas no apêndice 17.

3. Uma ou várias séries de frequência da secção A (com excepção das frequências mencionadas abaixo no § 5) podem ser consignadas a cada estação costeira e esta utiliza essas frequências associadas por pares (v. o n.° **4381**); cada par compreende uma frequência de emissão e uma frequência de recepção. As séries devem ser escolhidas tendo em conta as zonas a servir e de modo a evitar, tanto quanto possível, as interferências prejudiciais entre as emissões das diferentes estações costeiras.

4. As frequências da secção B destinam-se a ser utilizadas em comum no mundo inteiro pelos navios de todas as categorias, tendo em conta as necessidades do tráfego, para as emissões dos navios com destino às estações costeiras e para as comunicações entre navios. Além disso, podem ser utilizadas em comum no mundo inteiro para as emissões das estações costeiras (exploração *simplex*), desde que a potência de ponta não exceda 1 kW (v. a Recomendação n.° 304).

5. São atribuídas para a chamada as seguintes frequências da secção A:

Via n.° 421 na faixa dos 4 MHz;
Via n.° 606 na faixa dos 6 MHz;
Via n.° 821 na faixa dos 8 MHz;
Via n.° 1221 na faixa dos 12 MHz;
Via n.° 1621 na faixa dos 16 MHz;
Via n.° 2221 na faixa dos 22 MHz.

As outras frequências das secções A e B são frequências de trabalho.

6:

a) As estações que utilizam emissões em faixa lateral única devem funcionar unicamente nas frequências portadoras indicadas nas secções A e B em conformidade com as características técnicas especificadas no apêndice 17. Essas estações deverão utilizar sempre a faixa lateral superior.

b) As estações que utilizam emissões em faixa lateral única devem efectuar unicamente emissões das classes R3E e J3E. Todavia, convém que as administrações se esforcem, tanto quanto possível, por limitar às emissões da classe J3E a utilização das vias n.^{os} 401, 601, 801, 1201, 1601 e 2201.

7. Se uma administração autorizar o emprego de frequências diferentes das indicações nas secções A e B as suas comunicações radiotelefónicas não devem causar interferência prejudicial às estações radiotelefónicas do serviço móvel marítimo que utilizam frequências especificadas nos quadros que seguem.

SECÇÃO

Quadro das frequências de emissão de faixa lateral única

Via número	Faixa dos 4 MHz				Via número	Faixa dos 6 MHz				Via número	Faixa dos 8 MHz			
	Estações costeiras		Estações de navio			Estações costeiras		Estações de navio			Estações costeiras		Estações de navio	
	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas		Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas		Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas
401	4 357,4	4 358,8	4 063	4 064,4	601	6 506,4	6 507,8	6 200	6 201,4	801	8 718,9	8 720,3	8 195	8 196,4
402	4 360,5	4 361,9	4 066,1	4 067,5	602	6 509,5	6 510,9	6 203,1	6 204,5	802	8 722	8 723,4	8 198,1	8 199,5
403	4 363,6	4 365	4 069,2	4 070,6	603	6 512,6	6 514	6 206,2	6 207,6	803	8 725,1	8 726,5	8 201,2	8 202,6
404	4 366,7	4 368,1	4 072,3	4 073,7	604	6 515,7	6 517,1	6 209,3	6 210,7	804	8 728,2	8 729,6	8 204,3	8 205,7
405	4 369,8	4 371,2	4 075,4	4 076,8	605	6 518,8	6 520,2	6 212,4	6 213,8	805	8 731,3	8 732,7	8 207,4	8 208,8
406	4 372,9	4 374,3	4 078,5	4 079,9	606	(*) 6 521,9	(*) 6 523,3	(2) (*) 6 515,5	(*) 6 216,9	806	8 734,4	8 735,8	8 210,5	8 211,9
407	4 376	4 377,4	4 081,6	4 083	–	–	–	–	–	807	8 737,5	8 738,9	8 213,6	8 215
408	4 379,1	4 380,5	4 084,7	4 086,1	–	–	–	–	–	808	8 740,6	8 742	8 216,7	8 218,1
409	4 382,2	4 383,6	4 087,8	4 089,2	–	–	–	–	–	809	8 743,7	8 745,1	8 219,8	8 221,2
410	4 385,3	4 386,7	4 090,9	4 092,3	–	–	–	–	–	810	8 746,8	8 748,2	8 222,9	8 224,3
411	4 388,4	4 389,8	4 094	4 095,4	–	–	–	–	–	811	8 749,9	8 751,3	8 226	8 227,4
412	4 391,5	4 392,9	4 097,1	4 098,5	–	–	–	–	–	812	8 753	8 754,4	8 229,1	8 230,5
413	4 394,6	4 396	4 100,2	4 101,6	–	–	–	–	–	813	8 756,1	8 757,5	8 232,2	8 233,6
414	4 397,7	4 399,1	4 103,3	4 104,7	–	–	–	–	–	814	8 759,2	8 760,6	8 235,3	8 236,7
415	4 400,8	4 402,2	4 106,4	4 107,8	–	–	–	–	–	815	8 762,3	8 763,7	8 238,4	8 239,8
416	4 403,9	4 405,3	4 109,5	4 110,9	–	–	–	–	–	816	8 765,4	8 766,8	8 241,5	8 242,9
417	4 407	4 408,4	4 112,6	4 114	–	–	–	–	–	817	8 768,5	8 769,9	8 244,6	8 246
418	4 410,1	4 411,5	4 115,7	4 117,1	–	–	–	–	–	818	8 771,6	8 773	8 247,7	8 249,1
419	4 413,2	4 414,6	4 118,8	4 120,2	–	–	–	–	–	819	8 774,7	8 776,1	8 250,8	8 252,2
420	4 416,3	4 417,7	4 121,9	4 123,3	–	–	–	–	–	820	8 777,8	8 779,2	8 253,9	8 255,3
421	(*) 4 419,4	(*) 4 420,8	(1) (*) 4 125	(*) 4 126,4	–	–	–	–	–	821	(*) 8 780,9	(*) 8 782,3	(*) 8 257	(*) 8 258,4
422	4 422,5	4 423,9	4 128,1	4 129,5	–	–	–	–	–	822	8 784	8 785,4	8 260,1	8 261,5
423	4 425,6	4 427	4 131,2	4 132,6	–	–	–	–	–	823	8 787,1	8 788,5	8 263,2	8 264,6
424	4 428,7	4 430,1	4 134,3	4 135,7	–	–	–	–	–	824	8 790,2	8 791,6	8 266,3	8 267,7
425	4 431,8	4 433,2	4 137,4	4 138,8	–	–	–	–	–	825	8 793,3	8 794,7	8 269,4	8 270,8
426	4 434,9	4 436,3	4 140,5	4 141,9	–	–	–	–	–	826	8 796,4	8 797,8	8 272,5	8 273,9
–	–	–	–	–	–	–	–	–	–	827	8 799,5	8 800,9	8 275,6	8 277
–	–	–	–	–	–	–	–	–	–	828	8 802,6	8 804	8 278,7	8 280,1
–	–	–	–	–	–	–	–	–	–	829	8 805,7	8 807,1	8 281,8	8 283,2
–	–	–	–	–	–	–	–	–	–	830	8 808,8	8 810,2	8 284,9	8 286,3
–	–	–	–	–	–	–	–	–	–	831	8 811,3	8 813,3	8 288	8 289,4
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(*) Frequências de chamada (v. os n.ºs 4375 e 4376).

(1) Para as condições de utilização da frequência portadora 4125 kHz (v. os n.ºs 2982, 3030, 3031, 4379 e 4380).

(2) Para as condições de utilização da frequência portadora 6215,5 kHz (v. o n.º 2986).

A

para exploração dúplex (vias de duas frequências), em kHz

Via número	Faixa dos 12 MHz				Via número	Faixa dos 16 MHz				Via número	Faixa dos 22 MHz			
	Estações costeiras		Estações de navio			Estações costeiras		Estações de navio			Estações costeiras		Estações de navio	
	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas		Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas		Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas
1 201	13 100,8	13 102,2	12 330	12 331,4	1 601	17 232,9	17 234,3	16 460	16 461,4	2 201	22 596	22 597,4	22 000	22 001,4
1 202	13 103,9	13 105,3	12 333,1	12 334,5	1 602	17 236	17 237,4	16 463,1	16 464,5	2 202	22 599,1	22 600,5	22 003,1	22 004,5
1 203	13 107	13 108,4	12 336,2	12 337,6	1 603	17 239,1	17 240,5	16 466,2	16 467,6	2 203	22 602,2	22 603,6	22 006,2	22 007,6
1 204	13 110,1	13 111,5	12 339,3	12 340,7	1 604	17 242,2	17 243,6	16 469,3	16 470,7	2 204	22 605,3	22 606,7	22 009,3	22 010,7
1 205	13 113,2	13 114,6	12 342,4	12 343,6	1 605	17 245,3	17 246,7	16 472,4	16 473,8	2 205	22 608,4	22 609,8	22 012,4	22 013,8
1 206	13 116,3	13 117,7	12 345,5	12 346,9	1 606	17 248,4	17 249,6	16 475,5	16 476,9	2 206	22 611,5	22 612,9	22 015,5	22 016,9
1 207	13 119,4	13 120,8	12 348,6	12 350	1 607	17 251,5	17 252,9	16 478,6	16 480	2 207	22 614,6	22 616	22 018,6	22 020
1 208	13 122,5	13 123,9	12 351,7	12 353,1	1 608	17 254,6	17 256	16 481,7	16 483,1	2 208	22 617,7	22 619,1	22 021,7	22 023,1
1 209	13 125,6	13 127	12 354,8	12 356,2	1 609	17 257,7	17 259,1	16 484,8	16 486,2	2 209	22 620,8	22 622,2	22 024,8	22 026,2
1 210	13 128,7	13 130,1	12 357,9	12 359,3	1 610	17 260,8	17 262,2	16 487,9	16 489,3	2 210	22 623,9	22 625,3	22 027,9	22 029,3
1 211	13 113,8	13 133,2	12 361	12 362,4	1 611	17 263,9	17 265,3	16 491	16 492,4	2 211	22 627	22 628,4	22 031	22 032,4
1 212	13 134,9	13 136,3	12 364,1	12 365,5	1 612	17 267	17 268,4	16 494,1	16 495,5	2 212	22 630,1	22 631,5	22 034,1	22 035,5
1 213	13 138	13 139,4	12 367,2	12 368,6	1 613	17 270,1	17 271,5	16 497,2	16 498,6	2 213	22 633,2	22 634,6	22 037,2	22 038,6
1 214	13 141,1	13 142,5	12 370,3	12 371,7	1 614	17 273,2	17 274,6	16 500,3	16 501,7	2 214	22 636,3	22 637,7	22 040,3	22 041,7
1 215	13 144,2	13 145,6	12 373,4	12 374,8	1 615	17 276,3	17 277,7	16 503,4	16 504,8	2 215	22 639,4	22 640,8	22 043,4	22 044,8
1 216	13 147,3	13 148,7	12 376,5	12 377,9	1 616	17 279,4	17 280,8	16 506,5	16 507,9	2 216	22 642,5	22 643,9	22 046,5	22 047,9
1 217	13 150,4	13 151,8	12 379,6	12 381	1 617	17 282,5	17 283,9	16 509,6	16 511	2 217	22 645,6	22 647	22 049,6	22 051
1 218	13 153,5	13 154,9	12 382,7	12 384,1	1 618	17 285,6	17 287	16 512,7	16 514,1	2 218	22 648,7	22 650,1	22 052,7	22 054,1
1 219	13 156,6	13 156	12 385,8	12 387,2	1 619	17 288,7	17 290,1	16 515,8	16 517,2	2 219	22 651,8	22 653,2	22 055,8	22 057,2
1 220	13 159,7	13 161,1	12 388,9	12 390,3	1 620	17 291,8	17 293,2	16 518,9	16 520,3	2 220	22 654,9	22 656,3	22 058,9	22 060,3
1 221	(*) 13 162,8	(*) 13 164,2	(*)12 392	(*) 12 393,4	1 621	(*)17 294,9	(*)17 296,3	(*)16 522	(*)16 523,4	2 221	(*) 22 658	(*) 22 659,4	(*) 22 062	(*) 22 063,4
1 222	13 165,9	13 167,3	12 395,1	12 396,5	1 622	17 298	17 299,4	16 525,1	16 526,5	2 222	22 661,1	22 662,5	22 065,1	22 066,5
1 223	13 169	13 170,4	12 398,2	12 399,6	1 623	17 301,1	17 302,5	16 528,2	16 529,6	2 223	22 664,2	22 665,6	22 068,2	22 069,6
1 224	13 172,1	13 173,5	12 401,3	12 402,7	1 624	17 304,2	17 305,6	16 531,3	16 532,7	2 224	22 667,3	22 668,7	22 071,3	22 072,7
1 225	13 175,2	13 176,6	12 404,4	12 405,8	1 625	17 307,3	17 308,7	16 534,4	16 535,8	2 225	22 670,4	22 671,8	22 074,4	22 075,8
1 226	13 178,3	13 179,7	12 407,5	12 408,9	1 626	17 310,4	17 311,8	16 573,5	16 538,9	2 226	22 673,5	22 674,9	22 077,5	22 078,9
1 227	13 181,4	13 182,8	12 410,6	12 412	1 627	17 313,5	17 314,9	16 540,6	16 542	2 227	22 676,6	22 678	22 080,6	22 082
1 228	13 184,5	13 185,9	12 413,7	12 415,1	1 628	17 316,6	17 318	16 543,7	16 545,1	2 228	22 679,7	22 681,1	22 083,7	22 085,1
1 229	13 187,6	13 189	12 416,8	12 481,2	1 629	17 319,7	17 321,1	16 546,8	16 548,2	2 229	22 682,8	22 684,2	22 086,8	22 088,2
1 230	13 190,7	13 192,1	12 419,9	12 421,3	1 630	17 322,8	17 324,2	16 549,9	16 551,3	2 230	22 685,9	22 687,3	22 089,9	22 091,3
1 231	13 193,8	13 195,2	12 423	12 424,4	1 631	17 325,9	17 327,3	16 553	16 554,4	2 231	22 689	22 690,4	22 093	22 094,4
1 232	13 196,9	13 198,3	12 426,1	12 427,5	1 632	17 329	17 330,4	16 556,1	16 557,5	2 232	22 692,1	22 693,5	22 096,1	22 097,5
–	–	–	–	–	1 633	17 332,1	17 333,5	16 559,2	16 560,6	2 233	22 695,2	22 699,6	22 099,2	22 100,6
–	–	–	–	–	1 634	17 335,2	17 336,6	16 562,3	16 563,7	2 234	22 698,3	22 699,7	22 102,3	22 103,7
–	–	–	–	–	1 635	17 338,3	17 339,7	16 565,4	16 566,8	2 235	22 701,4	22 702,8	22 105,4	22 106,8
–	–	–	–	–	1 636	17 341,4	17 342,8	16 568,5	16 569,9	2 236	22 704,5	22 705,9	22 108,5	22 109,9
–	–	–	–	–	1 637	17 344,5	17 345,9	16 571,6	16 573	2 237	22 707,6	22 709	22 111,6	22 113
–	–	–	–	–	1 638	17 347,6	17 349	16 574,7	16 576,1	2 238	22 710,7	22 712,1	22 114,7	22 116,1
–	–	–	–	–	1 639	17 350,7	17 352,1	16 577,8	16 579,2	2 239	22 713,8	22 715,2	22 117,8	22 119,2
–	–	–	–	–	1 640	17 353,8	17 355,2	16 580,9	16 582,3	2 240	22 716,9	22 718,3	22 120,9	22 122,3
–	–	–	–	–	1 641	17 356,9	17 358,3	16 584	16 585,4	–	–	–	–	–

SECÇÃO B

Quadro das frequências de emissão de faixa lateral única para a exploração *simplex* (vias a uma frequência) e para a exploração de faixas cruzadas entre navios (duas frequências), em kHz

Faixa dos 4 MHz		Faixa dos 6 MHz		Faixa dos 8 MHz		Faixa dos 12 MHz		Faixa dos 16 MHz		Faixa dos 22 MHz	
Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas	Frequências portadoras	Frequências consignadas
4 143,6	4 145	6 218,6	6 220	8 291,1	8 292,5	12 429,2	12 430,6	16 587,1	16 588,5	22 124	22 125,4
–	–	6 221,6	6 223	8 294,2	8 295,6	12 432,3	12 433,7	16 590,2	16 591,6	22 127,1	22 128,5
–	–	–	–	–	–	12 435,4	12 436,8	16 593,3	16 594,7	22 130,2	22 131,6
–	–	–	–	–	–	–	–	–	–	22 133,3	22 134,7
–	–	–	–	–	–	–	–	–	–	22 136,4	22 137,8

APÊNDICE 17

Características técnicas dos emissores de faixa lateral única utilizados no serviço móvel marítimo para a radiotelefonia nas faixas compreendidas entre 1606,5 kHz (1605 Região 2) e 4000 kHz e entre 4000 kHz e 23 000 kHz

(V. o artigo 60, secção IV)

1. Potência da portadora:

a) Para as emissões da classe R3E a potência da portadora será a seguinte:

Faixas compreendidas entre 1606,5 kHz (1605 Região 2) e 4000 kHz:

Emissores das estações costeiras até 1 de Janeiro de 1982 e emissores das estações de navio em serviço ou instalados antes de 2 de Janeiro de 1982: 16 ± 2 dB abaixo da potência de ponta da emissão;

Emissores das estações costeiras a partir de 1 de Janeiro de 1982 e emissores das estações de navio instaladas depois de 1 de Janeiro de 1982: 18 ± 2 dB abaixo da potência de ponta da emissão.

Faixas compreendidas entre 4000 kHz e 23 000 kHz:

Emissores das estações de navio instalados antes de 2 de Janeiro de 1978: 16 ± 2 dB abaixo da potência de ponta da emissão;

Emissores das estações costeiras a partir de 1 de Janeiro de 1978 e emissores das estações de navio instalados depois de 1 de Janeiro de 1978: 18 ± 2 dB abaixo da potência de ponta da emissão.

a) Para as emissões da classe J3E a potência da portadora será inferior à potência de ponta da emissão em, pelo menos, 40 dB.

2. As estações costeiras e as estações de navio devem emitir apenas na faixa lateral superior.

3. A faixa das frequências acústicas transmitida deve estender-se de 350 Hz a 2700 Hz, não devendo a variação da amplitude em função da frequência exceder 6 dB.

4. A frequência da portadora dos emissores deverá ser mantida dentro das tolerâncias seguintes:

a) Estações costeiras: ± 20 Hz;

b) Estações de navio:

Faixas compreendidas entre 1606,5 kHz (1605 Região 2) e 4000 kHz:

Tolerância aplicável aos emissores instalados antes de 2 de Janeiro de 1982: ± 100 Hz; a deriva máxima em curto período (da ordem de quinze minutos) é de ± 40 Hz;

Tolerância aplicável aos emissores instalados depois de 1 de Janeiro de 1982 mas antes de 2 de Janeiro de 1985: ± 50 Hz;

Tolerância aplicável aos emissores instalados depois de 1 de Janeiro de 1985 e a todos os emissores a partir de 1 de Janeiro de 1990: ± 40 Hz.

Faixas compreendidas entre 4000 kHz e 23 000 kHz:

Tolerância aplicável aos emissores instalados antes de 2 de Janeiro de 1978: ± 100 Hz; a deriva máxima em curto período (da ordem de quinze minutos) é de ± 40 Hz;

Tolerância aplicável aos emissores instalados depois de 1 de Janeiro de 1978 e a todos os emissores a partir de 1 de Janeiro de 1990: ± 50 Hz.

5. A modulação de frequência parasita da portadora deve ser suficientemente pequena para não criar distorções prejudiciais.

6. No caso das emissões da classe H3E, R3E ou J3E a potência de qualquer emissão não desejada fornecida à linha de alimentação da antena numa frequência específica qualquer deve, quando o emissor funciona na sua potência de ponta máxima, manter-se nos limites indicados no quadro seguinte:

a) Emissores em serviço ou instalados antes de 2 de Janeiro de 1982 (1):

Diferença Δ entre a frequência da radiação não desejada (*a*) e a frequência consignada (*b*) (kHz)	Atenuação mínima em relação à potência de ponta
$1,6 < \Delta \leq 4,8$	28 dB
$4,8 < \Delta \leq 8$	38 dB
$8 < \Delta$	43 dB, sem que a potência da radiação não desejada possa exceder 50 mW.

(*a*) *Radiação não desejada* (v. o artigo 1, n.º **140**).
(*b*) A frequência consignada é 1400 Hz superior à frequência portadora (v. o n.º **4194**).

No que respeita às emissões fora de faixa (2) e às radiações não essenciais (3) resultantes do processo de modulação mas que não caiam no espectro das emissões fora de faixa (2), pode-se, quando se deseje verificar se uma emissão com portadora reduzida ou suprimida satisfaz as condições acima indicadas, aplicar à entrada do emissor um sinal constituído por duas frequências acústicas suficientemente afastadas uma da outra para que todos os produtos de intermodulação caiam em frequências distantes de, pelo menos, 1,6 kHz da frequência consignada.

a) Emissores instalados depois de 1 de Janeiro de 1982 (1):

Diferença Δ entre a frequência da radiação não desejada (*a*) e a frequência consignada (*b*) (kHz)	Atenuação mínima em relação à potência de ponta
$1,5 < \Delta \leq 4,5$	31 dB
$4,5 < \Delta \leq 7,5$	38 dB
$7,5 < \Delta$	43 dB, sem que a potência da radiação não desejada possa exceder 50 mW.

(*a*) *Radiação não desejada* (v. o artigo 1, n.º **140**).
(*b*) A frequência consignada é 1400 Hz superior à frequência portadora (v. o n.º **4194**).

No que respeita às emissões fora de faixa (2) e às radiações não essenciais (3) resultantes do processo de modulação mas que não caiam no espectro das emissões de faixa (2), pode-se, quando se deseje verificar se uma emissão com portadora reduzida ou suprimida satisfaz as condições acima indicadas, aplicar à entrada do emissor um sinal constituído por duas frequências acústicas suficientemente afastadas uma da outra para que todos os produtos de intermodulação caiam em frequências distantes de, pelo menos, 1,5 kHz da frequência consignada.

APÊNDICE 18

Quadro das frequências de emissão para as estações do serviço móvel marítima na faixa 156-174 MHz

(V. o n.º **613** e os artigos 59 e 60)

Nota 1. — Para facilitar a compreensão do quadro, v. as notas (*a*) a (*q*) adiante.

Nota 2. — As vias 01 a 28, com excepção das vias 15 e 17, correspondem às vias do apêndice 18 ao Regulamento das Radiocomunicações de Genebra (1959) e as vias 15, 17 e 60 a 88 representam as vias suplementares disponíveis

(1) Todas as administrações reconhecem a necessidade de reduzir o nível das emissões não desejadas e, consequentemente, procurarão tomar as medidas necessárias para que todos os novos emissores sob a sua jurisdição estejam de acordo com as novas características, logo que possível antes de 2 de Janeiro de 1982.

(2) *Emissões fora de faixa* (v. o artigo 1, n.º **138**).

(3) *Radiação não essencial* (v. o artigo 1, n.º **139**).

para as consignações de acordo com as disposições do apêndice 18 MAR ao Regulamento das Radiocomunicações, Genebra (1967) (v. a Resolução n.º 308).

Nota 3. — Os n.^{os} 60 a 88 foram escolhidos para as vias suplementares, a fim de as distinguir claramente das vias originais.

Números das vias	Notas	Frequência de emissão (MHz)		Navio-navio	Operações portuárias		Movimento de navios		Correspondência pública
		Estações de navio	Estações costeiras		A uma frequência	A duas frequências	A uma frequência	A duas frequências	
60	(*j*)	156,025	160,625			17		9	25
01	(*i*)	156,050	160,650			10		15	8
61		156,075	160,675			23		3	19
02		156,100	160,700			8		17	10
62		156,125	160,725			20		6	22
03	(*i*)	156,150	160,750			9		16	9
63	(*i*)	156,175	160,775			18		8	24
04		156,200	160,800			11		14	7
64		156,225	160,825			22		4	20
05		156,250	160,850			6		19	12
65		156,275	160,875			21		5	21
06	(*h*)	156,300		1					
66		156,325	160,925			19		7	23
07		156,350	160,950			7		18	11
67	(*n*)	156,375	156,375	10	10		9		
08		156,400		2					
68	(*p*)	156,425	156,425		6		2		
09	(*o*)	156,450	156,450	5	5		12		
69	(*p*)	156,475	156,475	9	11		4		
10	(*n*)	156,500	156,500	3	9		10		
70	(*o*)	156,525		6					
11	(*p*)	156,550	156,550		3		1		
71	(*p*)	156,575	156,575		7		6		

Números das vias	Notas	Frequência de emissão (MHz)		Navio-navio	Operações portuárias		Movimento de navios		Correspondência pública
		Estações de navio	Estações costeiras		A uma frequência	A duas frequências	A uma frequência	A duas frequências	
12	(*p*)	156,600	156,600		1		3		
72	(*o*)	156,625		7					
13	(*p*)	156,650	156,650	4	4		5		
73	(*n*)	156,675	156,675	8	12		11		
14	(*p*)	156,700	156,700		2		7		
74	(*p*)	156,725	156,725		8		8		
15	(*g*) e (*l*)	156,750	156,750	12	14				
75	(*m*)		Faixa de guarda 156,7625-156,7875 MHz						
16		156,800	156,800	Perigo: segurança e chamada					
76	(*m*)		Faixa de guarda 156,8125-156,8375 MHz						
17	(*g*) e (*l*)	156,850	156,850	13	13				
77		156,875		11					
18	(*f*)	156,900	161,500			3		22	
78		156,925	161,525			12		13	27
19	(*f*)	156,950	161,550			4		21	
79	(*f*) e (*p*)	156,975	161,575			14		1	
20	(*f*)	157,000	161,600			1		23	
80	(*f*) e (*p*)	157,025	161,625			16		2	
21	(*f*) e (*i*)	157,050	156,050 ou 161,650			5		20	
81		157,075	161,675			15		10	28
22	(*f*)	157,100	161,700			2		24	
82		157,125	161,725			13		11	26
23	(*i*)	157,150	156,150 ou 161,750						5
83	(*i*)	157,175	156,175 ou 161,775						16

Números das vias	Notas	Frequência de emissão (MHz)		Navio-navio	Operações portuárias		Movimento de navios		Correspondência pública
		Estações de navio	Estações costeiras		A uma frequência	A duas frequências	A uma frequência	A duas frequências	
24		157,200	161,800						4
84		157,225	161,825			24		12	13
25		157,250	161,850						3
85		157,275	161,875						17
26		157,300	161,900						1
86	(*q*)	157,325	161,925						15
27		157,350	161,950						2
87		157,375	161,975						14
28		157,400	162,000						6
88	(*j*)	157,425	162,025						18

Notas relativas ao quadro

(*a*) Os algarismos que figuram na coluna «Navio-navio» indicam a ordem normal pela qual convém que as vias que sejam postas em serviço pela estação móvel.

(*b*) Os algarismos que figuram nas colunas «Operações portuárias», «Movimento de navios» e «Correspondência pública» indicam a ordem normal pela qual convém que as vias sejam postas em serviço por cada estação costeira. Todavia, pode ser necessário, em certos casos, omitir vias, a fim de evitar interferências prejudiciais entre estações costeiras vizinhas.

(*c*) As administrações podem designar frequências do serviço navio-navio, do serviço de operações portuárias ou do serviço do movimento de navios que poderão ser utilizadas por aeronaves ligeiras ou helicópteros para entrarem em comunicação com navios ou estações costeiras que participem em operações de apoio essencialmente marítimas, nas condições especificadas nos n.os **4144, 4148, 4149, 4150, 4151, 4152** e **4153**. Todavia, a utilização das vias partilhadas com o serviço de correspondência pública dependerá de um acordo prévio entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

(*d*) As vias do presente apêndice, com excepção das vias 6, 15, 16, 17, 75 e 76, poderão ser também utilizadas para a transmissão de dados a grande velocidade e de fac-símile, sob reserva de arranjos particulares entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

(*e*) Excepto nos Estados Unidos da América, as vias do presente apêndice e, de preferência, duas vias adjacentes das séries 87, 28, e 88, com excepção das vias 6, 15, 16, 17, 75 e 76, poderão ser utilizadas para os sistemas de faixa estreita de telegrafia com impressão directa e para a transmissão de dados, sob reserva de arranjos particulares entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

(*f*) As vias a duas frequências atribuídas ao serviço de operações portuárias (18, 19, 20, 21, 22, 79 e 80) poderão ser utilizadas para a correspondência pública, sob reserva de arranjos particulares entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

(*g*) Até 1 de Janeiro de 1983, nas vias 15 e 17, a potência aparente radiada pelos emissores das estações de navio não deverá exceder 1 W.

(*h*) A frequência de 156,300 MHz (via 6) (v. os n.os **2993** e **4154**) poderá também ser utilizada para as comunicações entre estações de navio e estações de aeronave que participem em operações coordenadas de busca e salvamento. As estações de navio devem evitar causar interferências prejudiciais a tais comunicações na via 6, assim como às comunicações entre as estações de aeronave, os quebra-gelos e os navios por estes assistidos durante a estação dos gelos.

(*i*) Na França e na Bélgica, as frequências de 156,050 MHz, 156,150 MHz e 156,175 MHz são utilizadas nas vias 1, 3 e 63, respectivamente, pelas estações de navio e nas vias 21, 23 e 83, respectivamente, pelas estações costeiras, no caso de sistemas especiais semidúplex de correspondência pública que funcionam com uma separação de 1 MHz entre as frequências de emissão e de recepção. Estas disposições especiais deixarão de ser aplicadas o mais tardar em 1 de Janeiro de 1983.

(*j*) As vias 60 e 88 poderão ser utilizadas sob reserva de arranjos particulares entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

(*k*) As frequências indicadas neste quadro poderão igualmente ser utilizadas para as radiocomunicações nas vias aquáticas interiores, nas condições previstas no n.º **613**.

(*l*) As vias 15 e 17 podem também ser utilizadas para as comunicações internas a bordo de navios, sob reserva de que a potência aparente radiada não exceda 1 W e dentro dos limites da regulamentação nacional da administração interessada, quando essas vias são utilizadas nas suas águas territoriais (v., todavia, a Recomendação n.º 305).

(*m*) Esta faixa de guarda aplicar-se-á a partir de 1 de Janeiro de 1983 (v. os n.os **3033, 3033.1, 4393** e **4393.1**.

(*n*) Na Zona Europeia Marítima e no Canadá estas frequências (vias 10, 67 e 73) podem também ser utilizadas, se necessário, pelas administrações interessadas, para as comunicações entre as estações de navio, as estações de aeronave e as estações terrestres que participem em operações coordenadas de busca e salvamento, assim como em operações de luta contra a poluição em áreas locais, nas condições especificadas nos n.os **4144, 4148, 4149, 4150, 4151, 4152** e **4153**.

(*o*) As três primeiras frequências a utilizar de preferência para a finalidade indicada na nota (*c*) são 156,450 MHz (via 9), 156,525 MHz (via 70) e 156,625 MHz (via 72).

(*p*) Estas vias (68, 69, 11, 71, 12, 13, 14, 74, 79 e 80) são as vias a utilizar de preferência para o serviço do movimento de navios, mas, se em determinada zona houver necessidade disso, poderão ser atribuídas ao serviço das operações portuárias enquanto não forem necessárias para o serviço do movimento de navios.

(*q*) Esta via (86) poderá ser utilizada como via de chamada, caso uma tal via seja necessária num sistema radiotelefónico automático que a CCIR tenha recomendado.

APÊNDICE 19

Características técnicas dos emissores e dos receptores utilizados no serviço móvel marítimo na faixa 156-174 MHz

(V. os artigos 59 e 60, o apêndice 18 e a Resolução n.º 308)

1. Só é utilizada a modulação de frequência com pré-acentuação de 6 dB por oitava (modulação de fase).

2. O desvio de frequência que corresponde a uma modulação de 100 % deve ser tão próximo quanto possível de ± 5 kHz. Não deverá, em qualquer caso, ultrapassar ± 5 kHz.

3. A tolerância de frequência de uma estação costeira ou de uma estação de navio é de 10 milionésimas [v. a nota 27 do apêndice 7].

4. Em qualquer das frequências indicadas no quadro do apêndice 18 das estações deve ser polarizada verticalmente na origem.

5. A faixa das frequências acústicas não deve ir além de 3000 Hz.

6. A potência média dos emissores das estações de navio deve poder ser reduzida facilmente a um valor inferior ou igual a 1 W.

APÊNDICE 20

Características dos aparelhos utilizados para as comunicações de bordo nas faixas de frequências compreendidas entre 450 MHz e 470 MHz

(V. os n.os **669** e **670**)

1. Convém que os equipamentos disponham de um número suficiente de vias que lhes permita um serviço satisfatório na zona de serviço prevista.

2. A potência aparente radiada deverá ser limitada ao mínimo necessário para obter um serviço satisfatório e em nenhum caso deverá exceder 2 W. Sempre que praticável, convém que os aparelhos estejam equipados com um dispositivo apropriado que permita reduzir facilmente a potência de saída de, pelo menos, 10 dB.

3. Quando sejam instalados aparelhos em pontos fixos do navio, a altura da antena não deverá ultrapassar em mais de 3,50 m o nível da ponte.

4. Só é utilizada a modulação de frequência com pré-acentuação de 5 dB por oitava (modulação de fase).

5. O desvio de frequência não deverá exceder ± 5 kHz.

6. A tolerância de frequência é de 5 milionésimas.

7. A faixa das frequências acústicas não deverá ir além de 3000 Hz.

8. Os sinais de telecomando, de telemedida e os sinais não telefónicos deverão ser codificados de forma a evitar tanto quanto possível a possibilidade de funcionamento intempestivo provocado por sinais interferentes.

9. Se for necessário utilizar a bordo de um navio uma estação repetidora, os pares de frequências a utilizar são os seguintes (v. igualmente o n.º **670**).

457,525 MHz e 467,525 MHz;
457,550 MHz e 467,550 MHz;
457,575 MHz e 467,575 MHz.

APÊNDICE 21

Relatórios sobre as observações de fiscalização internacional das emissões

(V. o artigo 20)

SECÇÃO I

Relatórios relativos às estações dos serviços de radiocomunicações de Terra

1. Convém que os relatórios sobre os resultados das medidas de frequência contenham, na medida necessária, as seguintes informações:

a) Identificação da estação de fiscalização (administração ou organização e localização);

b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe de emissão ([1]);
f) Frequência consignada ou frequência de referência;
g) Tolerância de frequência;
h) Frequência medida;
i) Precisão da medida;
j) Afastamento em relação à frequência consignada ou em relação à frequência de referência;
k) Informações suplementares (por exemplo: período durante o qual foram efectuadas as medidas, deriva da frequência medida durante esse período, qualidade dos sinais recebidos e condições de recepção);
l) Observações.

2. Convém que os relatórios sobre os resultados das medidas de campo ou de densidade de fluxo de potência contenham, na medida necessária, as informações seguintes:

a) Identificação da estação de fiscalização (administração ou organização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe da emissão ([1]);
f) Frequência consignada;
g) Valor medido do campo ou da densidade de fluxo de potência;
h) Precisão da medida (estimativa);
i) Valor da componente de polarização medida;
j) Outros elementos ou características da medida;
k) Observações.

3. Convém que as listas de observações relativas ao grau de ocupação do espectro sejam fornecidas, na medida do praticamente possível, segundo a forma recomendada pela IFRB e contenham, se possível, as informações seguintes:

a) Identificação da estação de fiscalização (administração ou organização e localização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe da emissão ([1]);
f) Classe da estação e natureza do serviço;
g) Frequência medida;
h) Período durante o qual a emissão foi escutada ou registada;
i) Valor medido do campo, da densidade de fluxo de potência ou da intensidade do sinal, segundo a escala OSA;
j) Largura da faixa ocupada (indicar se foi medida ou estimada ou indicar a largura de faixa necessária notificada à IFRB;
k) Informações sobre a localidade ou sobre a zona de recepção pretendidas;
k) Observações.

4. Convém utilizar, tanto quanto possível, na transmissão destas informações os símbolos que figuram no Regulamento das Radiocomunicações ou no prefácio da Lista Internacional das Frequências.

SECÇÃO II

Relatórios relativos às estações dos serviços de radiocomunicações espacial

1. Convém que os relatórios sobre os resultados das medidas de frequência, na medida necessária, as informações seguintes:

a) Identificação da estação de fiscalização (administração ou organização e localização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;

([1]) A classe da emissão compreende as características fundamentais contidas no artigo 4 e, se possível, as características suplementares contida no apêndice 6. Os símbolos das características que não possam ser determinadas são substituídos por travessões. Todavia, no caso de incerteza para a classificação de uma estação entre modulação de frequência ou modulação de fase, é utilizado o símbolo de modulação de frequência (F).

e) Classe da emissão ([1]);
f) Frequência consignada ou frequência de referência;
g) Tolerância de frequência;
h) Frequência de medida;
i) Precisão da medida;
j) Afastamento em relação à frequência consignada ou em relação à frequência de referência;
k) Informações suplementares (por exemplo: período durante o qual foram efectuadas as medidas, deriva da frequência medida durante esse período, qualidade dos sinais recebidos e condições de recepção);
l) Observações.

2. Convém que os relatórios sobre os resultados das medidas de campo ou de densidade de fluxo de potência contenham, na medida necessária, as informações seguintes:

a) Identificação da estação de fiscalização (administração ou organização e localização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe da emissão ([1]);
f) Frequência consignada;
g) Valor medido do campo ou da densidade de fluxo de potência;
h) Precisão da medida (estimativa);
i) Valor da componente de polarização medida;
j) Outros elementos ou características da medida;
k) Observações.

3. Convém que as listas de observação relativas ao grau de ocupação do espectro sejam fornecidas, na medida do praticamente possível, segundo a forma recomendada pela IFRB e contenham, se possível, as informações seguintes:

3.1. Relatórios relativos às observações de emissões de estações espaciais:

a) Identificação da estação de fiscalização (administração ou organização e localização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe da emissão ([1]);
f) Classe da estação e natureza do serviço;
g) Frequência medida;
h) Período durante o qual a emissão foi observada ou registada;
i) Valor medido do campo, da densidade de fluxo de potência ou da intensidade do sinal, segundo a escala QSA;
j) Largura de faixa ocupada (indicar se foi medida ou estimada ou indicar a largura de faixa necessária à IFRB);
k) Polarização observada;
l) Informações relativas à órbita;
m) Informações relativas à localidade ou à zona de recepção pretendidas, se forem conhecidas;
n) Observações.

3.2. Relatórios relativos às observações de emissões de estações terrenas:

a) Identificação da estação de fiscalização (administração ou organização e localização);
b) Data da medida;
c) Hora da medida (UTC);
d) Indicativo de chamada ou qualquer outro meio de identificação da estação fiscalizada, ou ambos;
e) Classe da emissão ([1]);
f) Classe da estação e natureza do serviço;
g) Frequência medida;
h) Período durante o qual a emissão foi observada ou registada;
i) Valor medido do campo, da densidade de fluxo de potência ou da intensidade, segundo a escala QSA;
j) Largura de faixa ocupada (indicar se foi medida ou estimada ou indicar a largura de faixa necessária a IFRB;
k) Informações relativas à posição orbital de recepção pretendida;
l) Observações.

([1]) A classe da emissão compreende as características fundamentais contidas no artigo 4 e, se possível, as características suplementares contida no apêndice 6. Os símbolos das características que não possam ser determinadas são substituídos por travessões. Todavia, no caso de incerteza para a classificação de uma estação entre modulação de frequência ou modulação de fase, é utilizado o símbolo de modulação de frequência (F).

4. Tanto quanto possível, convém utilizar na transmissão destas informações os símbolos que figuram no Regulamento das Radiocomunicações ou no prefácio da Lista Internacional das Frequências.

APÊNDICE 22

Relatório sobre uma irregularidade ou uma infracção à Convenção ou ao Regulamento das Radiocomunicações

(V. os artigos 21 e 22)

Informações relativas à estação que transgride o Regulamento:

1. Nome (*a*), se for conhecido (em maiúsculas de imprensa)...
2. Indicativo de chamada ou outra forma de identificação (em maiúsculas de imprensa)...
3. Nacionalidade, se for conhecida ...
4. Frequência utilizada (kHz, MHz, GHz ou THz) ...
5. Classe da emissão (*b*) ...
6. Classe de estação e natureza do serviço, se forem conhecidas ...
7. Localização (*c*), (*d*) e (*e*) ...

Informações relativas à estação ou ao organismo centralizador ou ao serviço de inspecção que assinala a irregularidade ou a infracção:

8. Nome (maiúsculas de imprensa) ...
9. Indicativo de chamada ou outra forma de identificação (em maiúsculas de imprensa) ...
10. Nacionalidade ...
11. Localização (*c*) e (*d*) ...

Informação sobre a irregularidade ou a infracção:

12. Nome (*f*) da estação (em maiúsculas de imprensa) em comunicação com aquela que comete a irregularidade ou a infracção ...
13. Indicativo de chamada ou outra forma de identificação (em maiúsculas de imprensa) da estação em comunicação com aquela que comete a irregularidade ou a infracção ...
14. Data e hora (*g*) ...
15. Natureza da irregularidade ou da infracção (*h*) ...
16. Extractos do diário de bordo ou outras informações em apoio do relatório ...

Informações relativas à estação cuja emissão é indeferida (i):

17. Nome da estação (em maiúsculas de imprensa) ...
18. Indicativo de chamada ou outra forma de identificação (em maiúsculas de imprensa) ...
19. Frequência consignada (kHz, MHz, GHz ou THz) ...
20. Frequência medida no momento da interferência ...
21. Classe da emissão (*b*) e largura de faixa (indicar se foi medida ou estimada ou indicar a largura de faixa necessária notificada à IFRB) ...
22. Local de recepção (*c*) e (*d*) (em maiúsculas de imprensa) onde a interferência foi detectada ...
23. Certificado:

Certifico que o relatório acima é, tanto quanto sei, a descrição completa e fiel do que aconteceu.

...

Assinatura (*j*) ... Data ...

Indicações para preencher este impresso

(*a*) Cada relatório mencionará apenas uma única estação (v. nota 6) e deverá ser enviado em duplicado, se possível, dactilografado caso seja enviado por carta. Pode ser igualmente enviado por telegrama.

(*b*) A classe da emissão compreende as características fundamentais contidas no artigo 4 e, se possível, as características suplementares contidas no apêndice 6. Os símbolos das características que não possam ser determinadas são substituídos por travessões. Todavia, no caso de incerteza para a classificação de uma estação entre modulação de frequência ou modulação de fase, é utilizado o símbolo de modulação de frequência (F).

(*c*) No caso de se tratar de uma estação fixa, terrestre ou terrena, deverá indicar-se a posição em latitude e longitude (Greenwich) e, se isso não for possível, deverá indicar-se a zona de funcionamento.

(*d*) No caso de estações de navio ou de aeronave, deverá indicar-se a posição em latitude e longitude (Greenwich), ou por um azimute verdadeiro, em graus, e a distância em milhas marítimas ou em quilómetros em relação a qualquer ponto bem conhecido. Em caso de impossibilidade, deverá indicar-se a zona de funcionamento.

(*e*) No caso de estações espaciais, dar informações sobre a órbita.

(*f*) Se as duas estações em comunicação infringem o Regulamento, elabora-se um relatório separado para cada uma das estações.

(*g*) A hora deverá ser expressa em tempo universal coordenado (UTC) por um grupo de quatro algarismos (0000 a 2359). Se a infracção se prolongar ou repetir, deverão ser indicadas a data e as horas.

(*h*) Exige-se um relatório separado para cada uma das irregularidades ou infracções, a não ser que se repitam num curto período.

(*i*) Estas informações só terão de ser fornecidas no caso de queixa por interferência.

(*j*) Este relatório deverá ser assinado pelo operador que assinalou a infracção e rubricado pelo comandante do navio ou pela pessoa responsável pela aeronave ou pelo chefe da estação, quando se tratar de uma infracção assinalada por uma estação de serviço móvel. Quando o realtório provier de um organismo centralizador ou de um serviço de inspecção, deverá ser assinado pelo chefe desse organismo ou desse serviço e rubricado pelo funcionário da administração que o transmite.

Para uso exclusivo da administração

1. Companhia sob cuja dependência está a instalação da estação contra a qual a queixa foi apresentada ...
2. Nome do operador da estação tido como responsável pela irregularidade ou pela infracção aos regulamentos ...
3. Medida tomada ...

APÊNDICE 23

Relatório de interferência prejudicial

(V. o artigo 22)

Características da estação interferente:

a) Nome ou indicativo de chamada ou outros meios de identificação ...
b) Frequência medida ... Data ...
Hora (UTC) ...
c) Classe de emissão (*a*)...
d) Largura da faixa (indicar se foi medida ou estimada) ...
e) Valor de campo ou da densidade de fluxo de potência medidos (*a*) ...
Data ...
Hora (UTC) ...
f) Polarização observada ...
g) Classe da estação e natureza do serviço ...
h) Localização/posição/zona/azimute (QTE) ...
i) Localização do centro que efectuou as medidas acima ...

Características da estação cuja emissão é interferida:

j) Nome ou indicativo de chamada ou outros meios de identificação ...
k) Frequência consignada ...
l) Frequência medida ... Data ...
Hora (UTC) ...
m) Classe de emissão (*a*) ...
n) Largura de faixa (indicar se foi medida ou estimada ou indicar a largura de faixa necessária notificada à IFRB) ...
o) Localização/posição/zona ...
p) Localização do centro que efectuou as medidas acima ...

Informações fornecidas pela estação de recepção que verificou a interferência::

q) Nome da estação ...
r) Localização/posição/zona ...
s) Data e horas (UTC) da interferência prejudicial ...
t) Azimute (QTE) ou outros pormenores ...
u) Natureza da interferência ...
v) Campo ou densidade de fluxo de potência da emissão desejada na estação de recepção que sofre a interferência (*a*) ...
Data ...
Hora (UTC) ...
w) Polarização da antena de recepção ou polarização observada ...
x) Medidas a tomar ...

(*a*) Quando estas medidas não forem possíveis, deveria ser indicada a intensidade do sinal segundo a escala QSA.

Nota. — Por conveniência e brevidade, os relatórios telegráficos serão em conformidade com o modelo atrás indicado; utilizar-se-ão, pela ordem acima enumerada, as letras que designam cada uma das rubricas em vez das próprias rubricas, mas apenas aquelas para as quais existam informações disponíveis. Todavia, este relatório deverá conter informações suficientes de modo que a administração que o recebe possa empreender o inquérito apropriado.

APÊNDICE 24

Quadro de soletração das letras e dos algarismos

(V. os artigos 37 e 65)

1. Quando for necessário soletrar indicativos de chamada, abreviaturas regulamentares ou palavras, utiliza-se o quadro seguinte de soletração das letras:

Letra a transmitir	Palavra de código	Pronúncia da palavra de código (*)
A	Alfa	*AL* FAH
B	Bravo	*BRA* VO
C	Charlie	*TCHAH* LI, ou *CHAR* LI
D	Delta	*DEL* TAH
E	Echo	*ÉK* O
F	Foxtrot	*FOX* TROTT
G	Golf	GOLF
H	Hotel	HO *TÉLL*
I	Índia	*IN* DI AH
J	Juliett	*DJOU* LI ÊTT

Letra a transmitir	Palavra de código	Pronúncia da palavra de código (*)
K	Kilo	*KI* LO
L	Lima	*LI* MAH
M	Mike	MA IK
N	November	NO *VÈMM* BER
O	Oscar	*OSS* KAR
P	Papa	PAH *PAH*
Q	Quebec	KE *BEK*
R	Romeo	*RO* MIO
S	Sierra	SI *ER* RAH
T	Tango	*TANG* GO
U	Uniform	*YOU* NI FORM, ou *OU* NI FORM
V	Victor	*VIK TAR*
W	Whiskey	*OUISS* KI
X	X-ray	*EKSS RÉ*
Y	Yankee	*YANG* KI
Z	Zoulou	*ZOU* LOU

(*) As sílabas acentuadas estão em itálico.

2. Quando for necessário soletrar algarismos ou sinais, utiliza-se o quadro seguinte:

Número ou sinal a transmitir	Palavra de código	Pronúncia da palavra de código (*)
0	NADAZERO	NAH-DAH-ZE-ROH
1	UNAONE	OU-NAH-OUANN
2	BISSOTWO	BIS-SO-TOU
3	TERRATHREE	TE-RAH-TRI
4	KARTEFOUR	KAR-TE-FO-EUR
5	PANTAFIVE	PAN-TAH-FA-ÏF
6	SOXISIX	SOK-SI-SIKS
7	SETTESEVEN	SE-TE-SEV'N
8	OKTOEIGHT	OK-TOH-EÏT
9	NOVENINE	NO-VE-NAI-NEU
Vírgula Decimal	— DECIMAL	— DE-SI-MAL
Ponto	STOP	STOP

(*) Todas as sílabas são igualmente acentuadas.

3. Todavia, as estações de um mesmo país, ao comunicarem entre si, podem utilizar um outro quadro adoptado pela administração de que dependem.

APÊNDICE 25 MAR2

Plano de adjudicação de frequências às estações costeiras radiotelefónicas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 kHz e 23 000 kHz

(V. os n.^{os} **4198** e **4212** do Regulamento das Radiocomunicações e o apêndice 16)

Nota. — V. p. 1472.

APÊNDICE 26 Aer

Plano de adjudicação de frequências para o serviço móvel aeronáutico e informações correspondentes

Este apêndice ao Regulamento das Radiocomunicações (Genebra, 1959) foi publicado num fascículo à parte. Relativamente ao serviço móvel aeronáutico (R), foi adoptado, em 1966, pela Conferência Aeronáutica, um plano revisto que está contido no apêndice 27. Mas o plano adoptado, em 1959, para o serviço móvel aeronáutico (OR) continua em vigor, de modo que, no que respeita a este serviço, é ao apêndice 26 que se deverá reportar. Estão disponíveis no Secretariado-Geral da UIT exemplares do apêndice 26 (edição de 1959).

Nota. — V. p. 1552.

APÊNDICE 27 Aer (*)

Plano de adjudicação de frequências para o serviço móvel aeronáutico (R) e informações correspondentes entre 2850 kHz e 17 970 kHz

Este apêndice foi publicado num fascículo à parte e contém exclusivamente disposições relativas ao serviço móvel aeronáutico (R), que substituem as disposições relativas a esse serviço contidas no apêndice 26. Portanto, será exclusivamente às disposições do apêndice 27 que se deverá reportar quando se trate do serviço móvel aeronáutico (R).

APÊNDICE 27 Aer2 (*)

Plano de adjudicação de frequências para o serviço móvel aeronáutico (R) e informações correspondentes entre 2850 kHz e 22 000 kHz

Nota. — V. p. 1600.

APÊNDICE 28

Método de determinação da zona de coordenação de uma estação terrena nas faixas de frequência compreendidas entre 1 Ghz e 40 GHz, partilhadas entre serviços de radiocomunicações espacial e de radiocomunicação de Terra.

1. *Objectivos:*

Determina-se a zona de coordenação (v. o n.º **165**) calculando, em todos os azimutes e a partir da estação terrena, as distâncias de coordenação (v. o n.º **167**) e traçando o contorno de coordenação (v. o n.º **166**), à escala, sobre um mapa apropriado.

É necessário sublinhar que a existência ou a instalação de uma estação de Terra no interior da zona de coordenação de uma estação terrena não impede necessariamente o bom funcionamento da estação terrena ou dessa estação de Terra, dado que o método se baseia nas hipóteses mais desfavoráveis no que respeita às interferências.

Para determinar a zona de coordenação podem considerar-se dois casos:

1) O da estação terrena na emissão (susceptível de causar interferências a estações de Terra);
2) O da estação terrena na recepção (susceptível de ser interferida por estações de Terra).

Quando uma estação terrena se destina a funcionar em diversas classes de emissão, os parâmetros de estação terrena a utilizar para a determinação do contorno de coordenação devem ser aqueles que conduzem às maiores distâncias de coordenação, para cada feixe de antena de estação terrena e em cada faixa de frequências atribuída que a estação terrena se proponha partilhar com os serviços de Terra.

Quando uma estação terrena se destina a receber diversas classes de emissão, os parâmetros de estação terrena a utilizar para a determinação do contorno de coordenação devem ser aqueles que conduzem às maiores distâncias de coordenação, para cada feixe de antena de estação terrena e em cada faixa de frequências atribuída que a estação terrena se propomha partilhar com o serviços de Terra, excepto nos casos em que a administração responsável pela estação terrena verifique que um contorno de coordenação menor permitiria assegurar a protecção adequada de todas as emissões destinadas a ser recebidas pela estação terrena. Quando a determinação de tal contorno de coordenação diferir do procedimento descrito no presente apêndice, a administração notificada deverá indicar com precisão a natureza dessa diferença.

Se uma administração decidir ulteriormente proteger a sua estação terrena de recepção notificando um contorno de coordenação maior do que aquele que ela tinha determinado segundo um método diferente do descrito no presente apêndice, deverá coordenar de novo a estação terrena. Qualquer protecção maior resultante dessa nova coordenação deve entrar em vigor a partir da data de publicação da ficha de notificação na parte II da circular semanal da IFRB.

O presente apêndice apresenta métodos que permitem a determinação gráfica ou informática na zona de coordenação.

Sugere-se que, além do contorno de coordenação, sejam traçados contornos auxiliares baseados em hipóteses menos desfavoráveis do que utilizadas para a determinação do contorno de coordenação. Esses contornos auxiliares podem ser utilizados no decorrer de negociações posteriores entre as administrações interessadas, com vista a eliminar dessas negociações (sem que seja necessário recorrer a cálculos mais precisos) o caso de certas estações existentes ou em projecto situadas no interior da zona de coordenação. O método a aplicar para obter e utilizar esses contornos auxiliares é explicado no anexo I ao presente apêndice.

(*) Até 31 de Janeiro de 1983, as 23.59 UTC, e depois substituído pelo apêndice 27 Aer2.

(**) V. o anexo à Resolução n.º 404.

2. *Considerações gerais.*

2.1. *Noção de atenuação de transmissão mínima admissível.*

A determinação da distância de coordenação — distância a partir de uma estação terrena para além da qual pode considerar desprezável a interferência causada ou sofrida por uma estação de Terra — baseia-se no princípio de que a atenuação do sinal interferente aumenta regularmente em função da distância.

O valor da atenuação pretendido entre um emissor interferente e um receptor interferido é dado pela atenuação de transmissão mínima admissível (dB) durante p % do tempo, valor este que a atenuação de transmissão prevista deve exceder durante (110 — p)% do tempo:

$$L(p)=P_t' - P_r(p) \quad (1)$$

onde:

P_t (*) — nível de potência de emissão máxima disponível (em dBW) na largura de faixa de referência, à entrada da antena de uma estação interferente;

$p_r(p)$ — nível admissível de uma emissão interferente (em dBW), na largura de faixa de referência, que não deve ser excedido durante mais de p % do tempo à saída da antena de recepção de uma estação interferida, quando a emissão interferente tiver por origem uma única fonte.

P_t e $P_r(p)$ são definidos para a mesma largura de faixa radioeléctrica (largura de fauixa de referência) e $L(p)$ e $P_r(p)$ são definidos para a mesma percentagem de tempo, imposta pelos critérios de qualidade do sistema interferido.

Para as pequenas percentagens de tempo de que aqui se trata é necessário distinguir entre os mecanismos de atenuação nitidamente diferentes:

A atenuação de sinais sujeitos a uma propagação troposférica seguindo trajectos vizinhos do círculo máximo; modo (1), v. o § 3;

Atenuação de sinais à difusão por hidrometeoros; modo (2), v. o § 4.

2.2. *Noção de atenuação de transmissão de referência mínima admissível.*

No caso do modo de propagação (1), a atenuação de transmissão é definida pela forma de parâmetros separáveis, a saber: uma atenuação de transmissão de referência (quer dizer, entre antenas isotrópicas) e os ganhos efectivos das antenas em cada extremidade do trajecto de interferência. A atenuação de transmissão de referência mínima admissível pode exprimir-se por:

$$L_b(p) = P_t + G_t + G_r - P_r(p) \quad (2)$$

em que:

$L_b(p)$ — atenuação de transmissão de referência mínima admissível (dB) durante p % do tempo, valor este que a atenuação de transmissão de referência prevista deve exceder durante (100–p) % do tempo;

G_t — ganho isotrópico (dB) da antena de emissão da estação interferente. Se a estação interferente é uma estação terrena, trata-se aqui do ganho da antena na direcção do horizonte físico no azimute considerado; no caso de uma estação de Terra, utilizar-se-á o ganho máximo da antena dessa estação;

G_r — ganho isotrópico (dB) da antena de recepção da estação interferida. Se a estação interferida for uma estação terrena, trata-se aqui do ganho na direcção do horizonte físico no azimute considerado; no caso de uma estação de Terra, utilizar-se-á o ganho máximo da antena dessa estação.

O anexo II descreve métodos numéricos e gráficos que permitem determinar o ângulo formado pelo feixe principal da antena da estação e o horizonte físico, assim como ganho da antena na direcção do horizonte em função do ângulo azimutal.

Quando se trata do caso de satélites não geostacionários, aquele dos dois ganhos G_t e G_r que corresponde a uma antena de estação terrena varia com o tempo. Neste caso deve empregar-se um ganho equivalente (**) de antena de estação terrena invariável no tempo, e que seja igual à maior das duas seguintes quantidades: o ganho máximo da antena na direcção do horizonte, diminuído de 10 dB, ou o ganho dessa antena na direcção do horizonte que não seja excedido durante mais de 10 % do tempo (se for conhecido).

(*) Os símbolos afectados por uma plica referem-se às características da estação interferente.

(**) Este ganho equivalente não deve ser utilizado quando a antena da estação terrena se mantém apontada na mesma direcção durante períodos de duração apreciável (por exemplo, quando trabalha com sondas espaciais ou com satélites quase geostacionários).

2.3. *Determinação e listagem dos parâmetros de interferência.*

2.3.1. *Nível admissível de emissão indiferente.*

O nível admissível da emissão interferente (dBW) na largura de faixa de referência, que não deve ser excedido mais de p % do tempo à saída da antena de recepção de uma estação susceptível de ser interferida, sob o efeito de cada origem de interferência, é dado pela relação geral:

$$P_r(p) - 10 \log (kT_eB) + J + M(p) - W \quad (3)$$

em que:

$$M(p) = M(p_o/n) - M_o(p_o) \quad (4)$$

em:

K — Constante de Boltzmann $1{,}38 \times 10^{23}$ J/K;
T_e — temperatura de ruído do sistema de recepção (K), á saída da antena de recepção (v. nota 1);
B — largura de faixa de referência (Hz) (largura de faixa do sistema interferido, na qual se pode determinar o valor médio da potência da emissão interferente);
J — valor a longo prazo (20 % do tempo) da relação (dB) entre a potência admissível da emissão interferente e a potência de ruído térmico do sistema de recepção, referidas aos terminais de saída da antena de recepção (v. nota 2);
P_o — percentagem do tempo durante o qual a interferência proveniente de todas as origens pode exceder o valor admissível;
n — número de casos de interferência supostos sem correlação, que se esperam;
p — percentagem do tempo durante o qual a interferência proveniente de uma origem pode exceder o valor admissível; dada a não simultaneidade provável dos casos de interferência, $p = p_o/n$;
$M_o(p_o)$ — relação (dB) entre as potências admissíveis da emissão interferente, respectivamente, durante p_o % e durante 20 % do tempo para todos os casos de interferência (v. nota 3);
$M(p)$ — relação (dB) entre as potências admissíveis da emissão interferente, respectivamente, durante p % do tempo, para um caso de interferência, e durante 20 % do tempo para todos os casos de interferência;
W — factor de equivalência (dB) que permite estabelecer uma relação entre a interferência proveniente de emissões interferentes e a provocada pela introdução de um ruído térmico suplementar da mesma potência na largura de faixa de referência. Este factor é positivo nos casos em que as emissões interferentes causam maior degradação que o ruído térmico (v. a nota 4).

Os quadros I e II dão os valores dos parâmetros acima indicados.

Em certos casos, uma administração pode ter razões para pensar que, para a usa estação terrena, se pode justificar a adopção de valores diferentes dos indicados no quadro II. Convém chamar a atenção para o facto de que, para certos sistemas determinados, pode ser necessário modificar as larguras de faixas B ou, por exemplo, no caso de sistemas de consignação em função dos pedidos, as percentagens de tempo p e p_o em relação aos valores indicados no quadro II. O § 2.3.2 fornece outras informações sobre o assunto.

Nota 1. — A temperatura de ruído do sistema de recepção, em graus de Kelvin, referida aos terminais de saída da antena de recepção, pode ser determinada aplicando a fórmula:

$$T_r = T_a + (e - 1)\ 290 + eT_r$$

em que:

T_a — Temperatura de ruído (K) produzida pela antena de recepção;
e — Valor núnerico da atenuação na linha de transnuissão (por exemplo, um guia de ondas) entre a antena e os terminais de entrada do receptor;
T_r — Temperatura de ruído (K), incluindo a contribuição dos andares sucessivos, referida aos terminais de entrada do receptor.

Para os receptores de feixes hertzianos, e quando a atenuação no guia de ondas de uma estação terrena de recepção não for conhecida, utilizar-se-á um valor de e igual a 1,0.

Nota 2. — O factor J (dB) define-se como a relação entre a potência total admissível a longo prazo de emissões interferentes (durante 20 % do tempo) no sistema e a potência de ruído radioeléctrico térmico a longo prazo num só receptor. Quando se calcula o factor J, considera-se que a emissão interferente tem uma densidade espectral de potência uniforme e tem-se em conta a forma real do seu espectro, utilizando o factor W (v. abaixo). Por exemplo, num circuito fictício de referência para feixes hertzianos de 50 saltos, a potência total admissível de interferência acumulada é de 1000 pWOp (parecer n.° 357-3 da CCIR) e pode supor-se que a potência média de ruído térmico por salto é de 25 pWOp. Consequentemente, dado que, num sistema de multiplexagem por divisão de frequência e modulação de frequência (MRF/MF), a relação entre uma potência de ruído de interferência uniforme e o ruído térmico na mesma faixa de referência é a mesma antes e depois da desmodulação, J é dado pela relação 1000/25, ou seja, 16 dB, se for expresso em decibéis. Num sistema do serviço fixo por satélite, a potência total de interferência admissível é também de 1000 pWOp (parecer n.° 356-4 da CCIR), enquanto que a contribuição de ruído térmico da ligação descendente não deve exceder 7000 pWOp, resultando daqui que $J \geq -8{,}5$ dB.

Nos sistemas numéricos, especifica-se e mede-se a interferência pela taxa de erro em *bits* ou pelo aumento admissível desta taxa de erro. Se o aumento da taxa de erro em *bits* é cumulativo num circuito de referência que compreenda ligações em tandem, a potência radioeléctrica das emissões interferentes que é a causa desse aumento da taxa de erro em *bits* não é cumulativa, porque a taxa de erro em *bits* não é uma função linear do nível de potência radioeléctrica das emissões interferentes. Pode, portanto, ser necessário proteger separadamente cada receptor. Nos feixes hertzianos numéricos que funcionam acima de 10 GHz, e para todos os sistemas numéricos de satélites, a potência de interferência a longo prazo pode ser da mesma ordem de grandeza que o ruído térmico a longo prazo, donde $j = 0$ dB. Nos feixes hertzianos numéricos que funcionam abaixo de 10 GHz, convém que a

potência de interferência a longo prazo não reduza em mais de cerca de 1 dB a margem de desvanecimento do receptor. Assim, convém que a potência de interferência a longo prazo seja inferior cerca de 6 dB a potência de ruído térmico, donde $J = -6$ dB.

Nota 3. — M_u (p_u) é a «margem de interferência» (dB) entre as potências admissíveis a curto prazo (p_u %) e a longo prazo (20 %) de uma emissão interferente.

No caso dos sistemas analógicos de feixes hertzianos e dos do serviço fixo por satélite entre 1 GHz e 15 GHz, essa margem é igual à relação (dB) entre 50 000 pWOp e 1000 pWOp, ou seja, 17 dB.

No caso dos sistemas numéricos e na maior parte das regiões do Mundo, pode-se, em muitos casos, definir utilmente as características de um sistema que funcione nas frequências superiores a 10 GHz pela percentagem de tempo p, durante o qual o nível útil pode descer abaixo do limiar de funcionamento, definido por uma dada taxa de erro em *bits*. Durante o funcionamento do sistema sem desvanecimento, o nível do sinal útil ultrapassa o limiar de uma margem M_s que depende da zona hidrometeorológica na qual a estação funciona. Quanto maior for essa margem tanto maior é a elevação do nível da emissão interferente que degradaria o sistema até ao nível do limiar. Como primeira aproximação pode supor-se que, para pequenas percentagens do tempo (da ordem de 0,001 % a 0,003 %), o nível tolerável das emissões interferentes é igual, em potência, ao ruído térmico que existe à entrada do desmodulador em presença de desvanecimento. Pode, portanto, supor-se que, para os sistemas numéricos que funcionam acima de 10 GHz, M_u (quadros I e II) é igual à margem de desvanecimento M_s do sistema. Nos feixes hertzianos numéricos que funcionam abaixo de 10 GHz supõe-se que se pode admitir que a potência a curto prazo de uma emissão interferente ultrapassa a potência a longo prazo dessa emissão de uma quantidade igual à margem de desvanecimento do sistema menos J, ou seja, 41 dB, se $J = -6$ dB.

Nota 4. — O factor W (dB) é a relação entre a potência de ruído térmico radioeléctrico e a potência da emissão interferente na largura de faixa de referência, quando ambas produzem a mesma interferência após desmodulação (num sistema MRF/MF exprimir-se-ia que as potências de ruído são idênticas numa via telefónica e, num sistema numérico, que as probabilidades de erro em *bits* são idênticas). Para os sinais de modulação de frequência, este factor é definido do seguinte modo:

$$W = 10 \log \left\{ \frac{\text{Potência de ruído térmico na largura de faixa de referência à saída da antena de recepção}}{\text{Potência da emissão interferente em frequências radioeléctricas na largura de faixa de referência à saída da antena de recepção}} \times \frac{\text{Potência de interferência no sistema de recepção após desmodulação}}{\text{Potência de ruído térmico no sistema de recepção após desmodulação}} \right\} \quad (5b)$$

O factor W depende das características do sinal útil e do sinal interferente. Todavia, para evitar ter de considerar uma longa série de características, determinou-se para este factor um valor máximo. Quando o sinal útil é modulado em frequência, e para factores de modulação eficazes superiores à unidade, W não excede 4 dB. Em tais casos, fixar-se-á, por prudência, em 4 dB o valor do factor W nas relação (3), independentemente das características do sinal interferente. Para sistemas MRF/MF de baixo factor de modulação, uma largura de faixa de referência muito estreita (4 kHz) implica para W valores que não excedam 0 dB. Em tais casos fixar-se-á, por prudência, em 0 dB o valor do factor W na relação (3), independentemente das características do sinal interferente.

Quando o sinal útil é numérico, W é habitualmente inferior ou igual a 0 dB, sejam quais forem as características do sinal interferente.

2.3.2. *Parâmetros de coordenação para as emissões de faixa muito estreita (estação terrena de recepção).*

2.3.2.1. *Generalidades.*

No caso de uma estação terrena que receba ao memso tempo emissões de faixa larga e emissões de faixa muito estreita (por exemplo, nos sistemas de uma única via por portadora, SCPC), pode ser desejável traçar dois contornos de coordenação separados, um para as emissões de faixa estreita e o outro para as emissões de faixa larga, indicando especificamente as partes de faixa utilizadas para as emissões de faixa muito estreita.

2.3.2.2. *Emissões de faixa estreita com pré-consignação.*

Para estas emissões convém substituir o valor da largura de faixa de referência pelo da largura de faixa ocupada por uma emissão de faixa estreita do tipo considerado.

2.3.2.3. *Emissões de faixa estreita de consignação em função dos pedidos.*

Para estas emissões pode, além disso, ser útil ter em conta a probabilidade reduzida de uma dada via sofrer interferências no preciso momento em que é escolhida para ser utilizada numa estação terrena.

As administrações devem fornecer todos os dados técnicos pertinentes utilizados na determinação do(s) contorno(s) de coordenação para tais emissões.

3. *Determinação da distância de coordenação para o modo de propagação* (1) — *Mecanismos de propagação ao longo do círculo máximo.*

3.1. *Zonas radioclimáticas.*

Para calcular a distância de coordenação no caso do modo de propagação (1) divide-se a Terra em três grandes zonas radioclimáticas, as zonas A, B e C, que se definem como segue:

Zona A — terras;

Zona B — mares, oceanos e grandes extensões de água (como critério, uma extensão de água capaz de cobrir um círculo de 100 km de diâmetro), em latitudes superiores a 23° 30' N. ou S., com excepção do mar Negro e do mar Mediterrâneo;

Zona C — mares, oceanos e grandes extensões de água (como critério, uma extensão de água capaz de cobrir um círculo de 100 km de diâmetro), em latitudes inferiores a 23° 30' N. ou S., incluindo o mar Negro e o mar Mediterrâneo.

3.2. *Cálculo da distância de coordenação em trajectos compreendidos numa só zona radioclimática.*

3.2.1. *Generalidades.*

A fórmula (2) dá o valor da atenuação de transmissão de referência mínima admissível $L_b(p)$ durante p % do tempo. A partir desse valor, calcula-se a distância de coordenação em cada zona radioclimática utilizando um ou outro dos dois métodos seguintes: o primeiro, descrito no § 3.2.2., é um método numérico que recorre a diversas fórmulas matemáticas e que é sobretudo concebido para ser utilizado com um computador; o segundo, descrito no § 3.2.3., é um método gráfico.

Quando a distância determinada utilizando os métodos descritos, respectivamente, nos §§ 3.2.2. ou 3.2.3. fica inteiramente dentro dos limites da zona radioclimática a que pertence a estação terrena, essa distância é considerada como a distância de coordenação efectiva para o modo de propagação (1). Se essa distância não ficar dentro dos limites de uma só zona radioclimática, a distância global de coordenação calcula-se aplicando o método descrito no § 3.3.

3.2.2. *Método numérico.*

A relação entre a atenuação de transmissão de referência mínima admissível e a distância de coordenação exprime-se pela fórmula:

$$L_b(p) = A_o + \beta d_1 + A_h$$

em que:

A_O — 120+20 log f (decibéis);
β — factor de atenuação (decibéis por quilómetro);
d_1 — distância de coordenação para o modo de propagação (1) (quilómetro);
A_h — correcção devida ao ângulo do horizonte (decibéis);
f — frequência (gigahertzes).

A_h calcula-se como segue:

$$Ah = 20 \log (1 + 4{,}5 f^{1/2} \varepsilon) + f^{1/3} \varepsilon \text{ para } \varepsilon > 0° \quad (*) \ (7a)$$

$$Ah = 8\ \varepsilon \text{ para } -0{,}5° \leq \varepsilon \leq 0{,}5° \quad (7b)$$

$$Ah = -4 \text{ para } \varepsilon \leq -0{,}5° \quad (7c)$$

em que ε: ângulo do horizonte (**) (graus).

A partir da fórmula (6), a distância de coordenação d_1 calcula-se como segue:

$$d_1 = [L_b(p) - A_o - Ah]/\beta \quad (8)$$

O valor de β depende da zona radioclimática e da percentagem de tempo p e é resultado como a soma de três elementos:

$$\beta = \beta_z + \beta_v + \beta_o \quad (9)$$

em que:

β_z — factor de atenuação (decibéis por quilómetro) devido a todos os efeitos, excepto o dos gases atmosféricos;
β_v — factor de atenuação (decibéis por quilómetro) devido ao vapor de água atmosférico;
β_o — factor de atenuação (decibéis por quilómetro) devido ao oxigénio.

β_z depende da zona radioclimatérica, da frequência e da percentagem de tempo. O seu valor é dado pelas fórmulas:

Para a zona A:

$$\beta_{za} = 0{,}154\ (1 + 3{,}05 \log f)^{0{,}4}\ (0{,}9028 + 0{,}0486 \log p)^2 \quad (10)$$

Para as zonas B e C:

$$\beta_{zb} + \beta_{zc} = (0{,}272 + 0{,}047 \log p)^2 \quad (11)$$

(*) Deve-se utilizar a equação (7*a*) e, portanto, a figura 1 com precaução nas frequências superiores a cerca de 20 GHz e nos ângulos do horizonte superiores a 5°, até que a CCIR tenha completado novos estudos sobre o assunto, em conformidade com a Resolução n.º 60.

(**) Define-se aqui o «ângulo do horizonte» como sendo o ângulo do centro da antena da estação terrena, formado pelo plano horizontal e por um raio que passe em incidência rasante pelo horizonte físico visível na direcção considerada.

β_v depende da frequência e da densidade do valor de água atmosférico (β_v é desprezável se f<15 GHz). O seu valor é dado pela fórmula:

$$\beta_v = 3{,}5 \times 10^{-4} \rho \left[\frac{1}{\left(1 - \frac{22{,}3}{f}\right)^2 + \frac{9}{f}} + \frac{1}{\left(1 + \frac{22{,}3}{f}\right)^2} \right] + 3 \times 10^{-6} \rho f_2 \quad (12)$$

em que ρ representa a densidade do valor de água (gramas por metro cúbico) e depende da zona radioclimática. São utilizados os seguintes valores:

Zona A — ρ = 1 g/m³;
Zona B — ρ = 2 g/m³;
Zona C — ρ = 5 g/m³.

β_o depende da frequência; o seu valor é dado pela fórmula:

$$\beta_o = 68 \times 10^{-4} \times f^2 \left\{ \frac{1}{(60 - f)^2} \quad \frac{1}{(60 + f)^2} \quad \frac{1}{(f)^2 + 0{,}36)} \right\} \quad (13)$$

Calcula-se, pois, a distância de coordenação na zona A, para a frequência, a percentagem de tempo e o ângulo do horizonte apropriados, aplicando as fórmulas (7), (8), (9), (10), (12) e (13). De modo semelhante, calcula-se a distância de coordenação na zona B ou na zona C, utilizando as fórmulas (7), (8), (9), (11), (12) e (13).

3.2.3. *Método gráfico:*

As fórmulas do § 3.2.2. foram convertidas na forma de curvas, o que constitui o segundo método de avaliação da distância de coordenação para o modo de programação (1). É de notar que o método gráfico pode substituir o método do § 3.2.2. e que compete a cada administração utilizar o método que lhe pareça mais cómodo.

A atenuação de transmissão de referência mínima admissível L_b (p) calcula-se utilizando a fórmula (2). Deduz-se a «atenuação de coordenação» L_1 subtraindo da atenuação de transmissão de referência mínima admissível a correcção A_h devida ao ângulo do horizonte:

$$L_1 = L_b\ (p) - A_h \quad (14)$$

Os valores da correcção devida ao ângulo do horizonte deduzem-se da figura 1, para a frequência e o ângulo do horizonte apropriados (*).

Determina-se do seguinte modo a distância de coordenação em cada zona radioclimática. Comecemos pela zona A: a distância de coordenação durante 0,01 % do tempo, d_A (0,01), é tirada da figura 2 com base nos valores apropriados da atenuação de coordenação L_1 e da frequência para p % do tempo, a distância de coordenação na zona A obtêm-se então multiplicando a distância associada a 0,01 % do tempo pelo factor Δp_A dado na figura 3:

$$d_A = d_{A\,(0{,}01)} \times \Delta p_A \quad (15)$$

De modo semelhante, a distância de coordenação na zona B baseia-se nos valores de d_B (0,01) e de Δp_{BC} tirados respectivamente, das figuras 4 e 3; a distância de coordenação na zona C baseia-se nos valores de d_c (0,01) e de Δp_{BC} tirados, respectivamente, das figuras 5 e 3.

3.3. *Trajectos mistos.*

Se a distância a calcular se estender por várias zonas radioclimáticas (trajecto misto), a previsão faz-se do seguinte modo:

Se se designar pelos índices i, j, k, ... as secções do trajecto em zonas diferentes, tem-se:

$$L_b(p) - A_o - A_h = \beta_i d_i \quad (16)$$

em que b_i é o factor de atenuação na primeira zona (i).

Se d_i for superior à distância D_i na primeira zona (i) para a direcção considerada, o trajecto prolonga-se pela segunda zona (j) e pode escrever-se:

$$L_b(p) - A_o - A_h - \beta_i D_i = \beta_j d_j \quad (17)$$

(*) Define-se aqui D_i «ângulo do horizonte», como sendo o ângulo visto do centro da antena da estação terrena, formado pelo plano horizontal e por um raio que passe em incidência rasante pelo horizonte físico visível na direcção considerada.

donde se tira d_j do trajecto na segunda zona (j), pode escrever-se:

$$L_b(p) - A_o - A_h - \beta_i D_i - \beta_j d_j = \beta_k d_k \quad (18)$$

donde se tira d_k. O método pode ser repetido tantas vezes quantas se desejar; no caso considerado, a distância total d_i tem por expressão:

$$d^i = D_i + D_j + d_k \text{ (km)} \quad (19)$$

Encontram-se no anexo III exemplos de aplicação gráfica deste método.

3.4. *Distância de coordenação máxima para o modo de propagação (1).*

Se, ao determinar a distância de coordenação para o modo de propagação (1), se obtiverem valores superiores ao valor indicado na figura 6 no quadro III, a distância de coordenação para o modo de propagação (1) será o valor indicado na figura 6 ou no quadro III. No caso de trajectos mistos, os valores a considerar são os indicados para as zonas B ou C, consoante o caso. No caso de trajectos mistos com vários troços na zona A, a distância total na zona A não deve exceder o valor indicado para essa zona na figura 6 ou no quadro III.

4. *Determinação do contorno de coordenação para o modo de propagação (2) — Difusão pelos hidrometeoros.*

No caso do mecanismo de propagação por difusão pelos hidrometeoros (chuva), o contorno de coordenação é determinado por um trajecto cuja configuração é sensivelmente diferente da que intervém nos mecanismos da propagação no arco de círculo máximo. Em primeira aproximação, a chuva provoca uma difusão isotrópica da energia, de tal modo que a interferência se pode manifestar em ângulos de difusão muito grandes e em intersecções de faixas afastados do arco de círculo máximo.

4.1. *Atenuação de transmissões normalizada L_2 (0,01).*

Para determinar o contorno de coordenação correspondente à difusão pela chuva é preciso calcular a «atenuação de transmissão normalizada» aplicando a fórmula seguinte:

$$L_2\ (0{,}001) = P_t' + \Delta G - P_r(p) - F(p, f) \quad (20)$$

Nesta fórmula:

ΔG — diferença (decibéis) entre valor do ganho máximo das antenas das estações de Terra que funcionam na faixa de frequências considerada e o valor de 42 dB. Quando a estação terrena é uma estação de emissão, ΔG é dada pelo quadro I; quando a estação terrena é uma estação de recepção, ΔG é dada pelo quadro II.

$F(p, f)$ — correcção (decibéis) a aplicar para passar da percentagem de 0,01 % à percentagem de tempo efectivo p na faixa de frequências considerada (v. a figura 7).

Os outros parâmetros estão definidos no § 2. Para as estações de Terra, os valores de P_t' estão indicados no quadro II.

4.2. *Zonas hidrometeorológicas.*

A superfície terrestre foi dividida em cinco zonas hidrometeorológicas principais (zonas 1 a 5). Estas zonas estão representadas na figura 8. As características climáticas destas zonas para 0,01 % do tempo encontram-se no quadro IV.

4.3. *Cálculo da distância de difusão pela chuva d_r*

4.3.1. *Método numérico.*

A atenuação de transmissão normalizada é constituída por seis termos:

$$L_2\ (0{,}01) = A_1 + A_2 - A_3 - A_4 - A_5 + A_6 \quad (21)$$

em que

$$A_1 = 157 + 20 \log d_r - 20 \log f \text{ (dB)} \quad (22)$$

em que d_r é a distância de difusão pela chuva (quilómetros).

$$A_2 = 26 + 14 \log R - 5{,}88 \times 10^{-5} (d_r - 40)^2 \text{ dB} \quad (23)$$

em que R é a intensidade de precipitação à superfície da Terra em milímetros/hora (quadro IV). Considera-se que a distância da estação de Terra ao horizonte é de 40 km.

$$A_3 = 0{,}005\ (f - 10)^{1.7}\ R^{0.4}\ \text{(dB) para } 10 < f < 40\ \text{GHz} \quad (24a)$$

$$= 0\ \text{(dB) para } f \leq 10\ \text{GHz} \quad (24b)$$

$$A_4 = 10\ \log\left[\frac{2{,}7}{\gamma D}\ (1 - 10)^{-\gamma D/5}\right]\text{(dB) para } f < 5\ \text{GHz} \quad (25a)$$

$$= 0\ \text{(dB) para } f \leq 5\ \text{GHz} \quad (25b)$$

em que D é o diâmetro da célula de precipitação em quilómetro (quadro IV).

$$\gamma = 0{,}008\ R\ (f - 5) \text{ para } f > 5\ \text{GHz} \quad (26a)$$

$$= 0 \text{ para } f \leq 5\ \text{GHz} \quad (26b)$$

$$A_5 = 10\ \log D\ \text{(dB)} \quad (27)$$

$$A_6 = d_o b_o + d_v \beta_v \quad (28)$$

$$d_o = 0{,}7\ d_r + 32\ \text{km para } d_r < 340\ \text{km} \quad (29a)$$

$$= 270\ \text{km para } d_r \geq 340\ \text{km} \quad (29b)$$

$$d_v = 0{,}7\ d_r + 32\ \text{km para } d_r < 240\ \text{km} \quad (30a)$$

$$= 200\ \text{km para } d_r \geq 240\ \text{km} \quad (30b)$$

β_v é dado na fórmula (12), onde é preciso substituir p por p_m (quadro IV).

β_o é dado na fórmula (13).

Assim, para uma dada zona hidrometeorológica utilizam-se os parâmetros do quadro IV para calcular a distância de difusão pela chuva d_r, aplicando um procedimento iterativo.

4.3.2 *Método gráfico.*

As fórmulas do § 4.3.1. foram convertidas em forma gráfica para proporcionar um outro método de determinação da distância d_r.

Para calcular a distância de difusão pela chuva e para a zona hidrometeorológica 1, utiliza-se a atenuação de transmissão normalizada obtida por aplicação da fórmula (20) para a frequência apropriada (v. a figura 9), donde se deduz a distância de difusão pela chuva d_r.

As figuras 10 e 13 contêm curvas que correspondem às zonas 2 a 5. Em todos os casos escolhe-se a zona hidrometeorológica que corresponde à localização da estação terrena.

4.4. *Distâncias máximas de difusão pela chuva.*

Ao determinar-se a distância de difusão pela chuva pelo método de propagação (2), se se chegar a valores que excedas o valor apropriado no quadro V, tomar-se-á para d_r o valor do referido quadro.

4.5. *Traçado do contorno de coordenação no caso da difusão pela chuva.*

Devido à geometria de propagação da difusão pela chuva, o centro de contorno de coordenação que corresponde a este modo não coincide com a localização da estação terrena. A distância que os separa designa-se por Δd.

Utiliza-se a distância de difusão pela chuva d_r, bem como o ângulo de elevação ε_s, do feixe principal da antena da estação terrena para determinar Δd. A fórmula a utilizar é a seguinte:

$$\Delta d = 5{,}88 \times 10^{-5}\ (d_r - 40)^2\ \text{cotg}\ \varepsilon_s\ \text{(km)} \quad (31)$$

Pode-se ainda determinar Δd por meio da figura 14.

Esta distância Δd é medida a partir da estação terrena, num mapa de escala apropriada, segundo o azimude do feixe principal da sua antena. Traça-se um círculo de raio d_r, tendo por centro o ponto assim obtido. Este círculo é o contorno de coordenação no caso da difusão pela chuva.

A distância de coordenação no caso da difusão pela chuva, representada por d_2, é a distância compreendida entre a localização da estação terrena e o contorno de coordenação no azimude considerado.

4.6. *Ausência de efeitos dos trajectos mistos.*

Como o único efeito significativo da difusão pela chuva é o que produz na área da estação terrena, a questão dos trajectos mistos não se coloca. Tem-se em conta a zona hidrometeorológica que corresponde à estação terrena, bem como a distância máxima apropriada de difusão pela chuva (quadro V).

5. *Valores mínimos da distância de coordenação.*

Se o método de determinação da distância de coordenação para o modo de programação (1), d_1, conduzir a um resultado cujo valor seja inferior a 100 km, d_1, deve ser tomada como igual a 100 km. De igual modo, se o método de determinação da distância de difusão pela chuva, d_r, conduzir a um resultado cujo valor seja inferior a 100 km, d_r, deve ser tomada como igual a 100 km.

6. *Distância de coordenação.*

Em qualquer azimude, a maior das distâncias de coordenação, d_1 ou d_2, é a distância de coordenação a utilizar para o procedimento de coordenação.

A figura 15 dá um exemplo de contorno de coordenação.

7. *Estações terrenas móveis (excepto estações móveis aeronáuticas).*

Para verificar se é preciso procurar, com uma outra administração, o acordo previsto pelas disposições dos n.os **1108** a **1111**, é necessário determinar a zona de coordenação que engloba todas as zonas de coordenação relativas a cada localização no interior da zona de serviço em que se pretende explorar estações terrenas móveis.

Pode utilizar-se o método precedente com este objectivo, determinando os contornos de coordenação individuais apropriados para um número suficientemente elevado de localizações, no interior e na periferia da zona de serviço proposta, e determinando, a partir desses contornos, uma zona de coordenação resultante que englobe todas as zonas de coordenação individuais possíveis.

8. *Revisão dos dados relativos à propagação.*

As informações dadas nas secções 3, 4 e 6 e no anexo III do presente apêndice baseiam-se, directa ou indirectamente, em dados de propagação reunidos, interpretados e ilustrados nos relatórios e nos pareceres pertinentes da CCIR. Os conhecimentos referentes à propagação estão sujeitos a modificações, à medida que se disponha de novos dados, podendo então ser necessário ou vivamente recomendável introduzir emendas correspondentes nas informações sobre a propagação contidas no presente apêndice.

A Resolução n.° 60 fixa o processo a seguir para manter em dia os elementos do presente apêndice referentes à propagação.

QUADRO I

Características necessárias para a determinação da distância de coordenação no caso de uma estação terrena de emissão

Designação do serviço de radiocomunicação espacial		Exploração espacial	Fixo por satélite — Móvel por satélite	Fixo por satélite	Pesquisa espacial	Fixo por satélite — Móvel por satélite — Meteorologia por satélite	Fixo por satélite (7)	Fixo por satélite	Fixo por satélite (7)	Fixo por satélite (7)	Fixo por satélite
Faixa de frequência (gigahertzes)		1,427-1,429	2,655-2,690	5,725-7,075	7,145-7,235	7,900-8,400	10,7-11,7	12,5-14,5	14,5-14,8	17,7-18,1	27-37,5
Tipo de modulação na estação de Terra (1)		A	A	A	A	A	A	A	A	N	N
Características e critérios de interferência	P_o (%)	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,003	0,003
	n	2	1	2	2	2	2	2	2	1	1
	p (%)	0,005	0,01	0,005	0,005	0,005	0,005	0,005	0,005	0,003	0,003
	J (dB)	16	9	16	16	16	16	16	16	0	0
	M_o (p_o) (dB)	17	17	17	17	17	17	17	17	30	30
	W (dB)	0	0	0	0	0	0	0	0	0	0
Características da estação de Terra	B (Hz)	4×10^7	4×10^7	4×10^7	4×10^7	4×10^7	4×10^7	4×10^7	4×10^7	4×10^6	4×10^6
	Gr (dB) (2)	35	52 (3)	45	47	47	50	50	50	50	50
	ΔG(dB)	–7	10 (3)	3	5	5	8	8	8	8	8
	Tr (K)	750	500 (3)	750	750	750	1 500	1 500	1 500	3 200	3 200
Características auxiliares	S (dBW) (4)	166	192	176	178	178	178	178	178	154	154
	Pr (p) (dBW) em B	– 131	– 140	– 131	– 131	– 131	– 128	– 128	– 128	– 104	– 104

(1) A = modulação analógica; N = modulação numérica.
(2) Não incluídas as perdas nas linhas de alimentação.
(3) Nestas faixas indicaram-se as características das estações de Terra correspondentes aos sistemas transorizonte.
(4) Para a definição de S (v. o anexo 1).
(7) As características indicadas para estas colunas são válidas para as ligações de conexão para satélites de radiodifusão; o seu valor é dado a título provisório, aguardando-se os resultados de estudos futuros da CCIR (v. a Resolução n.° 101).

QUADRO II

Características necessárias para a determinação da distância de coordenação no caso de uma estação de recepção

Designação do serviço de radiocomunicação espacial		Exploração espacial (1)	Meteorologia por satélite (1)	Meteorologia por satélite	Pesquisa espacial		Fixo por satélite		Fixo por satélite		Fixo por satélite		Fixo por satélite — Meteorologia por satélite — Móvel por satélite		Exploração da Terra por satélite	Pesquisa espacial		Fixo por satélite		Meteorologia por satélite	Fixo por satélite	Móvel por satélite
					Na vizinhança da Terra	Espaço longínquo e engenhos habitados										Na vizinhança da Terra	Espaço longínquo					
Faixas de frquência (gigahertzes		1,525-1,535	1,670-1,700	1,700-1,790	1,700-1,710 2,290-2,300		2,500-2,690		3,400-4,200		4,500-4,800		7,250-7,750		8,025-8,400	8,400-8,500		10,7-12,75		17,7-40,0		
Tipo de moludação na estação terrena (2)		–	–	–	–	–	A	N	A	N	A	N	A	N	–	–	–	A	N	–	N	–
Características e critérios de interferência	p_0 (%)	–	–	–	0,1	0,001	0,03	0,003	0,03	0,003	0,03	0,003	0,03	0,003	1,0	0,1	0,001	0,03	0,003	–	0,003	–
	n	–	–	–	2	1	3	3	3	3	3	3	3	3	–	2	1	2	1	–	1	–
	p_0 (%)	–	–	–	0,05	0,001	0,01	0,001	0,01	0,001	0,01	0,001	0,01	0,001	–	0,05	0,001	0,015	0,003	–	0,003	–
	J (dB)	–	–	–	–	–	— 8	0	— 8	0	— 8	0	— 8	0	–	–	–	— 8	0	–	0	–
	$M_2(p_0)$(dB)	–	–	–	–	–	17	5	17	(3) 5	17	(3) 5	17	(3) 5	–	–	–	17	(3) 5	–	(3) 5	–
	W (dB)	–	–	–	–	–	4	0	4	0	4	0	4	0	–	–	–	4	0	–	0	–
Cacterísticas da estação de Terra	E (dBW) em B (4)	55	55	(3) 92	(3)(5) 62	(3)(5)62	(3) 92	(3) 92	55	55	(3) 92	(3) 92	55	55	55	(3) 25	(3) 25	55	55	–	(3) 35	–
	P_{TS} (dBW) em B	13	13	(3) 40	(3)(5) 10	(3)(5) 10	(3) 40	(3) 40	13	13	(3) 40	(3) 40	13	13	13	(3) —17	(3) —17	10	10	–	(3) —10	–
	ΔG (dB)	0	0	(3) 10	(3) 10	(3) 10	(3) 10	(3) 10	0	0	(3) 10	(3) 10	0	0	0	0	0	3	3	–	3	–
Largura de faixa de referência (4)	B (Hz)	–	–	10^3	1	1	10^3	10^3	10^4	10^4	10^3	10^4	10^4	10^4	10^4	1	1	10^3	10^4	–	10^4	–
Potência de interferência admissível	P (p) (dBW) em B	–	–	–	— 222	— 222	–	–	–	–	–	–	–	–	— 154	— 220	— 220	–	–	–	–	–

(1) As características correspondentes a estes serviços podem variar entre limites bastante grandes. É necessário um estudo complementar para fornecer valores significados.
(2) A = modulação analógica; N = modulação numérica.
(3) Ver nota (3) do § 2. $M_2(p_0)$ pode tomar valores compreendidos entre 5 dB e 40 dB, consoante a frequência utilizada, a zona hidrometeorológica e a concepção do sistema.
(4) Valores estimados para uma faixa com a largura de 1 Hz e 30 dB inferiores à potência total suposta para cada emissão.
(5) Os valores supõem que as larguras de faixa radioeléctrica são de, pelo menos, 100 MHz e 20 dB inferiores à potência total suposta para cada emissão.
(6) Nestas faixas indicaram-se características das estações de Terra correspondentes aos sistemas transhorizonte. Se uma administração considerar que não é necessário tomar em consideração os sistemas transhorizonte, podem utilizar-se as características de feixes hertzianos de visibilidade directa correspondentes à faixa de frequência 3400-4200 MHz para determinar a zona de coordenação em conformidade com o § 2.3.1.
(7) Em certos sistemas do serviço fixo por satélite pode ser desejável escolher uma largura de faixa de referência B mais larga quando as exigências do sistema mostrem que é possível. Todavia, a escolha de uma faixa mais larga conduz a distâncias de coordenação mais pequenas e será talvez necessário proceder a nova coordenação da estação terrena se se decidir ulteriormente reduzir a faixa de referência. Para as emissões de faixa estreita deve tomar-se para a faixa de referência B a mesma largura que a da faixa ocupada pela portadora útil.
(8) Para a definição de B, ver o anexo 1.

QUADRO III

Distância de coordenação máxima para o modo de propagação (1)

	Percentagem do tempo			
	$p = 0{,}001$	$p = 0{,}01$	$p = 0{,}1$	$p = 1$
Zona A	375	350	300	200
Zona B	1 050	1 000	900	700
Zona C	1 400	1 350	1 200	950

QUADRO IV

Valores característicos dos parâmetros para as cinco zonas hidrometeorológicas (para 0,01 % do tempo)

Parâmetro	Zona hidrometeorológica					Unidade
	1	2	3	4	5	
Intensidade de precipitação (R) à superfície	75	55	37	26	14	mm/h
Diâmetro da célula de precipitação (D)	2,5	2,8	3	3	4,5	km
Densidade do vapor de água (ρ_m)	10	5	2	2	2	g/m³

QUADRO V

Distância máxima de difusão pela chuva (em quilómetros)

Zona hidrometeorológica	Percentagem do tempo		
	$0{,}001 \leq p < 0{,}01$	$0{,}01 \leq p < 0{,}1$	$p = 0{,}1$
1	540	470	390
2	470	390	330
3, 4 e 5	390	330	270

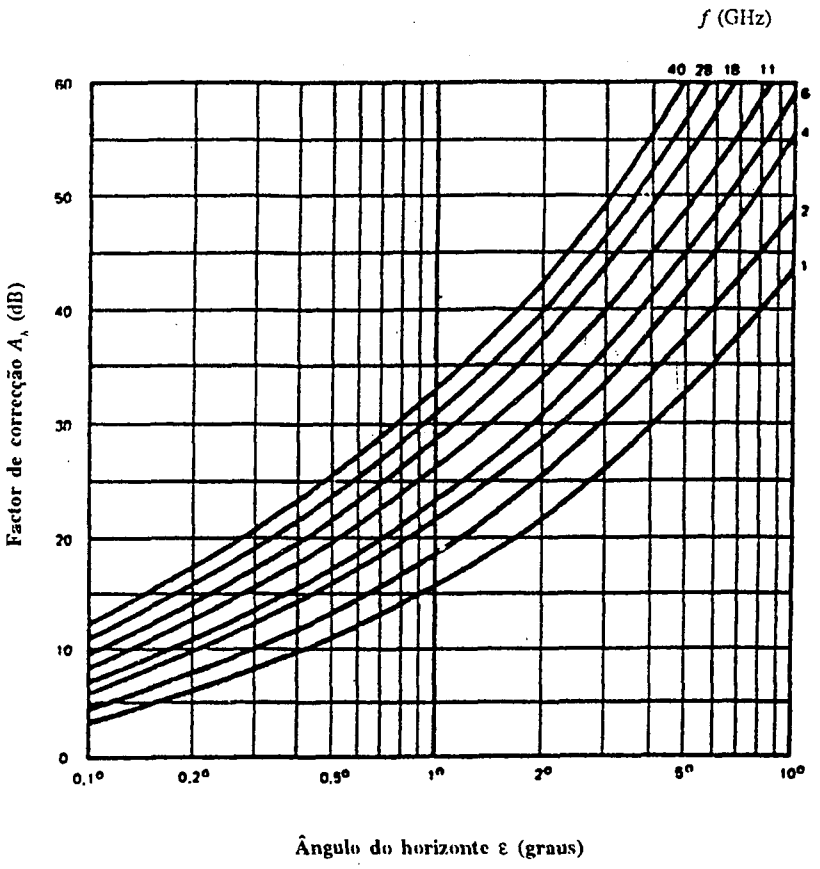


Fig. 1 — Correcção A_h em função do ângulo do horizonte e da frequência

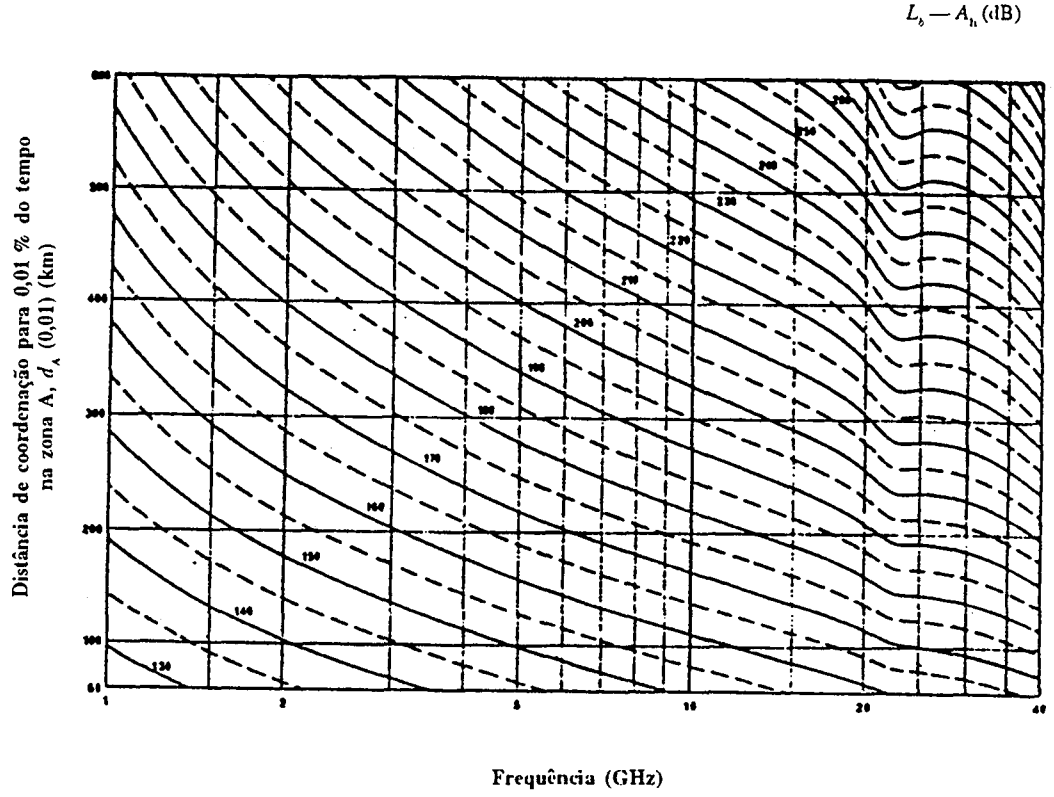


Fig. 2 — Distância de coordenação d_A (0.01), para 0.01 % do tempo, devida ao modo de propagação (1), em função da frequência e da atenuação de coordenação na zona A

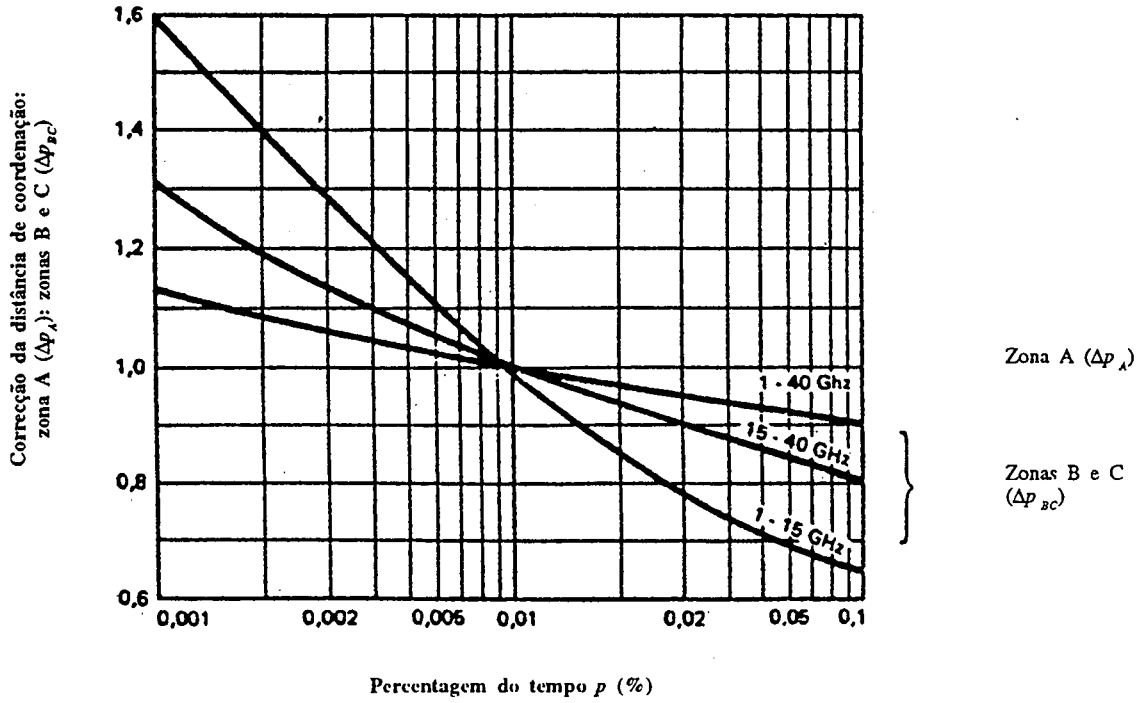


Fig. 3 — Correcção da distância de coordenação — Modo de propagação (1), para percentagens do tempo diferentes de 0,01

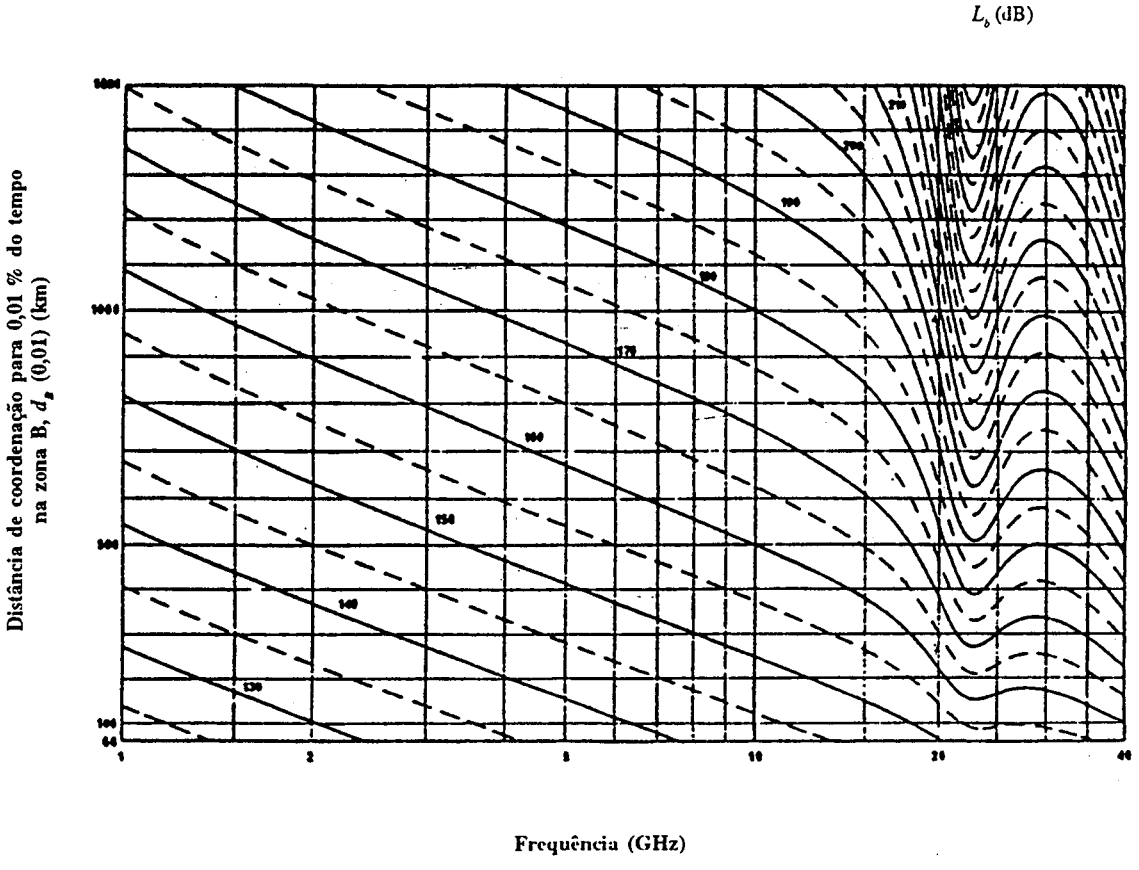


Fig. 4 — Distância de coordenação d_B (0,01), para 0,01 % do tempo, devida ao modo de propagação (1), em função da frequência e da atenuação de coordenação na zona B

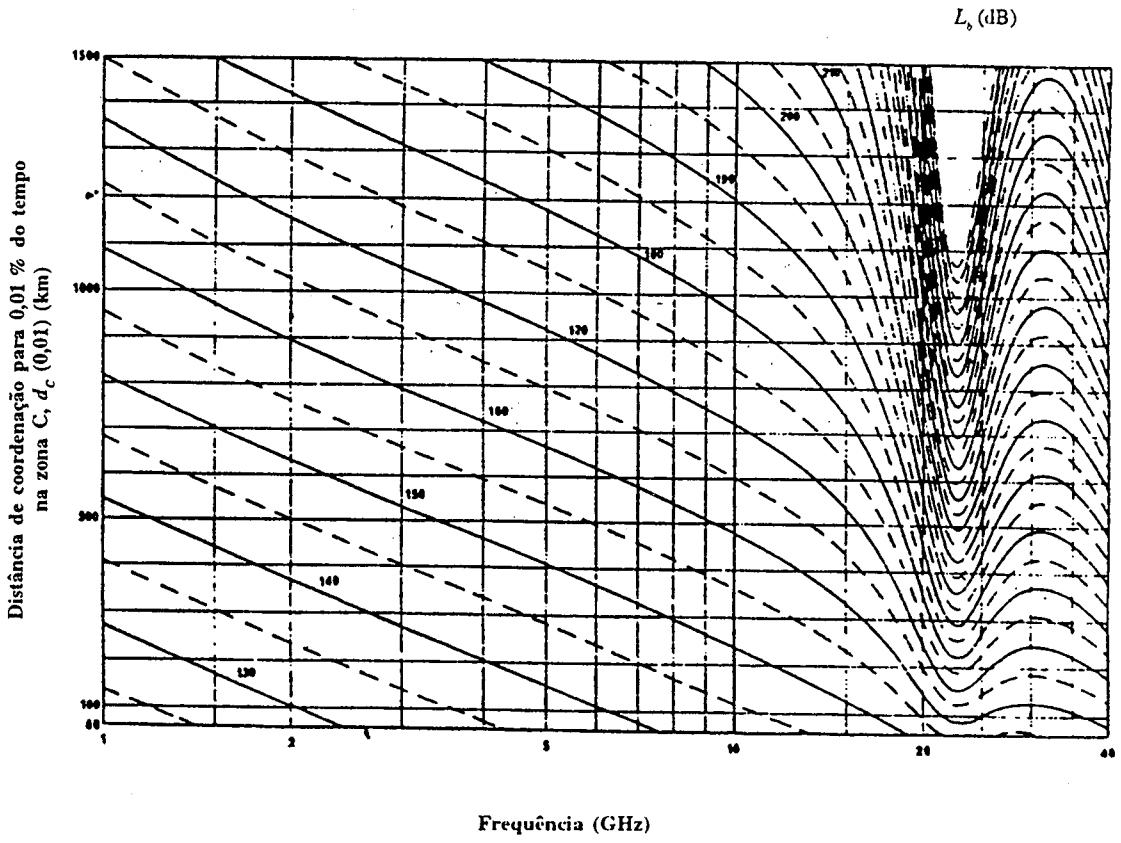


Fig. 5 — Distância de coordenação d_c (0,01), para 0,01 % do tempo, devida ao modo de propagação (1), em função da frequência e da atenuação de coordenação na zona C

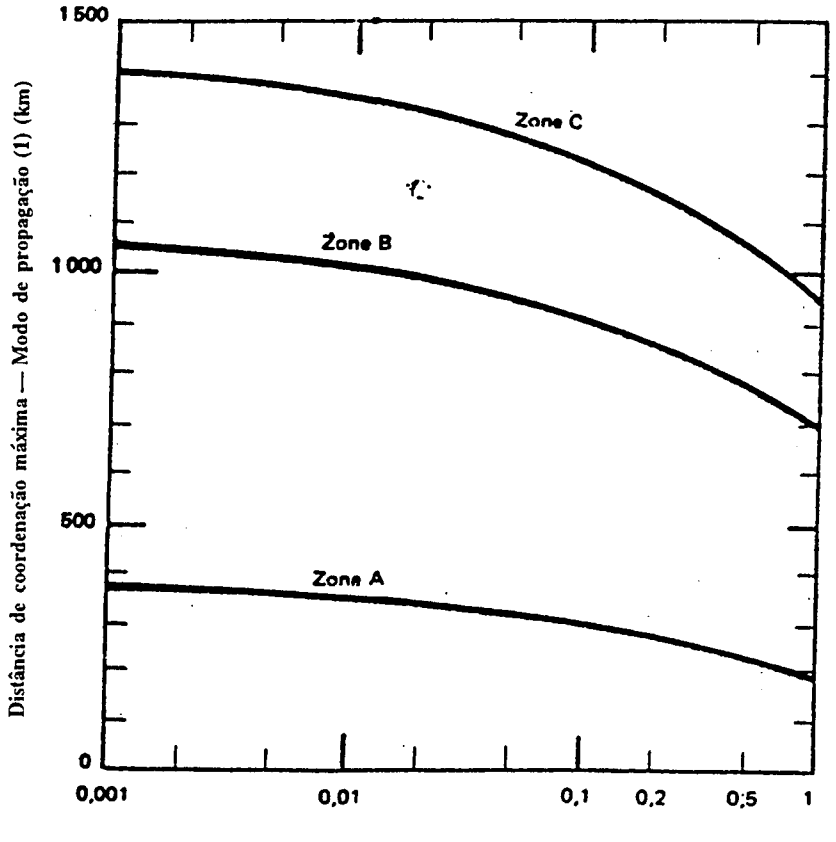


Fig. 6 — Distância de coordenação máxima em função da percentagem do tempo — Modo de propagação (1)

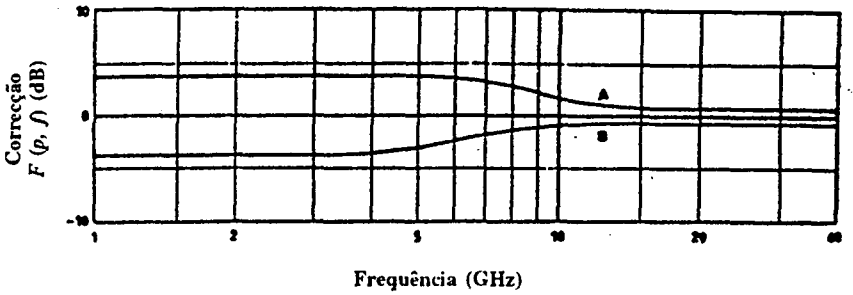


Fig. 7 — Correcção para a conversão a partir da percentagem de tempo 0,01 %
para todas as zonas hidrometeorológicas: conversão a 0,1 % (curva A); conversão a 0,001 % (curva B)

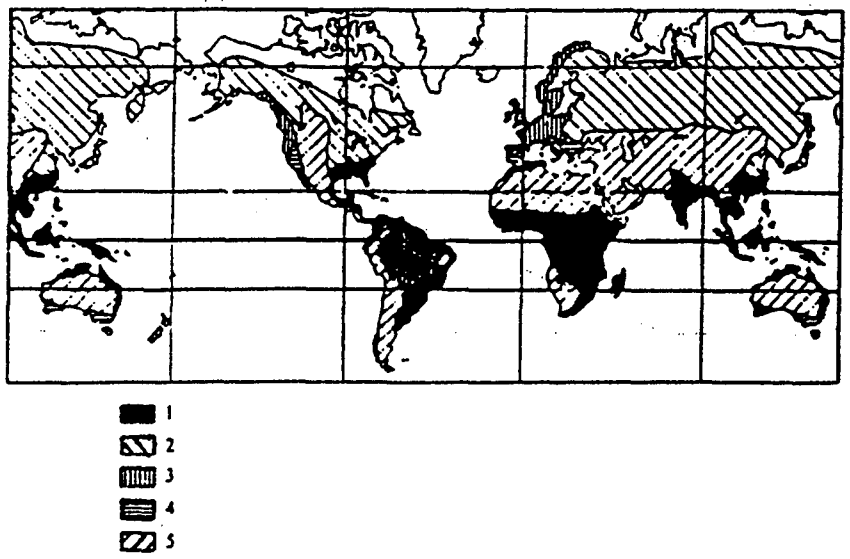


Fig. 8 — Regiões que correspondem às cinco zonas hidrometeorológicas (v. o § 4.2)

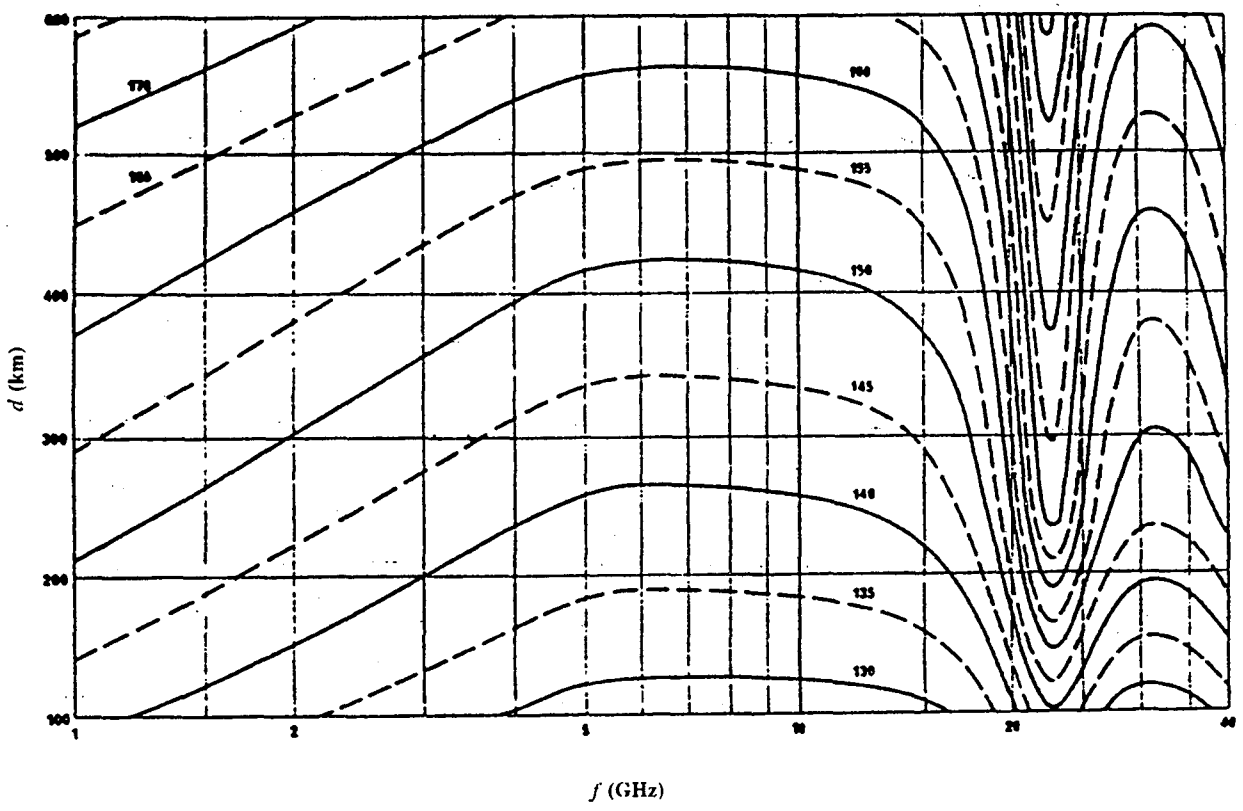


Fig. 9 — Distância de difusão pela chuva em função da frequência — Zona hidrometeorológica 1, para 0,01 % do tempo.
Os números inscritos nas curvas indicam a atenuação de transmissão em decibéis

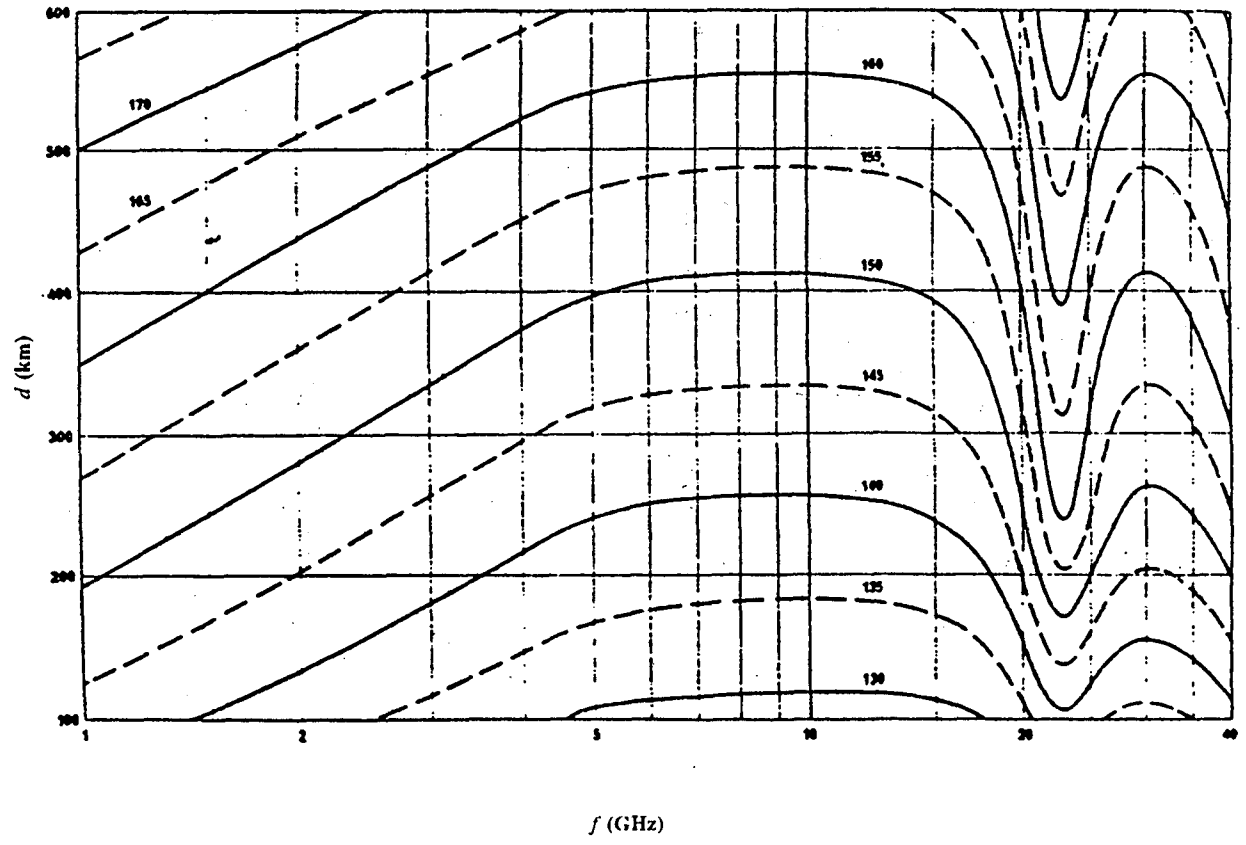


Fig. 10 — Distância de difusão pela chuva em função da frequência — Zona hidrometeorológica 2, para 0,01 % do tempo.
Os algarismos inscritos nas curvas indicam a atenuação de transmissão em decibéis

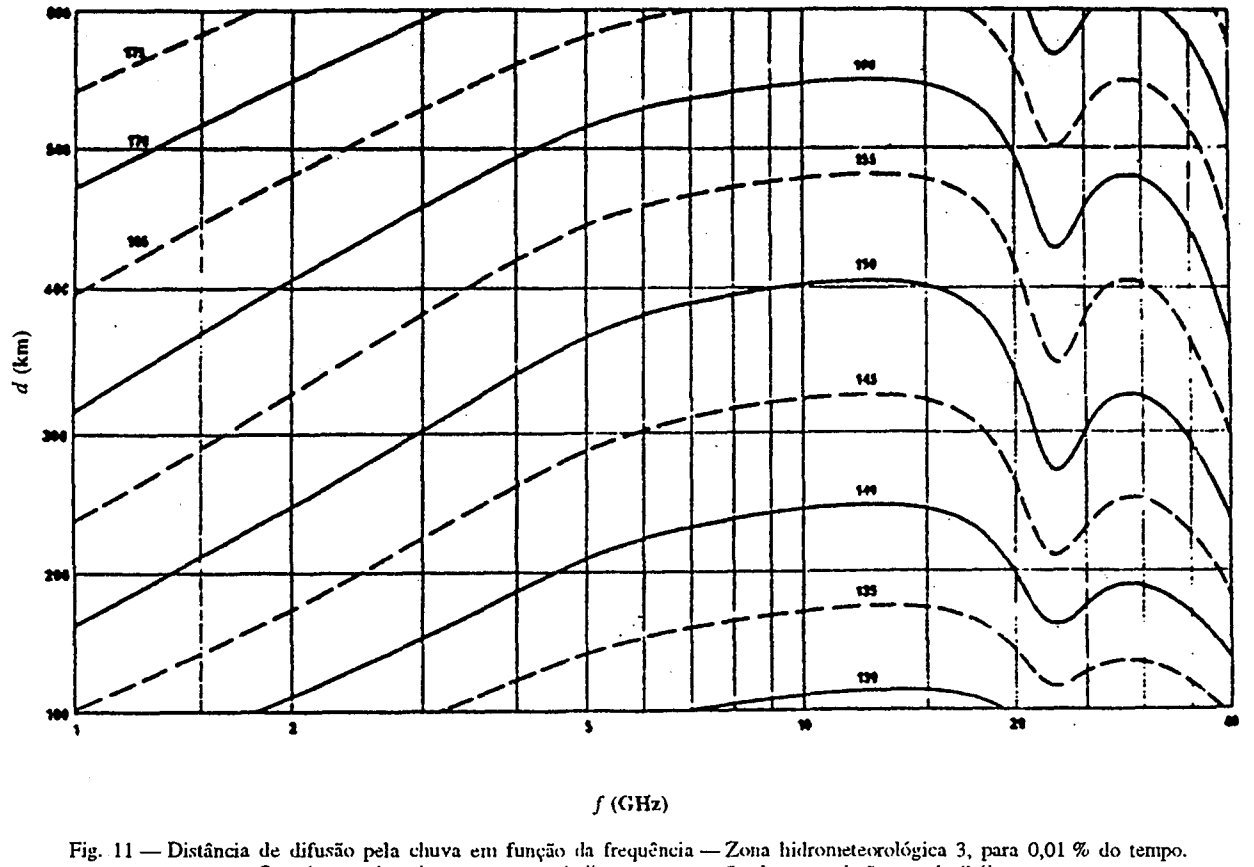


Fig. 11 — Distância de difusão pela chuva em função da frequência — Zona hidrometeorológica 3, para 0,01 % do tempo.
Os números inscritos nas curvas indicam a atenuação de transmissão em decibéis

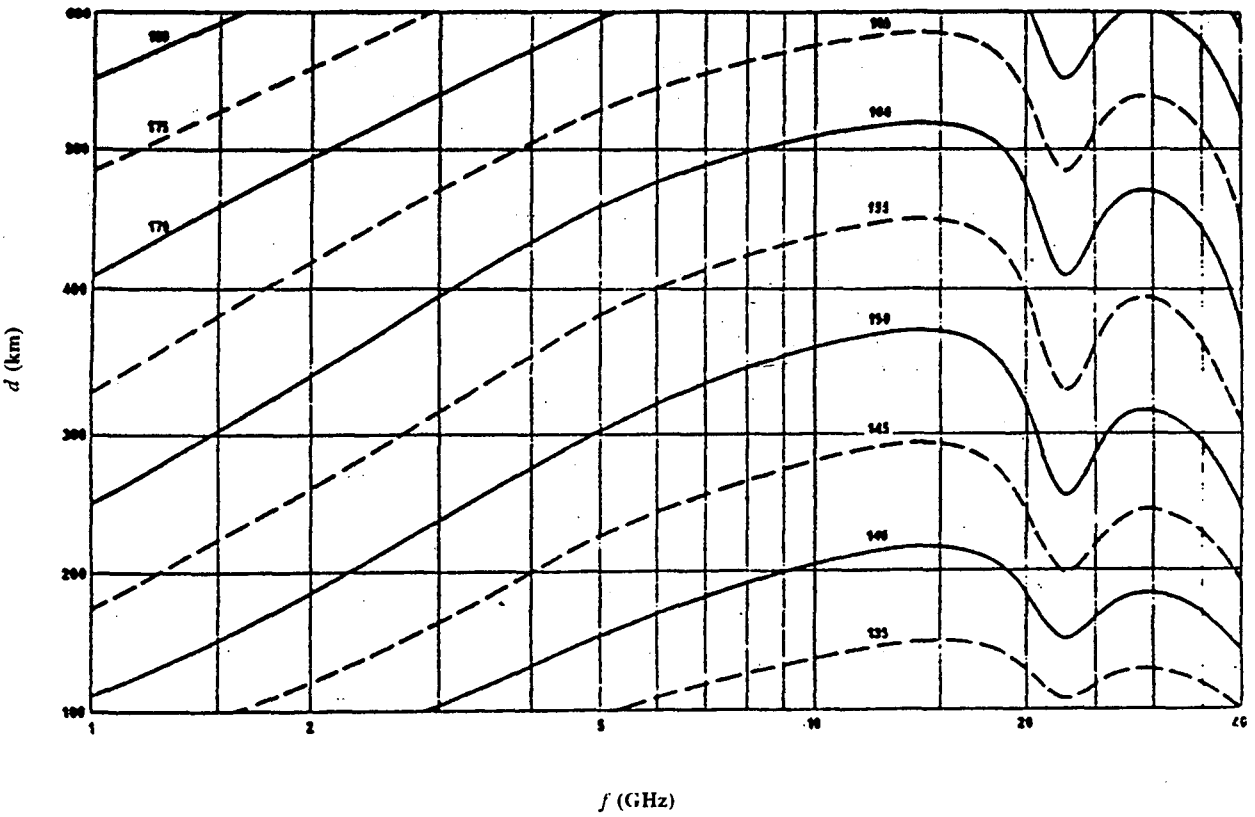


Fig. 12 — Distância de difusão pela chuva em função da frequência — Zona hidrometeorológica 4, para 0,01 % do tempo.
Os números inscritos nas curvas indicam a atenuação de transmissão em decibéis

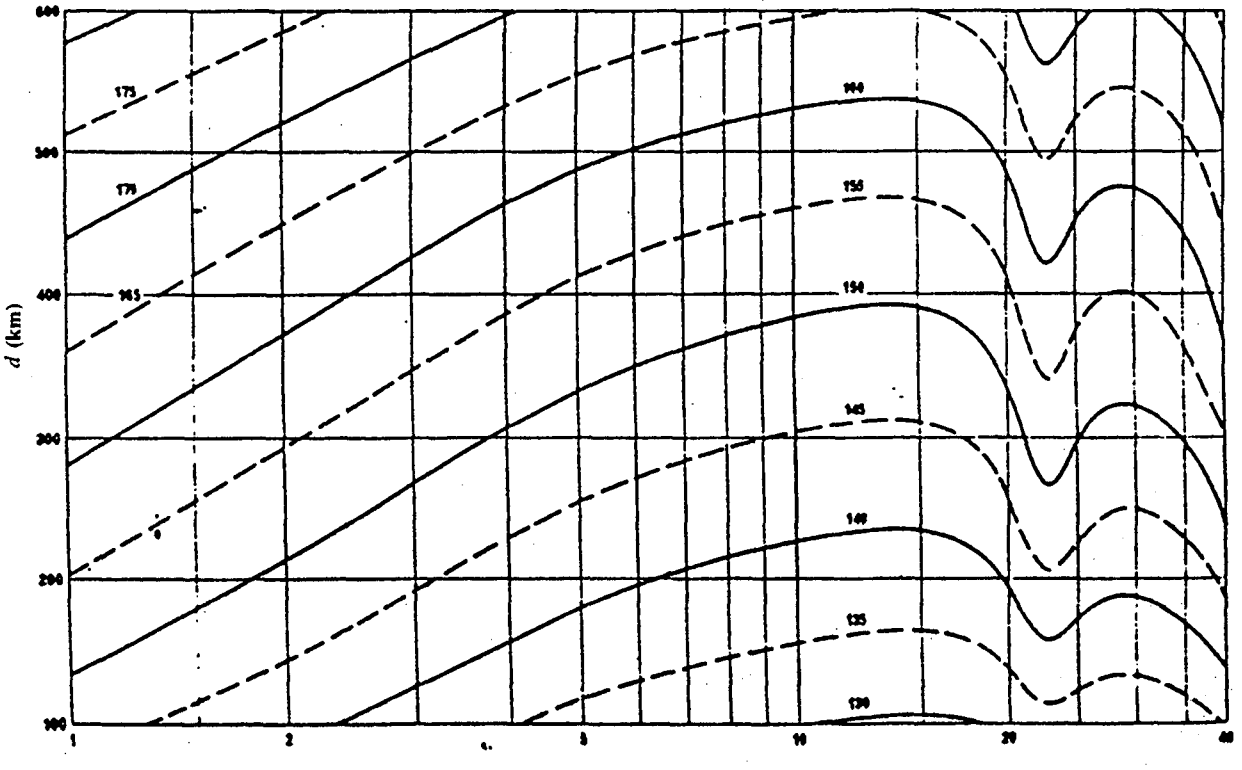


Fig. 13 — Distância de difusão pela chuva em função da frequência — Zona hidrometeorológica 5, para 0,01 % do tempo.
Os números inscritos nas curvas indicam a atenuação de transmissão em decibéis

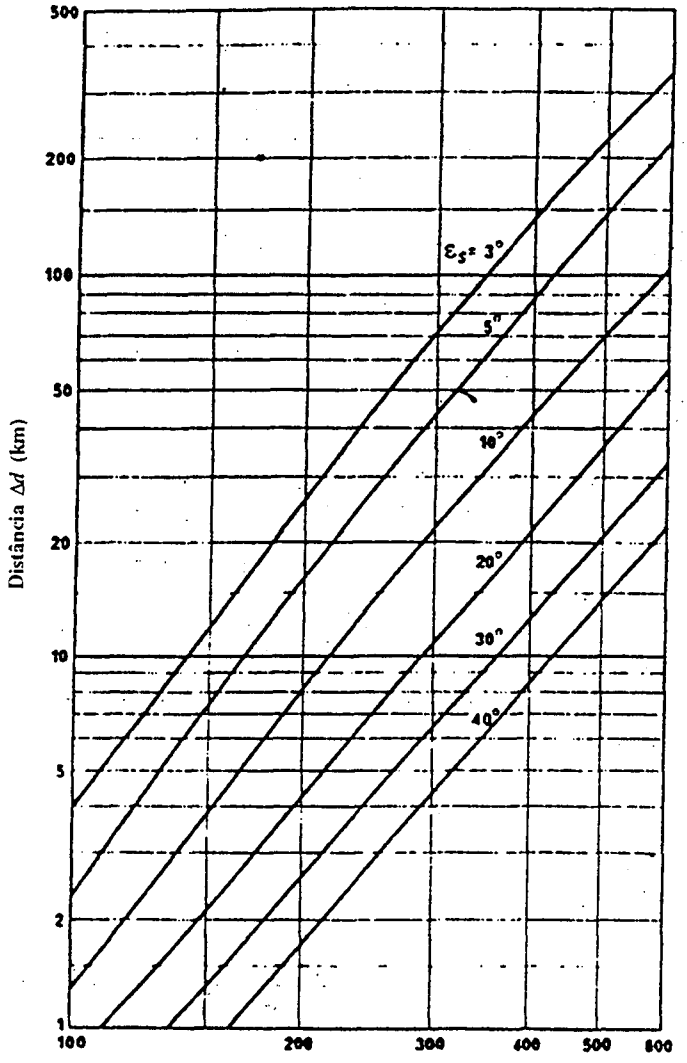


Fig. 14 — Distância Δd em função da distância de difusão pela chuva d_r e do ângulo de elevação ε_s do lóbulo principal da antena da estação terrena

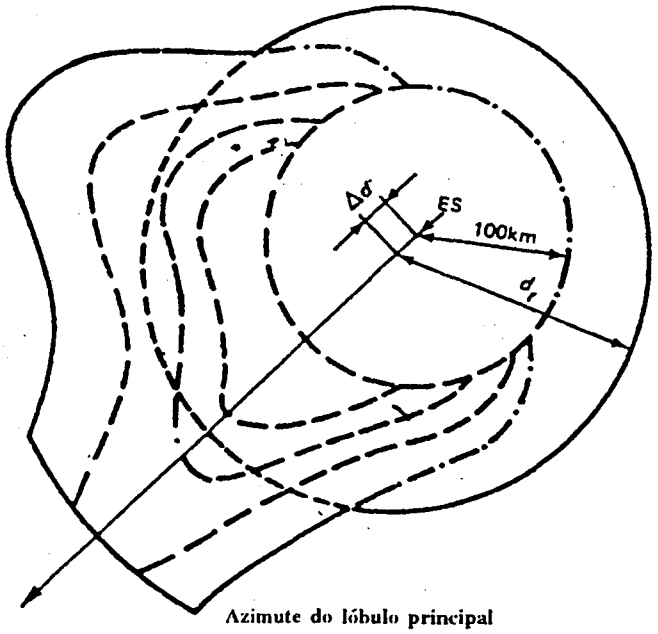


Fig. 15 — Exemplo de contorno de coordenação

ES: Estação terrena.
———— Contorno de coordenação.
—·—·—·— Contorno para o modo de propagação (1).
---------- Contorno para o modo de propagação (2).
———— Contornos auxiliares para o modo de propagação (1).

Nota. — Se ao utilizar os contornos auxiliares for verificado que, sob o ponto de vista do modo de propagação (1), se pode eliminar uma estação de Terra, segue-se que:

Se a estação de Terra se encontrar no exterior do contorno correspondente ao modo de propagação (2), pode deixar-se de tê-la em conta;
Se a estação de Terra se encontrar no interior do contorno correspondente ao modo de propagação (2), continuar-se-á a tê-la em conta, mas somente para esta modo.

ANEXO I

Determinação e utilização dos contornos auxiliares

1. *Introdução.*

Para os mecanismos de propagação ao longo do círculo máximo, modo (1), os contornos auxiliares são de grande interesse, pois permitem eliminar dos estudos algumas das estações de Terra, existentes ou em projecto, que se encontram no interior da zona de coordenação, sem o recurso a cálculos precisos e difíceis. Deste modo, no decorrer de negociações posteriores, os trabalhos da administração responsável pela estação terrena e os das administrações em causa encontrar-se-ão facilitados se esses contornos auxiliares lhes forem fornecidos.

2. *Determinação dos contornos auxiliares.*

Podem determinar-se dois tipos de contornos, consoante a estação terrena funcione como estação de emissão ou de recepção.

2.1. *Estação terrena de emissão.*

Na equação (2) pode-se isolar o termo $G_r - P_r\ (p)$ e definir um factor de sensibilidade à interferência S (dBW) para as estações de Terra interferidas:

$$S = G_r - P_r\ (p) \tag{32}$$

O quadro I dá valores desse factor para diversos tipos de estações de Terra.

Associa-se o contorno de coordenação a um factor de sensibilidade (máxima) S, cujo valor se inscreve na curva.

A determinação dos contornos auxiliares faz-se do mesmo modo que a do contorno de coordenação correspondente ao modo de propagação (1), mas, para o factor de sensibilidade à interferência S (dBW) da estação de Terra, utilizam-se valores 5, 10, 15, 20 dB, etc., inferiores ao valor (dado no quadro I) que corresponde ao contorno de coordenação.

2.2. *Estação terrena de recepção.*

Na equação (2) pode-se também isolar o termo $P_t + G_t$ e definir a p. i. r. e. E (dBW) das estações de Terra interferentes:

$$E = P_t + G_t \tag{33}$$

cujos valores se encontram no quadro II.

Associa-se o contorno de coordenação a um valor máximo de E que se inscreve na curva.

A determinação dos contornos auxiliares faz-se do mesmo modo que a do contorno de coordenação correspondente ao modo de propagação (1) mas para a p. i. r. e. E (dBW) da estação Terra utilizam-se valores 5, 10, 15, 20 dB, etc., inferiores ao valor (dado no quadro II) que corresponde ao contorno de coordenação.

3. *Utilização dos contornos auxiliares.*

Para uma dada faixa partilhada, traçam-se no mesmo gráfico os contornos auxiliares, o contorno de coordenação para a propagação ao longo do círculo máximo, modo (1), e o contorno de coordenação para a difusão pelos hidrometeoros, modo (2). A título de ilustração, dá-se um exemplo na figura 15.

Para cada estação de Terra situada no interior da zona de coordenação pode aplicar-se um método de duas fases, por um lado, para a propagação ao longo do arco de círculo máximo, e, por outro, para a difusão pelos hidrometeoros.

3.1. *Mecanismos de propagação ao longo do círculo máximo, modo (1).*

Se uma estação de Terra de emissão se encontrar no interior da zona de coordenação correspondente ao modo (1), é inútil continuar a tê-la em conta no que respeita a este modo.

Para qualquer estação de Terra de emissão situada no interior da zona de coordenação correspondente ao modo (1), determina-se a p. i. r. e. na direcção da estação terrena. Se este valor for inferior ao correspondente ao contorno mais próximo que define uma zona no exterior da qual se encontra a estação, pode considerar-se que esta não causa interferência superior a um nível admissível, e que, por conseguinte, não será necessário continuar a tê-la em conta no que respeita ao modo (1).

Poderá aplicar-se o mesmo método para qualquer estação de terra de recepção, utilizando o factor de sensibilidade à interferência em substituição da p. i. r. e.

3.2. *Eliminação de uma estação de Terra e mecanismos de difusão pelos hidrometeoros, modo (2).*

As estações de Terra eliminadas pelo método anterior e que deixaram de ser tomadas em conta no que respeita ao modo (1) devem, todavia, ser tomadas em consideração no que respeita ao modo (2), caso estas estações se encontrem no interior da zona de coordenação para a difusão pelos hidrometeoros.

ANEXO II

Ganho de antena na direcção do horizonte da estação terrena para os satélites geostacionários

1. *Generalidades.*

A componente do ganho da antena de uma estação terrena da direcção do horizonte físico em redor da estação terrena é uma função do ângulo de separação φ para cada azimute.

Existe uma relação unívoca entre o ângulo de elevação ε e o azimute a dos satélites geostacionários vistos de uma estação terrena que se encontra à latitude ζ. A figura II-1 apresenta, num diagrama rectangular elevação/azimute, os segmentos e arco possíveis da órbita dos satélites geostacionários; cada arco corresponde a uma latitude de estação terrena.

É possível que não se conheçam antecipadamente as longitudes relativas exactas dos satélites. Mas, mesmo que essas longitudes sejam conhecidas, a possibilidade de acrescentar um novo satélite ou a possibilidade de deslocar um satélite existente sugerem que se deve considerar como contendo satélites todo ou parte do arco correspondente.

2. *Método de determinação gráfica de $\varphi(\alpha)$.*

No gráfico da figura II-1, depois de ser ter escolhido e marcado o arco ou o segmento de arco apropriados, sobrepõe-se o traçado do horizonte $\varepsilon(\alpha)$, como mostra a figura II-2, na qual é dado um exemplo para uma estação terrena situada a 45° de latitude N. e para um satélite cuja localização está prevista entre as longitudes relativas 10° E. e 45° O.

Para cada ponto situado no horizonte local $\varepsilon(a)$, determina-se e mede-se a mais curta distância ao arco, na escala dos ângulos de elevação. O exemplo da figura II-2 mostra como se determina o ângulo fora do lóbulo principal φ para um azimute α (=210°), com um ângulo de elevação ε (=4°). A medida dá para φ o valor de 26°.

Procedendo assim para todos os azimutes (por escalões apropriados, por exemplo de 5° em 5°), obtém-se uma relação $\varphi(\alpha)$.

3. *Método de determinação numérica de $\varphi(\alpha)$.*

Utilizam-se neste método as fórmulas seguintes:

$$\Psi = \arccos(\cos\zeta \cdot \cos\delta; \tag{34}$$

$$\alpha'_s = \arccos(\operatorname{tg}\zeta \cdot \operatorname{cotg}\psi); \tag{35}$$

$\alpha_s = \alpha'_s + 180°$ para estações terrenas situadas no hemisfério norte e satélites situados a oeste da estação terrena; (36*a*)

$\alpha_s = 180° - \alpha'_s$ para estações terrenas situadas no hemisfério norte e satélites situados a este da estação terrena; (36*b*)

$\alpha_s = 360° - a'_s$ para estações terrenas situadas no hemisfério sul e satélites situados a oeste da estação terrena; (36*c*)

$a_s = a'_s$ para estações terrenas situadas no hemisfério sul e satélites situados a este da estação terrena; (36*d*)

$$\varepsilon_s = \arctan\left(\frac{K - \cos\Psi}{\sin\Psi}\right) - \Psi; \tag{37}$$

$$\varphi(\alpha) = \arccos[\cos\varepsilon \cdot \cos\varepsilon_s \cdot \cos(\alpha - \alpha_s) + \sin\varepsilon \cdot \sin\varepsilon_s]. \tag{38}$$

em que:

ζ — latitude da estação terrena;
δ — diferença de longitude entre o satélite e a estação terrena;
Ψ — arco do círculo máximo entre a estação terrena e o ponto na vertical do satélite;
α_S — azimute do satélite visto da estação terrena;
ε_S — ângulo de elevação do satélite visto da estação terrena;
α — azimute da direcção considerada;
ε — ângulo de elevação do horizonte no azimute α considerado;
$\varphi(\alpha)$ — ângulo entre o eixo do lóbulo principal e a direcção do horizonte correspondente ao azimute α considerado;
K — relação entre o raio da órbita e o raio da Terra, igual a 6,62.

Todos os arcos acima mencionados são expressos em graus.

4. *Determinação do ganho de antena.*

Pode utilizar-se a relação $\varphi(\alpha)$ para obter o ganho de antena na direcção do horizonte G (dB), em função do azimute α, utilizando o diagrama real de radiação da antena da estação terrena ou uma fórmula que dê uma boa aproximação. Por exemplo, nos casos em que a relação entre o diâmetro da antena e o comprimento de onda seja superior ou igual a 100, convém utilizar as fórmulas:

$$G(\varphi) = G_{max} - 2{,}5 \times 10^{-3}\left(\frac{D}{\lambda}\varphi\right)^2 \text{ para } 0 < \varphi < \varphi_m \quad (39a)$$

$$G(\varphi) = G_1 \text{ para } \varphi_m \leq \varphi < \varphi, \quad (39b)$$

$$G(\varphi) = 32 - 25 \log \varphi \text{ para } \varphi, \leq \varphi < 48° \quad (39c)$$

$$G(\varphi) = -10 \text{ para } 48° \leq \varphi \leq 180° \quad (39d)$$

onde:

D — diâmetro da antena
λ — comprimento de onda
} expressos na mesma unidade;

G_1 — ganho do primeiro lóbulo lateral $= 2 + 15 \log \frac{D}{\lambda}$

$$\varphi_m = \frac{20\lambda}{D}\sqrt{G_{max} - G_1} \text{ (graus)}$$

$$\varphi_1 = 15{,}85\left(\frac{D}{\lambda}\right)^{-0{,}6} \text{ (graus)}$$

Para a antenas cuja relação $\frac{D}{\lambda}$ seja inferior a 100, quando não for possível utilizar o diagrama de radiação de referência acima mencionado e não se puder recorrer, em seu lugar, nem á um dado medido nem a um parecer pertinente da CCIR aceite pelas administrações em causa, as administrações podem utilizar o diagrama de referência representado por:

$$G(\varphi) = G_{max} - 2{,}5 \times 10^{-3}\left(\frac{D}{\lambda}\right)^2 \text{ para } 0 < \varphi < \varphi_m \quad (40a)$$

$$G(\varphi) = G_1 \text{ para } \varphi_m \leq \varphi < 100\frac{\lambda}{D} \quad (40b)$$

$$G(\varphi) = 52 - 10 \log\frac{D}{\lambda} - 25 \log \varphi \text{ para } 100\frac{\lambda}{D} \leq \varphi < 48° \quad (40c)$$

$$G(\varphi) = 10 - 10 \log\frac{D}{\lambda} \text{ para } 48° \leq \varphi \leq 180° \quad (40d)$$

onde:

D — diâmetro da antena
λ — comprimento de onda
} expressos na mesma unidade;

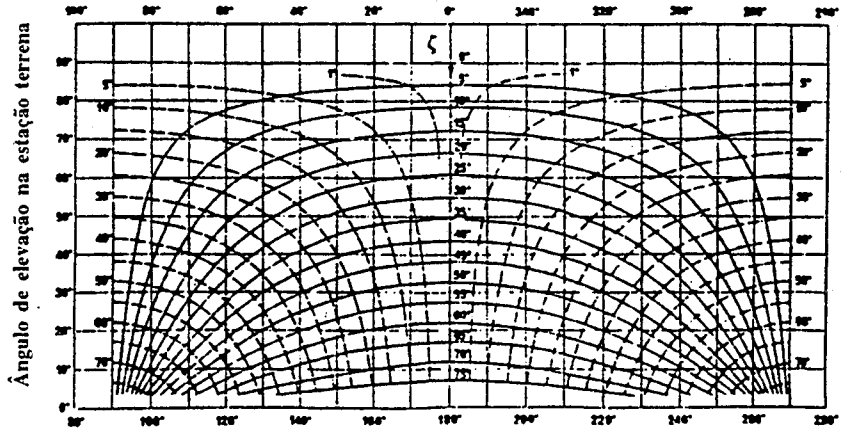
G_1 — ganho do primeiro lóbulo lateral $= 2 + 15 \log \frac{D}{\lambda}$

$$\varphi_m = \frac{20\lambda}{D}\sqrt{G_{max} - G_1} \text{ (graus)}$$

Os diagramas acima indicados podem ser modificados como convenha para obter uma melhor representação do diagrama real de radiação.

Nos casos em que $\frac{D}{\lambda}$ não é dado, pode ser calculado a partir da expressão $20 \log \frac{D}{\lambda} = G_{max} - 7{,}7$, na qual G_{max} é, em decibéis, o ganho do lóbulo principal da antena.

Azimute da estação terrena (hemisfério sul)



Azimute da estação terrena (hemisfério norte)

Fig. II-1

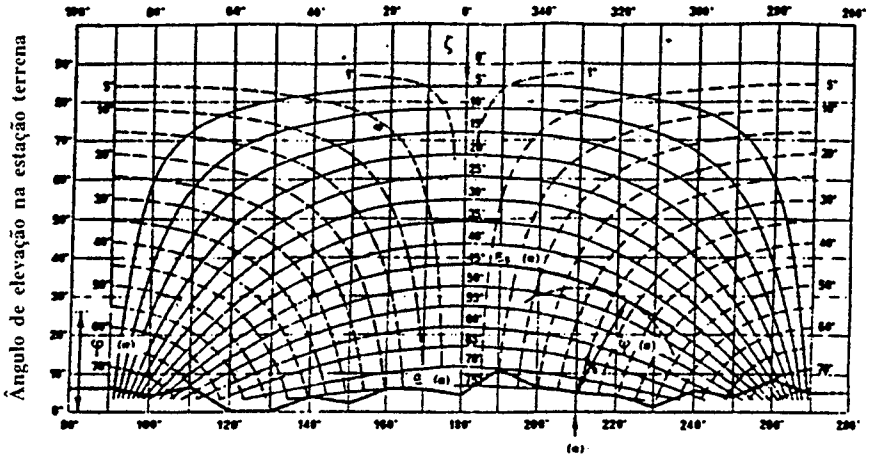
Arcos contendo as posições dos satélites geoestacionários

———— Arco da órbita dos satélites geostacionários visível da estação terrena situada na latitude terrestre ζ.

Diferença de longitude entre a estação terrena e o ponto na vertical do satélite:

— — — — — Longitude do satélite a este da longitude da estação terrena;
— · — · — · — Longitude do satélite a oeste da longitude da estação terrena;
— ·· — ·· — Longitude do satélite igual à longitude da estação terrena.

Azimute da estação terrena (hemisfério sul)



Azimute da estação terrena (hemisfério norte)

Fig. II-2

Exemplo de determinação de φ

———— Arco da órbita dos satélites geostacionários visível da estação terrena situada na latitude terrestre ζ.
·· ———— ·· Perfil do horizonte ε(α).

Diferença de longitude entre a estação terrena e o ponto na vertical do satélite:

— — — — — Longitude do satélite a este da longitude da estação terrena;
— · — · — · — Longitude do satélite a oeste da longitude da estação terrena;
— ·· — ·· — Longitude do satélite igual à longitude da estação terrena.

ANEXO III

Método gráfico de determinação da distância de coordenação no caso de trajectos mistos

1. *Duas zonas:*

O método a utilizar no caso de um trajecto misto envolvendo duas zonas é ilustrado pelo exemplo da figura III-1 (*a*). A estação terrena está situada na zona A a uma distância de 75 km da zona B. O método gráfico descrito abaixo é particularmente útil quando há, como neste exemplo, mais de uma fronteira entre zonas.

No exemplo abaixo supõe-se que a atenuação de coordenação é de 180 dB, a frequência de 20 GHz e a percentagem do tempo de 0,01 %. A sequência das operações é a seguinte:

1.1. Determinar a distância que, inteiramente na zona A, daria o valor da atenuação de coordenação; marcar esta distância (aqui 160 km), a partir da origem, no eixo das abcissas de uma folha de papel milimétrico, o que dá o ponto A [figura III-1 (*b*)];

1.2. Determinar a distância que, inteiramente na zona B, daria o mesmo valor da atenuação de coordenação; marcar esta distância (aqui 530 km), a partir da origem, no eixo das ordenadas da mesma folha, o que dá o ponto B;

1.3. Unir os pontos A e B por um segmento de recta;

1.4. Marcar no eixo das abcissas, a partir da origem, a distância de 75 km entre a estação terrena e a zona B, o que dá o ponto A_1;

1.5. Partindo do ponto A_1, marcar, paralelamente ao eixo das ordenadas, a distância de 150 km inteiramente compreendida na zona B, o que dá o ponto B_1;

1.6. A distância que falta percorrer na segunda parte da zona A determina-se traçando, a partir de B_1, uma paralela ao eixo das abcissas até ao ponto X onde ela encontra a curva a utilizar no caso de um trajecto misto. Na figura III-1 (*b*) lê-se: $B_1X = 40$ km;

1.7. A distância de coordenação é a soma das distâncias OA_1, A_1B_1 e B_1X, ou seja:

$$75 + 150 + 40 = 265 \text{ km}$$

2. *Três zonas:*

Em certos casos especiais, o trajecto misto atravessa as três zonas radioclimáticas A, B e C. Pode-se resolver o problema considerando uma terceira dimensão adicional ao método seguido no caso em que o trajecto misto atravesse apenas duas zonas. Teoricamente, isso equivale a dizer que se deve procurar a terceira coordenada de um ponto cujas duas primeiras coordenadas correspondam às distâncias conhecidas nas duas primeiras zonas e que se encontre no plano que passa pelos três pontos dos eixos Ox, Oy e Oz correspondendo às distâncias que, nas zonas A, B e C, respectivamente, dariam o valor pretendido da atenuação de transmissão de referência.

Na prática, pode reduzir-se essa determinação ao método gráfico simples apresentado na figura III-2 (*a*), para o qual se supõe, por exemplo, que a atenuação de coordenação (L_1) é igual a 180 dB para uma frequência de 20 GHz. O problema consiste em encontrar a distância de coordenação a partir da estação terrena na direcção indicada na figura III-2 (*a*). Nesta direcção e a partir de O, estação terrena situada na zona A, o comprimento do trajecto na zona A é de 75 km (OA), sendo seguido de um comprimento de 150 km na zona B (A_1B_1), na mesma direcção, e seguir de um comprimento desconhecido, que se pretende precisamente determinar, na zona C [figura III-2 (*a*)].

O método a aplicar é então o seguinte [figura III-2 (*b*)]:

2.1. Começar por aplicar o mesmo método que no caso em que estejam envolvidas apenas duas zonas, aplicando somente as etapas 1.1 a 1.5, e continuar como se segue:

2.2. Pelo ponto B_1, traçar uma paralela à recta AB. Essa paralela corta o eixo das abcissas em D;

2.3. Determinar a distância que, situada inteiramente na zona C, daria o mesmo valor da atenuação de coordenação. Marcar esta distância (aqui 350 km) no eixo das ordenadas em OC. Unir os pontos C e A por um segmento de recta;

2.4. Pelo ponto D, traçar uma paralela ao eixo das ordenadas. Essa paralela corta CA em X;

2.5. A distância DX é o comprimento procurado do trajecto na zona C. Verifica-se que é igual a 85 km;

2.6. A distância de coordenação é a soma dos comprimentos OA_1, A_1B_1 e DX e o seu valor é, neste exemplo:

$$75 + 150 + 85 = 310 \text{ km}$$

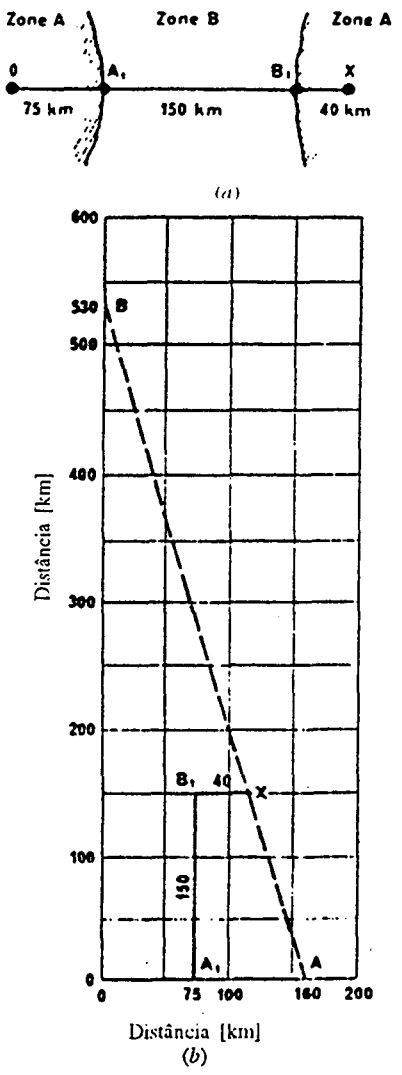


Fig. III-1 — Exemplo de determinação da distância de coordenação no caso de um trajecto misto envolvendo as zonas A e B

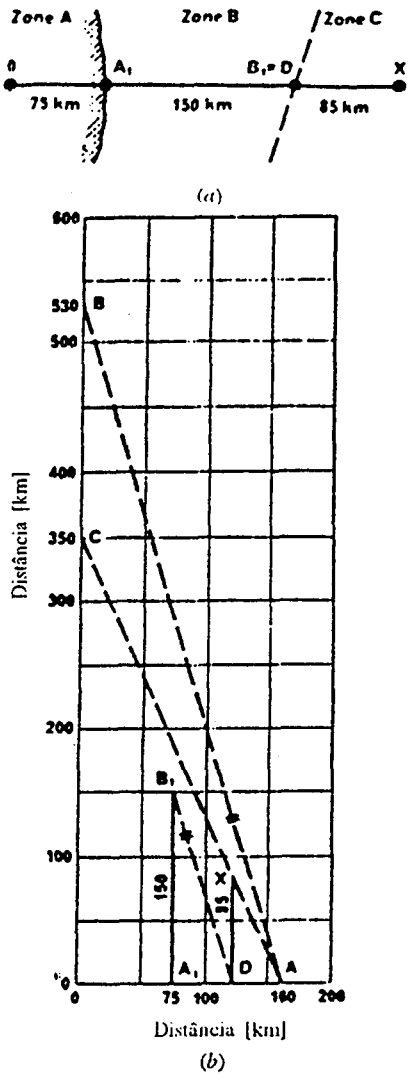


Fig. III-2 — Exemplo de determinação da distância de coordenação no caso de um trajecto misto envolvendo as zonas A, B e C

APÊNDICE 29

Método de cálculo para determinar se é necessária coordenação entre redes de satélite geostacionário que partilham as mesmas faixas de frequências

1. *Introdução.*

O método de cálculo para determinar se é necessária a coordenação de acordo com o n.º **1060** baseia-se no facto de que a temperatura de ruído de um sistema interferido aumenta com o nível da emissão interferente. Este método é, portanto, aplicável quaisquer que sejam quer as características de modulação das redes de satélite envolvidas, quer as frequências exactas que utilizem.

Segundo este método, calcula-se, para uma dada ligação por satélite, o acréscimo aparente da temperatura de ruído equivalente, resultante da emissão interferente de um dado sistema (v. § 2 a seguir), e a relação, expressa em percentagem, entre esse acréscimo e a temperatura de ruído equivalente da ligação é comparada com um valor limite (v. § 3 a seguir).

2. *Cálculo do acréscimo aparente da temperatura de ruído equivalente de uma ligação por satélite sujeita a interferência.*

Consideram-se dois casos possíveis:

Caso 1 — redes útil e interferente partilhando uma ou várias faixas de frequências, cada uma no mesmo sentido de transmissão;

Caso II — redes útil e interferente partilhando uma ou várias faixas de frequências, cada uma em sentidos de transmissão opostos (utilização bidireccional).

Estes dois casos são aplicáveis a todas as posições relativas dos satélites, desde posições próximas a posições quase antípodas.

2.1. *Notações.*

Seja A uma ligação por satélite da rede R associada ao satélite S e A´ uma ligação por satélite da rede R' associada ao satélite S´. Os símbolos relativos à ligação por satélite A´ são afectados por uma plica e os relativos à ligação por satélite A não são afectados por tal notação:

As notações utilizadas para a ligação por satélite A são as seguintes:

T — temperatura de ruído equivalente da ligação por satélite, referida à saída da antena de recepção da estação terrena (K);

T_s — temperatura de ruído do sistema de recepção da estação espacial, referida à saída da antena de recepção da estação espacial (K);

T_e — temperatura de ruído do sistema de recepção da estação terrena, referida à saída da antena de recepção da estação terrena (K);

ΔT_s — acréscimo aparente da temperatura de ruído do sistema de recepção do satélite S causado por uma emissão interferente, referida à saída da antena de recepção desse satélite (K);

ΔT_e — acréscimo aparente da temperatura de ruído do sistema de recepção da estação terrena e_R, causado por uma emissão interferente, referido à saída da antena de recepção dessa estação (K);

ps — densidade máxima de potência, por hertz, fornecida à antena do satélite S (média determinada na faixa de 4 kHz mais desfavorecida, quando a frequência da portadora for inferior a 15 GHz, ou na faixa de 1 MHz mais desfavorecida, quando a frequência da portadora for superior a 15 GHz) (watt/hertz);

$g_3(\eta)$ — ganho da antena de emissão do satélite S na direcção η (relação numérica de potências);

η_A — direcção, a partir do satélite S, da estação terrena de recepção e_R para a ligação por satélite A;

$\eta_{e'}$ — direcção, a partir do satélite S, da estação terrena de recepção e'_R para a ligação por satélite A´;

Nota. — O produto $p_s g_3(\eta_{e'})$ é a p. i. r. e. máxima, por Hz, do satélite S na direcção da estação terrena de recepção e'_R para ligação por satélite A´.

$\eta_{s'}$ — direcção do satélite S´, a partir do satélite S;

p_e — densidade máxima de potência, por hertz, fornecida à antena da estação terrena de emissão e_T (média determinada na faixa de 4 kHz mais desfavorecida, quando a frequência da portadora for inferior a 15 GHz, ou na faixa de 1 MHz mais desfavorecida, quando a frequência da portadora for superior a 15 GHz) (watt/hertz);

$g_2(\delta)$ — ganho da antena de recepção do satélite S na direcção δ (relação numérica de potências);

δ_A — direcção, a partir do satélite S, da estação terrena de emissão e_T para a ligação por satélite A;

$\delta_{e'}$ — direcção, a partir do satélite S, da estação terrena de emissão e'_T para a ligação por satélite A´;

$\delta_{s'}$ — direcção do satélite S´, a partir do satélite S;

θ_t — afastamento angular topocêntrico, em graus, entre os dois satélites (1), tendo em conta tolerâncias longitudinais de manutenção em posição;

Nota. — Só o ângulo topocêntrico θ_t deve ser utilizado no tratamento do caso I.

θ_g — afastamento angular geocêntrico, em graus, entre os dois satélites, tendo em conta as tolerâncias longitudinais de manutenção em posição;

Nota. — Só o ângulo geocêntrico θ_g deve ser utilizado no tratamento do caso II.

$g_1(\theta_1)$ — ganho da antena de emissão da estação terrena e_T na direcção do satélite S´ (relação numérica de potências);

$g_4(\theta_1)$ — ganho da antena de recepção da estação terrena e_R na direcção do satélite S´ (relação numérica de potências);

k — constante de Boltzmann ($1{,}38 \times 10^{-23}$ J/K);

l_d — atenuação de transmissão em espaço livre (2) na ligação descendente (relação numérica de potências), entre o satélite S e a estação terrena de recepção e_R para a ligação por satélite A;

Nota. — Considera-se que atenuação de transmissão em espaço livre em qualquer ligação descendente, entre os satélites S ou S´ e as estações terrenas de recepção e_R ou e'_R é igual a ld.

---

(1) O anexo I descreve um método de cálculo do afastamento angular topocêntrico.

(2) O anexo II descreve um método de cálculo de atenuação de transmissão em espaço livre.

l_u — Atenuação de transmissão em espaço livre (1) na ligação ascendente (relação numérica de potências), entre a estação terrena e_T e o satélite S para a ligação por satélite A;

Notas. — Considera-se que a atenuação de transmissão em espaço livre em qualquer ligação ascendente, entre as estações terrenas e_T ou e'_T e os satélites S ou S', é igual a l_u.

l_s — Atenuação de transmissão em espaço livre (1) na ligação intersatélites (relação numérica de potências), entre o satélite S' e o satélite S;

γ — Ganho de transmissão de uma ligação específica por satélite que sofre uma interferência, avaliado entre a saída da antena de recepção do satélite S e a saída da antena de recepção da estação terrena e_R (relação numérica de potências, habitualmente inferior a 1).

2.2. *Método geral.*

Nas expressões que se seguem, a frequência a utilizar para o calculo de dd_u, l_u e l_s é a frequência média da faixa comum às duas redes no sentido considerado. Se, num dado sentido, não houver sobreposição das faixas de frequências consignadas às duas redes, o valor correspondente ΔT_s ou ΔT_e) é considerado como sendo igual a zero. No caso em que para uma rede os dados do apêndice 3 não tenham sido publicados, considera-se que a faixa de frequências consignada a esse rede é a faixa de frequências indicada no apêndice 4.

2.2.1. *Caso 1 — Redes útil e interferente que partilham uma faixa de frequências no mesmo sentido de transmissão.*

Os ganhos $g_1(\theta_t)$ e $g_4(\theta_t)$ são os das estações terrenas consideradas. Quando não se dispuser de dados medidos num de um parecer pertinentes da CCIR aceite pelas administrações em causa, será preciso utilizar os diagramas de radiação dados no anexo III.

2.2.1.1. *Simples repetidor-conversor de frequência a bordo de um satélite.*

ΔT_S e ΔT_e podem ser calculados pelas seguintes expressões:

$$\Delta T_s = \frac{p_{e'}\, g_1{}'(\theta_t)\, g_2(\delta_{e'})}{k l_u} \tag{1}$$

$$\Delta T_e = \frac{p_{s'}\, g_3{}'(\eta_e)\, g_4(\theta_t)}{k l_d} \tag{2}$$

Utiliza-se o símbolo ΔT para representar o acréscimo aparente, causado pela emissão interferente da ligação A', da temperatura de ruído equivalente para a ligação por satélite completa referida à saída da antena de recepção da estação terrena de recepção e_r.

Este acréscimo da temperatura de ruído resulta das emissões interferentes que afectam tanto o receptor do satélite da ligação A como o da estação terrena dessa ligação. Pode, pois, escrever-se:

$$\Delta T = \gamma\, \Delta T_S + \Delta T_e \tag{3}$$

$$\Delta T = \gamma \frac{p_{e'}\, g_1{}'(\theta_t)\, g_2(\delta_{e'})}{k l_u} + \frac{p_{s'}\, g_3{}'(\eta_e)\, g_4(\theta_t)}{k l_d} \tag{4}$$

Encontrar-se-á no anexo IV um exemplo de cálculo para a aplicação, no caso I, do método formulado no presente apêndice.

Pode obter-se do mesmo modo o valor $\Delta T'$ do acréscimo da temperatura de ruído equivalente parta a ligação por satélite completa, referido à saída da antena de recepção da antena de recepção da estação terrena de recepção e_R que sofre as interferências causadas pela ligação por satélite A, utilizando as expressões seguintes:

$$\Delta T_{SS'} = \frac{p_e\, g_1(\theta_t)\, g_2{}'(\delta_e)}{k l_u} \tag{5}$$

$$\Delta T_{ee'} = \frac{p_s\, g_3(\eta_{e'})\, g_4{}'(\theta_t)}{k l_d} \tag{6}$$

$$\Delta T' = \gamma' \frac{p_e\, g_1(\theta_t)\, g_2{}'(\delta_e)}{k l_d} + \frac{p_s\, g_3(\eta_{e'})\, g_4{}'(\theta_t)}{k l_d} \tag{7}$$

(1) O anexo II descreve um método de cálculo da atenuação de transmissão em espaço livre.

2.2.1.2. Casos que necessitam de um tratamento separado da ligação ascendente e da ligação descendente.

Se houver uma mudança de modulação a bordo do satélite ou se a transmissão for feita a partir do satélite, o acréscimo aparente da temperatura de ruído deve ser referido à temperatura total de ruído do sistema de recepção da ligação considerada (na estação espacial ou na estação terrena, consoante o caso). Em tal caso, a temperatura de ruído equivalente da ligação total por satélite e o ganho de transmissão não são utilizadas e as expressões (1) e (2) anteriores são utilizadas separadamente como convier (v. o § 2.3).

2.2.2. *Caso II* — Redes útil e interferente que partilham uma faixa de frequências em sentidos de transmissão opostos (utilização bidireccional).

O método de cálculo seguinte aplica-se apenas às emissões interferentes entre satélites.

As interferências entre as estações terrenas que utilizam uma mesma faixa de frequência em sentidos de transmissão opostos (utilização direccional) devem ser tratadas segundo métodos de coordenação análogos aos utilizados para a coordenação entre estações terrenas e estações de Terra.

2.2.2.1. *Simples repetidor-conversor de frequência a bordo de um satélite.*

O acréscimo da temperatura de ruído ΔT_S, referido à saída da antena de recepção do satélite da ligação A, é dado por:

$$\Delta T_S = \frac{p_S' \, g_3' \, (\eta_S) \, g_2 \, (\delta_S')}{k l_S} \tag{8}$$

O acréscimo aparente da temperatura de ruído equivalente da ligação é então dado por:

$$\Delta T = g \, \Delta T_S \tag{9}$$

O valor $\Delta T'$ do acréscimo da temperatura de ruído equivalente da ligação A' causado pelas emissões interferentes do satélite associado à ligação A é dado por:

$$\Delta T' = g' \, \Delta T_{SS'} = \frac{\gamma \, p_S \, g_3 \, (\eta_{S'}) \, g_2' \, (\delta_S)}{k l_S} \tag{10}$$

2.2.2.2. *Caso que necessita de um tratamento separado da ligação ascendente e da ligação descendente.*

Neste caso, utiliza-se directamente a expressão (8), com T_S para obter a percentagem de acréscimo. O valor $\Delta T_{SS'}$ do acréscimo da temperatura de ruído da ligação A' causado pelas emissões interferentes do satélite associado à ligação A obtém-se do mesmo modo.

2.2.3. *Consideração eventual da discriminação de polarização.*

O factor de discriminação de polarização descrito neste parágrafo deve ser tomado em consideração se cada uma das administrações responsáveis pelas redes deu o seu assentimento para tal efeito e notificou ou publicou a sua polarização, para fins de coordenação, em conformidade com as disposições do n.º **1060**. Neste caso, o acréscimo aparente da temperatura de ruído equivalente da ligação obtém-se pelas fórmulas seguintes:

Caso I:

$$\Delta T = \frac{\gamma \, \Delta T_s}{Y_{us}} + \frac{\Delta T_c}{Y_{cl}}$$

Caso II:

$$\Delta T = \frac{\gamma \, \Delta T_s}{Y_{ss}}$$

em que ΔT_s e ΔT_c têm os valores dados nos §§ 2.2.1 e 2.2.2 e os valores dos factores de discriminação de polarização Y_{us} Y_{cl} e Y_{ss} são dados pelo seguintes quadro:

Polarização		Factor de discriminação de polarização (relação numérica) $\frac{}{Y}$
Rede *R*	Rede *R*	
CE	*CD*	4
CE	*R*	1,4
CD	*R*	1,4
CE	*CE*	1
CD	*CD*	1
R	*R*	1

em que:

CE = circular esquerda (levogira);
CD = circular direita (dextrogira);
R = rectilínea.

2.3. *Determinação da ligação por satélite a ter em consideração para o cálculo do acréscimo da temperatura de ruído equivalente (caso 1 apenas).*

É necessário determinar o maior acréscimo de temperatura de ruído equivalente causado a qualquer ligação de outra rede de satélite, existente ou em projecto, provocado por emissões interferentes da rede de satélite considerada.

Para cada antena de recepção do satélite da rede interferida convém determinar a localização mais desfavorável da estação terrena de emissão da rede interferente sobrepondo, num mapa da superfície terrestre, as zonas de serviço «Terra para espaço» da rede interferente aos contornos de ganho da antena de recepção da estação espacial. A localização mais desfavorável da estação terrena de emissão é aquela em cuja direcção é mais elevado o ganho da antena de recepção do satélite da rede interferida.

Para cada zona de serviço «espaço para Terra» da rede interferida convém também determinar, de forma análoga, a localização mais desfavorável da estação terrena de recepção dessa rede. A localização mais desfavorável da estação terrena de recepção é aquela em cuja direcção é mais elevado o ganho da antena de emissão do satélite da rede interferente.

2.4 *Utilização das informações fornecidas de acordo com o apêndice 4.*

Quando uma administração decidir utilizar as informações fornecidas de acordo com o apêndice 4, com os procedimentos de cálculo descritos nas secções 2.2.1.1. e 2.2.2.1. para formular observações relativas à publicação antecipada de uma nova rede, os cálculos devem ser efectuados para as duas séries de valores fornecidos para γ e T. O maior dos dois valores de $\Delta T/T$ resultantes desses cálculos é o que convém utilizar.

3. *Comparação entre o acréscimo relativo calculado da temperatura de ruído e o valor de limiar.*

3.1. *Simples repetidor-conversor de frequência a bordo do satélite.*

Os valores calculados de $\frac{\Delta T}{T}$ e $\frac{\Delta T'}{T'}$, expressos em percentagem, devem comparar-se com o valor de limiar de 4 %:

Se o valor calculado de $\frac{\Delta T'}{T}$, expresso em percentagem, devido a qualquer emissão interferente causada pela ligação *A'* à ligação *A* não for superior ao valor de limiar, não é necessária qualquer coordenação relativamente à interferencia da ligação *A* pela ligação *A'*;

Se o valor calculado de $\frac{\Delta T}{T}$, expresso em percentagem, for superior ao valor de limiar, a coordenação é necessária.

Deve fazer-se, de forma análoga, a comparação entre o valor calculado de $\frac{\Delta T'}{T'}$ e o valor de limiar, expressos em percentagem.

3.2. Casos que necessitam de um tratamento separado da ligação ascendente e da ligação descendente.

a) Num caso de interferência que afecte uma única ligação, a ligação ascendente ou a ligação descendente, o valor de $\Delta T_e/T_e$ ou de $\Delta T_s/T_s$, expresso em percentagem, deve ser comparado com o valor de limiar de 4 %;

b) Num caso de interferência que afecte simultaneamente a ligação descendente, entre as quais há uma mudança de modulação a bordo do satélite, os valores de $\Delta T_e/T_e$, ou de $\Delta T_s/T_s$, expressos em percentagem, devem ser comparados com o valor de limiar de 4 %.

Quando nenhum dos valores calculados devidos a qualquer emissão interferente causada pela ligação *A'* à ligação *A* for superior ao valor de limiar, não é necessária coordenação relativamente à interferência da ligação *A* pela ligação *A'*.

Se pelo menos um dos valores calculados for superior ao valor limiar, a coordenação é necessária.

Deve fazer-se, de forma análoga, a comparação dos valores de $\frac{\Delta T_e}{T_e}$ ou de $\frac{\Delta T_s}{T_s}$, expressos em percentagem, com o valor de limiar.

4. *Consideração das portadoras de faixa estreita.*

Pode acontecer que o método de cálculo descrito neste apêndice subestime a interferência causada a certas emissões de faixa estreita (de uma única via portadora — SCPC) por emissões de televisão de varrimento lento.

Para facilitar o procedimento de coordenação entre sistemas de satélites e reduzir o número das administrações implicadas neste procedimento, as administrações cujas consignações a estações que utilizam sistemas SCPC estão quer inscritas no ficheiro de referência quer em curso de coordenação podem dar a conhecer à administração que notifica uma nova consignação os canais radioeléctricos utilizados nos seus sistemas para as emissões SCPC. A administração notificadora poderá, assim, se for caso disso, evitar a utilização desses canais para as emissões de televisão em modulação de frequência.

Reciprocamente, as administrações que prevejam novos sistemas de emissões SCPC poderão procurar obter junto de outras administrações as informações apropriadas sobre as suas emissões de televisão em modulação de frequência.

ANEXO I

Cálculo do afastamento angular topocêntrico entre dois satélites geostacionários

O afastamento angular topocêntrico θ entre dois satélites geostacionários a partir de uma dada estação terrena pode ser calculado utilizando a fórmula:

$$\theta_t = \text{arc cos} \left[\frac{d_1^2 + d_2^2 - \left(84\ 332 \sin \frac{\theta_g}{2}\right)^2}{2\ d_1 \cdot d_2} \right]$$

em que d_1 e d_2 são as distâncias reespectivas, em quilómetros, entre a estação terrena e os dois satélites, determinadas pelo método descrito no anexo II para o cálculo de d, e θ_g, tem o valor indicado no § 2.1.

ANEXO II

Cálculo da atenuação de transmissão em espaço livre

A atenuação de transmissão L em espaço livre pode ser calculada utilizando a fórmula:

$$L = 20\ (\log f + \log d) + 32{,}45\ \text{(dB)}$$

em que:

f — Frequência (MHz);
d — Distância (km).

$$d = 42\ 644 \sqrt{1 - 0{,}2954 \cos \psi}\ \text{(km)}$$

a) A distância d entre uma estação terrena e um stélite geostacionário é dada pela fórmula:
na qual:

$$\cos \psi = \cos \zeta \times \cos \beta$$

em que:

ζ — Latitude da estação terrena;
β — Diferença de longitude entre o satélite e a estação terrena.

Nota. — Se cos ψ < 0,151 o satélite está abaixo do plano horizontal.

b) A distância *d*) entre dois satélites geostacionários é dada por:

$$d_S = 84\ 332 \sin \frac{\theta_g}{2}\ \text{(km)}$$

onde:

θ_g — Afastamento angular geocêntrico segundo a definição dada no § 2.1.

ANEXO III

Diagramas de radiação a utilizar para as antenas de estação terrena quando não estão publicados

Se não existirem nem dados medidos nem pareceres pertinentes da CCIR aceites pelas administrações interessadas, estas devem utilizar os diagramas de referência representados, em decibéis, por:

a) Para valores de $\frac{D}{\lambda} \geq 100$ (1) (ganho máximo cerca de ≥ 48 dB):

$G\ (\varphi) = G_{max} - 2{,}5 \times 10^{-3} \left(\frac{D}{\lambda}\ \varphi\right)^2$ para $0 < \varphi < \varphi_m$
$G\ (\varphi) = G_1$ para $\varphi_m \leq \varphi < \varphi_t$
$G\ (\varphi) = 32 - 23 \log \varphi$ para $\varphi'\ \varphi < 48°$
$G\ (\varphi) = -10$ para $48° \leq \varphi \leq 180°$

em que:

D — diâmetro de antena
λ — comprimento de onda
} expressos na mesma unidade;

(1) No caso de $\frac{D}{\lambda}$ não ser dado, pode ser avaliado a partir da expressão $20 \log \frac{D}{\lambda}$ $G_{máx.} - = 7{,}7$, na qual $G_{máx}$, é, em decibéis, o ganho do lóbulo principal da antena.

φ — ângulo em relação ao eixo principal da antena, em graus, e igual a θ_t ou θ_g, consoante o caso;

G_1 — ganho do primeiro lóbulo lateral = $2 + 15 \log \frac{D}{\lambda}$.

$$\varphi_m = \frac{20\lambda}{D} \sqrt{G_{máx.} - G_1} \text{ (graus)}$$

$$\varphi_t = 15{,}85 \left(\frac{D}{\lambda}\right)^{-0{,}6} \text{ (graus)}$$

b) Para valores de $\frac{D}{\lambda} < 100$ (1) (ganho máximo < 48 dB, aproximadamente):

$$G(\varphi) = G_{máx} - 2{,}5 \times 10^{-3} \left(\frac{D}{\lambda} \varphi\right)^2 \text{ para } 0 < \varphi < \varphi_m$$

$$G(\varphi) = G_1 \text{ para } \varphi_m \leq \varphi < 100$$

$$G(\varphi) = 52 - 10 \log \frac{D}{\lambda} - 25 \text{ logo } \varphi \text{ para } 100 \frac{\lambda}{D} \leq \varphi < 48°$$

$$G(\varphi) = 10 - 10 \log \frac{D}{\lambda} \text{ para } 48° \leq \varphi \leq 180°$$

Se necessário, os diagramas anteriores podem modificar-se para obter uma melhor representação do diagrama de radiação real:

ANEXO IV

Exemplo de aplicação do apêndice 29

1. *Considerações gerais:*

No presente exemplo, relativo ao caso 1 (v. § 2.2.1), admitem-se, por hipótese, duas redes de satélite idênticas, contendo cada uma um simples repetidor-conversor de frequência e uma antena de cobertura mundial.

Parte-se da suposição de que todos os ângulos topocêntricos têm um valor de 5°.

Para este afastamento angular e para uma antena de estação terrena cuja relação $\frac{D}{\lambda}$ seja maior que 100, o diagrama de radiação de referência ($32 - 25 \log \theta_t$) indica um ganho de 14,5 dB na direcção do satélite da outra rede.

Os dados de partida indicados no § 2 seguinte são expressos em decibéis, com excepção dos parâmetros T e θ_t. No § 3 seguinte, os cálculos são efectuados em decibéis.

Pode notar-se que, visto que os dois satélites utilizam feixes de cobertura mundial, a antena do satélite não proporcione praticamente qualquer discriminação entre o sinal útil e o sinal interferente. Trata-se, portanto, de um caso extremo favorável.

2. *Dados de partida.*

Os valores das características da rede dados no quadro são tirados dos valores publicados de acordo com o apêndice 3 ou com o apêndice 4.

	Símbolo (*a*)	Valor	Unidade
Ligação ascendente em 6175 MHz ...	P'	— 37	dB (W/Hz)
	$G'_1(\theta_e)$	14.5	dB
	$G_2(\delta_e)$	15.5	dB
	L_u	200	dB
Ligação descendente em 3950 MHz	P'_s	— 57	dB (W/Hz)
	$G'_3(\eta_e)$	15.5	dB
	$G_4(\theta_t)$	14.5	dB
	L_d	196	dB
—	10 log γ	— 15	dB
	T	105	k
	θ_t	5	Graus

(*a*) Com excepção de I, todos os símbolos em letras maiúsculas referem-se as características dadas em unidades logarítmicas.

(1) No caso de $\frac{D}{\lambda}$ não ser dado, pode ser avaliado a partir da expressão 20 log — $G_{máx.}$ — ≈ 7,7, na qual $G_{máx}$, é em decibéis, o ganho do lóbulo principal da antena.

3. Cálculo de $\frac{\Delta T}{T}$.

A partir da fórmula (1):

$$10 \log \Delta T_s = P'_e + G'_1 (\theta_t) + G_2 (\delta_{\acute{e}}) + 228{,}6 - L_u$$
$$= -37 + 14{,}5 + 15{,}5 + 228{,}6 - 200 = 21{,}6 \text{ dBK}$$

obtém-se:

$$\Delta T_s = 145 \text{ K}$$

A partir da fórmula (2):

$$10 \log \Delta T_e = P'_e + G'_3 (\eta_e) + G_4 (\theta_t) + 228{,}6 - L_d$$
$$= -57 + 15{,}5 + 14{,}5 + 228{,}6 - 196 = 5{,}6 \text{ dBK}$$

obtém-se:

$$\Delta T_e = 3{,}6 \text{ K}$$

A fórmula (3) dá:

$$\Delta T = \gamma \Delta T_s + \Delta T_e$$
$$= 0{,}032 \times 145 + 3{,}6 = 8{,}2 \text{ K}$$

donde:

$$\frac{\Delta T}{T} \times 100 = \frac{8{,}2 \times 100}{105} = 7{,}8 \%$$

4. *Conclusão.*

No exemplo acima, a percentagem de aumento da temperatura de ruído equivalente da ligação por satélite é de 7,8 %. Dado que este valor excede o valor de liminar de 4 %, é necessária uma coordenação das duas redes.

APÊNDICE 30

Disposições aplicáveis a todos os serviços e plano associado relativo ao serviço de radiodifusão por satélite nas faixas de frequências de 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1) (1)

(V. o artigo 15)

ARTIGO 1

Definições gerais

Para os fins do presente apêndice, os termos seguintes terão os sentidos abaixo definidos:

Conferência. — Conferência Administrativa Mundial das Radiocomunicações Encarregada de Elaborar Um Plano para o Serviço de Radiodifusão por Satélite nas Faixas de Frequência de 11,7-12,2 GHz (nas Regiões 2 e 3) e de 11,7-12,5 GHz (na Região 1), designada abreviadamente por Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

Plano. — O plano para as Regiões 1 e 3 e seus anexos.

Consignação de frequência em conformidade com o plano. — Consignação de frequência que figura no plano ou para o qual foi aplicado com êxito o procedimento do artigo 4 do presente apêndice.

ARTIGO 2

Faixas de frequências

2.1. As disposições do presente apêndice aplicam-se ao serviço de radiodifusão por satélite nas faixas de frequências compreendidas entre 11,7 GHz e 12,5 GHz, na Região 1, e entre 11,7 GHz e 12,2 GHz, nas Regiões 2 e 3 e aos outros serviços a que estas faixas estão atribuídas, no que respeita às relações desses serviços com o serviço de radiodifusão por satélite nesta faixas.

---

(1) As disposições e o plano associado do presente apêndice entraram em vigor em 1 de Janeiro de 1979, em aplicação do artigo 15 dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

ARTIGO 3

Execução das disposições e do plano associado

3.1. Os Membros da União pertencentes às Regiões 1 e 3 adoptam, para as suas estações espaciais de radiodifusão que funcionam nas faixas de frequências objecto do presente apêndice, as características especificadas no plano para essas Regiões.

3.2. Os Membros da União pertencentes à Região 2 aplicam as disposições transitórias contidas no artigo 12 do presente apêndice. Essas disposições regem o serviço de radiodifusão por satélite na Região 2, até à entrada em vigor dos planos pormenorizados da Região 2, que serão elaborados por uma futura conferência administrativa regional das radiocomunicações.

3.3. Os Membros da União só poderão modificar as características especificadas no plano ou colocar em serviço novas estações espaciais de radiodifusão por satélite ou estações dos outros serviços a que estas faixas de frequência estão atribuídas nas condições indicadas no Regulamento das Radiocomunicações e nos artigos e anexos pertinentes do presente apêndice.

ARTIGO 4

Procedimento relativo às modificações ao plano

4.1. Quando uma administração se propõe efectuar um modificação (1) ao plano:

Quer para modificar as características de uma das suas consignações de frequência a uma estação espacial (2) do serviço de radiodifusão por satélite que figura no plano ou para a qual foi aplicado com êxito o procedimento definido no presente artigo, esteja ou não essa estação em serviço;

Quer para inscrever no plano uma nova consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite;

Quer para anular uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite;

é aplicado o procedimento seguinte, antes de qualquer notificação pertinente à Comissão Internacional do Registo de Frequências (v. o artigo 5 do presente apêndice).

4.2. A expressão «consignação de frequência em conformidade com o plano», utilizada neste e nos seguintes artigos, está definida no artigo 1.

4.3. *Projecto de modificação de uma consignação de frequência em conformidade com o plano ou projecto de inscrição no plano de uma nova consignação de frequência.*

4.3.1. Uma administração que pretenda modificar características de uma consignação de frequência em conformidade com o plano ou inscrever uma nova consignação de frequência no plano procurará o acordo de qualquer outra administração:

4.3.1.1. Que tenha, no mesmo canal ou num canal adjacente, uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite em conformidade com o plano ou relativamente à qual a comissão tenha publicado modificações ao plano de acordo com as disposições do presente artigo.

4.3.1.2. Que tenha uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite na Região 2 com uma largura de faixa necessária que cubra parcialmente a da consignação pretendida e que essa consignação esteja inscrita no ficheiro de referência, ou:

Seja ou tenha sido objecto da coordenação segundo as disposições da Resolução n.º 33 (3);

Figure num plano para a Região 2 (4) a ser adoptado numa futura conferência administrativa regional das radiocomunicações, tendo em conta as modificações que possam ser feitas a esse plano de acordo com os actos finais dessa conferência.

4.3.1.3. Que não tenha qualquer consignação de frequência do serviço de radiodifusão por satélite no canal considerado, mas em cujo território, como resultado desse projecto de modificação, a densidade de fluxo de potência exceda o limite prescrito.

4.3.1.4. Que tenha uma consignação de frequência a uma estação espacial do serviço fixo por satélite inscrita no ficheiro de referência na faixa de 11,7-12,2 GHz e que essa consignação de frequência seja, ou tenha sido, objecto de uma coordenação nos termos do n.º **1060** do Regulamento das Radiocomunicações ou do § 7.2.1. do presente apêndice, e se considere que é desfavoravelmente influenciada.

Considera-se que uma consignação de frequência é desfavoravelmente influenciada quando são ultrapassados os limites indicados no anexo 1.

---

(1) A utilização de um valor da dispersão de energia diferente do especificado no § 3.18 do anexo 8 é considerada como uma modificação e, por isso, são-lhe aplicáveis as disposições pertinentes do presente artigo.

(2) A expressão «consignação de frequência a uma estação espacial», onde quer que figure no presente artigo, deve ser entendida como referindo-se a uma consignação de frequência associada a uma dada posição na órbita. V., no anexo 10, as restrições aplicáveis às posições na órbita.

(3) Substitui a Resolução Spa 2-3 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

(4) O plano para a Região 2, que será adoptado numa futura conferência administrativa regional das radiocomunicações, não deverá diminuir o grau de protecção às consignações de frequência que figuram no plano abaixo dos limites especificados no presente apêndice.

4.3.2. Uma administração que pretenda fazer uma modificação ao plano deve enviar à Comissão as informações pertinentes indicadas no anexo 2, antes da data em que a consignação deve entrar em serviço, mas não com uma antecedência superior a 5 anos nem inferior a 18 meses. Se a consignação não for posta em serviço o mais tardar nessa data, a modificação será considerada nula.

4.3.2.1. Se esse projecto de modificação não conduzir a que sejam ultrapassados os limites especificados no anexo 1, este facto deve ser indicado quando do envio à Comissão das informações pedidas no § 4.3.2. A Comissão publicará essas informações numa secção especial da sua circular semanal.

4.3.2.2. Nos outros casos, para se alcançar o acordo previsto no § 4.3.1, a administração comunica à Comissão das administrações junto das quais julga que deve ser procurado um acordo, bem como o nome das administrações com as quais foi já concluído um acordo.

4.3.3. A Comissão determina, na base do anexo 1, quais as administrações cujas consignações de frequência são consideradas como sendo desfavoravelmente influenciadas no sentido do § 4.3.1. A Comissão inclui o nome dessas administrações recebidas em aplicação do § 4.3.2.2 e publica o conjunto das informações numa secção especial da sua circular semanal. A Comissão comunica imediatamente os resultados dos seus cálculos à administração que pretende efectuar a modificação ao plano.

4.3.4. A Comissão envia um telegrama às administrações indicadas na secção especial da sua circular semanal, chamando a atenção delas para a publicação dessas informações, e comunica-lhes o resultado dos seus cálculos.

4.3.5. Qualquer administração que considere que deveria ter figurado na lista das administrações cujos serviços são considerados como sendo desfavoravelmente influenciados pode pedir à Comissão que a inclua nessa lista, fornecendo-lhe as razões técnicas em apoio do seu pedido. A Comissão estuda esse pedido na base do anexo 1 e envia uma cópia do referido pedido, acompanhada de uma recomendação apropriada, à administração que pretende a modificação do plano.

4.3.6. Qualquer modificação de uma consignação de frequência em conformidade com o plano ou qualquer inscrição no plano de uma nova consignação de frequência susceptível de conduzir a que sejam ultrapassados os limites especificados no anexo 1 está dependente do acordo de todas as administrações desfavoravelmente influenciadas.

4.3.7. A administração que procura um acordo ou a administração junto da qual é procurado um acordo pode pedir as informações técnicas que julgue necessárias. As administrações levam esses pedidos ao conhecimento da Comissão.

4.3.8. As observações feitas pelas administrações relativamente às informações publicadas por força do § 4.3.3 são enviadas à administração que pretende a modificação, quer directamente, quer por intermédio da Comissão. Em todos os casos, a Comissão deverá ser informada de quem foram formuladas observações.

4.3.9. Considera-se que deu o seu acordo à modificação pretendida a administração que, no prazo de 120 dias a partir da data da circular semanal mencionada nos §§ 4.3.2.1 ou 4.3.3, não tenha enviado as suas observações à administração notificadora, quer directamente, quer por intermédio da Comissão. Este prazo poderá ser prorrogado por 80 dias no caso de uma administração que tenha pedido informações suplementares em conformidade com o disposto no § 4.3.7 ou a ajuda em conformidade com o § 4.3.17. Neste último caso, a Comissão leva esse pedido ao conhecimento das administrações interessadas.

4.3.10. Quando, para chegar a um acordo, uma administração seja levada a modificar o seu projecto inicial, aplicará de novo as disposições do § 4.3.2 e o procedimento que daí decorre relativamente a qualquer administração cujos serviços possam ser desfavoravelmente influenciados em consequência das modificações efectuadas no projecto inicial.

4.3.11. Se, no prazo especificado no § 4.3.9, não lhe chegar qualquer observação ou se tiver sido concluído um acordo com as administrações que formularam observações e cujo acordo era necessário, a administração que pretende a modificação pode continuar a aplicar o procedimento apropriado do artigo 5 e informa disso a Comissão, indicando-lhe as características definitivas da consignação de frequência, bem como o nome das administrações com as quais foi concluído um acordo.

4.3.12. O acordo das administrações interessadas pode igualmente obter-se, nos termos do presente artigo, para um período determinado.

4.3.13. Quando um projecto de modificação ao plano interessar países em vias de desenvolvimento, as administrações procurarão todas as soluções práticas susceptíveis de assegurar o desenvolvimento económico do sistema de radiodifusão por satélite dos referidos países.

4.3.14. A Comissão publica numa secção especial da sua circular semanal as informações que receber nos termos do § 4.3.11, acompanhando-as, se for caso disso, do nome das administrações com as quais tenham sido aplicadas com êxito as disposições do presente artigo. A consignação de frequência beneficiará do mesmo estatuto das que figuram no plano e será considerada como uma consignação de frequência em conformidade com o plano.

4.3.15. Quando uma administração que pretenda modificar as características de uma consignação de frequência ou colocar em serviço uma nova consignação de frequência receber um aviso de desacordo da parte de uma administração a que tinha pedido o acordo, esforçar-se-á, em primeiro lugar, por resolver o problema, procurando todos os meios possíveis para satisfazer as suas necessidades. Se o problema ainda não puder ser resolvido pela utilização desses meios, a administração junto da qual foi procurado o acordo deve esforçar-se, em toda a medida do possível, por superar as dificuldades e dará as razões técnicas do desacordo se lhe forem pedidas pela administração que procura o acordo.

4.3.16. Se não for alcançado qualquer acordo entre as administrações interessadas, a Comissão procederá a qualquer estudo que essas administrações lhe possa pedir, informá-las-á do resultado desse estudo e apresentar-lhes-á as recomendações que possa formular para resolver o problema.

4.3.17. Em qualquer fase do procedimento descrito ou antes de aplicar esse procedimento, qualquer administração pode pedir a ajuda da Comissão, designadamente na procura do acordo de uma outra administração.

4.3.18. Aplicam-se as disposições pertinentes do artigo 5 do presente apêndice quando da notificação das consignações de frequência à Comissão.

4.4. *Anulação de uma consignação de frequência.*

Quando uma consignação de frequência em conformidade com o plano for definitivamente abandonada, como consequência ou não de uma modificação, a administração interessada informará disso imediatamente a Comissão, e esta publicará essa informação numa secção especial da sua circular semanal.

4.5. *Exemplar de referência do plano.*

4.5.1. A Comissão mantém em dia um exemplar de referência do plano tendo em conta a aplicação do procedimento descrito no presente artigo. A Comissão preparará um documento indicando as emendas a efectuar no plano em consequência das modificações feitas em conformidade com o procedimento do presente artigo.

4.4.2. O secretário-geral é informado pela Comissão de qualquer modificação efectuada no plano e publica, sob forma apropriada, numa versão actualizada do plano quando as circunstâncias o justificarem.

ARTIGO 5

Notificação, exame e inscrição no ficheiro de referência das consignações de frequência às estações espaciais do serviço de radiodifusão por satélite nas Regiões 1 e 3

5.1. *Notificação.*

5.1.1. Qualquer administração que se proponha pôr em serviço uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite deve notificar essa consignação de frequência à Comissão. A administração notificadora aplica, para isso, as disposições seguintes:

5.1.2. Qualquer consignação de frequência notificada em execução do § 5.1.1 deve ser objecto de uma ficha individual de notificação elaborada pela forma prescrita no anexo 2, cujas diversas secções especificam as características fundamentais a fornecer consoante o caso. Recomenda-se que a administração notificadora comunique à Comissão qualquer outra informação que julgue útil.

5.1.3. A ficha de notificação deve ser recebida pela Comissão no máximo de 3 anos antes da data de entrada em serviço da consignação de frequência em causa e, em todo o caso, deve ser recebida o mais tardar 90 dias antes dessa data (1).

5.1.4. Qualquer consignação de frequência cuja notificação chegue à Comissão depois de expirado o prazo prescrito no § 5.1.3 levará, quando houver lugar à sua inscrição no ficheiro de referência, uma observação a indicar que a ficha de notificação não está em conformidade, com as disposições do § 5.1.3.

5.1.5. Quando a Comissão receber uma ficha de notificação, elaborada em execução do § 5.1.1, que não contenha as características fundamentais especificiadas no anexo 2, devolve-a imediatamente pelo correio aéreo à administração de origem, acompanhada dos motivos dessa devolução.

5.1.6. Quando a Comissão receber uma ficha de notificação completa, inclui as informações que ela contém, com a data de recepção, na sua circular semanal. Esta circular contém as informações que figuram em todas as fichas de notificação completas recebidas pela Comissão desde a publicação da circular precedente.

5.1.7. A circular será considerada pela administração notificadora como aviso de recepção pela Comissão de uma ficha de notificação completa.

5.1.8. A Comissão examina as fichas de notificação completas pela ordem em que as recebe e não pode adiar a conclusão a menos que lhe faltem informações suficientes para tomar uma decisão sobre o assunto. Além disso, a Comissão não resolverá sobre uma ficha de notificação que tenha relações técnicas com uma ficha recebida anteriormente e ainda em exame antes de tomar uma decisão no que respeita a esta última.

5.2. *Exame e inscrição.*

5.2.1. A Comissão examina cada ficha de notificação:

a) No que respeita à sua conformidade com as cláusulas da Convenção, com as disposições pertinentes do Regulamento das Radiocomunicações e do anexo 1 ao presente apêndice (com excepção das que se relacionam com a conformidade com o plano);

b) No que respeita à sua conformidade com o plano.

5.2.2. Quando a Comissão formular uma conclusão favorável relativamente ao § 5.2.1, a consignação de frequência notificada pela administração é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d. No que respeita às relações entre as administrações, todas as consignações de frequência postas em serviço em conformidade com o plano e inscritas no ficheiro de referência serão consideradas como beneficiando do mesmo estatuto, seja qual for a data inscrita na coluna 2d relativamente a cada uma delas.

5.2.3. Sempre que a Comissão inscreve uma consignação de frequência no ficheiro de referência, indicará a sua conclusão utilizando um símbolo colocado na coluna 13a.

5.2.4. Quando a Comissão formular uma conclusão desfavorável relativamente ao § 5.2.1, a ficha de notificação é devolvida imediatamente pelo correio aéreo à administração notificadora com uma exposição das razões que motivam a conclusão da Comissão e com as sugestões que ela possa fazer para se chegar a uma solução satisfatória do problema.

5.2.5. Quando a administração notificadora apresentar de novo a sua ficha de notificação e se a conclusão da Comissão passar a ser favorável relativamente ao § 5.2.1, a ficha é tratada como se indica no § 5.2.2.

---

(1) A administração notificadora inicia, se for caso disso, o procedimento relativo às modificações no plano com a antecedência necessária para que seja respeitada essa data limite.

5.2.6. Se a administração apresentar de novo a sua ficha não modificada insistindo em novo exame dessa ficha e se a conclusão da Comissão relativamente ao § 5.2.1 continuar desfavorável, a ficha de notificação é devolvida à administração notificadora, em conformidade com o § 5.2.4. Neste caso, a administração notificadora compromete-se a não pôr em serviço a consignação de frequência enquanto não for satisfeita a condição especificada no § 5.2.5. Nos termos do artigo 4, as administrações podem igualmente chegar a um acordo para um período determinado. Neste caso, o acordo é notificado, à Comissão e a consignação de frequência é inscrita no ficheiro de referência com uma nota a indicar, que é válida apenas para o período especificado. A administração notificadora que utilize a consignação de frequência durante o período assim determinado não deverá ulteriormente servir-se dessa utilização como pretexto para manter a consignação em serviço no fim desse período se não obtiver autorização da ou das administrações interessadas.

5.2.7. Se a consignação de frequência notificada antes da sua entrada em serviço em conformidade com as disposições do § 5.1.3 for objecto de uma conclusão favorável da Comissão relativamente às disposições do § 5.2.1, é inscrita provisoriamente no ficheiro de referida com um símbolo especial na coluna «Observações» a indicar o carácter provisório dessa inscrição.

5.2.8. Quando a Comissão receber a confirmação da entrada em serviço da consignação de frequência, suprime o símbolo no ficheiro de referência.

5.2.9. A data a inscrever na coluna 2c será a da entrada em serviço notificada pela administração interessada. É dada somente a título de informação.

5.3. *Anulação das inscrições do ficheiro de referência.*

5.3.1. Se a administração não tiver confirmado a entrada em serviço de uma consignação de frequência, como previsto no § 5.2.8, a Comissão efectuará um inquérito junto dessa administração não antes de 6 meses após a expiração do prazo indicado no § 5.1.3. Quando receber as informações pertinentes, a Comissão modifica a data de entrada em serviço ou anula a inscrição.

5.3.2. Se a utilização de uma consignação de frequência inscrita no ficheiro de referência vier a ser abandonada definitivamente, a administração deve informar do facto a Comissão no prazo de 90 dias, após o que é anulada a inscrição no ficheiro de referência.

ARTIGO 6

Coordenação, notificação e inscrição no ficheiro de referência internacional das frequências de consignações de frequência a estações de Terra que afectam consignações de frequência a estações de radiodifusão por satélite nas faixas de 11,7-12,2 GHz (nas Regiões 2 e 3) e de 11,7-12,5 GHz (na Região 1) (1) (2).

SECÇÃO I

Procedimento de coordenação a aplicar

6.1.1. Antes de notificar a Comissão de uma consignação de frequência a uma estação de emissão de Terra, uma administração deve iniciar a coordenação com qualquer outra administração que tenha uma consignação de frequência a uma estação de radiodifusão por satélite de acordo com o plano se:

As larguras de faixa necessárias das duas emissões se sobrepõem; e

Se a densidade de fluxo de potência que produziria a estação de emissão de Terra em projecto excedesse o valor calculado em conformidade com o anexo 3 num ou vários pontos situados no limite da zona de serviço compreendida na zona de cobertura da estação de radiodifusão por satélite.

6.1.2. Com vista a essa coordenação, a administração de que depende a estação de Terra envia às administrações interessadas, pelas vias mais rápidas, um diagrama de escala conveniente a indicar a localização da estação de Terra, e comunica-lhes todos os outros dados relativos à consignação de frequência em projecto, assim como a data aproximada prevista para a entrada em serviço da estação.

6.1.3. Qualquer administração junto da qual seja procurada a coordenação acusa imediatamente, por telegrama, a recepção dos dados relativos à coordenação. Se a administração que procura a coordenação não receber aviso de recepção no prazo de 15 dias a partir do envio dos dados relativos à coordenação, pode enviar um telegrama a pedir esse aviso de recepção, telegrama a que deve responder a administração que o recebe. Após a recepção dos dados relativos à coordenação, a administração junto da qual é procurada a coordenação estuda rapidamente a questão no que respeita ás interferências (3) que seriam causadas às suas consignações conformes com o plano. Depois, no prazo total de 60 dias a partir do envio dos dados relativos à coordenação, esta administração ou comunica à administração que procura a coordenação o seu acordo sobre a consignação em projecto ou então, em caso de impossibilidade, indica-lhe os motivos do seu desacordo e apresenta-lhe as sugestões que possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema.

---

(1) Estes procedimentos não dispensam a aplicação dos procedimentos prescritos para as estações de Terra no artigo 12 do Regulamento das Radiocomunicações, quando estejam implicadas estações diferentes das do serviço de radiodifusão por satélite.

(2) Os procedimentos de coordenação, de notificação e de inscrição das consignações às estações de Terra que afectam estações de radiodifusão por satélite na Região 2 estação estabelecidos no artigo 12 do Regulamento das Radiocomunicações, excepto que a necessidade da coordenação mencionada nos n.os **1148** a **1154** do Regulamento das Radiocomunicações é determinada de acordo com as regras do anexo 3.

(3) Os critérios a utilizar para avaliar o nível de interferência baseiam-se nos pareceres pertinentes da CCIR ou, na falta de tais pareceres, são objecto de acordo entre as administrações interessadas.

6.1.4. Não é necessária qualquer coordenação quando uma administração se propuser modificar as características de uma consignação existente de tal modo que com isso não aumente o nível das interferências causadas aos serviços que devem ser assegurados pelas estações do serviço de radiodifusão por satélite de outras administrações cujas consignações estejam conformes com o plano.

6.1.5. A administração que procura a coordenação pode pedir à Comissão que procure efectuar essa coordenação nas circunstâncias seguintes:

a) Uma administração junto da qual foi procurada a coordenação não envia aviso de recepção, nos termos do § 6.1.3, no prazo de 30 dias a partir da data do envio dos dados relativos à coordenação;
b) Uma administração que enviou um aviso de recepção em conformidade com as disposições do § 6.1.3 não comunica a sua decisão no prazo de 90 dias a partir do envio dos dados relativos à coordenação;
c) A administração que procura a coordenação e uma administração junto da qual foi procurada a coordenação estão em desacordo no que respeita ao nível de interferência aceitável;
d) Ou ainda a coordenação não é possível por qualquer razão.

Ao apresentar o seu pedido à Comissão, a administração interessada comunicar-lhe-á as informações necessárias que lhe permitam procurar efectuar a coordenação.

6.1.6. A administração que procura a coordenação, ou qualquer administração junto da qual a coordenação tenha sido procurada, ou então a Comissão, podem pedir as informações de que julguem precisar para avaliar o nível das interferências causadas aos serviços interessados.

6.1.7. Quando a Comissão receber um pedido nos termos da alínea *a*) do § 6.1.5, envia sem demora um telegrama à administração interessada a pedir-lhe a recepção imediatamente.

6.1.8. Quando a Comissão receber um aviso de recepção em seguimento da medida que tomou nos termos do § 6.1.7 ou quando a Comissão receber um pedido nos termos da alínea *b*) do § 6.1.5, envia sem demora um telegrama à administração em causa pedindo-lhe que tome rapidamente uma decisão sobre o assunto.

6.1.9. Quando a Comissão receber um pedido nos termos da alínea *d*) do § 6.1.5, procurará efectuar a coordenação em conformidade com as disposições do § 6.1.2. Quando a Comissão não receber aviso de recepção do seu pedido de coordenação no prazo especificado no § 6.1.3, procederá em conformidade com as disposições do § 6.1.7.

6.1.10. Quando uma administração não responder no prazo de 30 dias a partir do envio do telegrama que a Comissão lhe enviou nos termos do § 6.1.7 pedindo-lhe um aviso de recepção, ou quando uma administração não comunicar a sua decisão sobre o assunto no prazo de 60 dias a contar do envio do telegrama da Comissão nos termos do § 6.1.8, considera-se que a administração junto da qual a coordenação é pedida se compromete a não formular queixa relativa às interferências prejudiciais que venham a ser causadas pela estação de Terra em via de coordenação ao serviço assegurado ou que deva ser assegurado pela sua sua estação de radiodifusão por satélite.

6.1.11. Se for caso disso, a Comissão avalia, de acordo com o procedimento especificado no § 6.1.5, o nível de interferência. Em qualquer caso, comunica às administrações interessadas os resultados obtidos.

6.1.12. No caso de desacordo persistente entre a administração que procura a coordenação e uma administração junto da qual é procurada a coordenação, as administrações interessadas podem encarar a possibilidade de concluir um acordo sobre a utilização, durante um dado período, da consignação de frequência proposta.

SECÇÃO II

Procedimento de notificação das consignações de frequência

6.2.1. Qualquer consignação de frequência a uma estação fixa, terrestre ou de radiodifusão deve ser notificada à Comissão Internacional do Registo de Frequências se a utilização em questão for susceptível de provocar interferências prejudiciais ao serviço assegurado ou que deva ser assegurado por uma estação de radiodifusão por satélite de qualquer outra administração, ou se se desejar obter o reconhecimento internacional da utilização dessa frequência (1).

6.2.2. Essa consignação de frequência deve ser objecto de uma ficha individual de notificação, elaborada pela forma prescrita no apêndice 1 do Regulamento das Radiocomunicações, cuja secção A especifica as características fundamentais a fornecer consoante o caso. Recomenda-se que a administração notificadora comunique igualmente à Comissão as outras informações indicadas nesse apêndice, assim como qualquer outra informação que possa julgar útil.

6.2.3. Cada ficha de notificação deve, na medida do possível, chegar à Comissão antes da data de entrada em serviço da consignação de frequência em causa. Qualquer ficha elaborada em conformidade com as disposições do § 6.2.2 deve ser recebida pela Comissão com uma antecipação de 3 anos no máximo e de 90 dias no mínimo em relação à data de entrada em serviço da consignação de frequência em causa.

6.2.4. Qualquer consignação de frequência cuja notificação seja recebida pela Comissão menos de 90 dias antes da data notificada de entrada em serviço leva, quando houver lugar à sua inscrição no ficheiro de referência, uma observação a indicar que a ficha de notificação não está em conformidade com as disposições do § 6.2.3.

---

(1) Chama-se especialmente a atenção das administrações para a aplicação das disposições da secção I do presente artigo.

Secção III

Procedimento para o exame das fichas de notificação e a inscrição das consignações de frequência no ficheiro de referência

6.3.1. Qualquer que seja o meio de comunicação, inclusive o telégrafo, pelo qual seja transmitida uma ficha à Comissão, esta será considerada completa quando contenha, pelo menos, as características fundamentais apropriadas, tais como estão especificadas na secção A do apêndice 1 do Regulamento das Radiocomunicações.

6.3.2. A Comissão examina as fichas de notificação completas pela ordem em que as recebe.

6.3.3. Quando a Comissão receber uma ficha de notificação incompleta, devolve-a imediatamente pelo correio aéreo à administração de origem, indicando os motivos dessa devolução.

6.3.4. Quando a Comissão receber uma ficha de notificação completa, inclui as informações que ela contém, com a data de recepção, na sua circular semanal. Esta circular contém as informações que figuram em todas as fichas de notificação completas recebidas pela Comissão desde a publicação da circular precedente.

6.3.5. A circular será considerada pela administração notificadora como aviso de recepção pela Comissão de uma ficha de notificação completa.

6.3.6. Cada ficha de notificação completa é examinada pela Comissão pela ordem especificada no § 6.3.2. A Comissão não pode adiar a conclusão, a menos que lhe faltem informações suficientes para tomar uma decisão sobre o assunto. Além disso, a Comissão não resolverá sobre uma ficha de notificação que tenha relações técnicas com uma ficha recebida anteriormente e ainda em exame antes de tomar uma decisão no que respeita a esta última.

6.3.7. A Comissão examina cada ficha de notificação:

6.3.8. — *a*) Sob o ponto de vista da sua conformidade com as cláusulas da Convenção, as cláusulas pertinentes do Regulamento das Radiocomunicações e as cláusulas do presente apêndice (com excepção das relativas ao procedimento de coordenação e à probabilidade de interferências prejudiciais).

6.3.9. — *b*) Sob o ponto de vista da sua conformidade com as disposições do § 6.1.1, as quais dizem respeito à cooperação da utilização da consignação de frequência com as outras administrações interessadas.

6.3.10. — *c*) Se for caso disso, sob o ponto de vista da probabilidade de interferência prejudicial em detrimento de uma estação cuja consignação de frequência com o plano.

6.3.11. Segundo as conclusões a que a Comissão chegar na sequência do exame previsto nos §§ 6.3.8, 6.3.9 e 6.3.10, o procedimento prossegue como a seguir se indica:

6.3.12. *Conclusão desfavorável relativamente ao § 6.3.8.*

6.3.13. Quando a ficha incluir uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações, é examinada imediatamente sob o ponto de vista dos §§ 6.3.9 e 6.3.10.

6.3.14. Se a conclusão for favorável relativamente aos §§ 6.3.9 ou 6.3.10, consoante o caso, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inscreve-se na coluna 2d.

6.3.15. Se a conclusão for desfavorável relativamente aos §§ 6.3.9 ou 6.3.10, consoante o caso, a ficha é devolvida imediatamente pelo correio aéreo à administração notificadora com a exposição das razões que motivam a conclusão da Comissão. Nesse caso, a administração notificadora compromete-se a não utilizar a consignação de frequência até que possa ser preenchida a condição definida no § 6.3.14. Mas as administrações interessadas podem encarar a possibilidade de concluir um acordo sobre a utilização, durante um dado período, da consignação de frequência proposta.

6.3.16. Quando a ficha não incluir qualquer referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações, é devolvida imediatamente, por correio aéreo, à administração notificadora com a exposição das razões que motivam a conclusão da Comissão e com as sugestões que possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema.

6.3.17. Se a administração notificadora apresentar de novo a sua ficha não modificada, esta é tratada segundo as disposições do § 6.3.16.

6.3.18. Se a administração notificadora apresentar de novo a sua ficha com uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações, a ficha de notificação é tratada de acordo com as disposições dos §§ 6.3.13 e 6.3.14 ou 6.3.15, consoante o caso.

6.3.19. Se a administração notificadora apresentar de novo a sua ficha com modificações tais que, após novo exame, a conclusão da Comissão passe a ser favorável relativamente ao § 6.3.8, a ficha de notificação é tratada segundo as disposições dos §§ 6.3.20 a 6.3.32. Se ulteriormente for necessário inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo é inscrita na coluna 2d.

6.3.20. *Conclusão favorável relativamente ao § 6.3.8.*

6.3.12. Quando a Comissão concluir que o procedimento de coordenação de que trata o § 6.3.9 foi aplicado com êxito junto de todas as administrações cujos serviços de radiodifusão por satélite podem ser desfavoravelmente influenciados, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

6.3.22. Quando a Comissão concluir que o procedimento de que trata o § 6.3.9 não foi aplicado e se a administração notificadora lhe pedir que efectue a coordenação pretendida, a Comissão toma as medidas necessárias para esse fim e comunica às administrações interessados os resultados obtidos. Se as tentativas da Comissão para levar a bom termo a coordenação tiverem êxito, a ficha de notificação é tratada em conformidade com as disposições do § 6.3.21. Se as tentativas da Comissão não tiverem êxito, examina a ficha de notificação sob o ponto de vista do § 6.3.10.

6.3.23. Quando a Comissão concluir que o procedimento de coordenação de que trata o § 6.3.9 não foi aplicado e se a administração notificadora não lhe pedir que efectue a coordenação pretendida, a ficha de notificação é devolvida imediatamente pelo correio aéreo à administração com uma exposição das razões que motivam essa devolução e com as sugestões que a Comissão possa fazer, se for o caso disso, para chegar a uma solução satisfatória do problema.

6.3.24. Quando a administração notificadora apresente de novo a sua ficha de notificação e se a Comissão concluir que o procedimento de coordenação de que trata o § 6.3.9 foi aplicado com êxito de todas as administrações cujos serviços de radiodifusão por satélite podem ser desfavoravelmente influenciados, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inicial é inscrita na coluna 2d. A data de recepção pela Comissão da ficha de notificação apresentada de novo é indicada na coluna «Observações».

6.3.25. Quando a administração notificadora apresentar de novo a sua ficha de notificação pedindo à Comissão que efectue a coordenação pretendida, a ficha de notificação é tratada em conformidade com as disposições do § 6.3.22. Se ulteriormente for caso de inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo é indicada na coluna «Observações».

6.3.26. Quando a administração notificadora apresentar de novo a sua ficha de notificação declarando que tentou, sem êxito, efectuar a coordenação, a Comissão examina a ficha relativamente às disposições do § 6.3.10. Se ulteriormente for caso de inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo é indicada na coluna «Observações».

6.3.27. *Conclusão favorável relativamente aos §§ 6.3.8 e 6.3.10.*

6.3.28. A consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

6.3.29. *Conclusão favorável relativamente ao § 6.3.8, mas desfavorável relativamente ao § 6.3.10.*

6.3.30. A ficha de notificação é devolvida imediatamente pelo correio aéreo à administração de origem com uma exposição das razões que motivam a conclusão da Comissão e com as sugestões que esta possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema.

6.3.31. Se a administração notificadora apresentar de novo a sua ficha com modificações que, após novo exame, motivem da parte da Comissão uma conclusão favorável relativamente ao § 6.3.10, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação (inicial) inscreve-se na coluna 2d. A data de recepção pela Comissão da ficha de notificação apresentada de novo é indicada na coluna «Observações».

6.3.32. No caso em que a administração notificadora apresente de novo a sua ficha de notificação, quer não modificada, quer com modificações cujo efeito seja diminuir a probabilidade de interferências prejudiciais mas em proporções insuficientes para permitir a aplicação das disposições do § 6.3.31, e em que essa administração insista por novo exame da ficha de notificação, mas em que as conclusões da Comissão se mantenham, a ficha de notificação é novamente devolvida à administração notificadora, em conformidade com o § 6.3.30. Neste caso, a administração notificadora compromete-se a não utilizar a consignação de frequência proposta até que possa ser preenchida a condição definida no § 6.3.31. Mas as administrações interessadas podem encarar a possibilidade de concluir um acordo sobre a utilização, durante um período especificado, da consignação de frequência proposta. Neste caso, a Comissão é avisada do acordo e a consignação de frequência inscreve-se no ficheiro de referência, acompanhada de uma nota indicando que a sua validade não vai além do período especificado. A administração notificadora que utiliza a consignação de frequência durante um período especificado não deverá ulteriormente servir-se dessa utilização como pretexto para manter a consignação em serviço no fim desse período, se não obtiver autorização da ou das administrações interessadas.

6.3.33. *Modificações das características fundamentais das consignações já inscritas no ficheiro de referência.*

6.3.34. Qualquer notificação de modificação das características fundamentais de uma consignação já inscrita no ficheiro de referência, tais como definidas no apêndice 1 do Regulamento das Radiocomunicações (exceptuando, todavia, as que figuram nas colunas 3 e 4a do ficheiro de referência), é examinada pela Comissão de acordo com as disposições dos §§ 6.3.8 e 6.3.9 e, se for caso disso, do § 6.3.10, e aplicam-se as disposições dos §§ 6.3.12 a 6.3.32. Sempre que seja necessário inscrever a modificação no ficheiro de referência, modifica-se a consignação inicial conforme a notificação.

6.3.35. Todavia, no caso de uma modificação das características fundamentais de uma consignação em conformidade com as disposições do § 6.3.8, em que a Comissão formule uma conclusão favorável relativamente ao § 6.3.9 e relativamente ao § 6.3.10, quando se apliquem as disposições deste, ou conclua que essa modificação não aumenta a probabilidade de interferências prejudiciais em detrimento de consignações de frequência já inscritas no ficheiro de referência, a consignação de frequência modificada conserva a data inicialmente inscrita na coluna 2d. Além disso, indica-se na coluna «Observações» a data de recepção pela Comissão da ficha de notificação relativa à modificação.

6.3.36. Na aplicação das disposições da presente secção, será considerada nova ficha de notificação toda aquela que seja apresentada de novo à Comissão e que seja recebida por esta mais de 2 anos após a data em que devolva a ficha à administração notificadora.

6.3.37. *Inscrição das consignações de frequência notificadas antes da sua entrada em serviço.*

6.3.38. Se uma consignação de frequência notificada antes da sua entrada em serviço for objecto de uma conclusão favorável formulada pela Comissão relativamente aos §§ 6.3.8 e 6.3.9 e, se for caso disso, 6.3.10, é inscrita provisoriamente no ficheiro de referência com um símbolo especial, na coluna de «Observações», a indicar o carácter provisório dessa inscrição.

6.3.39. A Comissão suprime o símbolo especial inserido na coluna «Observação» se, no prazo de 30 dias a partir da data prevista para a entrada em serviço, receber da administração notificadora a confirmação da data da entrada em serviço. No caso de, na sequência de um pedido recebido da administração notificadora antes de expirado este prazo de 30 dias, a Comissão concluir que circunstâncias especiais justificam um prazo suplementar, este não deverá em nenhum caso ir além de 150 dias.

6.3.40. Se a utilização, por uma estação de Terra, de uma consignação não em conformidade com as disposições anteriores causar qualquer interferência prejudicial à recepção das emissões de uma estação espacial do serviço de radiodifusão por satélite utilizando uma consignação em conformidade com o plano, a administração de que depende a estação de Terra deve, uma vez avisada, tomar imediatamente medidas para eliminar a referida interferência.

ARTIGO 7

Procedimentos preliminares, notificação e inscrição no ficheiro de referência internacional das frequências das consignações de frequência às estações do serviço fixo por satélite na faixa de 11,7-12,2 GHz (na Região 2) quando estejam implicadas consignações de frequência a estações de radiodifusão por satélite conformes com o plano (1).

SECÇÃO I

Procedimento para publicação antecipada de informações relativas aos sistemas do serviço fixo por satélite em projecto

7.1.1. Qualquer administração que se proponha estabelecer um sistema do serviço fixo por satélite, antes de iniciar, se for caso disso, o procedimento descrito no § 7.2.1, envia à Comissão Internacional do Registo de Frequências, no máximo 5 anos antes da entrada em serviço de cada rede de satélite do sistema em projecto, as informações indicadas no apêndice 4 ao Regulamento das Radiocomunicações.

7.1.2. Qualquer modificação às informações comunicadas em conformidade com as disposições do § 7.1.1 relativas a um sistema de satélites em projecto é igualmente comunicada à Comissão a partir do momento em que esteja disponível.

7.1.3. A Comissão publica as informações de que tratam os §§ 7.1.1 e 7.1.2 numa secção especial da sua circular semanal e, quando a circular semanal contiver informações desta natureza, avisa do facto as administrações por telegrama-circular.

7.1.4. Se, após ter estudado as informações publicadas nos termos do § 7.1.3, qualquer administração for de parecer que poderão ser causadas interferências inaceitáveis às suas consignações de frequência conformes com o plano, comunica as suas observações à administração interessada no prazo de 90 dias a contar da data da circular semanal na qual foram publicadas as informações indicadas no apêndice 4 do Regulamento das Radiocomunicações. Envia igualmente à Comissão uma cópia dessas observações. Se a administração interessada não receber de outra administração qualquer observação desta natureza durante o período acima mencionado, pode admitir que esta última não tem objecção de maior a formular contra a ou as redes em projecto do sistema do serviço fixo por satélite relativamente às quais foram publicadas informações.

7.1.5. Uma administração que receba observações formuladas nos termos do § 7.1.4 procurará resolver as dificuldades de qualquer natureza que se lhe apresentem, sem considerar a possibilidade de serem feitas modificações nas estações do serviço de radiodifusão por satélite dependentes de outras administrações. Se para isso não dispuser de meios, a administração poderá então dirigir-se às outras administrações em causa, a fim de resolver essas dificuldades sob reserva de que as modificações do plano que daí possam resultar sejam conformes com o artigo 4.

7.1.6. As administrações podem pedir o auxílio da Comissão nas suas tentativas para resolver as dificuldades mencionadas no parágrafo anterior.

7.1.7. Em observância das disposições dos §§ 7.1.5 e 7.1.6, uma administração responsável por um sistema do serviço fixo por satélite em projecto diferirá, se for necessário, o início do procedimento de coordenação definido no § 7.2.1 ou, se este procedimento não for aplicável, o envio das suas fichas de notificação à Comissão, até uma data 150 dias posterior à data da circular semanal que contém as informações indicadas no apêndice 4 do Regulamento das Radiocomunicações e relativas à rede de satélite pertinente. Todavia, relativamente às administrações com as quais foram resolvidas as dificuldades ou que responderam favoravelmente, o procedimento de coordenação poderá, se conveniente, ser iniciado antes de expirado o prazo de 150 dias atrás indicado.

7.1.8. Qualquer administração em nome da qual, em conformidade com as disposições dos §§ 7.1.1 a 7.1.3, tenham sido publicadas informações relativas às redes em projecto do seu sistema do serviço fixo por satélite, comunicará periodicamente à Comissão se recebeu ou não observações e informá-la-á do estado de adiantamento das negociações, com outras administrações, para a solução de eventuais dificuldades. A Comissão publicará essas informações numa secção especial da sua circular semanal e, quando a circular semanal contiver informações dessa natureza, avisará do facto as administrações por telegrama-circular.

SECÇÃO II

Procedimentos de coordenação a aplicar em certos casos

7.2.1. Antes de notificar à Comissão ou de pôr em serviço uma consignação de frequência a uma estação espacial do serviço fixo por satélite, uma administração deve procurar o acordo de qualquer outra administração que tenha uma consignação de frequência em conformidade com o plano se:

Qualquer porção da largura de faixa necessária prevista para a estação espacial do serviço fixo por satélite se sobrepuser, pelo menos parcialmente, à largura de faixa necessária associada à consignação da estação de radiodifusão por satélite; e

A densidade de fluxo de potência, que seria produzida pela estação espacial do serviço fixo por satélite, exceder o valor específico no anexo 4.

Para isso, a administração que procura a coordenação envia a qualquer outra administração visada no parágrafo anterior as informações indicadas no apêndice 3 do Regulamento das Radiocomunicações.

---

(1) Estas disposições não dispensam a aplicação dos procedimentos prescritos pelos artigos 11 e 13 do Regulamento das Radiocomunicações quando estejam implicadas estações diferentes das do serviço de radiodifusão por satélite que tenham consignações em conformidade com o plano.

7.2.2. Não é necessário qualquer acordo suplementar quando uma administração se propuser modificar as características de uma consignação existente de tal modo que as condições do § 7.2.1 anterior não obriguem à procura de um acordo relativamente ao serviço de radiodifusão por satélite de uma outra administração ou quando essa consignação tenha já sido objecto de um acordo e a sua modificação não cause interferência eventual que exceda os valores convencionados nesse acordo.

7.2.3. Ao mesmo tempo que procura a coordenação em conformidade com o § 7.2.1, a administração envia à Comissão uma cópia do pedido de coordenação, acompanhada das informações indicadas no apêndice 3 do Regulamento das Radiocomunicações, assim como o nome da ou das administrações cujo acordo procura. Baseando-se no anexo 4, a Comissão determina quais são as consignações de frequência conformes com o plano consideradas como sendo afectadas. A Comissão junta o nome dessas administrações às informações comunicadas pela administração que procura a coordenação e publica essas informações numa secção especial da sua circular semanal, com uma referência à circular semanal em que, nos termos da secção I do presente artigo, foram publicadas as informações relativas ao sistema de satélites. Quando a circular semanal contiver informações desta natureza, a Comissão avisa do facto as administrações por telegrama-circular.

7.2.4. Qualquer administração que considere que deveria ter sido incluída no procedimento de que trata o § 7.2.1 tem o direito para participar nesse procedimento.

7.2.5. Qualquer administração junto da qual se procure acordo nos termos do § 7.2.1, acusa imediatamente a recepção, por telegrama, dos dados relativos à coordenação. Se a administração que procura a coordenação não receber aviso de recepção no prazo de 30 dias a contar da data da circular semanal em que foram publicadas as informações pertinentes em conformidade com as disposições do § 7.2.3, envia um telegrama a pedir esse aviso de recepção, telegrama a que a administração que o recebe responde num novo prazo de 30 dias. Ao receber informações relativas à coordenação, a administração junto da qual é procurado o acordo, tendo em conta a data prevista de entrada ao serviço da consignação para a qual é procurada a coordenação, estuda rapidamente a questão relativamente às interferências (1) que seriam causadas ao serviço assegurado por aquelas das suas estações para as quais é procurado um acordo nos termos do § 7.2.1. Depois, no prazo, de 90 dias a partir da data da circular semanal pertinente, comunica o seu acordo à administração que procura a coordenação. No caso contrário, envia, dentro do mesmo prazo, à administração que procura a coordenação informações técnicas a indicar as razões que motivam o seu desacordo e apresenta-lhe as sugestões que possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema. É enviada igualmente à Comissão uma cópia dessas observações.

7.2.6. A administração que procura a coordenação pode pedir à Comissão que tente efectuar essa coordenação, nas seguintes circunstâncias:

a) Uma administração junto da qual se procura o acordo nos termos do § 7.2.1 não envia aviso de recepção, nos termos do § 7.2.5, no prazo de 60 dias a contar da data da circular semanal em que foram publicadas as informações relativas ao pedido de coordenação;

b) Uma administração enviou um aviso de recepção nos termos do § 7.2.5, mas não comunica a sua decisão no prazo de 90 dias a contar da circular semanal pertinente;

c) A administração que procura a coordenação e a administração junto da qual é procurado o acordo não são do mesmo parecer relativamente ao nível de interferência aceitável; ou ainda

d) A coordenação não é possível por qualquer outra razão.

Ao apresentar o seu pedido à Comissão, a administração interessada comunica-lhe as informações necessárias que lhe permitam tentar efectuar a coordenação.

7.2.7. A administração que procura a coordenação, ou qualquer administração junto da qual é procurado o acordo, ou então a Comissão, pode pedir as informações suplementares de que julgue precisar para avaliar o nível das interferências causadas aos serviços interessados.

7.2.8. Quando a Comissão receber um pedido nos termos da alínea *a*) do § 7.2.6, envia sem demora um telegrama à administração junto da qual é procurado o acordo pedindo-lhe que acuse a recepção imediatamente.

7.2.9. Quando a Comissão receber um aviso de recepção na sequência da medida que tomou nos termos do § 7.2.8, ou quando a Comissão receber um pedido nos termos da alínea *b*) do § 7.2.6, envia sem demora um telegrama à administração junto da qual foi procurado o acordo pedindo-lhe que tome rapidamente uma decisão sobre a questão.

7.2.10. Quando a Comissão receber um pedido nos termos da alínea *d*) do § 7.2.6, procura efectuar a coordenação em conformidade com as disposições do § 7.2.1. A Comissão toma igualmente, se necessário, as medidas previstas no § 7.2.3. Quando a Comissão não receber, no prazo indicado no § 7.2.5, aviso de recepção ao seu pedido de coordenação, procede em conformidade com as disposições do § 7.2.8.

7.2.11. Quando uma administração não responda no prazo de 30 dias a contar do envio do telegrama que a Comissão lhe enviou nos termos do § 7.2.8, pedindo-lhe aviso de recepção, ou quando ela não comunique a sua decisão sobre o assunto no prazo de 30 dias a partir do envio do telegrama da Comissão nos termos do § 7.2.9, considera-se que a administração junto da qual foi procurado acordo se compromete:

a) A não formular queixa relativa a interferências prejudiciais que possam ser causadas ao serviço assegurado pelas suas estações de radiodifusão por satélite pela utilização da consignação de frequência para a qual foi procurada a coordenação;

b) A proceder de modo que as suas estações de radiodifusão por satélite não venham a causar interferências prejudiciais à utilização da consignação de frequência para a qual foi procurada a coordenação.

---

(1) Os critérios a utilizar para avaliar os níveis de interferência baseiam-se nas informações técnicas contidas no presente apêndice ou nos pareceres pertinentes da CCIR e são objecto de um acordo entre as administrações interessadas.

7.2.12. Quando necessário, a Comissão avalia, no quadro do procedimento especificado no § 7.2.6, o nível de interferência. Em qualquer caso, comunica às administrações interessadas os resultados obtidos.

7.2.13. Em caso de desacordo persistente entre a administração que procura a coordenação e a administração junto da qual foi procurado o acordo, a administração que procura a coordenação tem o direito de, 150 dias após a data em que pediu a coordenação, tendo em conta as disposições do § 7.3.4, enviar à Comissão a sua ficha de notificação relativa à consignação proposta, sob reserva de que tenha sido pedido o auxílio da Comissão. Em tais condições, a administração notificadora compromete-se a não pôr em serviço a sua consignação enquanto não puder ser preenchida a condição estipulada no § 7.4.11.2. Todavia, as administrações interessadas podem estudar a possibilidade de chegar a um acordo sobre o emprego da consignação proposta durante um período determinado.

SECÇÃO III

Notificação das consignações de frequência

7.3.1. Qualquer consignação de frequência a uma estação espacial do serviço fixo por satélite deve ser notificada à Comissão:

a) Se a utilização da frequência em questão for susceptível de provocar interferências prejudiciais a uma consignação de frequência conforme com o plano [1], pertencente a outra administração; ou ainda

b) Se se desejar obter o reconhecimento internacional oficial da utilizado dessa frequência.

7.3.2. Deverá fazer-se uma notificação análoga no caso de qualquer frequência destinada a ser utilizada na recepção por uma estação terrena, sempre que se apresente, pelo menos, uma das circunstâncias especificadas no n.º 7.3.1.

7.3.3. Qualquer consignação de frequência notificada em execução dos §§ 7.3.1 ou 7.3.2 deve ser objecto de uma ficha individual de notificação, elaborada pela forma prescrita no apêndice 3 ao Regulamento das Radiocomunicações, cujas diversas secções especificam as características fundamentais a fornecer consoante o caso. A administração notificadora comunica igualmente qualquer outra informação que considere útil.

7.3.4. Cada ficha de notificação deve ser recebida pela Comissão no máximo 3 anos antes da data da entrada em serviço da consignação de frequência em causa. Em todo o caso, deve ser recebida não mais tarde que 90 dias [2] antes dessa data.

7.3.5. Qualquer consignação de frequência a uma estação terrena ou espacial cuja notificação seja recebida pela Comissão depois de expirado o prazo necessário especificado no § 7.3.4 leva, quando for necessário inscrevê-la no ficheiro de referência, uma observação a indicar que a ficha de notificação não está em conformidade com as disposições do § 7.3.4.

SECÇÃO IV

Procedimento para o exame das fichas de notificação e a inscrição das consignações de frequência no ficheiro de referência

7.4.1. Quando a Comissão receber uma ficha de notificação que não contenha pelo menos as características fundamentais especificadas no apêndice 3 ao Regulamento das Radiocomunicações, devolve-a imediatamente, pelo correio aéreo, à administração de origem, acompanhada dos motivos dessa evolução.

7.4.2. Quando a Comissão receber uma ficha de notificação completa, inclui as informações que ela contém, com a data de recepção, na sua circular semanal; esta circular contém as informações que figuram em todas as fichas de notificação completas recebidas pela Comissão desde a publicação da circular precedente.

7.4.3. A circular será considerada, pela administração notificadora, como aviso de recepção pela Comissão de uma ficha de notificação completa.

7.4.4. A Comissão examina as fichas de notificação completas pela ordem em que as recebe. Não pode adiar a conclusão, a menos que lhe faltem informações suficientes para tomar uma decisão nesse sentido; além disso, a Comissão não resolverá sobre uma ficha de notificação que tenha relações técnicas com uma ficha recebida anteriormente e ainda em exame antes de tomar uma decisão no que respeita a esta última.

7.4.5. A Comissão examina cada ficha de notificação:

7.4.5.1. Sob o ponto de vista da sua conformidade com as cláusulas da Convenção, as disposições pertinentes do Regulamento das Radiocomunicações e as disposições do presente apêndice (com excepção das relativas ao procedimento de coordenação e à probabilidade de interferências prejudiciais).

7.4.5.2. Se for caso disso, sob o ponto de vista da sua conformidade com as disposições do § 7.2.1, as quais dizem respeito à coordenação da utilização da consignação de frequência com as outras administrações interessadas que tenham uma consignação em conformidade com o plano.

7.4.5.3. Se for caso disso, sob o ponto de vista da probabilidade de interferência prejudicial em detrimento do serviço assegurado ou que deva ser assegurado por uma estação de radiodifusão por satélite cuja consignação de frequência está em conformidade com o plano.

---

[1] Chama-se especialmente a atenção das administrações para a aplicação do § 7.2.1 anterior.

[2] A administração notificadora inicia, se for caso disso, o ou os procedimentos de coordenação com a antecedência necessária para que seja respeitada esta data limite.

7.4.6. Segundo as conclusões a que a Comissão chegar na sequência do exame previsto nos §§ 7.4.5.1, 7.4.5.2 e 7.4.5.3, consoante o caso, o procedimento prossegue como a seguir se indica:

7.4.7. *Conclusão favorável relativamente ao § 7.4.5.1, nos casos em que não sejam aplicáveis as disposições do § 7.4.5.2.*

7.4.7.1. A consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

7.4.8. *Conclusão desfavorável relativamente ao § 7.4.5.1.*

7.4.8.1. Quando a ficha incluir uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações e quando a conclusão for favorável relativamente aos §§ 7.4.5.2 e 7.4.5.3, consoante o caso, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

7.4.8.2. Quando a ficha incluir uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações e quando a conclusão for desfavorável relativamente aos §§ 7.4.5.2 ou 7.4.5.3, consoante o caso, a ficha é devolvida imediatamente pelo correio aéreo à administração notificadora com uma exposição das razões que motivam a conclusão da Comissão. Em tais condições, a administração notificadora compromete-se a não utilizar a consignação de frequência até que possa ser preenchida a condição especificada no § 7.4.8.1. Em conformidade com este artigo, o acordo das administrações interessadas pode igualmente obter-se por um período determinado. Neste caso o acordo será notificado a Comissão e a consignação de frequência será inscrita no ficheiro de referência com uma nota a indicar que é válida para o período especificado. A administração notificadora que utilize a consignação de frequência durante um período especificado não deverá ulteriormente servir-se dessa utilização como pretexto para manter a consignação em serviço depois desse período, se não obtiver autorização da ou das administrações interessadas. A data de recepção pela Comissão da ficha de notificação inicial é inscrita na coluna 2d.

7.4.8.3. Quando a ficha não comportar qualquer referência segundo a qual a estação funcionará em conformidade com as disposições do n.º 342 do Regulamento das Radiocomunicações, essa ficha é devolvida imediatamente, pelo correio aéreo, à administração notificadora com uma exposição das razões que motivam a conclusão da Comissão e com as sugestões que essa possa fazer, se for caso disso, para se chegar a uma solução satisfatória do problema.

7.4.8.4. Se a administração notificadora apresentar de nova a sua ficha não modificada, esta é tratada de acordo com as disposições do § 7.4.8.3. Se a administração notificadora apresentar de novo a sua ficha com uma referência segundo a qual a estação funcionará em conformidade com as disposições do n.º **342** do Regulamento das Radiocomunicações, a ficha de notificação é tratada de acordo com as disposições dos §§ 7.4.8.1 ou 7.4.8.2, consoante o caso. Se a ficha for apresentada de novo com modificações tais que, após novo exame, a conclusão da Comissão passe a ser favorável relativamente ao § 7.4.5.1, a ficha é tratada como uma nova ficha de notificação.

7.4.9. *Conclusão favorável relativamente ao § 7.4.5.1, nos casos em que são aplicáveis as disposições do § 7.4.5.2.*

7.4.9.1. Quando a Comissão concluir que os procedimentos de coordenação de que trata o § 7.4.5.2 foram aplicados com êxito relativamente a todas as administrações cujas consignações de frequência conformes com o plano podem ser desfavoravelmente influenciadas, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

7.4.9.2 Quando a Comissão concluir que o procedimento de coordenação de que trata o § 7.4.5.2 não foi aplicado e se a administração notificadora lhe pedir que efectue a coordenação pretendida, a Comissão toma as medidas necessárias para esse fim e comunica às administrações interessadas os resultados obtidos. Se as tentativas da Comissão para levar a bom termo a coordenação tiverem êxito, a ficha de notificação é tratada em conformidade com as disposições do § 7.4.9.1. Se não tiverem êxito as tentativas da Comissão esta examina a ficha de notificação sob o ponto de vista das disposições do § 7.4.5.3.

7.4.9.3. Quando a Comissão concluir que o procedimento de coordenação de que trata o § 7.4.5.2 não foi aplicado e se a administração notificadora lhe não pedir que efectue a coordenação pretendida, a ficha de notificação é enviada imediatamente pelo correio aéreo à administração notificadora com uma exposição das razões que motivam essa devolução e com as sugestões que a Comissão possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema.

7.4.9.4. Quando a administração notificadora apresentar de nova a sua ficha de notificação e se a Comissão concluir que o procedimento de coordenação de que trata o § 7.4.5.2 foi aplicado com êxito relativamente a todas as administrações cujas consignações conformes com o plano podem ser desfavoravelmente influenciadas, a consignação é inscrita de no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inicial é inscrita na coluna 2d. A data de recepção pela Comissão da ficha de notificação apresentada de novo indica-se na coluna «Observações».

7.4.9.5. Quando a administração notificadora apresentar de novo a sua ficha de notificação pedindo à Comissão que efectue a coordenação pretendida nos termos do § 7.2.1, a ficha de notificação é tratada em conformidade com as disposições do § 7.4.9.2. Se ulteriormente for necessário inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo indica-se na coluna «Observações».

7.4.9.6. Quando a administração notificadora apresentar de novo a sua ficha de notificação declarando que não teve êxito na tentativa para efectuar a coordenação, a Comissão informa do facto as administrações interessadas. A Comissão examina a ficha de notificação sob o ponto de vista das disposições do § 7.4.5.3. Se ulteriormente for necessário inscrever a consignação no ficheiro de referência, a data de recepção pela Comissão da ficha de notificação apresentada de novo indica-se na coluna «Observações».

7.4.10. *Conclusão favorável relativamente aos §§ 7.4.5.1 e 7.4.5.3.*

7.4.10.1. A consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d.

7.4.11. *Conclusão favorável relativamente ao § 7.4.5.1, mas desfavorável ao § 7.4.5.3.*

7.4.11.1. A ficha de notificação é devolvida imediatamente, pelo correio aéreo, à administração de origem, com uma exposição das razões que motivam a conclusão da Comissão e com as sugestões que esta possa fazer, se for caso disso, para chegar a uma solução satisfatória do problema.

7.4.11.2. Se a administração notificadora apresentar de novo a sua ficha com modificações que, após novo exame, motivem da parte da Comissão uma conclusão favorável relativamente ao § 7.4.5.3, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação inicial é inscrita na coluna 2d. A data de recepção pela Comissão da ficha de notificação apresentada de novo indica-se na coluna «Observações».

7.4.11.3. No caso em que a administração notificadora apresente de novo a sua ficha de notificação, quer não modificada, quer com modificações cujo efeito seja diminuir de interferências prejudiciais mas em proporções insuficientes para permitir a aplicação das disposições do § 7.4.11.2, e em que essa administração insista por novo exame da ficha de notificação mas em que as conclusões da Comissão se mantenham, a ficha de notificação deve ser novamente devolvida à administração notificadora, em conformidade com o § 7.4.11.1. Nessas condições, a administração notificadora compromete-se a não utilizar a consignação de frequência até que possa ser preenchida a condição definida no § 7.4.11.2. Mas as administrações interessadas podem encarar a possibilidade de concluir um acordo sobre a utilização, durante um período especificado, da consignação de frequência proposta. Neste caso, a IFRB será avisada do acordo e a consignação de frequência será inscrita no ficheiro de referência, acompanhada de uma nota na coluna «Observações» a indicar que a sua validade não vai além do período especificado. A administração que utilize a consignação de frequência durante o período especificado não deverá posteriormente servir-se dessa utilização como pretexto para manter a consignação em serviço depois desse período, se não obtiver autorização da ou das administrações interessadas. A data de recepção pela Comissão da ficha de notificação inicial é inscrita na coluna 2d.

7.4.12. *Modificações das características fundamentais das consignações já inscritas no ficheiro de referência.*

7.4.12.1. Qualquer notificação de modificação das características fundamentais de uma consignação do serviço fixo por satélite já inscrita no ficheiro de referência, tais como definidas no apêndice 3 ao Regulamento das Radiocomunicações (exceptuando, todavia, o nome da estação e o nome da localidade onde está situada), é examinada pela Comissão de acordo com as disposições do § 7.4.5.1, e, se for caso disso, dos §§ 7.4.5.2 e 7.4.5.3, e aplicam-se as disposições dos §§ 7.4.7 a 7.4.11.3, inclusive. Quando seja necessário inscrever a modificação no ficheiro de referência, é modificada em conformidade a consignação inicial.

7.4.12.2. Todavia, no caso de uma modificação das características fundamentais de uma consignação conforme as disposições do § 7.4.5.1, e em que a Comissão formule uma conclusão favorável relativamente aos §§ 7.4.5.2 e 7.4.5.3, se for caso disso, ou conclua que essa modificação não aumenta a probabilidade de interferência prejudiciais em detrimento de consignações de frequência conformes com o plano, a consignação de frequência modificada conserva a data inicialmente inscrita na coluna 2d. Além disso, indica-se na coluna «Observações» a data da recepção pela Comissão da ficha de notificação relativa à modificação.

7.4.12.3. Na aplicação das disposições da presente secção, será considerada nova ficha de notificação toda aquela que seja apresentada de novo à Comissão e recebida por esta mais de dois anos após a data em que devolveu a ficha à administração notificadora.

7.4.13. *Inscrição das consignações de frequência do serviço fixo por satélite notificadas antes da sua entrada em serviço.*

7.4.13.1. Se uma consignação de frequência notificada antes da sua entrada em serviço for objecto de conclusões favoráveis formuladas pela Comissão relativamente ao § 7.4.5.1 e, se for cado disso, aos §§ 7.4.5.2 e 7.4.5.3, ela inscrita provisoriamente no ficheiro de referência com um símbolo especial, na coluna «Observações», a indicar o carácter provisório dessa inscrição.

7.4.13.2. A Comissão suprime o símbolo especial inserido na coluna «Observações» se, no prazo de 30 dias a contar da data prevista para a entrada em serviço, receber da administração notificadora a confirmação da data de entrada em serviço. No caso de a Comissão concluir, na sequência de um pedido recebido da administração notificadora antes da expirado este prazo de 30 dias, que circunstâncias excepcionais justificam um prazo suplementar, este não deverá, em nenhum caso, ir além de 150 dias.

7.4.13.3. Se a Comissão não receber confirmação nos prazos previstos no § 7.4.13.2, a inscrição em causa é anulada. A Comissão avisa a administração interessada antes de tomar esta medida.

Secção V

Inscrição das conclusões no ficheiro de referência

7.5. Sempre que a Comissão inscrever uma consignação de frequência no ficheiro de referência, indica a sua conclusão utilizando um símbolo colocado na coluna 13a. Além disso, indica na coluna «Observações» os motivos de qualquer conclusão desfavorável.

SECÇÃO VI

Categorias de consignações de frequência

7.6.1. A data a inscrever na coluna 2c é a data de entrada ao serviço notificada pela administração interessada e é dada somente a título de informação.

7.6.2. Se a utilização de uma consignação de frequência a uma estação de radiocomunicação espacial, que foi inscrita no ficheiro de referência em conformidade com as disposições do § 7.4.11.3, causar efectivamente interferência prejudicial à recepção de uma estação de radiodifusão por satélite cuja consignação de frequência está conforme com o plano, a estação que utiliza a consignação de frequência inscrita em conformidade com as disposições do § 7.4.11.3 deve fazer cessar imediatamente a interferência prejudicial quando dela for avisada.

7.6.3. Se a utilização de uma consignação de frequência não conforme com as disposições do § 7.4.5.1 causar efectivamente interferência prejudicial à recepção de qualquer estação de radiodifusão por satélite cuja consignação de frequência está em conformidade com o plano, a estação que utiliza a consignação de frequência não conforme com as disposições do § 7.4.5.1 deve fazer cessar imediatamente a interferência prejudicial logo que dela seja avisada.

SECÇÃO VII

Reexame das conclusões

7.7.1. Uma conclusão pode ser reexaminada pela Comissão:

A pedido da administração notificadora;

A pedidos de qualquer outra administração interessada no assunto, mas unicamente devido a uma interferência prejudicial verificada;

Por iniciativa da própria Comissão quando considerar justificada tal medida.

7.7.2. Apoiando-se em todas as informações de que disponha, a Comissão reexamina a questão tendo em conta as disposições do § 7.4.5.1 e, se for caso disso, as disposições dos §§ 7.4.5.2 e 7.4.5.3 e formula uma conclusão apropriada. Depois informa dessa conclusão a administração notificadora, quer antes de publicar a conclusão quer antes de a incluir no ficheiro de referência.

7.7.3. Se for, então, favorável a conclusão da Comissão, esta inclui no ficheiro de referência as modificações pretendidas para que a inscrição passe a figurar aí como se a conclusão inicial tivesse sido favorável.

7.7.4. Se a conclusão relativa à probabilidade de interferência prejudicial continuar desfavorável, a inscrição inicial não é modificada.

SECÇÃO VII

Modificação, anulação e revisão das inscrições do ficheiro de referência

7.8.1. Quando a utilização de uma consignação de frequência a uma estação do serviço fixo por satélite inscrita no ficheiro de referência for suspensa por um período de 18 meses, a administração notificadora informa a Comissão, no decorrer desse período de 18 meses, da data em que a utilização foi suspensa e da data em que será reiniciada a utilização regular dessa consignação.

7.8.2. Sempre que lhe pareça, em consequência ou não de medidas tomadas nos termos do § 7.8.1, que uma consignação de frequência a uma estação do serviço fixo por satélite inscrita no ficheiro de referência não foi utilizada regularmente durante mais de 18 meses, a Comissão consulta a administração notificadora sobre a data em que será reiniciada a utilização regular dessa consignação.

7.8.3. Se, num prazo de 6 meses, a Comissão não receber qualquer resposta ao seu pedido de informações nos termos do § 7.8.2, ou se a resposta recebida não confirmar que será reiniciada a utilização regular dessa consignação a uma estação do serviço fixo por satélite no prazo de 6 meses, insere-se um símbolo no ficheiro de referência em frente da inscrição.

7.8.4. Se a utilização de uma consignação de frequência inscrita no ficheiro de referência vier a ser abandonada definitivamente, a administração notificadora deverá informar do facto a Comissão num prazo de 90 dias, após o que será anulada a inscrição no ficheiro de referência.

7.8.5. Sempre que lhe apareça, segundo as informações de que disponha, que uma consignação inscrita no ficheiro de referência não entrou em serviço regular de acordo com as características fundamentais notificadas, ou não é utilizada de acordo com as características fundamentais notificadas, a Comissão consulta a administração notificadora e, sob reserva do seu acordo, anula a inscrição ou introduz-lhe as modificações convenientes.

7.8.6. Se,na sequência de um inquérito feito pela Comissão nos termos do § 7.8.5, a administração notificadora não fornecer à Comissão, no prazo de 45 dias, as informações necessárias ou pertinentes, a Comissão insere na coluna «Observações» do ficheiro de referência observações que indiquem a situação.

ARTIGO 8

Disposições diversas relativas aos procedimentos

8.1. Se para tal lhe for feito pedido por qualquer administração e se as circunstâncias parecerem justificá-lo, a Comissão, utilizando para o efeito os meios de que disponha e que sejam apropriados às circunstâncias, procede a um estudo dos casos de presunção de contravenção às presentes disposições ou de falta de observância destas, ou dos casos de interferência prejudicial.

8.2. A Comissão elabora em seguida um relatório, que comunica às administrações interessadas e no qual consigna as suas conclusões e as suas recomendações para a solução do problema.

8.3. No caso de, na sequência de um estudo, a Comissão apresentar a uma ou várias administrações propostas ou recomendações tendentes à solução de uma questão e de, no prazo de 90 dias, não receber resposta de uma ou várias dessas administrações, considerará que as suas propostas ou recomendações não são aceitáveis pela ou pelas administrações que não responderam. Se a própria administração requerente não responder nesse prazo, a Comissão não prosseguirá o estudo.

8.4. Se qualquer administração lho pedir, particularmente a administração de um país que tenha necessidade de assistência especial, e se as circunstâncias parecerem justificá-lo, a Comissão, utilizando para o efeito os meios de que disponha e que sejam apropriados às circunstâncias, fornecerá a seguinte assistência:

a) Cálculo necessário para a aplicação dos anexos 1, 3 e 4;

b) Qualquer outra assistência de carácter técnico a fim de que possam ser levados a bom termo os procedimentos descritos no presente apêndice.

ARTIGO 9

Limites da densidade de fluxo de potência entre 11,7 GHz e 12,2 GHz para a protecção, nas Regiões 1 e 3, dos serviços de Terra contra as interferências provenientes de estações espaciais de radiodifusão por satélite da Região 2

9.1. Sejam quais forem as condições e os métodos de modulação, a densidade de fluxo de potência produzida à superfície da Terra nas Regiões 1 e 3 pelas emissões de uma estação espacial do serviço de radiodifusão por satélite da Região 2 não deve exceder, no território de qualquer país, os limites indicados no anexo 5, salvo se a administração desse país aceitar o excesso.

ARTIGO 10

Limites da densidade de fluxo de potência entre 11,7 GHz e 12,2 GHz para a protecção, dos serviços espaciais da Região 2 contra as interferências provenientes de estações espaciais do serviço de radiodifusão por satélite das Regiões 1 e 3

10.1. As estações espaciais do serviço de radiodifusão por satélite das Regiões 1 e 3 devem utilizar antenas em que as características dos lóbulos laterais não excedam o diagrama de radiação de referência da figura 6 do anexo 8. Consequentemente, a densidade de fluxo de potência radiada sobre o território de qualquer administração da Região 2 na faixa 2 de 11,7-12,2 GHz, antes de qualquer modificação ao plano, não deverá exceder, quaisquer que sejam as condições e os métodos de modulação, os valores produzidos pelas estações de radiodifusão por satélite que funcionam em conformidade com o plano à data da sua entrada em vigor e que utilizam as características técnicas especificadas neste.

Os valores da densidade de fluxo de potência devem ser calculados pelo método descrito no anexo 11.

10.2. Em particular, num ponto de referência (35° de longitude O., 8° de latitude S.), antes de qualquer modificação ao plano, as densidades de fluxo de potência não devem exceder os valores indicados no anexo 11.

ARTIGO 11

Plano para o serviço de radiodifusão por satélite nas faixas de frequências de 11,7-12,2 GHz na Região 3 e de 11,7-12,5 GHz na Região 1

11.1. Informações incluídas nas colunas do plano.

Coluna 1 — *Símbolo que designa o país e número de referência da IFRB* (a coluna 1 contém o símbolo que designa o país ou a zona geográfica tirado do quadro n.º 1 do prefácio da Lista Internacional das Frequências).

Coluna 2 — *Posição nominal na órbita em graus.*

Coluna 3 — *Número do canal* (v. o quadro a seguir para a correspondência entre os números dos canais e as frequências consignadas).

Coluna 4 — *Coordenadas geográficas do ponto visado,* em graus e décimos de grau.

Coluna 5 — *Abertura do feixe de antena.* A coluna inclui dois valores que representam, respectivamente, o eixo maior e o eixo menor da secção recta do feixe elíptico entre os pontos de meia potência; estes valores são expressos em graus e décimos de grau.

Coluna 6 — *Orientação da elipse,* determinada como segue: num plano perpendicular ao eixo de feixe, a direcção do eixo maior da elipse é definida pelo ângulo, medido no sentido inverso do movimento dos ponteiros do relógio, a partir de uma linha paralela ao plano equatorial até ao eixo, maior da elipse com aproximação para o grau mais próximo.

Coluna 7 — *Polarização* (1 = directa, 2 = indirecta) (1).

Coluna 8 — *P. i. r. e.* na direcção da radiação máxima, em dBW.

Coluna 9 — *Observações.*

11.2. Notas relativas ao plano.

1. O ΔG desta consignação é ... dB.

2. A afectar ao propaganda islâmico nos documentos da Conferência(2).

3. Esta consignação resulta de uma necessidade comum das administrações da Dinamarca e da Islândia. A zona de serviço compreende as ilhas Féroe e Islândia. Na sequência de consultas entre as duas administrações, a consignação pode ser utilizada por uma ou outra.

4. IFB-IFRB. Esta consignação foi incluída no plano pela Conferência.

5. Consignação destinada a assegurar a cobertura da Argélia, da Líbia, de Marrocos, da Mauritânia e da Tunísia, após acordo destes países. Em caso de necessidade, pode ser utilizada com as características do feixe TUN 150.

6. As consignações inscritas no plano em nome da Somália devem ser coordenadas com cada um dos países interessados e particularmente com a Etiópia.

11.3. Quadro de correspondência entre o número do canal e da frequência consignada:

Canal número	Frequência consignada (MHz)	Canal número	Frequência consignada (MHz)
1	11 727,48	21	12 111,08
2	11 746,66	22	12 130,26
3	11 765,84	23	12 149,44
4	11 785,02	24	12 168,62
5	11 804,20	25	12 187,80
6	11 823,38	26	12 206,98
7	11 842,56	27	12 226,16
8	11 861,74	28	12 245,34
9	11 880,92	29	12 264,52
10	11 900,10	30	12 283,70
11	11 919,28	31	12 302,88
12	11 938,46	32	12 322,06
13	11 957,64	33	12 341,24
14	11 976,82	34	12 360,42
15	11 996,00	35	12 379,60
16	12 015,18	36	12 398,78
17	12 034,36	37	12 417,96
18	12 053,54	38	12 437,14
19	12 072,72	39	12 456,32
20	12 091,90	40	12 475,50

(1) V. § 3.2.3 do anexo 8.

(2) Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

11 727,48 MHz (1)

1		2	3	4		5		6	7	8	9
AFG	245A	50,0	1	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005A	98,0	1	133,5	— 18,8	2,70	1,40	76	2	64,3	
CAR	338A	122,0	1	149,5	8,0	5,36	0,77	178	1	62,5	
CHN	155A	62,0	1	88,3	31,5	3,38	1,45	162	2	62,9	
CHN	162A	92,0	1	115,9	21,0	2,74	2,42	23	2	63,9	
CHN	163A	80,0	1	116,0	39,2	1,20	0,83	132	1	64,4	
CME	300A	— 13,0	1	12,7	6,2	2,54	1,68	87	1	63,4	
F	093A	— 19,0	1	2,6	45,9	2,50	0,98	160	1	63,8	
FJI	193A	152,0	1	179,4	— 17,9	1,04	0,98	67	1	63,7	
GUI	192A	— 37,0	1	— 11,0	10,2	1,58	1,04	147	2	63,4	
IND	039A	56,0	1	72,7	11,2	1,26	0,60	107	1	63,1	
IND	044A	68,0	1	79,5	22,3	2,19	1,42	146	1	63,3	
INS	035A	104,0	1	124,3	— 3,2	3,34	1,94	82	1	63,2	
J	111A	110,0	1	134,5	31,5	3,52	3,30	68	1	63,2	
LBY	280A	— 25,0	1	21,4	26,0	2,50	1,04	119	2	63,5	
MDG	236A	29,0	1	46,6	— 18,8	2,72	1,14	65	2	63,3	
NZL	055A	158,0	1	172,3	— 39,7	2,88	1,56	47	1	63,3	
PLM	337A	170,0	1	— 161,4	7,0	0,60	0,60	0	1	62,4	
POL	132A	—1,0	1	19,3	51,8	1,46	0,64	162	2	64,1	
QAT	247A	17,0	1	51,1	25,3	0,60	0,60	0	1	61,8	1/1,6
SMA	335A	170,0	1	— 170,1	— 14,2	0,60	0,60	0	2	61,1	1/0,9
SMR	311A	— 37,0	1	12,6	43,7	0,60	0,60	0	1	62,4	1/0,8
SWZ	313A	— 1,0	1	31,5	— 26,5	0,62	0,60	66	1	62,8	1/1,7
THA	142A	74,0	1	100,7	13,2	2,82	1,54	106	2	63,6	
TUR	145A	5,0	1	34,4	38,9	2,68	1,04	168	1	63,7	
URS	064A	23,0	1	45,6	40,8	2,16	0,60	163	2	63,9	
URS	067A	44,0	1	62,4	58,5	3,20	1,52	169	1	66,3	
WAK	334A	140,0	1	166,5	19,2	0,60	0,60	0	1	63,6	
YMS	267A	11,0	1	48,8	15,2	1,76	1,54	176	2	62,8	

11 746,66 MHz (2)

1		2	3	4		5		6	7	8	9
AGL	251A	— 25,0	2	4,2	33,2	2,45	1,25	172	1	63,4	
ARS	275A	17,0	2	48,3	24,6	3,84	1,20	138	2	62,7	
AUS	006A	98,0	2	135,4	— 30,3	2,00	1,40	44	1	63,2	
AUS	006A	128,0	2	145,9	— 21,5	2,90	2,00	120	2	63,7	
BOT	297A	— 1,0	2	23,3	— 22,2	2,13	1,50	36	2	63,7	
CHN	154A	62,0	2	83,9	40,5	2,75	2,05	177	1	63,2	
CHN	161A	92,0	2	118,1	31,1	2,49	1,69	117	1	64,4	
CKH	052A	158,0	2	— 161,0	— 19,8	1,02	0,64	132	2	64,6	
CLN	219A	50,0	2	80,6	7,7	1,18	0,60	106	2	63,6	
D	087A	— 19,0	2	9,6	49,9	1,62	0,72	147	2	65,5	
FNL	103A	5,0	2	22,5	64,5	1,38	0,76	171	2	67,7	
GNP	304A	— 31,0	2	— 15,0	12,9	0,90	0,60	172	2	63,1	
GUM	331A	122,0	2	144,5	13,1	0,60	0,60	0	2	63,3	
IND	037A	68,0	2	93,0	25,5	1,46	1,13	40	2	63,9	
IND	045A	— 56,0	2	76,2	19,5	1,58	1,58	21	1	63,5	
INS	028A	80,0	2	101,5	0,0	3,00	1,20	133	2	63,3	
IRL	211A	— 31,0	2	— 8,2	53,2	0,84	0,60	162	1	63,2	
KOR	112A	110,0	2	127,5	36,0	1,24	1,02	168	2	63,6	
LAO	284A	74,0	2	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	242A	29,0	2	59,8	— 18,9	1,62	1,24	55	1	64,0	
MLA	228A	86,0	2	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	327A	— 37,0	2	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333A	146,0	2	166,7	7,9	1,50	1,50	177	1	63,3	
NCL	100A	140,0	2	166,0	— 21,0	1,14	0,72	146	1	63,7	
PAK	127A	38,0	2	69,6	29,5	2,30	2,16	14	1	63,9	
PNG	131A	110,0	2	147,7	— 6,3	2,50	2,18	169	1	64,4	
ROU	136A	— 1,0	2	25,0	45,7	1,38	0,66	155	1	63,8	
TOD	143A	— 13,0	2	18,1	15,5	3,40	1,72	107	2	64,0	
TGO	225A	— 25,0	2	0,8	8,6	1,52	0,60	105	2	63,4	
WAL	102A	140,0	2	— 176,8	— 14,0	0,74	0,60	29	1	64,4	
YEM	266A	11,0	2	44,3	15,1	1,14	0,70	109	1	62,6	
ZAI	323A	— 19,0	2	21,3	— 6,8	2,80	1,52	149	1	64,6	

11 765,84 MHz (3)

1		2	3	4		5		6	7	8	9
AFG	245A	50,0	3	70,2	35,5	1,32	1,13	53	1	62,6	
AUS	004A	98,0	3	121,8	— 24,9	3,60	1,90	54	2	63,0	
AUS	009A	128,0	3	147,2	— 32,0	2,10	1,40	15	1	64,1	
AZR	134A	— 31,0	3	— 23,4	36,1	2,56	0,70	155	2	63,0	
BEN	233A	— 19,0	3	2,2	9,5	1,44	0,68	97	2	63,3	
CHN	157A	62,0	3	102,3	27,6	2,56	1,58	127	2	65,1	
CHN	160A	92,0	3	122,8	45,3	2,50	1,45	150	2	65,1	
COM	207A	29,0	3	44,1	—12,1	0,76	0,60	149	2	63,1	
GAB	260A	— 13,0	3	11,8	— 0,6	1,43	1,12	64	1	63,3	
GMB	302A	— 37,0	3	— 15,1	13,4	0,79	0,60	4	2	63,3	
GRC	150A	5,0	3	24,7	38,2	1,78	0,96	156	1	63,3	
IND	043A	56,0	3	77,8	11,1	1,36	1,28	172	1	63,3	
IND	047A	68,0	3	93,3	11,1	1,92	0,60	96	1	63,4	
INS	036A	104,0	3	135,2	— 3,8	2,46	2,00	147	1	63,8	
IRN	109A	34,0	3	54,2	32,4	3,82	1,82	149	2	62,8	
J	111B	110,0	3	134,5	31,5	3,52	3,30	68	1	64,2	
LBN	279A	11,0	3	35,8	33,9	0,60	0,60	0	2	61,6	1/1,8
LBR	244A	— 31,0	3	— 93	6,6	1,22	0,70	133	1	63,2	
LBY	321A	— 25,0	3	131	27,2	2,36	1,12	129	2	63,0	
LIE	253A	— 37,0	3	9,5	47,1	0,60	0,60	0	1	62,4	1/0,7
LUX	114A	— 19,0	3	6,0	49,8	0,60	0,60	0	1	62,9	1/2,0
MRA	332A	122,0	3	145,9	16,9	1,20	0,60	76	1	63,5	
NHB	128A	140,0	3	168,0	— 16,4	1,52	0,68	87	2	62,8	
NRU	309A	134,0	3	167,0	— 0,5	0,60	0,60	0	2	62,5	
POR	133A	— 31,0	3	— 8,0	39,6	0,92	0,60	112	2	63,4	
SMO	057A	158,0	3	—172,3	— 13,7	0,60	0,60	0	1	63,6	
SNG	151A	74,0	3	103,8	1,3	0,60	0,60	0	2	63,5	
SOM	312A	23,0	3	45,0	6,4	3,26	1,54	71	1	62,3	
TCH	144A	— 1,0	3	17,3	49,3	1,47	0,60	170	2	63,8	
UGA	061A	11,0	3	32,3	1,2	1,46	1,12	66	1	63,2	
URS	061A	23,0	3	24,7	56,6	0,88	0,64	1,2	2	65,0	
URS	073A	44,0	3	54,3	63,5	1,58	0,68	3	1	66,9	
VTN	325A	86,0	3	106,3	16,1	3,03	1,40	116	2	63,4	
ZMB	314A	— 1,0	3	27,5	— 13,1	2,38	1,48	39	1	63,7	

11 785,02 MHz (4)

1		2	3	4		5		6	7	8	9
AGL	252A	— 25,0	4	1,6	25,5	3,64	2,16	152	1	62,8	
AND	341A	— 37,0	4	1,6	42,5	0,60	0,60	0	2	61,5	1/0,5
ARS	003A	17,0	4	41,1	23,8	3,52	1,68	134	2	62,7	
AUS	007A	128,0	4	145,0	— 38,1	1,83	1,39	134	2	63,3	
AUT	016A	—19,0	4	12,2	47,5	1,14	0,63	166	2	64,1	
BUL	020A	— 1,0	4	25,0	43,0	1,04	0,60	165	1	63,6	
CHN	156A	62,0	4	97,8	36,3	2,56	1,58	157	1	63,5	
CHN	161B	92,0	4	118,1	31,1	2,49	1,69	117	1	64,4	
CKN	053A	158,0	4	— 163,0	— 11,2	1,76	0,72	30	2	64,3	
CPV	301A	— 31,0	4	— 24,0	16.0	0,86	0,70	144	2	62,2	
EGY	026A	— 7,0	4	29,7	26,8	2,33	1,72	136	2	63,1	
G	027A	— 31,0	4	— 3,5	53,8	1,84	0,72	142	1	65,0	
IND	040A	56,0	4	73,0	25,0	1,82	1,48	58	2	63,6	
IND	048A	68,0	4	86,2	25,0	1,56	0,90	120	2	63,7	
INS	028B	80,0	4	101,5	0,0	3,00	1,20	133	2	63,3	
KOR	112B	110,0	4	127,5	36,0	1,24	1,02	168	2	63,6	
LAO	248B	74,0	4	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	243A	29,0	4	56,8	— 12,9	1,56	1,38	65	1	63,7	
MLA	228B	86,0	4	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	328A	— 37,0	4	— 7,6	13,2	1,74	1,24	171	1	63,7	
MLT	147A	— 13,0	4	14,3	35,9	0,60	0,60	0	1	61,0	1/0,7
MOZ	307A	— 1,0	4	34,0	— 18,0	3,57	1,38	55	2	64,2	
OCE	101A	— 160,0	4	— 145,0	— 16,3	4,34	354	4	2	63,5	
PAK	283A	38,0	4	74,7	33,9	1,34	1,13	160	1	64,3	
PNG	271A	128,0	4	148,0	— 6,7	2,80	2,05	155	1	63,4	
RRW	310A	11,0	4	30,0	— 2,1	0,66	0,60	42	2	64,8	
S	138A	5,0	4	16,2	61,0	1,04	0,96	14	2	67,1	
STP	241A	13,0	4	7,0	0,8	0,60	0,60	0	2	61,4	1/1,3
TON	215A	170,0	4	— 174,7	— 18,0	1,41	0,68	85	1	63,3	
URS	060A	23,0	4	41,5	57,4	3,08	1,56	153	1	66,7	
ZAI	322A	— 19,0	4	22,4	0,0	2,16	1,88	48	1	64,7	

11 804,20 MHz (5)

1		2	3	4		5		6	7	8	9
AFG	246B	50,0	5	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005B	98,0	5	133,5	— 18,8	2,70	1,40	76	2	64,3	
CAR	338B	122,0	5	149,5	8,0	5,36	0,77	178	1	62,5	
CHN	155B	62,0	5	88,3	31,5	3,38	1,45	162	2	62,9	
CHN	162B	92,0	5	115,9	21,0	2,74	2,42	23	2	64,0	
CHN	164A	80,0	5	112,2	37,4	1,06	0,76	111	1	64,2	
CME	300B	— 13,0	5	12,7	6,2	2,54	1,68	87	1	63,5	
F	093B	— 19,0	5	2,6	45,5	2,50	0,98	160	1	63,8	
FJI	193B	152,0	5	179,4	— 17,9	1,04	0,98	67	1	63,7	
GUI	192B	— 37,0	5	— 11,0	10,2	1,58	1,04	147	2	63,5	
IND	039B	56,0	5	72,7	11,2	1,26	0,60	107	1	63,1	
IND	044B	68,0	5	79,5	22,3	2,19	1,42	146	1	63,4	
INS	035B	104,0	5	124,3	— 3,2	3,34	1,94	82	1	63,2	
J	111C	110,0	5	134,5	31,5	3,52	3,30	68	1	63,2	
LBY	280B	— 25,0	5	21,4	26,0	2,50	1,04	119	2	63,5	
MDG	236B	29,0	5	46,6	— 18,8	2,72	1,14	65	2	63,4	
NZL	055B	158,0	5	172,3	— 39,7	2,88	1,56	47	1	63,4	
PLM	337B	170,0	5	— 161,4	7,0	0,60	0,60	0	1	62,4	
POL	132B	—1,0	5	19,3	51,8	1,46	0,64	162	2	64,2	
QAT	247B	17,0	5	51,1	25,3	0,60	0,60	0	1	61,8	1/1,6
SMA	335B	170,0	5	— 170,1	— 14,2	0,60	0,60	0	2	61,2	1/0,9
SMR	311B	— 37,0	5	12,6	43,7	0,60	0,60	0	1	62,5	1/0,8
SWZ	313B	— 1,0	5	31,5	— 26,5	0,62	0,60	66	1	62,8	1/1,7
THA	142B	74,0	5	100,7	13,2	2,82	1,54	106	2	63,7	
TUR	145B	5,0	5	34,4	38,9	2,68	1,04	168	1	63,8	
URS	064B	23,0	5	45,6	40,8	2,16	0,60	163	2	63,9	
URS	067B	44,0	5	62,4	58,5	3,20	1,52	169	1	66,4	
WAK	334B	140,0	5	166,5	19,2	0,60	0,60	0	1	63,6	
YMS	267B	11,0	5	48,8	15,2	1,76	1,54	176	2	62,9	

11 823,38 MHz (6)

1		2	3	4		5		6	7	8	9
ALG	251B	— 25,0	6	4,2	33,2	2,45	1,25	172	1	63,4	
ARS	275B	17,0	6	48,3	24,6	3,84	1,20	138	2	62,8	
AUS	006B	98,0	6	135,4	— 30,3	2,00	1,40	44	1	63,3	
AUS	008B	128,0	6	145,9	— 21,5	2,90	2,00	120	2	63,7	
BOT	297B	— 1,0	6	23,3	— 22,2	2,13	1,50	36	2	63,8	
CHN	154B	62,0	6	83,9	40,5	2,75	2,05	177	1	63,3	
CHN	161C	92,0	6	118,1	31,1	2,49	1,69	117	1	64,5	
CKH	052B	158,0	6	— 161,0	— 19,8	1,02	0,64	132	2	64,6	
CLN	219B	50,0	6	80,6	7,7	1,18	0,60	106	2	63,6	
D	087B	— 19,0	6	9,6	49,9	1,62	0,72	147	2	65,5	
FNL	103B	5,0	6	22,5	64,5	1,38	0,76	171	2	67,8	
GNP	304B	— 31,0	6	— 15,0	12,0	0,90	0,60	172	2	63,2	
GUM	331B	122,0	6	144,5	13,1	0,60	0,60	0	2	63,4	
IND	037B	68,0	6	93,0	25,5	1,46	1,13	40	2	64,0	
IND	045B	— 56,0	6	76,2	19,5	1,58	1,58	21	1	63,6	
INS	028C	80,0	6	101,5	0,0	3,00	1,20	133	2	63,3	
IRL	211B	— 31,0	6	— 8,2	53,2	0,84	0,60	162	1	64,3	
KOR	112C	110,0	6	127,5	36,0	1,24	1,02	168	2	63,6	
LAO	284C	74,0	6	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	242B	29,0	6	59,8	— 18,9	1,62	1,24	55	1	64,0	
MLA	228C	86,0	6	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	327B	— 37,0	6	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333B	146,0	6	166,7	7,9	1,50	1,50	177	1	63,3	
NCL	100B	140,0	6	166,0	— 21,0	1,14	0,72	146	1	63,8	
PAK	127B	38,0	6	69,6	29,5	2,30	2,16	14	1	64,0	
PNG	131B	110,0	6	147,7	— 6,3	2,50	2,18	169	1	64,4	
ROU	136B	— 1,0	6	25,0	45,7	1,38	0,66	155	1	63,9	
TCD	143B	— 13,0	6	18,1	15,5	3,40	1,72	107	2	64,0	
TGO	225B	— 25,0	6	0,8	8,6	1,52	0,60	105	2	63,4	
WAL	102B	140,0	6	— 176,8	— 14,0	0,74	0,60	29	1	64,4	
YEM	266B	11,0	6	44,3	15,1	1,14	0,70	109	1	62,7	
ZAI	323B	— 19,0	6	21,3	— 6,8	2,80	1,52	149	1	64,7	

11 842,56 MHz (7)

1		2	3	4		5		6	7	8	9
AFG	245B	50,0	7	70,2	35,5	1,32	1,13	53	1	62,9	
AUS	004B	98,0	7	121,8	— 24,9	3,60	1,90	54	2	63,1	
AUS	009B	128,0	7	147,2	— 32,0	2,10	1,40	15	1	64,1	
AZR	134B	—31,0	7	— 23,4	36,1	2,56	0,70	158	2	63,1	
BEN	233B	— 19,0	7	2,2	9,5	1,44	0,68	97	2	63,3	
CHN	157B	62,0	7	102,3	27,8	2,56	1,58	127	2	65,1	
CHN	160B	92,0	7	122,6	45,3	2,50	1,45	150	2	65,1	
COM	207B	29,0	7	44,1	—12,1	0,76	0,60	149	2	63,1	
GAB	260B	— 13,0	7	11,8	— 0,6	1,43	1,12	64	1	63,4	
GMB	302B	— 37,0	7	— 15,1	13,4	0,79	0,60	4	2	63,4	
GRC	105B	5,0	7	24,7	38,2	1,78	0,98	156	1	63,4	
IND	043B	56,0	7	77,8	11,1	1,36	1,28	172	1	63,4	
IND	047B	68,0	7	93,3	11,1	1,92	0,60	96	1	63,5	
INS	036B	104,0	7	135,2	— 3,8	2,46	2,00	147	1	63,8	
IRN	109B	34,0	7	54,2	32,4	3,82	1,82	149	2	62,8	
J	111D	110,0	7	134,5	31,5	3,52	3,30	68	1	64,2	
LBN	279B	11,0	7	35,8	33,9	0,60	0,60	0	2	61,7	1/1,8
LBR	244B	— 31,0	7	— 9,3	6,6	1,22	0,70	133	1	63,3	
LBY	321B	— 25,0	7	13,1	27,2	2,36	1,12	129	2	63,1	
LIE	253B	— 37,0	7	9,5	47,1	0,60	0,60	0	1	62,5	1/0,7
LUX	114B	— 19,0	7	6,0	49,8	0,60	0,60	0	1	63,0	1/2,0
MRA	332B	122,0	7	145,9	16,9	1,20	0,60	76	1	63,5	
NHB	128B	140,0	7	168,0	— 16,4	1,52	0,68	87	2	62,9	
NRU	309B	134,0	7	167,0	— 0,5	0,60	0,60	0	2	62,6	
POR	133B	— 31,0	7	— 8,0	39,6	0,92	0,60	112	2	63,4	
SMO	057B	158,0	7	—172,3	— 13,7	0,60	0,60	0	1	63,7	
SNG	151B	74,0	7	103,8	1,3	0,60	0,60	0	2	63,6	
SOM	312B	23,0	7	45,0	6,4	3,26	1,54	71	1	62,4	
TCH	144B	— 1,0	7	17,3	49,3	1,47	0,60	170	2	63,9	
UGA	061B	11,0	7	32,3	1,2	1,46	1,12	60	1	63,3	
URS	061B	23,0	7	24,7	56,6	0,88	0,64	12	2	65,1	
URS	072A	44,0	7	54,3	61,5	2,38	0,66	173	1	67,1	
VTN	325B	86,0	7	106,3	16,1	3,03	1,40	116	2	63,5	
ZMB	314B	— 1,0	7	27,5	— 13,1	2,38	1,48	39	1	63,8	

11 861,74 MHz (8)

1		2	3	4		5		6	7	8	9
AGL	252B	— 25,0	8	1,6	25,5	3,64	2,16	152	1	62,8	
AND	341B	— 37,0	8	1,6	42,5	0,60	0,60	0	2	61,5	1/0,5
ARS	003B	.17,0	8	41,1	23,8	3,52	1,68	134	2	62,8	
AUS	007B	128,0	8	145,0	— 38,1	1,83	1,39	134	2	63,4	
AUT	016B	—19,0	8	12,2	47,5	1,14	0,63	166	2	64,2	
BUL	020B	— 1,0	8	25,0	43,0	1,04	0,60	165	1	63,7	
CHN	156B	62,0	8	97,8	36,3	2,56	1,58	157	1	63,5	
CHN	173A	92,0	8	115,7	27,4	1,14	0,94	99	1	64,0	
CKN	053B	158,0	8	— 163,0	— 11,2	1,76	0,72	30	2	64,3	
CPV	301B	— 31,0	8	— 24,0	16,0	0,86	0,70	144	2	62,2	
EGY	026B	— 7,0	8	29,7	26,8	2,33	1,72	136	2	63,2	
G	027B	— 31,0	8	— 3,5	53,8	1,84	0,72	142	1	65,1	
IND	040B	56,0	8	73,0	25,0	1,82	1,48	58	2	63,7	
IND	048B	68,0	8	86,2	25,0	1,56	0,90	120	2	63,7	
INS	028D	80,0	8	101,5	0,0	3,00	1,20	133	2	63,4	
KOR	112D	110,0	8	127,5	36,0	1,24	1,02	168	2	63,7	
LAO	248D	74,0	8	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	243B	29,0	8	56,8	— 13,9	1,56	1,38	65	1	63,8	
MLA	228D	86,0	8	114,1	3,9	2,34	1,12	45	1	63,7	
MLI	328B	— 37,0	8	— 7,6	13,2	1,74	1,24	171	1	63,8	
MLT	147B	— 13,0	8	14,3	35,9	0,60	0,60	0	1	61,0	1/0,7
MOZ	307B	— 1,0	8	34,0	— 18,0	3,57	1,38	55	2	64,2	
OCE	101B	— 160,0	8	— 145,0	— 16,3	4,34	3,54	4	2	63,6	
PAK	283B	38,0	8	74,7	33,9	1,34	1,13	160	1	64,3	
PNG	271B	128,0	8	148,0	— 6,7	2,80	2,05	155	1	63,4	
RRW	310B	11,0	8	30,0	— 2,1	0,66	0,60	42	2	64,9	
S	138B	5,0	8	16,2	61,0	1,04	0,96	14	2	67,1	
STP	241B	—13,0	8	7,0	0,8	0,60	0,60	0	2	61,5	1/1,3
TON	215B	170,0	8	— 174,7	— 18,0	1,41	0,68	85	1	63,3	
URS	060B	23,0	8	41,5	57,4	3,08	1,56	153	1	66,8	
ZAI	322B	— 19,0	8	22,4	0,0	2,16	1,88	48	1	64,8	

11 880,92 MHz (9)

1		2	3	4		5		6	7	8	9
AFG	245C	50,0	9	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005C	98,0	9	133,5	— 18,8	2,70	1,40	76	2	64,4	
CAR	335C	122,0	9	149,5	8,0	5,36	0,77	178	1	62,6	
CHN	155C	62,0	9	88,3	31,5	3,38	1,45	162	2	63,0	
CHN	162C	92,0	9	115,9	21,0	2,74	2,42	23	2	64,0	
CHN	165A	80,0	9	111,4	41,8	1,58	1,20	15	1	63,6	
CME	300C	— 13,0	9	12,7	6,2	2,54	1,68	87	1	63,5	
F	093C	— 19,0	9	2,6	45,9	2,50	0,98	160	1	63,9	
FJI	193C	152,0	9	179,4	— 17,9	1,04	0,98	67	1	63,8	
GUI	192C	— 37,0	9	— 11,0	10,2	1,58	1,04	147	2	63,5	
IND	039C	56,0	9	72,7	11,2	1,26	0,60	107	1	63,2	
IND	044C	68,0	9	79,5	22,3	2,19	1,42	146	1	63,5	
INS	035C	104,0	9	124,3	— 3,2	3,34	1,94	82	1	63,3	
J	111E	110,0	9	134,5	31,5	3,52	3,30	68	1	64,3	
LBY	280C	— 25,0	9	21,4	26,0	2,50	1,04	119	2	63,6	
MDG	236C	29,0	9	46,6	— 18,8	2,72	1,14	65	2	63,4	
NZL	055C	158,0	9	172,3	— 39,7	2,88	1,56	47	1	63,4	
PLM	337C	170,0	9	— 161,4	7,0	0,60	0,60	0	1	62,5	
POL	132C	—1,0	9	19,3	51,8	1,46	0,64	162	2	64,2	
QAT	247C	17,0	9	51,1	25,3	0,60	0,60	0	1	61,9	1/1,6
SMA	335C	170,0	9	— 170,1	— 14,2	0,60	0,60	0	2	61,3	1/0,9
SMR	311C	— 37,0	9	12,6	43,7	0,60	0,60	0	1	62,5	1/0,8
SWZ	313C	— 1,0	9	31,5	— 26,5	0,62	0,60	66	1	62,9	1/1,7
THA	142C	74,0	9	100,7	13,2	2,82	1,54	106	2	63,7	
TUR	145C	5,0	9	34,4	38,9	2,68	1,04	168	1	63,8	
URS	064C	23,0	9	45,6	40,8	2,16	0,60	163	2	64,0	
URS	067C	44,0	9	62,4	58,5	3,20	1,52	169	1	66,4	
WAK	334C	140,0	9	166,5	19,2	0,60	0,60	0	1	63,7	
YMS	267C	11,0	9	48,8	15,2	1,76	1,54	176	2	62,9	

11 900,10 MHz (10)

1		2	3	4		5		6	7	8	9
AGL	251C	— 25,0	10	4,2	33,2	2,45	1,25	172	1	63,5	
ARS	275C	17,0	10	48,3	24,6	3,84	1,20	138	2	62,9	
AUS	006C	98,0	10	135,4	— 30,3	2,00	1,40	44	1	63,3	
AUS	008C	128,0	10	145,9	— 21,5	2,90	2,00	120	2	63,8	
BOT	297C	— 1,0	10	23,3	— 22,2	2,13	1,50	36	2	63,9	
CHN	154C	62,0	10	83,9	40,5	2,75	2,05	177	1	63,3	
CHN	171A	92,0	10	117,2	32,0	1,20	0,74	126	1	64,2	
CHN	187A	80,0	10	106,6	26,7	1,14	0,94	179	2	64,0	
CKH	052C	158,0	10	— 161,0	— 19,8	1,02	0,64	132	2	64,7	
CLN	219C	50,0	10	80,6	7,7	1,18	0,60	106	1	63,7	
D	087C	— 19,0	10	9,6	49,9	1,62	0,72	147	2	65,6	
FNL	103C	5,0	10	22,5	64,5	1,38	0,76	171	2	67,9	
GNF	304C	— 31,0	10	— 15,0	12,0	0,90	0,60	172	2	63,2	
GUM	331C	122,0	10	144,5	13,1	0,60	0,60	0	2	63,4	
IND	037C	68,0	10	93,0	25,5	1,46	1,13	40	2	64,0	
IND	045C	— 56,0	10	76,2	19,5	1,58	1,58	21	2	63,6	
IRL	211C	— 31,0	10	— 8,2	53,2	0,84	0,60	162	1	64,4	
KOR	112E	110,0	10	127,5	36,0	1,24	1,02	168	2	63,7	
LAO	284E	74,0	10	103,7	18,1	2,16	0,78	133	1	63,9	
MAU	242C	29,0	10	59,8	— 18,9	1,62	1,24	55	1	64,1	
MLI	327C	— 37,0	10	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333C	146,0	10	166,7	7,9	1,50	1,50	177	1	63,4	
NCL	100C	140,0	10	166,0	— 21,0	1,14	0,72	146	1	63,8	
PAK	127C	38,0	10	69,6	29,5	2,30	2,16	14	1	64,0	
PNG	131C	110,0	10	147,7	— 6,3	2,50	2,18	169	1	64,5	
ROU	136C	— 1,0	10	25,0	45,7	1,38	0,66	155	1	63,9	
TCD	143C	— 13,0	10	18,1	15,5	3,40	1,72	107	2	64,1	
TGO	226C	— 25,0	10	0,8	8,6	1,52	0,60	105	2	63,5	
WAL	102C	140,0	10	— 176,8	— 14,0	0,74	0,60	29	1	64,5	
YEM	266C	11,0	10	44,3	15,1	1,14	0,70	109	1	62,7	
ZAI	323C	— 19,0	10	21,3	— 6,8	2,80	1,52	149	1	64,7	

11 919,28 MHz (11)

1		2	3	4		5		6	7	8	9
AFG	245C	50,0	11	70,2	35,5	1,32	1,13	53	1	62,9	
AUS	004C	98,0	11	121,8	— 24,9	3,60	1,90	54	2	63,1	
AUS	009C	128,0	11	147,2	— 32,0	2,10	1,40	15	1	64,2	
AZR	134C	—31,0	11	— 23,4	36,1	2,56	0,70	158	2	63,1	
BEN	233C	— 19,0	11	2,2	9,5	1,44	0,68	97	2	63,4	
CHN	157C	62,0	11	102,3	27,6	2,56	1,58	127	2	65,2	
CHN	160C	92,0	11	122,8	45,3	2,50	1,45	150	2	65,2	
COM	207C	29,0	11	44,1	—12,1	0,76	0,60	149	2	63,2	
GAB	260C	— 13,0	11	11,8	— 0,6	1,43	1,12	64	1	63,4	
GMB	302C	— 37,0	11	— 15,1	13,4	0,79	0,60	4	2	63,4	
GRC	150C	5,0	11	24,7	38,2	1,78	0,98	156	1	63,4	
IND	043C	56,0	11	77,8	11,1	1,36	1,28	172	1	63,5	
IND	047C	68,0	11	93,3	11,1	1,92	0,60	96	1	63,5	
INS	036C	104,0	11	135,2	— 3,8	2,46	2,00	147	1	63,9	
IRN	109C	34,0	11	54,2	32,4	3,82	1,82	149	2	62,9	
J	111F	110,0	11	134,5	31,5	3,52	3,30	68	1	64,3	
LBN	279C	11,0	11	35,8	33,9	0,60	0,60	0	2	61,7	1/1,8
LBR	244C	— 31,0	11	— 9,3	6,6	1,22	0,70	133	1	63,3	
LBY	321C	— 25,0	11	13,1	27,2	2,36	1,12	129	2	63,1	
LIE	253C	— 37,0	11	9,5	47,1	0,60	0,60	0	1	62,5	1/0,7
LUX	114C	— 19,0	11	6,0	49,8	0,60	0,60	0	1	63,0	1/2,0
MRA	332C	122,0	11	145,9	16,9	1,20	0,60	76	1	63,6	
NHB	128C	140,0	11	168,0	— 16,4	1,52	0,68	87	2	63,0	
NRU	309C	134,0	11	167,0	— 0,5	0,60	0,60	0	2	62,6	
POR	133C	— 31,0	11	— 8,0	39,6	0,92	0,60	112	2	63,5	
SMO	057C	158,0	11	—172,3	— 13,7	0,60	0,60	0	1	63,8	
SNG	151C	74,0	11	103,8	1,3	0,60	0,60	0	2	63,7	
SOM	312C	23,0	11	45,0	6,4	3,26	1,54	71	1	62,4	
TCH	144C	— 1,0	11	17,3	49,3	1,47	0,60	170	2	63,9	
UGA	061C	11,0	11	32,3	1,2	1,46	1,12	60	1	63,3	
URS	061C	23,0	11	24,7	56,6	0,88	0,64	12	2	65,1	
VTN	325C	86,0	11	105,3	16,1	3,03	1,40	116	2	63,5	
ZMB	314C	— 1,0	11	27,5	— 13,1	2,38	1,48	39	1	63,8	

11 938,46 MHz (12)

1		2	3	4		5		6	7	8	9
AGL	252C	— 25,0	12	1,6	25,5	3,64	2,16	152	1	62,9	
AND	341C	— 37,0	12	1,6	42,5	0,60	0,60	0	2	61,6	1/0,5
ARS	003C	. 17,0	12	41,1	23,8	3,52	1,68	134	2	62,8	
AUS	007C	128,0	12	145,0	— 38,1	1,83	1,39	134	2	63,4	
AUT	016C	—19,0	12	12,2	47,5	1,14	0,63	166	2	64,2	
BRU	330A	74,0	12	114,7	4,4	0,60	0,60	0	1	62,5	1/1,3
BUL	020C	— 1,0	12	25,0	43,0	1,04	0,60	165	1	63,8	
CHN	156C	62,0	12	97,8	36,3	2,56	1,58	157	1	63,6	
CHN	170A	92,0	12	119,5	33,0	1,34	0,64	155	1	64,4	
CHN	178A	80,0	12	111,5	27,4	1,22	0,86	130	2	64,4	
CKN	053C	158,0	12	— 163,0	— 11,2	1,76	0,72	30	2	64,4	
CPV	301C	— 31,0	12	— 24,0	16,0	0,86	0,70	144	2	62,3	
DNK	089A	5,0	12	12,3	57,1	1,20	0,60	177	2	64,3	
EGY	026C	— 7,0	12	29,7	26,8	2,33	1,72	136	2	63,2	
G	027C	— 31,0	12	— 3,5	53,8	1,84	0,72	142	1	65,1	
IND	040C	56,0	12	73,0	25,0	1,82	1,48	58	2	63,8	
IND	048C	68,0	12	86,2	25,0	1,56	0,90	120	2	63,8	
KOR	112F	110,0	12	127,5	36,0	1,24	1,02	168	2	63,7	
MAU	243C	29,0	12	56,8	— 13,9	1,56	1,38	65	1	63,8	
MLD	306A	44,0	12	73,1	6,0	0,96	0,60	90	1	63,7	
MLI	328C	— 37,0	12	— 7,6	13,2	1,74	1,24	171	1	63,8	
MLT	147C	— 13,0	12	14,3	35,9	0,60	0,60	0	1	61,1	1/0,7
MOZ	307C	— 1,0	12	34,0	— 18,0	3,57	1,38	55	2	64,3	
OCE	101C	— 160,0	12	— 145,0	— 16,3	4,34	3,54	4	2	63,6	
PAK	210A	38,0	12	72,1	30,6	1,16	0,72	160	1	63,5	
PNG	271C	128,0	12	148,0	— 6,7	2,80	2,05	155	1	63,5	
RRW	310C	11,0	12	30,0	— 2,1	0,66	0,60	42	2	64,9	
STP	241C	—13,0	12	7,0	0,6	0,60	0,60	0	2	61,5	1/1,3
TON	215C	170,0	12	— 174,7	— 18,0	1,41	0,68	85	1	63,4	
URS	060C	23,0	12	41,5	57,4	3,08	1,56	153	1	66,9	
URS	069A	44,0	12	70,8	38,5	1,36	0,74	161	2	64,1	
ZAI	322C	— 19,0	12	22,4	0,0	2,16	1,88	48	1	64,8	

11 957,64 MHz (13)

1		2	3	4		5		6	7	8	9
AFG	246D	50,0	13	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005D	98,0	13	133,5	— 18,8	2,70	1,40	76	2	64,4	
CAR	335D	122,0	13	149,5	8,0	5,36	0,77	178	1	62,6	
CHN	155D	62,0	13	88,3	31,5	3,38	1,45	162	2	63,0	
CHN	180A	92,0	13	113,7	12,9	3,76	2,18	72	2	63,6	
CME	300D	— 13,0	13	12,7	6,2	2,54	1,68	87	1	63,6	
F	093D	— 19,0	13	2,6	45,9	2,50	0,98	160	1	64,0	
GUI	192D	— 37,0	13	— 11,0	10,2	1,58	1,04	147	2	63,6	
IND	039D	56,0	13	72,7	11,2	1,26	0,60	107	1	63,3	
IND	044D	68,0	13	79,5	22,3	2,19	1,42	146	1	63,5	
INS	035D	104,0	13	124,3	— 3,2	3,34	1,94	82	1	63,4	
J	111G	110,0	13	134,5	31,5	3,52	3,30	68	1	64,3	
LBY	280D	— 25,0	13	21,4	26,0	2,50	1,04	119	2	63,6	
MDG	236D	29,0	13	46,6	— 18,8	2,72	1,14	65	2	63,5	
NZL	055D	158,0	13	172,3	— 39,7	2,88	1,56	47	1	63,5	
NZL	287A	128,0	13	173,0	— 41,0	3,30	1,28	48	1	64,8	
PLM	337D	170,0	13	— 161,4	7,0	0,60	0,60	0	1	62,6	
POL	132D	—1,0	13	19,3	51,8	1,46	0,64	162	2	64,3	
QAT	247D	17,0	13	51,1	25,3	0,60	0,60	0	1	62,0	1/1,6
SMA	335D	170,0	13	— 170,1	— 14,2	0,60	0,60	0	2	61,3	1/0,9
SMR	311D	— 37,0	13	12,6	43,7	0,60	0,60	0	1	62,6	1/0,8
SWZ	313D	— 1,0	13	31,5	— 26,5	0,62	0,60	66	1	63,0	1/1,7
THA	142D	74,0	13	100,7	13,2	2,82	1,54	106	2	63,8	
TUR	145D	5,0	13	34,4	38,9	2,68	1,04	168	1	63,9	
URS	064D	23,0	13	45,6	40,8	2,16	0,60	163	2	64,1	
URS	067D	44,0	13	62,4	58,5	3,20	1,52	169	1	66,5	
WAK	334D	140,0	13	166,5	19,2	0,60	0,60	0	1	63,7	
YMS	267D	11,0	13	48,8	15,2	1,76	1,54	176	2	63,0	

11 976,82 MHz (14)

1		2	3	4		5		6	7	8	9
AGL	251D	— 25,0	14	4,2	33,2	2,45	1,25	172	1	63,6	
ARS	275D	17,0	14	48,3	24,6	3,84	1,20	138	2	63,0	
AUS	006D	98,0	14	135,4	— 30,3	2,00	1,40	44	1	63,4	
AUS	008D	128,0	14	145,9	— 21,5	2,90	2,00	120	2	63,9	
BOT	297D	— 1,0	14	23,3	— 22,2	2,13	1,50	36	2	63,9	
BRU	330B	74,0	14	114,7	4,4	0,60	0,60	0	1	62,6	1/1,3
CHN	154D	62,0	14	83,9	40,5	2,75	2,05	177	1	63,4	
CHN	172A	92,0	14	120,4	29,1	0,96	0,84	123	1	64,3	
CHN	181A	80,0	14	108,5	23,8	1,41	1,08	153	2	64,1	
CKH	052D	158,0	14	— 161,0	— 19,8	1,02	0,64	132	2	64,8	
CLN	219D	50,0	14	80,6	7,7	1,18	0,60	106	1	63,8	
D	067D	— 19,0	14	9,6	49,9	1,62	0,72	147	2	65,7	
GNF	304D	— 31,0	14	— 15,0	12,0	0,90	0,60	172	2	63,3	
GUM	331D	122,0	14	144,5	13,1	0,60	0,60	0	2	63,5	
IND	037D	68,0	14	93,0	25,5	1,46	1,13	40	2	64,1	
IND	045D	56,0	14	76,2	19,5	1,58	1,58	21	2	63,7	
IRL	211D	— 31,0	14	— 8,2	53,2	0,84	0,60	162	1	64,4	
KRE	286A	110,0	14	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	242D	29,0	14	59,8	— 18,9	1,62	1,24	55	1	64,1	
MLI	327D	— 37,0	14	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333D	146,0	14	166,7	7,9	1,50	1,50	177	1	63,5	
NCL	100D	140,0	14	166,0	— 21,0	1,14	0,72	146	1	63,9	
NOR	120A	5,0	14	13,1	64,1	1,84	0,88	10	2	65,0	
PAK	210B	38,0	14	72,1	30,8	1,16	0,72	90	1	63,6	
PNG	131D	110,0	14	147,7	— 6,3	2,50	2,18	169	1	64,6	
ROU	136D	— 1,0	14	25,0	45,7	1,38	0,66	155	1	64,0	
TCD	143D	— 13,0	14	18,1	15,5	3,40	1,72	107	2	64,1	
TGO	226D	— 25,0	14	0,8	8,6	1,52	0,60	105	2	63,5	
WAL	102D	140,0	14	— 176,8	— 14,0	0,74	0,60	29	1	64,6	
YEM	266D	11,0	14	44,3	15,1	1,14	0,70	109	1	62,8	
ZAI	323D	— 19,0	14	21,3	— 6,8	2,80	1,52	149	1	64,8	

11 966,00 MHz (15)

1		2	3	4		5		6	7	8	9
AFG	245D	50,0	15	70,2	35,5	1,32	1,13	53	1	63,0	
AUS	004D	98,0	15	121,8	— 24,9	3,60	1,90	54	2	63,2	
AUS	009D	126,0	15	147,2	— 32,0	2,10	1,40	15	1	42,2	
AZR	134D	— 31,0	15	— 23,4	36,1	2,56	0,70	158	2	63,2	
BEN	233D	— 19,0	15	2,2	9,5	1,44	0,68	97	2	63,4	
BGD	220A	74,0	15	90,3	23,6	1,46	0,84	135	1	63,7	
CHN	158A	80,0	15	111,8	35,0	2,60	1,74	124	1	64,9	
CHN	174A	92,0	15	118,1	25,9	1,02	0,84	82	2	64,1	
COM	207D	29,0	15	44,1	— 12,1	0,76	0,60	149	2	63,3	
GAB	260D	— 13,0	15	11,8	— 0,6	1,43	1,12	64	1	63,5	
GMB	302D	— 37,0	15	— 15,1	13,4	0,79	0,60	4	2	63,5	
GRC	105D	5,0	15	24,7	38,2	1,78	0,98	156	1	63,5	
IND	043D	56,0	15	77,8	11,1	1,36	1,28	172	1	63,5	
IND	047D	68,0	15	93,3	11,1	1,92	0,60	96	1	63,6	
INS	036D	104,0	15	135,2	— 3,8	2,46	2,00	147	1	63,9	
IRN	109D	34,0	15	54,2	32,4	3,82	1,82	149	2	63,0	
J	111H	110,0	15	134,5	31,5	3,52	3,30	68	1	64,4	
LBN	279D	11,0	15	35,8	33,9	0,60	0,60	0	2	61,8	1/1,8
LBR	244D	— 31,0	15	— 9,3	6,6	1,22	0,70	133	1	63,4	
LBY	321D	— 25,0	15	13,1	27,2	2,36	1,12	129	2	63,2	
LIE	253D	— 37,0	15	9,5	47,1	0,60	0,60	0	1	62,6	1/0,7
LUX	114D	— 19,0	15	6,0	49,8	0,60	0,60	0	1	63,1	1/2,0
MRA	332D	122,0	15	145,9	16,9	1,20	0,60	76	1	63,6	
NHB	128D	140,0	15	168,0	— 16,4	1,52	0,68	87	2	63,0	
NRU	309D	134,0	15	167,0	— 0,5	0,60	0,60	0	2	62,7	
POR	133D	— 31,0	15	— 8,0	39,6	0,92	0,60	112	2	63,6	
SMO	057D	158,0	15	— 172,3	— 13,7	0,60	0,60	0	1	63,8	
SNG	151D	74,0	15	103,6	1,3	0,60	0,60	0	2	63,7	
SOM	312D	23,0	15	45,0	6,4	3,26	1,54	71	1	62,5	
TCH	144D	— 1,0	15	17,3	49,3	1,47	0,60	170	2	64,0	
UGA	051D	11,0	15	32,3	1,2	1,46	1,12	60	1	63,4	
URS	061D	23,0	15	24,7	56,6	0,88	0,64	12	2	65,2	
VTN	325D	86,0	15	105,3	16,1	3,03	1,40	116	2	63,6	
ZMB	314D	— 1,0	15	27,5	— 13,1	2 38	1,48	39	1	63,9	

12 015,18 MHz (16)

1		2	3	4		5		6	7	8	9
AGL	252D	— 25,0	16	1,6	25,5	3,64	2,16	152	1	63,0	
AND	341D	— 37,0	16	1,6	42,5	0,60	0,60	0	2	61,6	1/0,5
ARS	003D	17,0	16	41,1	23,8	3,52	1,68	134	2	62,8	
AUS	007D	128,0	16	145,0	— 38,1	1,83	1,39	134	2	63,5	
AUT	016D	— 19,0	16	12,2	47,5	1,14	0,63	166	2	64,3	
BUL	020D	— 1,0	16	25,0	43,0	1,04	0,60	165	1	63,8	
CHN	169A	92,0	16	118,5	36,4	1,16	0,76	11	1	64,7	
CHN	186A	62,0	16	102,5	30,2	1,91	1,23	147	2	65,5	
CKH	053D	158,0	16	— 163,0	— 11,2	1,76	0,72	30	2	64,5	
CPV	321D	— 31,0	16	— 24,0	16,0	0,86	0,70	144	2	62,4	
DNK	089B	5,0	16	12,3	57,1	1,20	0,60	177	2	64,4	
EGY	026D	— 7,0	16	29,7	26,8	2,33	1,72	136	2	63,3	
G	027D	— 31,0	16	— 3,5	53,8	1,84	0,72	142	1	65,2	
IND	040D	56,0	16	73,0	25,0	1,82	1,48	58	2	63,8	
IND	048D	68,0	16	86,2	25,0	1,56	0,90	120	2	65,5	
KRE	286B	110,0	16	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	243D	29,0	16	56,8	— 13,9	1,56	1,38	65	1	63,9	
MLA	227A	86,0	16	102,1	4,1	1,62	0,82	135	1	63,2	2
MLD	306B	44,0	16	73,1	6,0	0,96	0,60	90	1	63,7	
MLI	328D	— 37,0	16	— 7,6	13,2	1,74	1,24	171	1	63,9	
MLT	147D	— 13,0	16	14,3	35,9	0,60	0,60	0	1	61,2	1/0,7
MOZ	307D	— 1,0	16	34,0	— 18,0	3,57	1,38	55	2	64,4	
OCE	101D	— 160,0	16	145,0	— 16,3	4,34	3,54	4	2	63,7	
PHL	285A	96,0	16	121,3	11,1	3,46	1,76	99	2	63,7	
RRW	310D	11,0	16	30,0	— 2,1	0,66	0,60	42	2	65,0	
STP	241D	— 13,0	16	7,0	0,8	0,60	0,60	0	2	61,6	1/1,3
TON	215D	170,0	16	— 174,7	— 18,0	1,41	0,68	85	1	63,5	
URS	060D	23,0	16	41,5	57 4	3,06	1,56	153	1	66,9	
URS	069B	44,0	16	70,8	38,5	1,36	0,74	161	2	64,1	
ZAI	322D	— 19,0	16	22,4	0,0	2,16	1,88	48	1	64,9	

12 034,36 MHz (17)

1		2	3	4		5		6	7	8	9
AUS	005E	98,0	17	133,5	— 18,8	2,70	1,40	76	2	64,5	
BRM	298A	74,0	17	97,1	19,1	3,58	1,48	104	2	63,9	
CAR	338E	122,0	17	149,5	8,0	5,36	0,77	178	1	62,7	
CHN	167A	92,0	17	124,3	43,7	1,98	0,72	156	2	64,7	
CHN	182A	80,0	17	108,7	35,1	1,42	0,88	109	1	64,2	
CME	300E	— 13,0	17	12,7	6,2	2,54	1,68	87	1	63,6	
F	093E	— 19,0	17	2,6	45,9	2,50	0,98	160	1	64,0	
GUI	192E	— 37,0	17	— 11,0	10,2	1,58	1,04	147	2	63,7	
IND	038A	56,0	17	72,9	33,4	1,52	1,08	33	1	64,3	
IND	046A	68,0	17	84,7	20,5	1,60	0,86	30	1	63,6	
INS	032A	80,0	17	112,3	— 0,3	2,66	2,32	109	2	64,0	
LBY	280E	— 25,0	17	21,4	26,0	2,50	1,04	119	2	63,7	
MDG	236E	29,0	17	46,6	— 18,8	2,72	1,14	65	2	63,5	
NPL	122A	50,0	17	83,7	26,3	1,72	0,60	163	2	64,6	
NZL	287B	128,0	17	173,0	— 41,0	3,30	1,28	48	1	64,8	
PLM	337E	170,0	17	— 161,4	7,0	0,60	0,60	0	1	62,6	
POL	132E	— 1,0	17	19,3	51,8	1,46	0,64	162	2	64,3	
QTA	247E	17,0	17	51,1	25,3	0,60	0,60	0	1	62,0	1/1,6 2
SMA	335E	170,0	17	— 170,1	— 14,2	0,60	0,60	0	2	61,4	1/0,9
SMR	311E	— 37,0	17	12,6	43,7	0,60	0,60	0	1	62,7	1/0,8
SWZ	313E	— 1,0	17	31,5	— 26,5	0,62	0,60	66	1	63,0	1/1,7
TUR	145E	5,0	17	34,4	38,9	2,68	1,04	168	1	63,9	
URS	064E	23,0	17	45,6	40,8	2,16	0,60	163	2	64,1	
WAK	334E	140,0	17	166,5	19,2	0,60	0,60	0	1	63,8	
YMS	267E	11,0	17	48,8	15,2	1,76	1,54	176	2	63,0	

12 053,54 MHz (18)

1		2	3	4		5		6	7	8	9
AGL	251E	— 25,0	18	4,2	33,2	2,45	1,25	172	1	63,6	
ARS	275E	17,0	18	48,3	24,6	3,84	1,20	138	2	63,0	
AUS	006E	98,0	18	135,4	— 30,3	2,00	1,40	44	1	63,4	
AUS	008E	128,0	18	145,9	— 21,5	2,90	2,00	120	2	63,9	
BGD	220B	74,0	18	90,3	23,6	1,46	0,84	135	1	63,7	
BOT	297E	— 1,0	18	23,3	— 22,2	2,13	1,50	36	2	64,0	
CBG	299A	68,0	18	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159A	80,0	18	109,4	27,3	2,14	1,72	107	2	64,5	
CHN	185A	62,0	18	95,7	35,4	2,10	1,14	156	1	63,4	
D	087E	— 19,0	18	9,6	49,9	1,62	0,72	147	1	65,7	
GNP	304E	— 31,0	18	— 15,0	12,0	0,90	0,60	172	2	63,3	
GUM	331E	122,0	18	144,5	13,1	0,60	0,60	0	2	63,5	
IND	041A	56,0	18	76,4	16,0	2,08	1,38	35	2	63,8	
IND	042A	68,0	18	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030A	80,0	18	112,3	— 8,1	3,14	1,46	169	1	64,2	
IRL	211E	— 31,0	18	— 8,2	53,2	0,84	0,60	162	1	64,5	
KRE	286C	110,0	18	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	242E	29,0	18	59,8	— 18,9	1,62	1,24	55	1	64,2	
MLA	227B	86,0	18	102,1	4,1	1,62	0,82	135	1	63,3	
MLI	327E	— 37,0	18	— 2,0	19,0	2,68	1,26	127	1	63,2	
MRL	333E	146,0	18	166,7	7,9	1,50	1,50	177	1	63,5	
NOR	120B	5,0	18	13,1	64,1	1,84	0,88	10	2	65,0	
PAK	281A	38,0	18	65,2	27,9	1,52	1,42	28	1	63,0	
PHL	285B	98,0	18	121,3	11,1	3,46	1,76	99	2	63,7	
ROU	136E	— 1,0	18	25,0	45,7	1,38	0,66	155	1	64,0	
TCD	143E	— 13,0	18	18,1	15,5	3,40	1,72	107	2	64,2	
TGO	226E	— 25,0	18	0,8	8,6	1,52	0,60	105	2	63,6	
URS	070A	44,0	18	73,9	41,0	1,34	0,84	5	2	64,5	
YEM	266E	11,0	18	44,3	15,1	1,14	0,70	109	1	62,8	
ZAI	323E	— 19,0	18	21,3	— 6,8	2,80	1,52	149	1	64,9	

12 072,72 MHz (19)

1		2	3	4		5		6	7	8	9
AUS	004E	98,0	19	121,8	— 24,9	3,60	1,90	54	2	63,2	
AUS	009E	128,0	19	147,2	— 32,0	2,10	1,40	15	1	64,3	
AZR	134E	— 31,0	19	— 23,4	38,1	2,56	0,70	158	2	63,2	
BEN	233E	— 19,0	19	2,2	9,5	1,44	0,68	97	2	63,5	
BRM	295E	74,0	19	97,1	19,1	3,58	1,48	104	2	63,9	
CHN	158E	80,0	19	111,8	38,0	2,60	1,74	124	1	64,9	
CHN	179A	92,0	19	112,2	21,9	1,84	1,22	37	2	63,8	
GAE	260E	— 13,0	19	11,8	— 0,6	1,43	1,12	64	1	63,6	
GME	302E	— 37,0	19	— 15,1	13,4	0,79	0,60	4	2	63,5	
GRC	105E	5,0	19	24,7	38,2	1,78	0,98	156	1	63,5	
IND	038B	56,0	19	75,9	33,4	1,52	1,08	33	1	64,3	
IND	046B	68,0	19	84,7	20,5	1,60	0,86	30	1	63,6	
INS	032B	80,0	19	112,3	— 0,3	2,66	2,32	109	2	64,1	
INS	035E	104,0	19	135,2	— 3,8	2,46	2,00	147	1	64,0	2
IRN	109E	34,0	19	54,2	32,4	3,82	1,82	149	2	63,0	
LBN	279E	11,0	19	35,8	33,9	0,60	0,60	0	2	61,8	1/1,8
LBY	321E	— 25,0	19	13,1	27,2	2,36	1,12	129	2	63,3	
LIE	253E	— 37,0	19	9,5	47,1	0,60	0,60	0	1	62,6	1/0,7
LUX	114E	— 19,0	19	6,0	49,8	0,60	0,60	0	1	63,1	1/2,0
MRA	332E	122,0	19	145,9	16,9	1,20	0,60	76	1	63,7	
NIU	054A	158,0	19	— 169,8	— 19,0	0,60	0,60	0	2	64,1	
NPL	122B	50,0	19	83,7	28,3	1,72	0,60	163	2	64,6	
POR	133E	— 31,0	19	— 8,0	39,6	0,92	0,60	112	2	63,6	
SOM	312E	23,0	19	45,0	6,4	3,26	1,54	71	1	62,6	
TCH	144E	— 1,0	19	17,3	49,3	1,47	0,60	170	2	64,0	
UGA	061E	11,0	19	32,3	1,2	1,46	1,12	60	1	63,4	
URS	061E	23.0	19	24,7	56,6	0,88	0,64	12	2	65,2	
URS	077A	110,0	19	112,7	57,3	2,67	1,75	2	1	64,1	
ZMB	314E	— 1,0	19	27,5	— 13,1	2,38	1,48	39	1	63,9	

12 091,90 MHz (20)

1		2	3	4		5		6	7	8	9
ALG	252E	— 25,0	20	1,6	25,5	3,64	2,16	152	1	63,0	
AND	341E	— 37,0	20	1,6	42,5	0,60	0,60	0	2	61,7	1/0,5
ARS	003E	17,0	20	41,1	23,8	3,52	1,68	134	2	62,9	
AUS	007E	128,0	20	145,0	— 38,1	1,83	1,39	134	2	63,5	
AUT	016E	— 19,0	20	12,2	47,5	1,14	0,63	166	2	64,3	
BGD	220C	74,0	20	90,3	23,6	1,46	0,84	135	1	63,7	
BUL	020E	— 1,0	20	25,0	43,0	1,04	0,60	165	1	63,9	
CBG	299E	68,0	20	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159B	80,0	20	109,4	27,3	2,14	1,72	107	2	64,6	
CHN	184A	62,0	20	101,0	37,9	2,78	0,82	144	1	63,7	
CPV	301E	— 31,0	20	— 24,0	16,0	0,86	0,70	144	2	62,4	
DNK	089C	5,0	20	12,3	57,1	1,20	0,60	177	2	64,4	
EGY	026E	— 7,0	20	29,7	26,8	2,33	1,72	136	2	63,3	
G	027E	— 31,0	20	— 3,5	53,6	1,84	0,72	142	1	65,2	
IND	041B	56,0	20	78,4	16,0	2,06	1,38	35	2	63,8	
IND	042B	68,0	20	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030B	80,0	20	112,3	— 8,1	3,14	1,46	169	1	64,2	
KRE	285D	110,0	20	127,0	39,1	1,30	1,10	31	2	64,0	
MLA	227C	86,0	20	102,1	4,1	1,62	0,82	135	1	63,3	
MLI	328E	— 37,0	20	— 7,6	13,2	1,74	1,24	171	1	63,9	
MOZ	307E	— 1,0	20	34,0	— 18,0	3,57	1,38	55	2	64,4	
PAK	282A	38,0	20	68,5	25,8	1,32	0,62	133	1	63,3	
PHL	285C	98,0	20	121,3	11,1	3,46	1,76	99	2	63,7	
RRW	310E	11,0	20	30,0	— 2,1	0,66	0,60	42	2	65,0	
STP	241E	— 13,0	20	7,0	0,8	0,60	0,60	0	2	61,7	1/1,3
TKL	058A	158,0	20	— 171,8	— 8,9	0,70	0,60	35	1	63,8	
URS	065A	23,0	20	32,4	63,1	1,16	0,60	175	1	66,6	
URS	065A	44,0	20	64,3	44,6	4,58	2,48	169	2	65,4	
URS	079A	140,0	20	138,0	53,6	3,16	2,12	62	2	67,7	
ZAI	322E	— 19,0	20	22,4	0,0	2,16	1,88	48	1	64,9	

12 111,08 MHz (21)

1		2	3	4		5		6	7	8	9
AFI	099A	23,0	21	42,5	11,6	0,60	0,60	0	1	62,5	
AUS	005F	98,0	21	133,5	— 18,8	2,70	1,40	76	2	64,5	
BEL	018A	— 19,0	21	4,6	50,6	0,82	0,60	167	1	64,2	
BLR	062A	23,0	21	27,8	52,6	1,08	0,72	1	2	64,8	
BRM	298C	74,0	21	97,1	19,1	3,58	1,45	104	2	63,9	
CHN	175A	92,0	21	121,4	23,8	1,14	0,82	64	2	64,3	
CHN	176A	80,0	21	113,7	33,9	1,20	0,80	141	1	64,3	
CYP	085A	5,0	21	33,3	35,1	0,60	0,60	0	1	63,6	
DDR	216A	— 1,0	21	12,6	52,1	0,83	0,63	172	2	64,2	
HVO	107A	— 31,0	21	— 1,5	12,2	1,45	1,14	29	1	64,0	
IFB	021A	5,0	21	24,5	— 28,0	3,13	1,68	27	2	64,1	4
IND	038C	56,0	21	75,9	33,4	1,52	1,08	33	1	64,4	
IND	048C	68,0	21	84,7	20,5	1,60	0,86	30	1	63,7	
INS	032C	80,0	21	112,3	— 0,3	2,66	2,32	109	2	64,1	
ISL	049A	— 31,0	21	— 19,0	64,9	1,00	0,60	177	2	65,8	
KEN	249A	11,0	21	37,9	1,1	2,29	1,56	94	1	63,7	
MCO	116A	— 37,0	21	7,4	43,7	0,60	0,60	0	1	62,4	1/0,5
MRC	209A	— 25,0	21	— 9,0	29,2	2,72	1,47	43	2	63,3	
NPL	122C	50,0	21	83,7	28,3	1,72	0,60	163	2	64,6	
NZL	287C	128,0	21	173,0	— 41,0	3,30	1,28	48	1	64,9	
SEN	222A	— 37,0	21	— 14,4	13,8	1,46	1,04	139	2	63,6	
UAE	274A	17,0	21	53,6	24,2	0,98	0,80	162	1	63,2	2
YUG	148A	— 7,0	21	18,4	43,7	1,68	0,66	154	1	65,2	

12 130,26 MHz (22)

1		2	3	4		5		6	7	8	9
ALB	296A	— 7,0	22	19,8	41,3	0,68	0,60	146	2	63,8	
AUS	006F	98,0	22	135,4	— 30,3	2,00	1,40	44	1	63,5	
AUS	008F	128,0	22	145,9	— 21,5	2,90	2,00	120	2	64,0	
BDI	270A	11,0	22	29,9	— 3,1	0,71	0,60	80	2	63,4	
BGD	220D	74,0	22	90,3	23,6	1,48	0,84	135	1	63,8	
CBG	299C	68,0	22	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159C	80,0	22	109,4	27,3	2,14	1,72	107	2	64,6	
CHN	168A	92,0	22	124,8	48,1	2,68	0,92	157	2	65,4	
CHN	183A	62,0	22	104,8	39,0	1,48	0,60	142	1	63,8	
COG	235A	— 13,0	22	14,6	— 0,7	2,02	1,18	59	2	63,8	
CTI	237A	— 31,0	22	— 5,6	7,5	1,60	1,22	108	2	63,7	
ETH	092A	23,0	22	39,7	9,1	3,50	2,40	124	2	63,4	
FNL	104A	5,0	22	17,0	61,5	2,00	1,00	10	2	67,7	
HNG	106A	— 1,0	22	19,5	47,2	0,92	0,60	176	1	64,0	
IFB	135A	— 1,0	22	29,6	— 18,8	1,46	1,36	37	2	64,2	4
IND	041C	56,0	22	78,4	16,0	2,08	1,38	35	2	63,8	
IND	042C	68,0	22	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030C	80,0	22	112,3	— 8,1	3,14	1,46	169	1	64,2	
KRE	286E	110,0	22	127,0	39,1	1,30	1,10	31	2	64,1	
KWT	113A	17,0	22	47,6	29,2	0,68	0,60	145	2	63,1	
MLA	227D	86,0	22	102,1	4,1	1,62	0,82	135	1	63,3	
MTN	223A	— 37,0	22	— 12,2	18,5	2,62	1,87	150	1	62,8	
NIG	119A	— 19,0	22	7,8	9,4	2,16	2,02	45	1	63,9	
PAK	281B	38,0	22	65,2	27,9	1,52	1,42	28	1	63,1	
PHL	285D	96,0	22	121,3	11,1	3,46	1,76	99	2	63,7	
REU	097A	29,0	22	55,6	— 19,2	1,56	0,78	96	1	63,9	
SDN	231A	— 7,0	22	28,9	12,7	2,26	1,96	159	1	63,5	
SUI	140A	— 19,0	22	8,2	46,6	0,98	0,70	171	2	64,1	
SYR	229A	11,0	22	38,3	34,9	1,04	0,90	7	1	63,2	
TUN	150A	— 25,0	22	9,5	33,5	1,88	0,72	135	1	63,8	
URS	070B	44,0	22	73,9	41,0	1,34	0,84	5	2	64,6	
URS	081A	140,0	11	168,5	65,5	1,96	0,60	168	1	68,1	

12 149,44 MHz (23)

1		2	3	4		5		6	7	8	9
AGL	295A	— 13,0	23	16,5	— 12,0	3,09	2,26	84	1	64,1	
ARS	340A	17,0	23	52,3	24,8	2,68	0,70	143	1	63,2	
AUS	004F	98,0	23	121,8	— 24,9	3,60	1,90	54	2	63,3	
AUS	009F	128,0	23	147,2	— 32,0	2,10	1,40	15	1	64,3	
BRM	298D	74,0	23	97,1	19,1	3,58	1,48	104	2	64,0	
CHN	158C	80,0	23	111,6	38,0	2,60	1,74	124	1	65,0	
CNR	130A	— 31,0	23	— 15,7	28,4	1,54	0,60	5	2	62,8	
CVA	085A	— 37,0	23	10,8	41,5	2,00	0,60	138	1	63,6	1/1,5
E	129A	— 31,0	23	— 3,1	39,9	2,10	1,14	154	2	63,9	
GHA	108A	— 25,0	23	— 1,2	7,9	1,48	1,06	102	1	63,6	
GNE	303A	— 19,0	23	10,3	1,5	0,68	0,60	10	2	63,8	
HOL	213A	— 19,0	23	5,4	52,0	0,76	0,60	171	1	64,4	
IND	038D	56,0	23	75,9	33,4	1,52	1,08	33	1	64,4	
IND	046D	68,0	23	84,7	20,5	1,60	0,86	30	1	63,7	
INS	032D	80,0	23	112,3	— 0,3	2,66	2,32	109	2	64,1	
ISL	050A	5,0	23	— 19,5	61,0	2,20	0,80	4	1	66,3	3
JOR	224A	11,0	23	35,8	31,4	0,84	0,78	114	2	63,1	
NIU	054B	158,0	23	— 169,8	— 19,0	0,60	0,60	0	2	64,1	
SDN	230A	— 7,0	23	29,2	7,5	2,34	1,12	148	2	64,4	
SRL	259A	— 31,0	23	— 11,8	8,6	0,78	0,68	114	1	63,4	
TGK	225A	11,0	23	34,6	— 6,2	2,41	1,72	129	1	63,7	
URS	061F	23,0	23	24,7	56,6	0,88	0,64	12	2	65,3	
URS	064F	23,0	23	45,6	40,8	2,16	0,60	163	1	64,2	
URS	077B	110,0	23	112,7	57,3	2,67	1,75	2	1	68,1	
YUG	149A	— 7,0	23	18,4	43,7	1,68	0,66	154	1	65,2	

12 168,62 MHz (24)

1		2	3	4		5		6	7	8	9
AUS	007F	128,0	24	145,0	— 38,1	1,83	1,39	134	2	63,6	
BGD	220E	74,0	24	90,3	23,6	1,46	0,84	135	1	63,8	
CAF	258A	— 13,0	24	21,0	6,3	2,25	1,68	31	2	64,3	
CBG	299D	68,0	24	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	166A	92,0	24	121,1	41,7	1,52	0,78	154	2	64,5	
CHN	177A	80,0	24	111,8	30,8	1,42	0,82	160	2	64,7	
CHN	188A	62,0	24	101,5	25,1	1,86	1,08	132	2	65,0	
DNK	090A	5,0	24	17,0	61,5	2,00	1,00	10	2	67,5	
I	082A	— 19,0	24	12,3	41,3	2,38	0,98	137	2	64,1	
IND	041D	56,0	24	78,4	16,0	2,08	1,38	35	2	63,9	
IND	042D	68,0	24	79,3	27,7	2,14	1,16	147	2	63,9	
INS	030D	80,0	24	112,3	— 8,1	3,14	1,46	169	1	64,3	
IRQ	256A	11,0	24	43,6	32,8	1,88	0,96	143	1	63,3	2
LSO	305A	5,0	24	27,8	— 29,8	0,66	0,60	36	1	64,2	
MLA	227E	85,0	24	102,1	4,1	1,62	0,82	135	1	63,4	
MTN	288A	— 37,0	24	— 7,8	23,4	1,63	1,10	141	1	63,0	
MWI	308A	— 1,0	24	34,1	— 13,0	1,54	0,60	87	2	64,2	
MYT	098A	29,0	24	45,1	— 12,8	0,60	0,60	0	1	63,4	
NGR	115A	— 25,0	24	8,3	16,8	2,54	2,08	44	2	64,5	
OMA	123A	17,0	24	55,6	21,0	1,88	1,02	100	2	63,3	
PAK	282B	38,0	24	58,5	25,8	1,32	0,62	133	1	63,4	
PHL	285E	98,0	24	121,3	11,1	3,46	1,76	99	2	63,8	
SDN	232A	— 7,0	24	30,4	19,0	2,44	1,52	176	1	63,3	
TKL	058B	158,0	24	— 171,8	— 8,9	0,70	0,60	35	1	63,9	
URS	066B	44,0	24	64,3	44,6	4,56	2,48	169	2	65,4	
URS	079B	140,0	24	138,0	53,6	3,16	2,12	62	2	67,8	

12 187,80 MHz (25)

1		2	3	4		5		6	7	8	9
AFI	099E	23,0	25	42,5	11,6	0,60	0,60	0	1	62,6	
BEL	018B	— 19,0	25	4,6	50,6	0,82	0,60	167	1	64,1	
BLR	062B	23,0	25	27,6	52,6	1,08	0,72	1	2	64,9	
CYP	088B	5,0	25	33,3	35,1	0,60	0,60	0	1	63,6	
DDR	216B	— 1,0	25	12,6	52,1	0,83	0,63	172	2	64,3	
HVO	107B	— 31,0	25	— 1,5	12,2	1,45	1,14	29	1	64,0	
IFB	021B	5,0	25	24,5	— 28,0	3,13	1,68	27	2	64,1	4
ISL	049B	— 31,0	25	— 19,0	64,9	1,00	0,60	177	2	65,9	
ISR	110A	— 13,0	25	34,9	31,4	0,94	0,60	117	2	63,6	
KEN	249B	11,0	25	37,9	1,1	2,29	1,56	94	1	63,8	
MCO	116B	— 37,0	25	7,4	43,7	0,60	0,60	0	1	62,5	1/0,5
MNG	248A	74,0	25	102,2	46,6	3,60	1,13	169	1	64,1	
MRC	209B	— 25,0	25	— 9,0	29,2	2,72	1,47	43	2	63,3	
NMB	025A	— 19,0	25	17,5	— 21,6	2,66	1,90	48	2	64,7	
SEN	222B	— 37,0	25	— 14,4	13,8	1,46	1,04	139	2	63,7	
UAE	274B	17,0	25	53,6	24,2	0,98	0,80	162	1	63,2	
URS	078A	110,0	25	108,2	53,4	2,16	0,78	10	1	65,0	
YUG	148B	— 7,0	25	18,4	43,7	1,68	0,66	154	1	65,3	

12 206,98 MHz (26)

1		2	3	4		5		6	7	8	9
ALB	296B	— 7,0	26	19,8	41,3	0,68	0,60	146	2	63,8	
BDI	270B	11,0	26	29,9	— 3,1	0,71	0,60	80	2	63,4	
COG	235B	— 13,0	26	14,6	— 0,7	2,02	1,18	59	2	63,8	
CTI	237B	— 31,0	26	— 5,6	7,5	1,60	1,22	108	2	63,7	
ETH	092B	23,0	26	39,7	9,1	3,50	2,40	124	2	63,5	
FNL	104B	5,0	26	17,0	61,5	2,00	1,00	10	2	67,5	
HNG	106B	— 1,0	26	19,5	47,2	0,90	0,60	176	1	64,0	
IFE	135B	— 1,0	26	29,6	— 18,8	1,46	1,36	37	2	64,2	4
KWT	113B	17,0	26	47,6	29,2	0,68	0,60	145	2	63,1	
MTN	223B	— 37,0	26	— 12,2	18,5	2,62	1,87	150	1	62,9	
NIG	119B	— 19,0	26	7,8	9,4	2.16	2,02	45	1	63,9	
REU	097B	29,0	26	55,6	— 19,2	1,56	0,78	96	1	64,0	
SDK	231B	— 7,0	26	28,9	12,7	2,26	1,96	159	1	63,5	
SUI	140B	— 19,0	26	8,2	46,6	0,98	0,70	171	2	64,1	
SYR	229B	11,0	26	38,3	34,9	1,04	0,90	7	1	63,3	
TUN	150B	— 25,0	26	9,5	33,5	1,88	0,72	135	1	63,9	
URS	068A	44,0	26	59,0	38,8	2,24	1,00	164	2	64,0	
URS	074A	74,0	26	88,8	57,6	3,08	1,68	162	2	67,9	
URS	080A	140,0	26	155,3	55,4	2,90	2,36	35	1	67,9	

12 226,16 MHz (27)

1		2	3	4		5		6	7	8	9
AGL	295B	— 13,0	27	16,5	— 12,0	3,09	2,26	84	1	64,2	
BHR	255A	17,0	27	50,5	26,1	0,60	0,60	0	1	60,8	1/0,7
CNR	130B	— 31,0	27	— 15,7	28,4	1,54	0,60	5	2	62,8	
CVA	083A	— 37,0	27	12,4	41,8	0,60	0,60	0	1	65,2	
DNK	091A	5,0	27	— 19,5	61,0	2,20	0,80	4	1	68,2	3
E	129B	— 31,0	27	— 3,1	39,9	2,10	1,14	154	2	64,0	
GHA	108B	—25,0	27	— 1,2	7,9	1,48	1,06	102	1	63,7	
GNE	303B	— 19,0	27	10,3	1,5	0,68	0,60	10	2	63,8	
HOL	213B	— 19,0	27	5,4	52,0	0,76	0,60	171	1	64,5	
JOR	224B	11,0	27	35,8	31,4	0,84	0,78	114	2	63,1	
SDN	230B	— 7,0	27	29,2	7,5	2,34	1,12	148	2	64,5	
SRL	259B	— 31,0	27	— 11,8	8,6	0,78	0,68	114	1	63,5	
TGK	225B	11,0	27	34,6	— 6,2	2,41	1,72	129	1	63,8	
URS	059A	23,0	27	36,0	47,0	3,70	1,43	153	2	65,2	
URS	077C	110,0	27	112,7	57,3	2,67	1,75	2	1	67,2	
YUG	149B	— 7,0	27	18,4	43,7	1,68	0,66	154	1	65,3	

12 245,34 MHz (28)

1		2	3	4		5		6	7	8	9
CAF	258B	— 13,0	28	21,0	6,3	2,25	1,68	31	2	64,3	
I	082B	— 19,0	28	12,3	41,3	2,38	0,98	137	2	64,2	
IRQ	256B	11,0	28	43,6	32,8	1,66	0,95	143	1	63,4	
LSO	305B	5,0	28	27,8	— 29,8	0,66	0,62	36	1	64,2	
MTN	288B	— 37,0	28	— 7,8	23,4	1,63	1,10	141	1	63,0	
MWI	308B	— 1,0	28	34,1	— 13,0	1,54	0,60	87	2	64,3	
MYT	098B	29,0	28	45,1	— 12,8	0,60	0,60	0	1	63,5	
NGR	115B	— 25,0	28	8,3	16,8	2,54	2,08	44	2	64,5	
NOR	121A	5,0	28	17,0	61,5	2,00	1,00	10	2	66,8	
OMA	123B	17,0	28	55,6	21,0	1,88	1,02	100	2	63,3	
SDN	232B	— 7,0	28	30,4	19,0	2,44	1,52	176	1	63,3	
URS	066C	44,0	28	64,3	44,6	4,56	2,48	169	2	65,5	
URS	076A	74,0	28	98,0	63,2	1,84	0,69	170	2	68,1	
URS	079C	140,0	28	138,0	53,6	3,16	2,12	62	2	67,8	

12 264,52 MHz (29)

1		2	3	4		5		6	7	8	9
AFI	099C	23,0	29	42,5	11,6	0,60	0,60	0	1	62,6	
BEL	018C	— 19,0	29	4,6	50,6	0,82	0,60	167	1	63,5	
CYP	085C	5,0	29	33,3	35,1	0,60	0,60	0	1	63,7	
DDR	216C	— 1,0	29	12,6	52,1	0,83	0,63	172	2	64,3	
HVO	107C	— 31,0	29	— 1,5	12,2	1,45	1,14	29	1	64,1	
IFB	021C	5,0	29	24,5	— 28,0	3,13	1,68	27	2	64,2	4
ISL	049C	— 31,0	29	— 19,0	64,9	1,00	0,60	177	2	65,9	
ISR	110B	— 13,0	29	34,9	31,4	0,94	0,60	117	2	63,9	
KEN	249C	11,0	29	37,9	1,1	2,29	1,56	94	1	63,8	
MCO	116C	— 37,0	29	7,4	43,7	0,60	0,60	0	1	62,5	1/0,5
MNG	248B	74,0	29	102,2	46,6	3,60	1,13	169	1	64,2	
MRC	209C	— 25,0	29	— 9,0	29,2	2,72	1,47	43	2	63,4	
NMB	025B	— 19,0	29	17,5	— 21,6	2,66	1,90	48	2	64,8	
SEN	222C	— 37,0	29	— 14,4	13,8	1,46	1,04	139	2	63,7	
UAE	274C	17,0	29	53,6	24,2	0,98	0,80	162	1	63,3	
UKR	063A	23,0	29	31,2	48,4	2,32	0,96	172	2	64,6	
YUG	148C	— 7,0	29	18,4	43,7	1,68	0,66	154	1	65,3	

12 283,70 MHz (30)

1		2	3	4		5		6	7	8	9
ALB	296C	— 7,0	30	19,8	41,3	0,68	0,60	146	2	63,9	
BDI	270C	11,0	30	29,9	— 3,1	0,71	0,60	80	2	63,5	
COG	235C	— 13,0	30	14,6	— 0,7	2,02	1,18	59	2	63,9	
CTI	237C	— 31,0	30	— 5,6	7,5	1,60	1,22	108	2	63,8	
ETH	092C	23,0	30	39,7	9,1	3,50	2,40	124	2	63,6	
HNG	106C	— 1,0	30	19,5	47,2	0,92	0,60	176	1	64,1	
IFB	135C	— 1,0	30	29,6	— 18,8	1,46	1,36	37	2	64,3	4
KWT	113C	17,0	30	47,6	29,2	0,68	0,60	145	2	63,2	
MTN	223C	— 37,0	30	— 12,2	18,5	2,62	1,87	150	1	62,9	
NIG	119C	— 19,0	30	7,8	9,4	2,16	2,02	45	1	64,0	
REU	097C	29,0	30	55,6	— 19,2	1,56	0,78	96	1	64,1	
S	139A	5,0	30	17,0	61,5	2,00	1,00	10	2	67,1	
SDN	231C	— 7,0	30	28,9	12,7	2,26	1,96	159	1	63,6	
SUI	140C	— 19,0	30	8,2	46,6	0,98	0,70	171	2	64,2	
SYR	229C	11,0	30	38,3	34,9	1,04	0,90	7	1	63,3	
TUN	150C	— 25,0	30	9,5	33,5	1,88	0,72	135	1	63,9	
URS	068B	44,0	30	59,0	38,8	2,24	1,00	164	2	64,1	
URS	074B	74,0	30	88,8	57,6	3,08	1,68	162	2	68,0	
URS	080B	140,0	30	155,3	55,4	2,90	2,36	35	1	67,9	

12 302,88 MHz (31)

1		2	3	4		5		6	7	8	9
AGL	295C	— 13,0	31	16,5	— 12,0	3,09	2,26	84	1	64,2	
BHR	255B	17,0	31	50,5	26,1	0,60	0,60	0	1	60,9	1/0,7
CNR	130C	— 31,0	31	— 15,7	28,4	1,54	0,60	5	2	62,9	
CVA	083B	— 37,0	31	12,4	41,8	0,60	0,60	0	1	65,3	
E	129C	— 31,0	31	— 3,1	39,9	2,10	1,14	154	2	64,0	
GHA	108C	— 25,0	31	— 1,2	7,9	1,48	1,06	102	1	63,7	
GNE	303C	— 19,0	31	10,3	1,5	0,68	0,60	10	2	63,9	
HOL	213C	— 19,0	31	5,4	52,0	0,76	0,60	171	1	64,6	
ISL	050B	5,0	31	— 19,5	61,0	2,20	0,80	4	1	66,4	3
JOR	224C	11,0	31	35,8	31,4	0,84	0,78	114	2	63,2	
SDN	230C	— 7,0	31	29,2	7,5	2,34	1,12	148	2	64,5	
SRL	259C	— 31,0	31	— 11,8	8,6	0,78	0,68	114	1	63,6	
TGK	225C	11,0	31	34,6	— 6,2	2,41	1,72	129	1	63,8	
URS	059B	23,0	31	36,0	47,0	3,70	1,43	153	2	65,2	
URS	077D	110,0	31	112,7	57,3	2,67	1,75	2	1	67,2	
YUG	149C	— 7,0	31	18,4	43,7	1,68	0,66	154	1	65,4	

12 322,06 MHz (32)

1		2	3	4		5		6	7	8	9
CAF	258C	— 13,0	32	21,0	6,3	2,25	1,68	31	2	64,4	
I	082C	— 19,0	32	12,3	41,3	2,38	0,98	137	2	64,2	
IRQ	256C	11,0	32	43,6	32,8	1,88	0,96	143	1	63,4	
LSO	305C	5,0	32	27,8	— 29,8	0,68	0,60	36	1	64,3	
MTN	288C	— 37,0	32	— 7,8	23,4	1,63	1,10	141	1	63,1	
MWI	308C	— 1,0	32	34,1	— 13,0	1,54	0,60	87	2	64,4	
MYT	098C	29,0	32	45,1	— 12,8	0,60	0,60	0	1	63,5	
NGR	115C	— 25,0	32	8,3	16,8	2,54	2,08	44	2	64,6	
NOR	121B	5,0	32	17,0	61,5	2,00	1,00	10	2	66,9	
OMA	123C	17,0	32	55,6	21,0	1,88	1,02	100	2	63,4	
SDN	232C	— 7,0	32	30,4	19,0	2,44	1,52	176	1	63,4	
URS	066D	44,0	32	64,3	44,6	4,56	2,48	169	2	65,5	
URS	075A	74,0	32	94,0	51,7	1,52	0,60	172	2	65,1	
URS	079D	140,0	32	138,0	53,6	3,16	2,12	62	2	67,9	

12 341,24 MHz (33)

1		2	3	4		5		6	7	8	9
AFI	099D	23,0	33	42,5	11,6	0,60	0,60	0	1	62,7	
BEL	018D	— 19,0	33	4,6	50,6	0,82	0,60	167	1	63,9	
CYP	086D	5,0	33	33,3	35,1	0,60	0,60	0	1	63,7	
DDR	216D	— 1,0	33	12,6	52,1	0,83	0,63	172	2	64,4	
HVO	107D	— 31,0	33	— 1,5	12,2	1,45	1,14	29	1	64,1	
IFB	021D	5,0	33	24,5	— 28,0	3,13	1,68	27	2	64,2	4
ISL	049D	— 31,0	33	— 19,0	64,9	1,00	0,60	177	2	66,0	
ISR	110C	— 13,0	33	34,9	31,4	0,94	0,60	117	2	63,9	
KEN	249D	11,0	33	37,9	1,1	2,29	1,56	94	1	63,9	
MCO	116D	— 37,0	33	7,4	43,7	0,60	0,60	0	1	62,6	1/0,5
MNG	248C	74,0	33	102,2	46,6	3,60	1,13	169	1	64,2	
MRC	209D	— 25,0	33	— 9,0	29,2	2,72	1,47	43	2	63,4	
NMB	025C	— 19,0	33	17,5	— 21,6	2,66	1,90	48	2	64,8	
SEN	222D	— 37,0	33	— 14,4	13,8	1,46	1,04	139	2	63,8	
UAE	224D	17,0	33	53,6	24,2	0,98	0,80	162	1	63,3	
UKR	063B	23,0	33	31,2	48,4	2,32	0,96	172	2	64,7	
YUG	148D	— 7,0	33	18,4	43,7	1,68	0,66	154	1	65,4	

12 360,42 MHz (34)

1		2	3	4		5		6	7	8	9
ALB	295D	— 7,0	34	19,8	41,3	0,68	0,60	146	2	63,9	
BDI	270D	11,0	34	29,9	— 3,1	0,71	0,60	80	2	63,5	
COG	235D	— 13,0	34	14,6	— 0,7	2,02	1,18	59	2	63,9	
CTI	237D	— 31,0	34	— 5,6	7,5	1,60	1,22	108	2	63,9	
ETH	092D	23,0	34	39,7	9,1	3,50	2,40	124	2	63,6	
HNG	106D	— 1,0	34	19,5	47,2	0,92	0,60	176	1	64,1	
IFB	135D	— 1,0	34	29,6	— 18,8	1,46	1,35	37	2	64,3	4
KWT	113D	17,0	34	47,6	29,2	0,68	0,60	145	2	63,2	
MTN	223D	— 37,0	34	— 12,2	18,5	2,62	1,87	150	1	63,0	
NIG	119D	— 19,0	34	7,8	9,4	2,16	2,02	45	1	64,1	
REU	097D	29,0	34	55,6	— 19,2	1,56	0,78	96	1	64,1	
S	138C	5,0	34	16,2	61,0	1,04	0,98	14	2	67,4	
SDN	231D	— 7,0	34	28,9	12,7	2,26	1,96	159	1	63,6	
SUI	140D	— 19,0	34	8,2	46,6	0,98	0,70	171	2	64,3	
SYR	229D	11,0	34	38,3	34,9	1,04	0,90	7	1	63,4	
TUN	140D	— 25,0	34	9,5	33,5	1,88	0,72	135	1	64,0	
URS	071A	44,0	34	63,1	42,0	2,64	0,84	170	2	64,4	
URS	074C	74,0	34	88,8	57,6	3,08	1,68	162	2	68,0	
URS	080C	140,0	34	155,3	55,4	2,90	2,36	35	1	68,0	

12 379,60 MHz (35)

1		2	3	4		5		6	7	8	9
AGL	295D	— 13,0	35	16,5	— 12,0	3,09	2,26	84	1	64,3	
BHR	255C	17,0	35	50,5	26,1	0,60	0,60	0	1	61,0	1/0,7
CNR	130D	— 34,0	35	— 15,7	28,4	1,54	0,60	5	2	63,0	
CVA	063C	— 37,0	35	12,4	41,8	0,60	0,60	0	1	65,3	
DNK	091B	5,0	35	— 19,5	61,0	2,20	0,80	4	1	66,3	3
E	129D	— 31,0	35	— 3,1	39,9	2,10	1,14	154	2	64,1	
GHA	108D	— 25,0	35	— 1,2	7,9	1,48	1,06	102	1	63,8	
GNE	303D	— 19,0	35	10,3	1,5	0,68	0,60	10	2	63,9	
HOL	213D	— 19,0	35	5,4	52,0	0,76	0,60	171	1	64,6	
JOR	224D	11,0	35	35,8	31,4	0,84	0,78	114	2	63,2	
SDN	230D	— 7,0	35	29,2	7,5	2,34	1,12	148	2	64,6	
SRL	259D	— 31,0	35	— 11,8	8,6	0,78	0,68	114	1	63,6	
TGK	225D	11,0	35	34,6	— 6,2	2,41	1,72	129	1	63,9	
URS	059C	23,0	35	36,0	47,0	3,70	1,43	153	2	65,3	
URS	077E	110,0	35	112,7	57,3	2,67	1,75	2	1	67,3	
YUG	149D	— 7,0	35	18,4	43,7	1,68	0,66	154	1	65,4	

12 398,78 MHz (36)

1		2	3	4		5		6	7	8	9
CAF	258D	— 13,0	36	21,0	6,3	2,25	1,68	31	2	64,4	
DNK	090B	5,0	36	17,0	61,5	2,00	1,00	10	2	68,2	
I	082D	— 19,0	36	12,3	41,3	2,38	0,98	137	2	64,3	
IRQ	256D	11,0	36	43,6	32,8	1,88	0,96	143	1	63,5	
LSO	305D	5,0	36	27,8	— 29,8	0,65	0,60	36	1	64,3	
MTN	288D	— 37,0	36	— 7,8	23,4	1,63	1,10	141	1	63,1	
MWI	308D	— 1,0	36	34,1	— 13,0	1,54	0,60	87	2	64,4	
MYT	098D	29,0	36	45,1	— 12,8	0,60	0,60	0	1	63,6	
NGR	115D	— 25,0	36	8,3	16,8	2,54	2,08	44	2	64,7	
OMA	123D	17,0	36	55,6	21,0	1,88	1,02	100	2	63,4	
SDN	232D	— 7,0	36	30,4	19,0	2,44	1,52	176	1	63,4	
URS	066E	44,0	36	64,3	44,6	4,58	2,48	169	2	65,6	
URS	079E	140,0	36	138,0	53,6	3,16	2,12	62	2	68,0	

12 417,96 MHz (37)

1		2	3	4		5		6	7	8	9
AFI	099E	23,0	37	42,5	11,6	0,60	0,60	0	1	62,7	
BEL	018E	— 19,0	37	4,6	50,6	0,82	0,60	167	1	64,4	
CYR	085E	5,0	37	33,3	35,1	0,60	0,60	0	1	63,8	
DDR	216E	— 1,0	37	12,6	52,1	0,83	0,63	172	2	64,4	
HVO	107E	— 31,0	37	— 1,5	12,2	1,45	1,14	29	1	64,2	
IFB	021E	5,0	37	24,5	— 28,0	3,13	1,68	27	2	64,3	4
ISL	049E	— 31,0	37	— 19,0	64,9	1,00	0,60	177	2	66,0	
IRS	110D	— 13,0	37	34,9	31,4	0,94	0,60	117	2	64,0	
KEN	249E	11,0	37	37,9	1,1	2,29	1,56	94	1	63,9	
MCO	116E	— 37,0	37	7,4	43,7	0,60	0,60	0	1	62,6	1/0,5
MNG	248D	74,0	37	102,2	46,6	3,60	1,13	169	1	64,3	
MRC	209E	— 25,0	37	— 9,0	29,2	2,72	1,47	43	2	63,5	
NME	025D	— 19,0	37	17,5	— 21,6	2,66	1,90	48	2	64,9	
SEN	222E	— 37,0	37	— 14,4	13,8	1,46	1,04	139	2	63,9	
UAE	274E	17,0	37	53,6	24,2	0,98	0,80	162	1	63,4	
UKR	063C	23,0	37	31,2	48,4	2,32	0,96	172	2	64,7	
YUG	148E	— 7,0	37	18,4	43,7	1,68	0,66	154	1	65,4	

12 437,14 MHz (38)

1		2	3	4		5		6	7	8	9
ALB	296E	— 7,0	38	19,8	41,3	0,68	0,60	146	2	64,0	
BDI	270E	11,0	38	29,9	— 3,1	0,71	0,60	80	2	63,6	
COG	235E	— 13,0	38	14,6	— 0,7	2,02	1,18	59	2	64,0	
CTI	237E	— 31,0	38	5,6	7,5	1,60	1,22	108	2	63,9	
ETH	092E	23,0	38	39,7	9,1	3,50	2,40	124	2	63,7	
HNG	106E	— 1,0	38	19,5	47,2	0,92	0,60	176	1	64,2	
IFB	135E	— 1,0	38	29,6	— 18,8	1,46	1,36	37	2	64,4	4
KWT	113E	17,0	38	47,6	29,2	0,68	0,60	145	2	63,3	
MTN	223E	— 37,0	38	— 12,2	18,5	2,62	1,87	150	1	63,0	
NIG	119E	— 19,0	38	7,8	9,4	2,16	2,02	45	1	64,1	
NOR	120C	5,0	38	13,1	64,1	1,84	0,88	10	2	67,0	
REU	097E	29,0	38	55,6	— 19,2	1,56	0,78	96	1	64,2	
SDN	231E	— 7,0	38	28,9	12,7	2,26	1,96	159	1	63,7	
SUI	140E	— 19,0	38	8,2	48,6	0,98	0,70	171	2	64,3	
SYR	339A	11,0	38	37,6	34,2	1,32	0,88	74	1	63,4	2
TUN	272A	— 25,0	38	2,5	32,0	3,59	1,75	175	1	61,9	5
URS	071B	44,0	38	63,1	42,0	2,64	0,84	170	2	64,5	
URS	074D	74,0	38	88,8	57,6	3,08	1,68	162	2	68,1	
URS	080D	140,0	38	155,3	55,4	2,90	2,36	35	1	68,1	

12 456,32 MHz (39)

1		2	3	4		5		6	7	8	9
AGL	295E	— 13,0	39	16,5	— 12,0	3,09	2,26	84	1	64,4	
BHR	255D	17,0	39	50,5	26,1	0,60	0,60	0	1	61,0	1/0,7
CNR	130E	— 31,0	39	— 15,7	28,4	1,54	0,60	5	2	63,0	
CVA	083D	— 37,0	39	12,4	41,8	0,60	0,60	0	1	65,4	
E	129E	— 31,0	39	— 3,1	39,9	2,10	1,14	154	2	64,2	
GHA	108E	— 25,0	39	— 1,2	7,9	1,48	1,06	102	1	63,8	
GNE	303E	— 19,0	39	10,3	1,5	0,68	0,60	10	2	64,0	
HOL	213E	— 19,0	39	5,4	52,0	0,76	0,60	171	1	64,7	
ISL	050C	5,0	39	— 19,5	61,0	2,20	0,80	4	1	66,5	3
JOR	224E	11,0	39	35,8	31,4	0,84	0,78	114	2	63,3	
MNG	248E	74,0	39	102,2	46,6	3,60	1,13	169	1	64,3	
SDN	230E	— 7,0	39	29,2	7,5	2,34	1,12	148	2	64,6	
SRL	259E	— 31,0	39	— 11,8	8,6	0,78	0,68	114	1	63,7	
TGK	225E	11,0	39	34,6	— 6,2	2,41	1,72	129	1	63,9	
URS	059D	23,0	39	36,0	47,0	3,70	1,43	153	2	65,3	
URS	077F	110,0	39	112,7	57,3	2,67	1,75	2	1	67,4	
YUG	149E	— 7,0	39	18,4	43,7	1,68	0,66	154	1	65,5	

12 475,50 MHz (40)

1		2	3	4		5		6	7	8	9
CAF	258E	— 13,0	40	21,0	6,3	2,25	1,68	31	2	64,5	
I	082E	— 19,0	40	12,3	41,3	2,38	0,98	137	2	64,3	
IRQ	256E	11,0	40	43,6	32,8	1,88	0,96	143	1	63,5	
LSO	305E	5,0	40	27,8	— 29,8	0,66	0,60	36	1	64,4	
MTN	288E	— 37,0	40	— 7,8	23,4	1,63	1,10	141	1	63,2	
MWI	308E	— 1,0	40	34,1	— 13,0	1,54	0,60	87	2	64,5	
MYT	098E	29,0	40	45,1	— 12,8	0,60	0,60	0	1	63,6	
NGR	115E	— 25,0	40	8,3	16,8	2,54	2,08	44	2	64,7	
OMA	123E	17,0	40	55,6	21,0	1,88	1,02	100	2	63,5	
S	139B	5,0	40	17,0	61,5	2,00	1,00	10	2	68,2	
SDN	232E	— 7,0	40	30,4	19,0	2,44	1,52	176	1	63,5	
URS	066F	44,0	40	64,3	44,6	4,56	2,48	169	2	65,6	
URS	079F	140,0	40	138,0	53,6	3,16	2,12	62	2	68,0	

ARTIGO 12

Disposições que regem o serviço de radiodifusão por satélite na Região 2 antes do estabelecimento de um plano pormenorizado

12.1. Em conformidade com os princípios enunciados no anexo 6, aplicar-se-ão as disposições temporárias seguintes até que seja estabelecido, em virtude dos § 12.9 a § 12.12 abaixo, um plano pormenorizado para o serviço da radiodifusão por satélite, na faixa de 11,7-12,2 GHz, na Região 2.

12.2. As estações espaciais do serviço de radiodifusão por satélite serão colocadas nas porções de órbita seguintes:

Entre 75° O. e 100° O. de longitude (todavia, para uso do Canadá, Estados Unidos e México, a porção útil serão compreendida somente 75° O. e 95° O. de longitude);

Entre 140° O. e 170° O. de longitude.

12.2.1. As estações espaciais do serviço de radiodifusão por satélite poderão igualmente ser colocadas fora das porções de órbita acima indicadas e deverão então funcionar em conformidade com as disposições dos n.os **420 a 423** do Regulamento das Radiocomunicações. Excepcionalmente para uso da Gronelândia, pode aceitar-se a utilização de uma posição na órbita dos satélites geostacionários compreendida entre 55° O. e 60° O. para o serviço de radiodifusão por satélite (serviço primário). As administrações interessadas tudo devem fazer para permitir a partilha dessa porção do arco entre um satélite de radiodifusão destinado à Gronelândia e estações espaciais do serviço fixo de outras administrações da Região 2.

12.3. As estações espaciais do serviço fixo por satélite estarão situadas nas porções de órbita exteriores às porções mencionadas no § 12.2. Poderão igualmente estar situadas nas porções de órbita mencionadas no dito § 12.2. Neste caso deverão funcionar em conformidade com as disposições dos n.os **420** a **423** do Regulamento das Radiocomunicações.

12.3.1. As estações espaciais do serviço de radiodifusão por satélite situadas nas porções de órbita mencionadas no § 12.2 e as do serviço fixo por satélite situadas nas outras porções de órbita deverão funcionar de tal modo que as estações de um serviço não causem qualquer interferência inaceitável às estações dos outros serviços.

O nível de interferência inaceitável será determinado por acordo entre as administrações interessadas, na base dos mais recentes pareceres da CCIR e dos anexos 8 e 9 do presente apêndice. Todavia, as estações espaciais do serviço de radiodifusão por satélite poderão ser colocadas no limite da porção de órbita mencionada no § 12.2, na medida em que estejam conformes com as características técnicas permitentes, para a Região 2, expostas no anexo 8.

12.4. Antes da conferência administrativa regional das radiocomunicações mencionada no § 12.9, os sistemas do serviço de radiodifusão por satélite considerar-se-ão experimentais e serão explorados em conformidade com os critérios de partilha e com os parâmetros técnicos que figuram nos anexos 8 e 9.

12.5. As administrações podem pôr em serviço sistemas baseados em valores de características técnicas diferentes dos que figuram no anexo 8 do presente apêndice, sob condição de que daí não resulte para os sistemas em serviço ou previstos das outras administrações interferência mais intensa que a calculada em conformidade com o anexo 9.

12.6. A entrada em serviço de sistemas do serviço fixo por satélite efectuar-se-á em conformidade com as disposições pertinentes do Regulamentos das Radiocomunicações, especialmente com as do artigos 11 e 13 e, se for caso disso, com as disposições do artigo 7 do presente apêndice.

12.7. Na faixa 11,7-12,2 GHz, os sistemas espaciais utilizarão, na medida em que as questões técnicas e económicas o permitam, as técnicas que conduzam à utilização mais eficaz possível da órbita das satélites geostacionários e do espectro das frequências. A título de exemplo, encontrar-se-á no anexo 7 a descrição de tais técnicas.

12.8. Na Região 2, as disposições da Resolução n.º 33 (1) continuarão a aplicar-se ao serviço de radiodifusão por satélite na faixa de 11,7-12,2 GHz até ao momento em que venha a poder ser adoptado um plano pormenorizado para este serviço.

(1) Substitui a Resolução Spa 2-3 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

12.9. Em 1982, o mais tardar, deverá reunir-se uma conferência administrativa regional das radiocomunicações para proceder à planificação pormenorizada do serviço de radiodifusão por satélite e do serviço fixo por satélite em conformidade com as disposições enunciadas nos parágrafos seguintes.

12.9.1. Durante a referida conferência elaborar-se-á um plano pormenorizado de utilização do recurso órbita/espectro disponível para o serviço de radiodifusão por satélite na faixa de 11,7-12,2 GHz. Esse plano indicará a consignação pormenorizada das posições orbitais e dos canais disponíveis, garantindo, assim, que as necessidades em matéria de radiodifusão por satélite apresentadas por cada administração serão satisfeitas equitativamente para todos os países interessados. Por princípio, convirá garantir a cada administração da Região um número mínimo (4) de canais para a exploração do serviço de radiodifusão por satélite. Para além desse mínimo, ter-se-á em conta as características particulares dos países (superfície, zonas horárias, diversidade linguística, etc.).

12.9.2. A planificação basear-se-á na recepção individual, embora cada administração possa utilizar o sistema de recepção que melhor satisfaça as suas necessidades (recepção individual, comunitária ou ambas). Por outro lado ter-se-ão em conta as decisões das Conferências Administrativas Mundiais das Radiocomunicações de 1977 e 1979 e os mais recentes pareceres da CCIR relativamente aos parâmetros que ela estuda.

12.9.3. Logo que se estabeleça um plano para o serviço de radiodifusão por satélite convirá que os sistemas sejam concebidos de tal modo que sejam reduzidas ao mínimo as diferenças e as incompatibilidades técnicas com os outros sistemas das outras regiões.

12.9.4. A conferência terá igualmente em conta, e de modo equitativo, as necessidades do serviço fixo por satélite a que esta faixa de frequências é também atribuída na Região 2.

12.10. Todas as administrações da Região 2 deverão apresentar à IFRB as suas necessidades relativamente ao serviço de radiodifusão por satélite o mais tardar um ano antes do início da conferência administrativa regional das radiocomunicações encarregada de estabelecer um plano para este serviço na Região 2. Essas necessidades poderão ser actualizadas conforme as administrações considerem necessário, e deverão as mesmas administrações indicar o número e os limites de cada zona de serviço, bem como o número de canais necessários para cada zona. Seis meses antes da data limite fixada para enviar os pedidos, a IFRB lembrará às administrações, por circular e ou telegrama, que têm de apresentar as suas necessidades.

12.11. Qualquer sistema existente ou previsto antes da entrada em vigor de plano pormenorizado anteriormente referido não deverá causar interferência prejudicial a um sistema explorado em conformidade com tal plano.

12.12. No momento em que se efectue a planificação pormenorizada do serviço de radiodifusão por satélite na faixa de 11,7-12,2 GHz para a Região 2, não se terá necessariamente em conta os sistemas de radiodifusão por satélite existentes ou previstos. Por consequência, o estabelecimento ou a planificação de tais sistemas por uma administração antes da elaboração do plano não confere a esses sistemas qualquer direito ou reconhecimento.

ARTIGO 13

Relação com a Resolução n.º 507 (1)

13.1. As disposições e o plano associado que figuram no presente apêndice são considerados como contendo um acordo mundial e um plano associado para as Regiões 1 e 3, em virtude do ponto 1 do dispositivo da Resolução n.º 507, que requer que as estações do serviço de radiodifusão por satélite sejam estabelecidas e exploradas em conformidade com acordos e planos associados.

ARTIGO 14

Interferências

14.1. Os Membros da União procurarão estudar concertadamente as medidas necessárias com vista a reduzir as interferências prejudiciais que poderiam resultar da entrada em vigor das presentes disposições e do plano associado.

ARTIGO 15 (2)

Entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977)

ARTIGO 16

Duração de validade das disposições e do plano associado

16.1. As disposições e o plano associado foram elaborados com vista a satisfazer as necessidades do serviço de radiodifusão por satélite nas faixas respectivas e a sua duração será, pelo menos, de 15 anos, a partir de 1 de Janeiro de 1979.

16.2. Em qualquer caso, as disposições e o plano associado continuarão em vigor até serem revistos por uma conferência administrativa das radiocomunicações competente, convocada em conformidade com as disposições pertinentes da Convenção em vigor.

---

(1) Substitui a Resolução Spa 2-3 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

(2) Este artigo não é reproduzido no presente apêndice. V. nota de fundo de página referente ao título do presente apêndice.

ANEXO 1

Limites a ter em consideração para determinar se um serviço de uma administração é desfavoravelmente influenciado por um projecto de modificação ao plano (artigo 4, § 4.3.1) (1)

1. *Limites impostos à modificação da relação sinal útil/sinal interferente em relação a consignações de frequência conformes com o plano.*

Em relação com o § 4. 3.1.1, uma administração é considerada como sendo desfavoravelmente influenciada se o projecto de modificação do plano tiver como consequência descer a relação sinal útil/sinal interferente, em qualquer ponto situado no interior da zona de serviço associada a uma das suas consignações de frequência conformes com o plano, quer abaixo de 30 dB, quer abaixo do valor resultante das consignações de frequência do plano à data de entrada em vigor dos Actos Finais (2), tomando-se o menor dos dois valores.

Nota. — Para efectuar o cálculo, o efeito, à entrada do receptor, de todos os sinais no mesmo canal ou nos canais adjacentes expressa-se em função de um sinal interferente equivalente no mesmo canal. Este valor é habitualmente expresso em decibéis.

2. *Limites impostos à modificação da densidade de fluxo de potência com vista à protecção do serviço de radiodifusão por satélite na faixa de 11,7-12,2 GHz na Região 2.*

Em relação com o § 4.3.1.2, uma administração da Região 2 é considerada como sendo desfavoravelmente influenciada, se do projecto de modificação do plano resultar que os seguintes valores da densidade de fluxo de potência são excedidos em qualquer ponto da zona de serviço desfavoravelmente influenciada:

147 dB (W/m²/27 MHz)	$0° \leq \theta < 0{,}48°$
139 + 25 log θ dB (W/m²/27 MHz)	$0{,}48 \leq \theta \leq 27{,}25°$
103 dB (W/m²/27 MHz)	$0 \geq 27{,}25°$

θ representa a diferença em graus entre a longitude da estação espacial de radiodifusão da Região 1 ou da Região 3 e a longitude da estação espacial de radiodifusão da administração desfavoravelmente influenciada na Região 2.

3. *Limites impostos à modificação do valor da densidade de fluxo de potência com vista à protecção dos serviços de Terra das outras administrações.*

Em relação com o § 4.3.1.3, uma administração da Região 1 ou da Região 3 é considerada como sendo desfavoravelmente influenciada se o projecto de modificação do plano tiver como consequência elevar o valor da densidade de fluxo de potência, em qualquer parte do território dessa administração, em mais de 0,25 dB relativamente ao resultante das consignações de frequência conformes com o Plano da entrada em vigor dos Actos Finais (2).

A mesma administração é considerada como não sendo desfavoravelmente influenciada se o valor da densidade de fluxo de potência produzida em todas as partes do seu território não exceder os limites especificados no anexo 5.

Uma administração da Região 2 é considerada como sendo desfavoravelmente influenciada, se do projecto de modificação do plano resultar que, em qualquer ponto do território dependente dessa administração e para todos os ângulos de chegada, a densidade de fluxo de potência exceda — 125 dB(W/m²/4 kHz), quando a estação de radiodifusão por satélite funcione como polarização circular, e — 128 dB (W/m²/4 kHz), quando ela funcione com polarização rectilínea.

4. *Limites impostos à modificação da densidade de fluxo de potência, com vista à protecção do serviço fixo por satélite da Região 2, na faixa de 11,7-12,2 GHz.*

Em relação com o § 4.3.1.4, uma administração da Região 2 é considerada como sendo desfavoravelmente influenciada se o projecto de modificação de plano tiver por efeito aumentar, no seu território, a densidade de fluxo de potência em 0,25 dB ou mais, relativamente ao valor resultante das consignações de frequência do plano no momento da entrada em vigor dos Actos Finais (2).

Todavia, no caso de uma consignação de frequência do plano ou de suas modificações posteriores produzir uma densidade de fluxo de potência inferior a — 138 dB (W/m²/27 MHz) em qualquer parte do território de uma administração da Região 2, essa administração não é considerada como sendo desfavoravelmente influenciada.

---

(1) Os limites especificados neste anexo referem-se à densidade de fluxo de potência obtida supondo uma propagação em espaço livre.

(2) Actos Finais de Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) entrados em vigor em 1 de Janeiro de 1979.

ANEXO 2

Características fundamentais a inscrever nas notificações relativas às estações espaciais do serviço de radiodifusão por satélite

1. País e número IFRB.
2. Posição nominal na órbita (em graus, a partir do meridiano de Greenwich).
3. Frequência consignada ou número de canal.
4. Data de entrada em serviço.
5. Identidade da estação espacial.
6. Zona de serviço (a zona de serviço pode ser definida, se necessário, por um certo número de «pontos de cálculo»).
7. Coordenadas geográficas da intersecção do eixo do feixe de antena com a superfície da Terra.
8. Zona hidrometeorológica.
9. Classe de estação.
10. Classe de emissão e largura de faixa necessária.
11. Potência fornecida à antena (dBW).
12. Características da antena:

Ganho da antena em relação a uma antena telescópica;
Forma de feixe (elíptico ou circulante):

Eixo maior (graus) nos pontos a — 3 dB;
Eixo menor (graus) nos pontos a — 3 dB;

Orientação da elipse;
ΔG (diferença entre o ganho máximo e o ganho na direcção do ponto da zona de serviço em que a densidade de fluxo de potência é mínima);
Precisão de orientação;
Tipo de polarização;
Sentido de polarização;
Diagrama de radiação e características da componente contrapolar.

13. Precisão da manutenção em posição.
14. Características de modulação:

Tipo de modulação;
Características de pré-acentuação;
Norma de televisão;
Características de radiodifusão sonora;
Desvio de frequência;
Composição da faixa de base;
Tipo de multiplexagaun dos sinais imagem e som;
Características.

15. Ângulo de elevação mínimo na zona de serviço.
16. Tipo de recepção (individual ou comunitária).
17. Horário de funcionamento (UTC).
18. Coordenação.
19. Acordos.
20. Outras informações.
21. Administração ou companhia que explora a estação.

ANEXO 3

Método que permite determinar o valor limite da densidade de fluxo de potência interferente no limite da zona de serviço de uma estação espacial de radiodifusão por satélite nas faixas de frequências de 11,7-12,2 GHz (nas Regiões 2 e 3) e de 11,7-12,5 GHz (na Região 1) e cálculo da densidade de fluxo de potência produzida nesse limite por uma estação de Terra.

1. *Considerações gerais:*

1.1. O presente anexo descreve um método de cálculo da interferência susceptível de ser causada por emissores de Terra a receptores de radiodifusão por satélite na faixa de frequência de 11,7-12,2 GHz (11,7-12,5 GHz na Região 1).

1.2. O método a seguir compreende duas fases:

a) Cálculo do valor máximo admissível da densidade de fluxo de potência interferente no limite da zona de serviço da estação espacial de radiodifusão por satélite em causa;
b) Cálculo do valor provável da densidade de fluxo de potência produzida, em qualquer ponto do limite da zona de serviço, pelo emissor de Terra de outra administração.

1.3. É necessário examinar caso a interferência susceptível de ser causada pelos emissores de Terra; compara-se a densidade de fluxo de potência produzida por cada emissor de Terra com o valor limite da densidade de fluxo de potência em qualquer ponto do limite da zona de serviço de uma estação do serviço de radiodifusão por satélite de outra administração. Se, para um dado emissor, o valor de densidade de fluxo de potência for inferior ao valor admissível fixado para qualquer ponto do limite da zona de serviço, considera-se que a interferência causada pelo emissor ao serviço de radiodifusão por satélite é inferior ao valor admissível e as administrações estão dispensadas de coordenação antes da entrada em funcionamento do serviço de Terra. Quando acontecer o contrário, é necessário efectuar coordenação e cálculos mais precisos, numa base aceite pelas duas partes interessadas.

1.4. É preciso sublinhar que, se os cálculos descritos no presente anexo indicarem que é excedida a densidade de fluxo de potência máxima admissível, isso não interdiz necessariamente a introdução do serviço de Terra, pois os cálculos são obrigatoriamente baseados nas hipóteses mais desfavoráveis relativamente:

a) À natureza do terreno do trajecto da interferência;
b) À discriminação exercida pelas instalações de recepção de radiodifusão por satélite em relação às emissões fora do feixe;
c) Às relações de protecção necessárias ao serviço de radiodifusão por satélite;
d) Ao tipo de recepção no serviço de radiodifusão por satélite (na ocorrência a recepção individual); nos ângulos de elevação considerados, este tipo de recepção coloca mais problemas que a recepção comunitária;
e) Ao valor de densidade de fluxo de potência a proteger no serviço de radiodifusão por satélite;
f) Às condições de propagação entre a estação de Terra e a zona de serviço do satélite de radiodifusão.

2. *Limite da densidade de fluxo de potência:*

2.1. *Considerações gerais.*

O valor admissível da densidade de fluxo de potência a não exceder no limite da zona de serviço, para proteger o serviço de radiodifusão por satélite de uma administração, é dado pela fórmula:

$$F = F_o - R + D + P \qquad (1)$$

na qual:

F — valor máximo admissível da densidade de fluxo de potência interferente [em dB (W/m²)] na largura de faixa necessária das emissões de radiodifusão por satélite;
F_o — densidade de fluxo de potência útil [em dB (W/m²)] no limite da zona de serviço;
R — relação de protecção (dB) sinal útil/sinal interferente;
D — discriminação angular (dB) assegurada pelo diagrama de radiação da antena do receptor de radiodifusão por satélite;
P — discriminação de polarização (dB) entre os sinais útil e interferente.

2.2. *Densidade de fluxo de potência útil (F_o).*

O valor F_o é igual a:

a) — 103 em dB (W/m²) para as zonas de serviço nas Regiões 1 e 3;
b) — 105 em dB (W/m²) para as zonas de serviço na Região 2.

2.3. *Relação de protecção (R).*

2.3.1. No caso de uma única contribuição de interferência, a relação de protecção contra todos os tipos de emissões de Terra, excepto as emissões de sistema de televisão multicanais em modulação de amplitude, é de 35 dB quando a diferença entre as frequências portadoras do sinal útil e do sinal interferente é igual ou inferior a ± 10 MHz; desse linearmente de 35 dB a 0 dB quando a diferença entre as portadoras passa de 10 MHz a 35 MHz, e é igual a 0 dB no caso de diferenças de frequências que excedem 35 MHz (v. a fig. 1).

2.3.2. A diferença entre as frequências portadoras deve determinar-se na base das consignações de frequência que figuram no plano de radiodifusão por satélite ou, no caso de estações espaciais de radiodifusão que não estejam

compreendidas num plano, na base das características do sistema em serviço ou em projecto. Para sistemas de televisão multicanais em modulação em amplitude que produzem grandes pontas de densidade de fluxo de potência escalonadas em grande parte da largura de faixa ocupada a relação de protecção *R* é igual a 35 dB, qualquer que seja o espaçamento das frequências portadoras.

2.3.3. Só se tomará em consideração um sinal de uma estação de Terra quando a sua largura de faixa necessária se sobrepuser em parte à largura de faixa necessária de uma consignação a uma estação do serviço de radiodifusão por satélite.

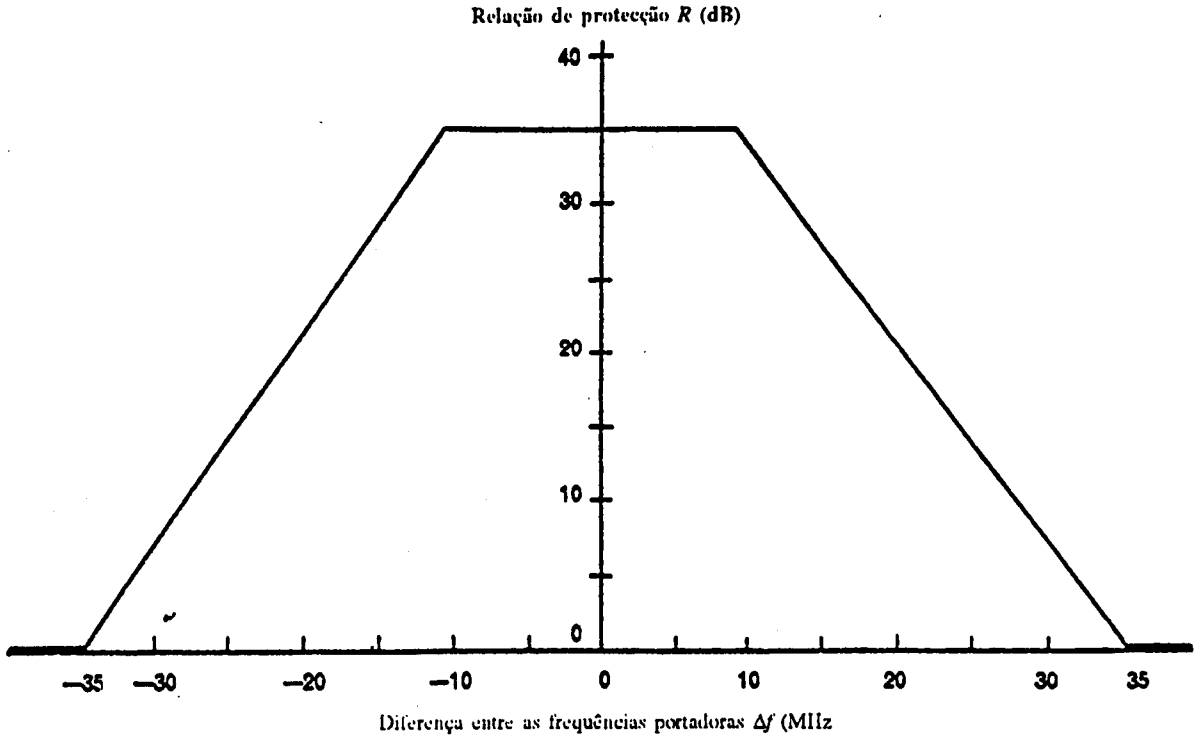


Fig. 1 — Relação de protecção R (dB) de um sinal de radiodifusão em presença de uma única fonte de interferência proveniente de um serviço de Terra (excepto para os sistemas de televisão multicanais em modulação de amplitude)

2.4. *Discriminação angular (D)*

2.4.1. *Zonas de serviço das estações espaciais do serviço de radiodifusão por satélite nas Regiões 1 e 3.*

Quando, para uma zona de serviço considerada, o ângulo de elevação (φ) escolhido para um sistema de radiodifusão por satélite, em serviço ou em projecto, é igual ou superior a 19°, admite-se que na fórmula (1) *(D)* = 33 dB. Se φ for inferior a 19°, calcula-se *(D)* utilizando as fórmulas (2a) e seguintes.

Nota. — Se são especificados vários valores de φ para uma dada zona de serviço, utiliza-se o valor apropriado a cada porção do limite da dita zona de serviço.

$$
\begin{aligned}
&D = 0 \text{ para } 0 \le \varphi \le 0{,}5° \\
&D = 3\,\varphi^{2} \text{ para } 0{,}5 < \varphi \le 1{,}41° \\
&D = 3 + 20 \log 10\ \varphi \text{ para } 1{,}41° < \varphi \le 2{,}52° \\
&D = 1 + 25 \log 10\ \varphi \text{ para } 2{,}52° < \varphi \le 19°
\end{aligned}
\qquad (2a)
$$

Nota. — Para determinação gráfica de *(D)* v. a figura 2.

2.4.2. *Zonas de serviço das estações espaciais do serviço de radiodifusão por satélite na Região 2*

Quando, para uma zona de serviço considerada, o ângulo de elevação φ escolhido para um sistema de radiodifusão por satélite, em serviço ou em projecto, for igual ou superior a 27°, admite-se que na fórmula (1) *(D)* = 38 dB.

Se φ for inferior a 27°, calcula-se *(D)* a partir das fórmulas (2b) e seguintes.

Nota. — Se forem especificados diversos valores de φ para uma dada zona de serviço, utiliza-se o valor apropriado a cada porção do limite da dita zona de serviço.

$$D = 0 \text{ para } 0 \leq \varphi \leq 0{,}45°$$
$$D = 3{,}7\ \varphi^2 \text{ para } 0{,}45 < \varphi \leq 1{,}27°$$
$$D = 3{,}9 + 20 \log_{10} \varphi \text{ para } 1{,}27° < \varphi \leq 2{,}27° \qquad (2b)$$
$$D = 2{,}1 + 25 \log_{10} \varphi \text{ para } 2{,}27° < \varphi \leq 27°$$

Nota. — Para a determinação gráfica de *(D)* v. a figura 2.

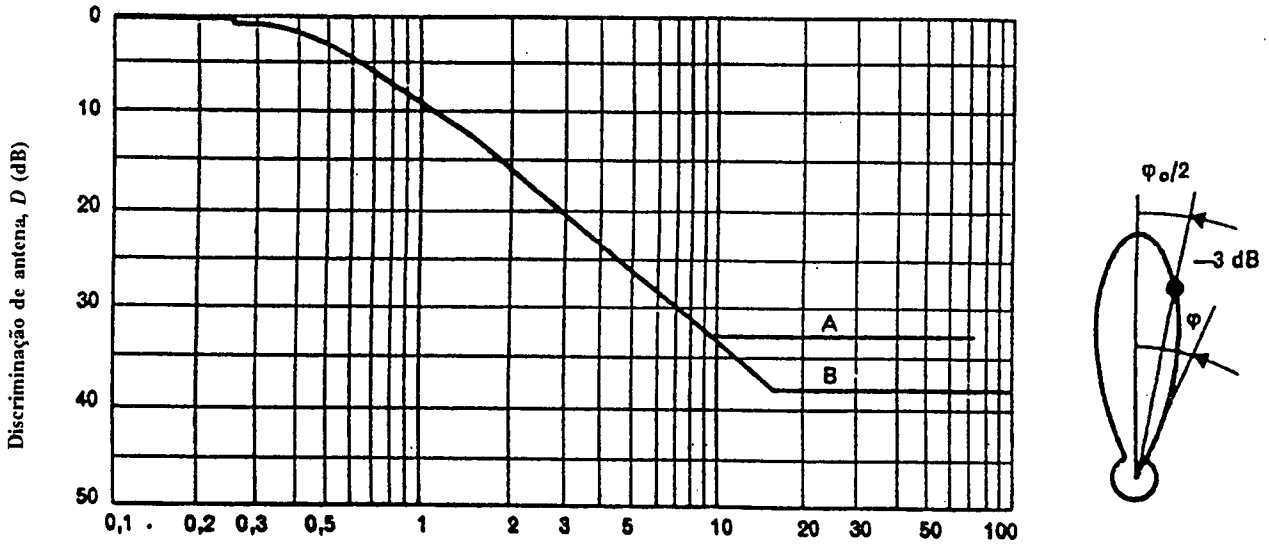


Fig. 2 — Discriminação de antena, *(D)* (dB), de um receptor de radiodifusão por satélite em função do ângulo de elevação do satélite

Para as zonas de serviço nas Regiões 1 e 3, $\varphi_o = 2°$; aplica-se a curva A.
Para as zonas de serviço na Região 2, $\varphi_o = 1{,}8°$; aplica-se a curva B.

2.5. Discriminação de polarização (P).

O valor de *P* é igual a:

a) 3 dB, quando o serviço de Terra interferente utilizar a polarização rectilínea e o serviço de radiodifusão por satélite a polarização circular, ou vice-versa;
b) 0 dB quando o serviço de Terra interferente e o serviço de radiodifusão por satélite utilizarem ambos a mesma polarização, circular ou rectilínea.

3. Densidade de fluxo de potência produzida por uma estação de Terra (F_p).

A densidade de fluxo de potência F_p [em dB(W/m²)] produzida por uma estação de Terra num ponto qualquer do limite da zona de serviço é determinada pela fórmula seguinte:

$$F_p = E - A + 43 \qquad (3)$$

na qual:

E — Potência isotrópica radiada equivalente (dBW) da estação de Terra na direcção do ponto considerado do limite da zona de serviço;
A — Atenuação de trajecto total (dB).

3.1. *Avaliação da atenuação de trajecto A no caso de uma estação de Terra situada a mais de 100 km do limite da zona de serviço de uma estação espacial de radiodifusão por satélite.*

Para trajectos de comprimento superior a 100 km, o valor de A é o seguinte:

$$A = 137{,}6 + 0{,}2324\ d_t + 0{,}0814\ d_m \qquad (4)$$

na qual d_t e d_m representam, respectivamente (em quilómetros), o comprimento do trajecto terrestre e o comprimento do trajecto marítimo.

3.2. *Avaliação da atenuação de trajecto A no caso de uma estação de Terra situada a uma distância igual ou inferior a 100 km do limite da zona de serviço de uma estação espacial de radiodifusão por satélite.*

Para trajectos de comprimento igual ou inferior a 100 km, calcula-se o valor de A empregando as fórmulas (4) e (5); o menor valor é introduzido na fórmula (3) para calcular a densidade de fluxo de potência produzida no ponto considerado do limite da zona de serviço:

$$A = 109{,}5 + 20 \log (d_t + d_m) \qquad (5)$$

A figura 3 dá o valor de A em função do comprimento total do trajecto e das percentagens de trajecto marítimo.

3.3. *Distância além da qual já não é necessária a aplicação do método.*

Deixa de ser necessário aplicar o método e é inútil a coordenação se a distância entre a estação de Terra e a zona de serviço da estação espacial de radiodifusão por satélite for superior a:

a) 400 km, no caso de trajectos inteiramente terrestres; ou
b) 1200 km, no caso de trajectos inteiramente marítimos ou de trajectos mistos.

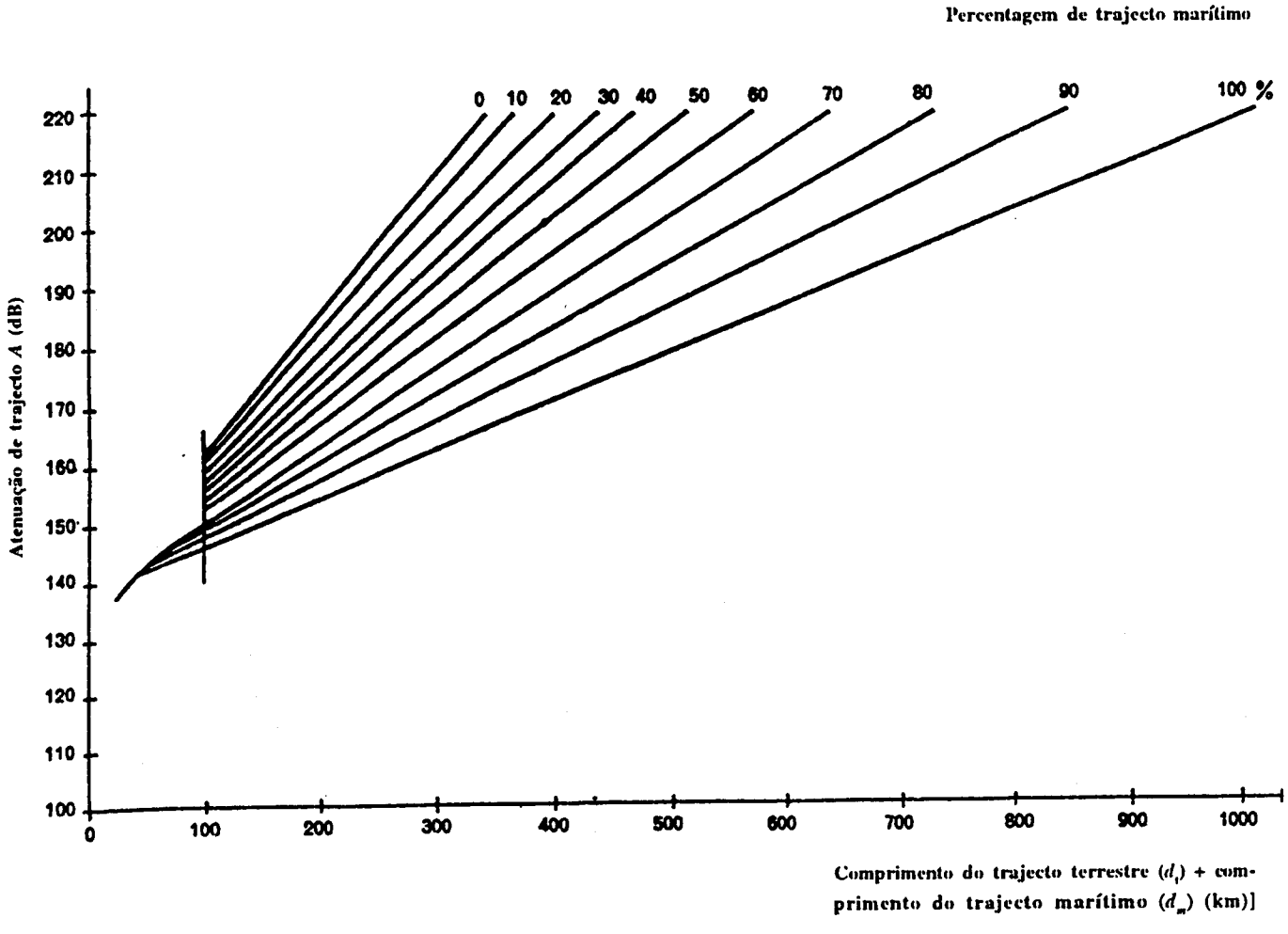


Fig. 3 — Atenuação total do trajecto, A (dB), em função do comprimento total do trajecto ($d_t + d_m$) e das percentagens de trajecto

ANEXO 4

Necessidade de coordenar, relativamente ao plano, uma estação espacial do serviço fixo por satélite ou uma estação espacial do serviço de radiodifusão por satélite da Região 2 (artigo 7)

Em relação com o § 7.2.1, a coordenação de uma estação espacial do serviço fixo por satélite ou do serviço de radiodifusão por satélite da Região 2 é necessária quando, na hipótese da programação em espaço livre, o valor de densidade de fluxo de potência produzida no território dependente de uma administração da Região 1 ou da Região 3 exceda o valor definido pelas seguintes expressões:

— 147 dB(W/m²/27 MHz) para $0 \leq \theta < 0{,}44°$;
— $138 + 25 \log \theta$ dB(W/m²/27 MHz) para $0{,}44 \leq \theta < 19{,}1°$;
— 106 dB(W/m²/27 MHz) para $19{,}1° \leq \theta$;

sendo θ a diferença, em graus, entre a longitude da estação espacial interferente do serviço de radiodifusão por satélite ou do serviço fixo por satélite na Região 2 e a longitude da estação espacial do serviço de radiodifusão por satélite desfavoravelmente influenciada nas Regiões 1 e 3.

ANEXO 5

Valores limites da densidade de fluxo de potência a aplicar para a protecção dos serviços de Terra nas Regiões 1 e 3 contra as interferências produzidas pelas estações espaciais do serviço de radiodifusão por satélite da Região 2, na faixa de 11,7-12,2 GHz (artigo 9)

Os valores limites da densidade de fluxo de potência são os seguintes:

1) Para todos os territórios das administrações das Regiões 1 e 3, para todos os ângulos de chegada:
   — 125 dB (W/m²/4 kHz) no caso das estações espaciais de radiodifusão por satélite que utilizam a polarização circular;
   — 128 dB(W/m²/4 kHz) no caso das estações espaciais de radiodifusão por satélite que utilizam a polarização rectilínea; e

2) Para os territórios das administrações da Região 3 e da parte ocidental da Região 1 situados a oeste da longitude 30° E.:
   — 132 dB(W/m²/5 MHz) no caso dos ângulos de chegada compreendidos entre 0° e 10° acima do horizonte;
   — $132 + 4{,}2(\gamma\text{-}10)$ dB (W/m²/5 MHz) no caso dos ângulos de chegada γ (em graus) compreendidos entre 10° e 15° acima do horizonte;
   — 111 dB (W/m²/5 MHz) no caso dos ângulos de chegada compreendidos entre 15° e 90° acima do horizonte.

ANEXO 6

Princípios de planificação na Região 2

Aplicaram-se os seguintes princípios ao serem elaboradas as disposições que regem a entrada em funcionamento dos serviços de radiocomunicação espacial na faixa de 11,7-12,2 GHz na Região 2:

1. *Igualdade de direitos entre os serviços a que é atribuída a faixa na Região 2.*

Nos termos do artigo 8 do Regulamento das Radiocomunicações, a faixa de 11,7-12,2 GHz é atribuída ao serviço de radiodifusão por satélite, ao serviço fixo por satélite e a serviços de radiocomunicação de Terra a título primário com igualdade de direitos. Cada administração da Região 2 tem o direito de ser ela a decidir sobre os serviços que porá em funcionamento no seu próprio território.

2. *Igualdade de direitos entre serviços de diferentes regiões.*

Em conformidade com as disposições do n.º **346** do Regulamento das Radiocomunicações, em todas as Regiões o funcionamento de serviços diferentes da mesma faixa de frequências baseia-se na igualdade de direitos, com a condição de não causarem qualquer interferência prejudicial aos serviços das outras regiões.

3. *Reconhecimento das necessidades nacionais.*

Todas as administrações da Região 2 terão em consideração as necessidades nacionais que foram apresentadas ou o serão no futuro.

4. *Direitos de acesso equitativos ao recurso órbita/espectro.*

Sob reserva das disposições da Convenção, do Regulamento das Radiocomunicações e das resoluções em vigor, reconhece-se que todas as administrações têm direito de acesso ao recurso órbita/espectro para prover às suas necessidades.

5. *Método de planificação flexível* (1).

O plano para a Região 2 a ser adoptado deverá ter bastante flexibilidade para permitir ter em conta: a evolução futura da técnica, a determinação das necessidades futuras, as modificações das necessidades actuais ou das necessidades formuladas, as necessidades das administrações não representadas na conferência (2), os novos dados relativos à propagação e os diversos métodos de concepção de sistemas. O plano só poderá ser modificado por uma conferência administrativa das radiocomunicações competente.

6. *Utilização eficaz da órbita dos satélites geostacionários e do espectro.*

O plano para a Região 2 aplicará, na medida em que isso seja técnica e economicamente possível, as técnicas mais recentes para utilizar com o máximo de eficácia a órbita dos satélites geostacionários e o espectro de frequências para satisfazer as necessidades globais das regiões, assim como as de cada administração.

7. *Consultas entre administrações.*

As administrações que projectem colocar sistemas em serviço na faixa de 11,7-12,2 GHz consultarão todas as outras administrações afectadas ou interessadas.

8. *Recepção.*

O plano para a Região 2 será estabelecido na base da recepção individual; todavia, cada administração poderá adoptar o sistema de recepção que melhor se ajuste às suas necessidades: recepção individual, recepção comunitária ou ambas.

ANEXO 7

Utilização do recurso órbita/espectro

Considerando que, na Região 2, a partilha dos recursos da órbita/espectro entre o serviço de radiodifusão por satélite e o serviço fixo por satélite na base de igualdade de direitos é difícil de efectuar e pode impor certas restrições aos dois serviços, importa escolher os parâmetros técnicos e aplicar as técnicas conducentes à utilização eficaz do recurso órbita/espectro de tal modo que os dois serviços espaciais daí tirem o melhor partido possível.

As técnicas abaixo indicadas fazem parte das que permitem a utilização mais eficaz do recurso órbita/espectro e devem, por isso, ser aplicadas com o máximo de eficácia na medida em que isso seja técnica e economicamente possível, tendo em conta a capacidade dos sistemas para responder às necessidades para que foram concedidos.

1. *Agrupamento.*

Análises muito rigorosas mostraram que a utilização da órbita melhora quando as estações espaciais são agrupadas segundo a vulnerabilidade à interferência do sistema a que pertencem e a interferência que esse sistema é susceptível de causar. Muitas vezes isso significa que estações espaciais de características semelhantes devem agrupar-se na mesma parte da órbita.

2. *Cruzamento de polarização.*

A utilização correcta do cruzamento de polarização pode melhorar notavelmente a utilização do recurso órbita/espectro, assegurando uma separação suplementar entre sistemas susceptíveis de se interferir.

3. *Geometria dos feixes cruzados.*

O princípio da geometria dos feixes cruzados é o seguinte: estações espaciais adjacentes não devem servir zonas de serviço adjacentes. Pode-se assim utilizar a discriminação das antenas de estação espacial e de estação terrena para chegar à separação máxima entre os sistemas.

4. *Zonas de serviço emparelhadas.*

Pode-se estender a este caso a aplicação do princípio da geometria das feixes cruzados. Com efeito, se as zonas de serviço estão bastante afastadas uma da outra, a discriminação da antena da estação espacial pode bastar, só por si, para que as estações espaciais que servem essas zonas ocupem a mesma posição na órbita, o que permite praticamente duplicar a capacidade da órbita.

5. *Entrelaçamento das frequências.*

Em sistemas diferentes, a interferência mútua entre os canais atinge geralmente o máximo quando as duas frequências portadoras coincidem. Quando a disposição dos canais for tal que as frequências estejam entrelaçadas, ou, mais geralmente, que se evite a coincidência das frequências portadoras, a interferência mútua pode frequentemente ser reduzida em proporções notáveis.

---

(1) O § 5 não implica o reconhecimento de sistemas explorados antes da entrada em vigor do plano.

(2) Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

6. *Espaçamento mínimo das estações espaciais.*

É evidente que, para se chegar à utilização máxima da órbita, convém colocar as estações espaciais o mais próximo possível umas das outras, na medida em que as interferências mútuas se possam manter em níveis aceitáveis.

7. *Discriminação da antena de estação espacial.*

A discriminação nos lóbulos laterais da antena de estação espacial determina o grau de separação existente entre os feixes que servem zonas de serviço que não se sobrepõem e que não são adjacentes. Para se chegar à separação máxima, tudo deve ser feito para melhorar a discriminação recorrente aos progressos da técnica de concepção e de construção de antenas.

8. *Discriminação da antena de estação terrena.*

A discriminação nos lóbulos laterais da antena de estação terrena determina o grau de separação obtido pelo espaçamento das estações espaciais. Para se chegar a uma separação máxima, tudo deve ser feito para melhorar a discriminação, tirando partido das técnicas modernas de concepção e de construção de antenas.

9. *Redução ao mínimo das diferenças de p. i. r. e.*

A interferência causada por estações espaciais de potência relativamente grande (satélites de radiodifusão ou certos tipos de satélites do serviço fixo) a estações terrenas de recepção é directamente proporcional à diferença entre as suas p. i. r. e. A partilha entre tais estações espaciais é grandemente facilitada quando essa diferença é mantida no valor mais fraco possível, tendo em conta as necessidades.

10. *Objectivos realistas de qualidade e de fiabilidade.*

Os objectivos de qualidade e de fiabilidade têm influência significativa sobre a utilização do recurso órbita/espectro. Objectivos inutilmente elevados provocam uma diminuição da capacidade da órbita e não devem, por isso, ser mais elevados que o absolutamente necessário.

ANEXO 8

Dados técnicos utilizados para o estabelecimento do plano e que devem ser utilizados para a aplicação do plano

1. *Definições.*

1.1. *Zona de serviço.*

Zona da superfície da Terra em que a administração responsável pelo serviço deve exigir que seja observada a protecção acordada.

Nota. — De acordo com a definição da zona de serviço, é óbvio que, no interior dessa zona, podem ser exigidas as condições de protecção acordadas. Na referida zona deverá haver, pelo menos, uma densidade de fluxo de potência apropriada e uma protecção contra interferências baseada numa relação de protecção acordada durante uma fracção de tempo igualmente acordada.

1.2. *Zona de cobertura.*

Zona delimitada na superfície da Terra por um contorno no qual, em todos os seus pontos, a densidade de fluxo de potência tem um valor constante acordado e, na interferência, permite obter a qualidade de recepção especificada.

Nota 1. — Em conformidade com as disposições do n.º **2674** do Regulamento das Radiocomunicações, a zona de cobertura deve ser a menor possível que englobe a zona de serviço.

Nota 2. — A zona de cobertura engloba normalmente a zona de serviço e resulta da intersecção do feixe (de secção elíptica ou circular) com a superfície da Terra. É definida por um dado valor da densidade de fluxo de potência. Por exemplo, no caso de um país da Região 1 ou da Região 3 cujo serviço esteja previsto para recepção individual, seria a zona limitada pelo contorno correspondente a uma densidade de fluxo de potência de — 103 dB (W/m²) durante 99 % do mês mais desfavorável. Em geral, existirá uma zona interior à zona de cobertura, mas exterior à zona de serviço, na qual a densidade de fluxo de potência será superior ao valor mínimo especificado, mas em que não será assegurada a protecção contra interferências.

1.3. *Área de um feixe.*

Zona delimitada pela intersecção do feixe, a meia potência, da antena de emissão do satélite com a superfície da Terra.

Nota. — A área do feixe não é senão a zona da superfície da Terra delimitada pelos pontos a — 3 dB do diagrama de radiação da antena de emissão do satélite. Em muitos casos, a área coincide quase com a zona de cobertura e, quando difere desta, isso explica-se pelas diferentes permanentes de comprimento dos trajectos entre o satélite e os diferentes pontos da área do feixe e também, se for caso disso, pelas variações igualmente permanentes dos factores de propagação relativos a essa zona. Todavia, no caso de uma zona de serviço cuja dimensão máxima é vista do satélite sob um ângulo inferior a 0,6° (valor admitido como sendo o mínimo realizável da abertura a meia potência do feixe), pode haver diferença importante entre a área do feixe e a zona de cobertura.

1.4. *Posição nominal na órbita.*

Longitude de uma posição na órbita dos satélites geostacionários associada a uma consignação de frequência a uma estação espacial de um serviço de radiocomunicação espacial. Esta posição é expressa em graus, a partir do meridiano de Greenwich.

2. *Factores de propagação radioeléctrica.*

2.1. A atenuação de propagação no trajecto espaço para Terra é igual à atenuação em espaço livre aumentada da atenuação suplementar excedida durante 1 %, no máximo, do mês mais desfavorável. Este último é indicado pela figura 1 para as cinco zonas hidrometeorológicas definidas na figura 2.

2.2. Quando se utilizam as curvas da figura 1, a diferença entre a atenuação em tempo claro e a atenuação durante 99 % do mês mais desfavorável deve limitar-se a 2 dB, no máximo, graças a uma escolha judiciosa do ângulo de elevação.

2.3. Na planificação do serviço de radiodifusão por satélite, para as emissões de polarização circular, deve-se utilizar a relação seguinte entre o nível da componente despolarizada e o da componente copolar:

Para as zonas hidrometeorológicas 1 e 2: — 27 dB;
Para as zonas hidrometeorológicas 3, 4 e 5: — 30 dB.

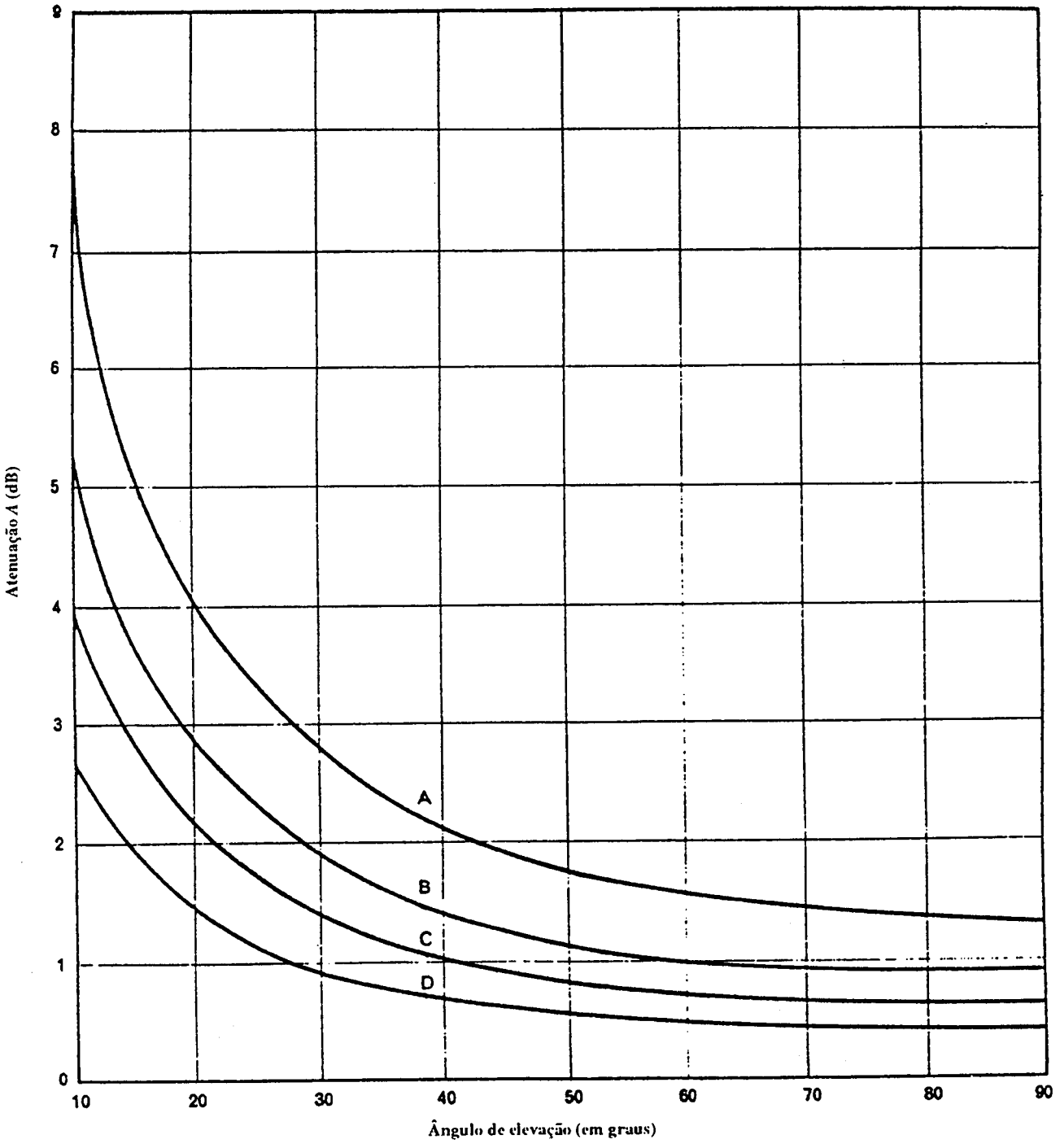


Fig. 1 — Valores previstos de atenuação suplementar excedida durante 1 %, no máximo, do mês mais desfavorável (0,25 % do tempo) em 12 GHz nas zonas hidrometeorológicas mencionadas na figura 2

A — Zona hidrometeorológica 1
B — Zona hidrometeorológica 2
C — Zonas hidrometeorológicas 3 e 4
D — Zona hidrometeorológica 5

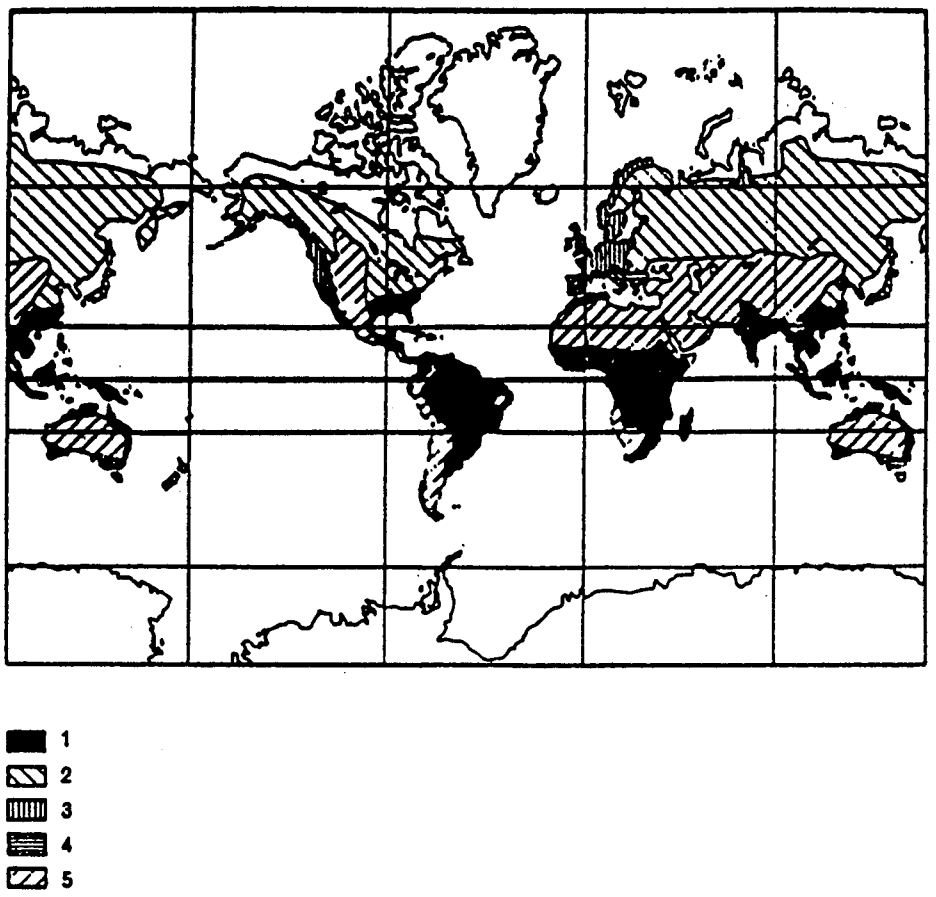


Fig. 2 — Zonas hidrometeorológicas

É de notar que não se fizeram muitas medidas de atenuação devido às precipitações nos países tropicais, particularmente na região africana.

3. *Características técnicas fundamentais.*

3.1. *Tipo de modulação.*

A planificação do serviço de radiodifusão por satélite baseia-se na utilização de um sinal composto por um sinal vídeo associado a uma via de som modulada em frequência; o conjunto modula em frequência uma portadora na faixa dos 12 GHz. A característica de pré-acentuação está de acordo com a figura 3, a qual provém do parecer n.º 405 da CCIR.

Isso não interdiz a utilização de sinais modulantes de características diferentes (por exemplo, uma modulação constituída por vias de som multiplexadas em frequência na faixa do canal de televisão, a modulação digital de sinais sonoros e de televisão ou ainda a utilização de características diferentes de pré-acentuação), com a condição de que a utilização dessas outras características não cause interferência mais importante que a causada pelo sistema considerado no plano.

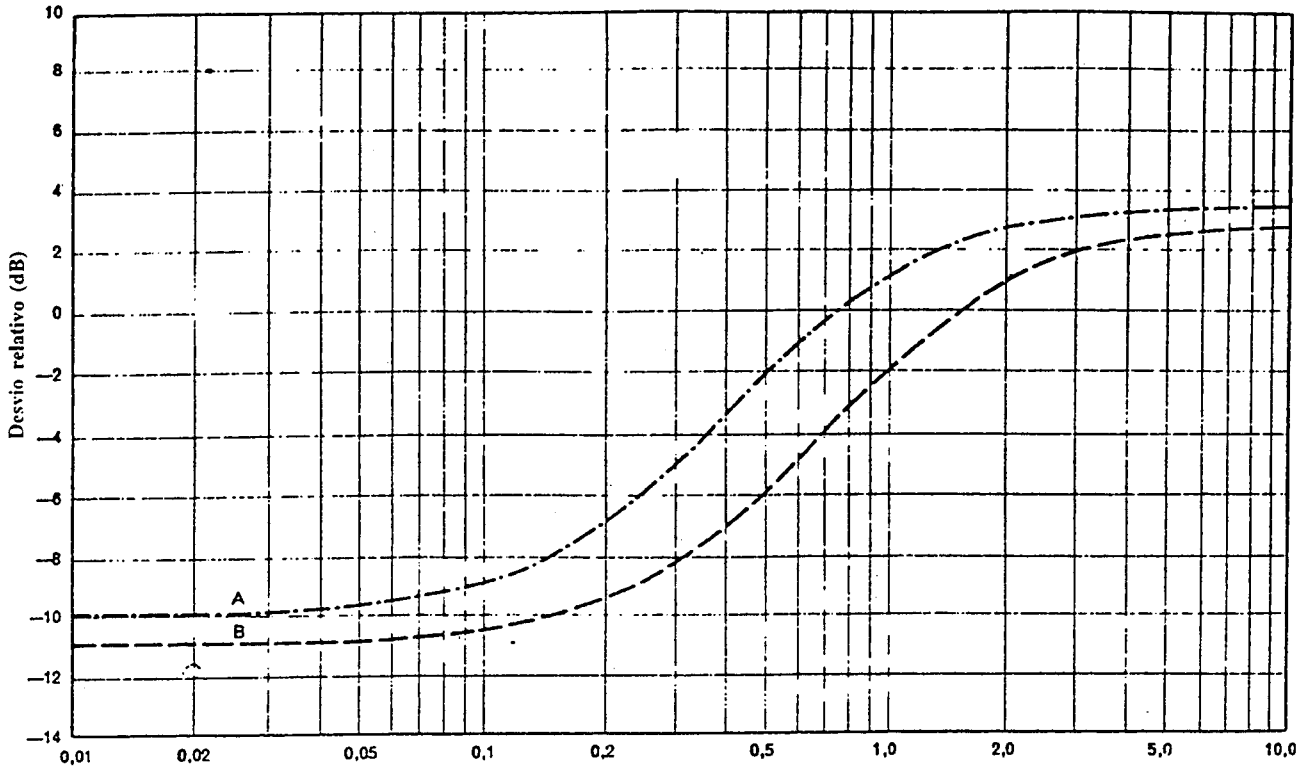


Fig. 3 — Características de pré-acentuação para os sistemas de televisão de 525 e 625 linhas

Curva A — Sistema de 525 linhas
Curva B — Sistema de 625 linhas

3.2. *Polarização.*

3.2.1. Para a planificação do serviço de radiodifusão por satélite, deve utilizar-se a polarização circular nas Regiões 1, 2 e 3 (1).

3.2.2. A polarização das emissões correspondente a feixes diferentes, concebidos de propósito para servir a mesma zona, deveria, se possível, ser a mesma.

3.2.3. Os termos «directo» e «indirecto», utilizados no plano para indicar o sentido de rotação das ondas polarizadas circularmente, correspondem a uma polarização dextrogira (no sentido do movimento dos ponteiros do relógio) ou levogira (no sentido inverso do movimento dos ponteiros do relógio), de acordo com as definições seguintes:

Sentido directo ou dextrogiro (sentido do movimento dos ponteiros do relógio):

Onda (electromagnética) polarizada elíptica ou circularmente, cujo vector campo eléctrico gira, *em função do tempo*, no sentido dextrorso, isto é, no sentido do movimento dos ponteiros do relógio. O movimento do vector campo eléctrico será verificado, num *plano fixo* qualquer normal à direcção de propagação, por um observador que olhe no sentido em que a onda se propaga.

Nota. — No caso de ondas planas polarizadas circularmente no sentido dextrorso, as extremidades dos vectores ligados aos diferentes pontos de uma recta qualquer normal aos planos que constituem as superfícies de ondas formam, num instante qualquer, uma hélice de *sentido sinistrorso.*

Sentido indirecto ou levogiro (sentido inverso do movimento dos ponteiros do relógio):

Onda (electromagnética) polarizada elíptica ou circularmente, cujo vector campo eléctrico gira, *em função do tempo*, no *sentido sinistrorso*, isto é, no sentido contrário ao do movimento dos

(1) A administração dos Estados Unidos da América expressou a sua preocupação quanto à adopção da polarização circular para a Região 2 e indicou que a adopção muito provável da polarização rectilínea pelo serviço fixo por satélite impedirá o emprego do cruzamento de polarização para facilitar a partilha entre os dois serviços e terá repercussões na utilização da órbita e do espectro na Região.

A administração do Irão formulou reservas quanto á adopção da polarização circular para a planificação do serviço de radiodifusão por satélite na Região 3. Precisou que tencionava adoptar a polarização rectilínea.

ponteiros do relógio. O movimento do vector campo eléctrico será verificado, num *plano fixo* qualquer normal à direcção de propagação, por um observador que olhe no sentido em que a onda se propaga.

Nota. — No caso de ondas planas polarizadas circularmente no sentido sinistrorso, as extremidades dos vectores ligados aos diferentes pontos de uma recta qualquer normal aos planos que constituem as superfícies de ondas formam, num instante qualquer, uma hélice de *sentido dextrorso.*

3.3. *Relação portadora/ruído.*

Para a planificação do serviço de radiodifusão por satélite, a relação portadora/ruído é igual a 14 dB durante 99 % do mês mais desfavorável.

Considera-se que a diminuição da qualidade no trajecto descendente devida ao ruído térmico no trajecto ascendente equivale a uma degradação da relação portadora/ruído que não excede 0,5 dB durante 99 % do mês mais desfavorável.

3.4. *Relação de protecção entre dois sinais de televisão modulados em frequência.*

Para a planificação nas Regiões 1 e 3 adoptaram-se os valores seguintes da relação de protecção para cálculo das margens de protecção equivalentes (1):

— 31 dB entre emissões de um mesmo canal;
— 15 dB entre emissões de canais adjacentes.

3.5. *Espaçamento entre canais.*

3.5.1. *Espaçamento entre canais do plano.*

O espaçamento entre as frequências consignadas de dois canais adjacentes é de 19,18 MHz. O plano contém a indicação da frequência consignada a cada canal.

3.5.2. *Agrupamento dos canais de um mesmo feixe.*

A planificação na Região 1 foi efectuada procurando agrupar todos os canais de um mesmo feixe de antena numa faixa de frequências de 400 MHz, a fim de facilitar a construção dos receptores.

3.5.3. *Espaçamento das frequências consignadas de canais utilizados com uma mesma antena.*

Devido a dificuldades técnicas no circuito de saída do emissor de um satélite, o espaçamento entre as frequências consignadas de dois canais utilizados com uma mesma antena deve ser superior a 40 MHz.

3.6. *Factor de qualidade (G/T) de uma instalação de recepção de serviço de radiodifusão por satélite.*

Para a planificação do serviço de radiodifusão por satélite utiliza-se um valor do factor de qualidade (G/T) de:

6 dB/K para a recepção individual;
14 dB/K para a recepção comunitária.

Estes valores são calculados empregando a fórmula seguinte, que inclui os erros de direcção, os efeitos de polarização e o envelhecimento dos equipamentos:

$$G/T = \frac{\alpha \beta G_r}{\alpha T_a + (1 - \alpha) T_o + (n - 1) T_o}$$

(1) A margem de protecção equivalente, M, é dada em decibéis, pela fórmula:

$$M = -10 \log [10^{-M_1/10} + 10^{-M_2/10} + 10^{-M_3/10}]$$

em que M_1 é o valor, em decibéis, da margem de protecção para o mesmo local. Esta é definida pela expressão seguinte, em que as potências são avaliadas à entrada do receptor (em decibéis):

$$\frac{\text{Potência útil}}{\text{Soma das potências de interferência no mesmo canal}} - (dB) \text{ de protecção no mesmo canal}$$

M_2 e M_3 são os valores, em decibéis, das margens de protecção para o canal adjacente inferior e para o canal adjacente superior.

A definição da margem de protecção no canal adjacente é similar à do mesmo canal, embora se faça intervir de um lado a relação de protecção no canal adjacente e do outro a soma das interferências devidas às emissões no canal adjacente.

na qual se define:

α — total das perdas de acoplamento, expresso em relação de potência;
β — total das perdas devidas ao erro de direcção, aos efeitos de polarização e a ao envelhecimento, expresso em relação de potência;
G_r — ganho efectivo da antena de recepção, expresso em relação de potência e tendo em conta o tipo de iluminação e o rendimento;
T_a — temperatura efectiva de antena;
T_o — temperatura de referência = 290 K;
n — factor de ruído global do receptor, expresso em relação de potência.

V., também, relatório n.º 473-1 (anexo 1) da CCIA.

3.7. *Antenas de recepção.*

3.7.1. *Diâmetro mínimo das antenas de recepção.*

Para planificação do serviço de radiodifusão por satélite do serviço de radiodifusão por satélite, considera-se que o diâmetro mínimo das antenas de recepção deve ser tal que a abertura do feixe a meia potência (φ_0) é:

a) Para a recepção individual: de 2° nas Regiões 1 e 3 e de 1,8° na Região 2;
b) Para a recepção comunitária: de 1° em todas as regiões.

3.7.2. *Diagramas de referência das antenas de recepção.*

Os diagramas de referência copolar e contrapolar das antenas de recepção são dados nas figuras 4 e 5.

a) O ganho relativo da antena, expresso em decibéis, é dado pelas curvas da figura 4 no caso:

Da recepção individual nas Regiões 1 e 3, para a qual convém utilizar:

Para a componente copolar, a curva A;
Para a componente contrapolar, a curva B.

Da recepção comunitária, para a qual convém utilizar:

Em todas as regiões para a componente copolar, a curva A', até à intersecção com a curva C, e depois a curva C;
Nas regiões 1 e 3, para a componente contrapolar, a curva B.

b) Para a Região 2, o ganho relativo da antena, expresso em decibéis, é dado pelas curvas da figura 5 no caso:

Da recepção individual, para a qual convém utilizar:

Para a componente copolar, a curva A;
Para a componente contrapolar, a curva B.

Da recepção comunitária, para a qual convém utilizar, para a componente, a curva B (sendo a componente copolar dada na figura 4).

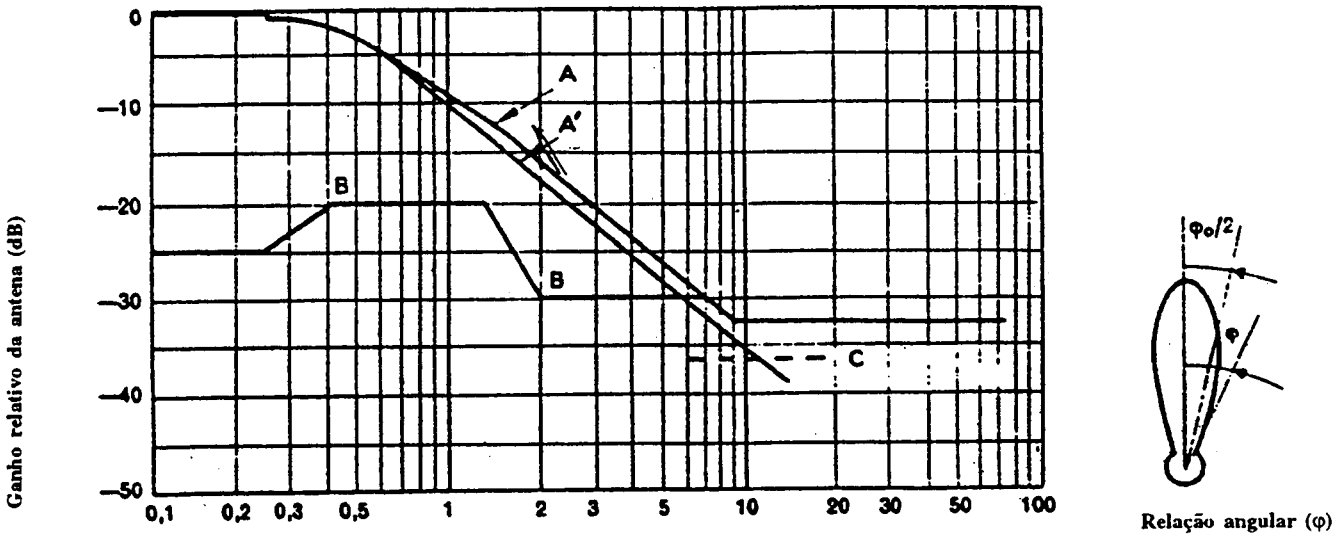


Fig. 4 — Diagramas de referência copolar e contrapolar da antena de recepção

Curva A — Componente copolar para a recepção individual sem supressão de lóbulos laterais:

0 para $0 \leq \varphi \supseteq \leq 0{,}25\ \varphi_0$;

$-\ 12 \left(\frac{\varphi}{\varphi_o}\right)^2$ para $0{,}25\ \varphi_0 < \varphi \leq 0{,}707\ \varphi_0$;

$-\ \left[9{,}0 + 20 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ para $0{,}707\ \varphi_0 < \varphi \leq 1{,}26\ \varphi_0$;

$-\ \left[8{,}5 + 25 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ para $1{,}26\ \varphi_0 < \varphi \leq 9{,}55\ \varphi_0$;

— 33 para $9{,}55\ \varphi_0 < \varphi$.

Curva A' — Componente copolar para a recepção comunitária sem supressão de lóbulos laterais:

0 para $0 \leq \varphi \leq 0{,}25\ \varphi_o$:

$-\ 12 \left(\frac{\varphi}{\varphi_o}\right)^2$ para $0{,}25\ \varphi_o < \varphi \leq 0{,}86\ \varphi_o$;

$-\ \left[\ 10{,}5 + 25 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ para $0{,}86 < \varphi_o < \varphi$, até à intersecção com a curva C (a seguir tomar a curca C).

Curva B — Componente copolar para os dois tipos de recepção:

— 25 para $0 \leq \varphi \leq 0{,}25\ \varphi_o$;

$-\ \left(30 + 40 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $0{,}25\ \varphi_o < \varphi \leq 0{,}44\ \varphi_o$;

— 20 para $0{,}44\ \varphi_o < \varphi \leq 1{,}4\ \varphi_o$;

$-\ \left(30 + 25 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $1{,}4\ \varphi_o < \varphi \leq 2\ \varphi_o$;

— 30 até à intersecção com a curva da componente copolar (em seguida tomar a curva de componente copolar).

Curva C — Oposto algébrico do ganho no eixo do feixe principal.

Nota. — Os valores de φ_o estão indicados no § 3.7.1.

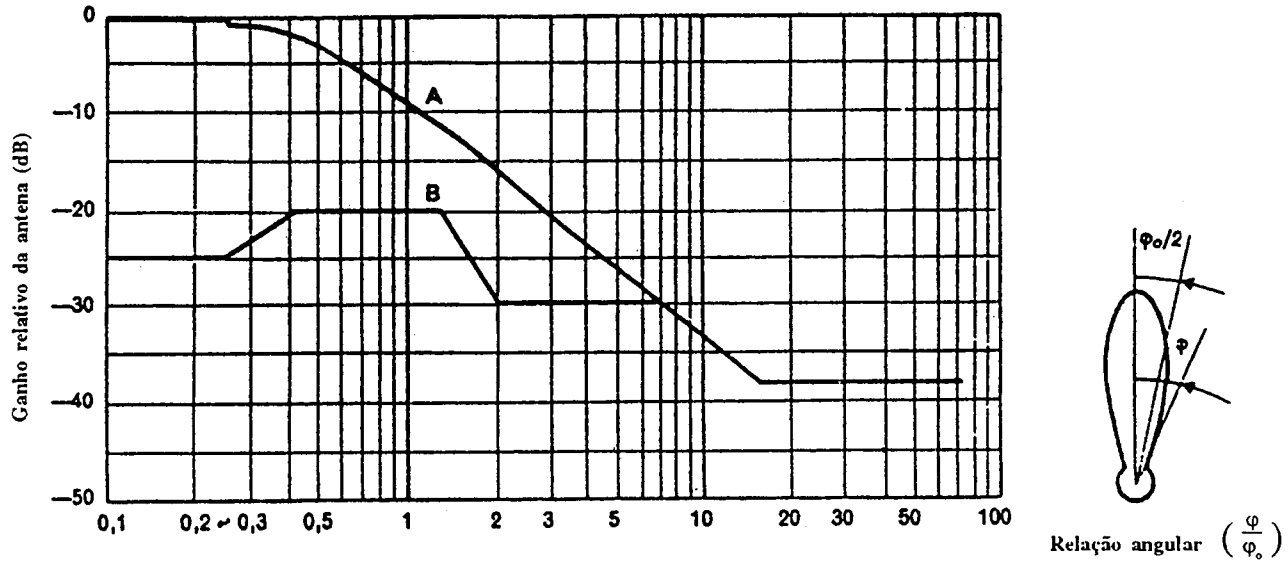


Fig. 5 — Diagramas de referência copolar e contrapolar da antena para recepção individual na Região 2

Curva A— Componente copolar sem supressão de lóbulos laterais:

0 para $0 \leq \varphi \leq 0{,}25\ \varphi_o$;

$-\ 12 \left(\frac{\varphi}{\varphi_o}\right)^2$ para $0{,}25\ \varphi_o < \varphi \leq 0{,}707\ \varphi_o$;

$-\ \left[\ 9{,}0 + 20 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ para $0{,}707\ \varphi_o < \varphi \leq 1{,}26\ \varphi_o$;

$-\ \left[\ 8{,}5 + 25 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ para $1.26\ \varphi_o < \varphi \leq 15{,}14\ \varphi_o$;

— 38 dB para $\varphi > 15{,}14\ \varphi_o$.

Curva B — Componente contrapolar:

— 25 para $0 \leq \varphi \leq 0{,}25\ \varphi_o$;

$-\ \left(30 + 40 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $0{,}25\ \varphi_o < \varphi \leq 0{,}44\ \varphi_o$;

— 20 para $0{,}44\ \varphi_o < \varphi \leq 1{,}4\ \varphi_o$;

$-\ \left(30 + 25 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $1{,}4\ \varphi_o < \varphi \leq 2\ \varphi_o$;

— 30 até à intersecção com a curva da componente copolar (em seguida tomar a curva da componente copolar).

Nota. — Os valores de φ_o estão indicados no § 3.7.1.

3.8. *Largura de faixa necessária.*

As larguras de faixa necessárias a tomar em consideração são:

Para os sistemas de 625 linhas: 27 MHz;
Para os sistemas de 525 linhas na Região 3: 27 MHz;
Para o sistema M de 525 linhas da Região 2: 18 MHz e 23 MHz.

3.9. *Faixas de guarda.*

3.9.1. Entende-se por faixa de guarda a porção do espectro radioélectrico compreendida entre o limite da faixa atribuída e o limite da faixa necessária à emissão no canal mais próximo.

3.9.2. Para a planificação do serviço de radiodifusão por satélite, as faixas de guarda necessárias para proteger os serviços assegurados nas faixas adjacentes estão indicadas no quadro seguinte:

Regiões	Faixa de guarda no limite inferior da faixa (11,7 GHz)	Faixa de guarda no limite superior da faixa (12,2–12,5 GHz)
1	14 MHz	11 MHz
2	12 MHz	9 MHz
3	14 MHz	11 MHz

Estas faixas de guarda foram calculadas na base de um valor de 67 dBW no caso das Regiões 1 e 3 e de um valor de 63 dBW no caso da Região 2, para p. i. r. e. máxima no centro do feixe e para uma atenuação de filtro de 2 dB/MHz. Estes valores referem-se à recepção individual. Se se admitirem valores mais baixos das p. i. r. e., as faixas de guarda poderão ser reduzidas 0,5 MHz por decibel de diminuição dessas p. i. r. e.

3.9.3. É provável que os progressos da técnica ou a adopção de p. i. r. e. menores que as p. i. r. e. indicadas acima venham a permitir a redução das faixas de guarda necessárias. Recomenda-se por isso que, para qualquer outro fim diferente da planificação pela Conferência (1), se observem os mais recentes pareceres da CCIR relativos às radiações não essenciais dos satélites de radiodifusão.

3.10. *Espaçamento na órbita.*

O plano para as Regiões 1 e 3 foi estabelecido espaçando, como regra geral, de 6° as posições nominais na órbita.

3.11. *Manutenção da posição do satélite.*

As estações espaciais do serviço de radiodifusão por satélite devem ser mantidas em posição com uma precisão melhor que ± 0,1°, tanto na direcção norte-sul como na este-oeste. (Estas tolerâncias conduzem a um afastamento máximo de ± 0,14° do satélite em relação à sua posição nominal.)

3.12. *Ângulo de elevação das antenas de recepção.*

O plano foi estabelecido considerando um ângulo de elevação de, pelo menos, 20° para reduzir o mais possível a p. i. r. e. do satélite, prevenir os efeitos de cortina e diminuir as possibilidades de interferências devidas aos serviços de Terra.

Todavia, nas zonas situadas a latitudes superiores a cerca de 60°, o ângulo de elevação é necessariamente inferior a 20° (v., também, o § 2.2.).

Nas zonas montanhosas em que possa ser insuficiente um ângulo de elevação de 20° considerou-se tanto quanto possível um ângulo de elevação mínimo de 30° para assegurar um serviço de qualidade aceitável. Considerou-se um ângulo de elevação de, pelo menos, 40° para zonas de serviço onde se produzem fortes precipitações (por exemplo, a zona hidrometeorológica 1).

Em certas zonas secas e não montanhosas poderá obter-se um serviço de qualidade aceitável com ângulos de elevação inferiores a 20°.

Nas zonas de ângulos de elevação baixos pode ser necessário ter em conta o efeito de cortina devido a edifícios muito elevados.

Ao escolher-se uma posição de satélite tal que o ângulo de elevação seja máximo no solo, considerou-se o período de eclipse correspondente a essa posição.

---

(1) Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

3.13. *Antenas de emissão.*

3.13.1. *Secção do feixe da antena de emissão.*

A planificação foi baseada na utilização de antenas de emissão de feixe de secção elíptica ou circular.

Se a secção recta do feixe emitido for elíptica, a abertura φ_0 a considerar é função do ângulo de rotação (q) entre o plano que passa pelo satélite e contém o eixo menor da secção recta do feixe e o plano em que é considerada a abertura da antena.

Pode calcular-se a relação existente entre o ganho máximo de uma antena e a abertura a meia potência a partir da expressão:

$$G_m = 27843/ab$$

ou

$$G_m(\text{dB}) = 44{,}44 - 10\log_{10a} - 10\log_{10b}$$

na qual a e b são respectivamente os ângulos (em graus) segundo os quais são vistos do satélite o eixo maior e o eixo menor do traço elíptico da secção recta do feixe.

Admite-se que o rendimento da antena é de 55 %.

3.13.2. *Abertura mínima da antena de emissão.*

Para a planificação que o valor mínimo actualmente realizável da abertura a meia potência é de 0,6°.

3.13.3 *Diagramas de referência da antena de emissão.*

Os diagramas de referência copolar e contrapolar das antenas de emissão das estações espaciais utilizadas para o estabelecimento do plano são reproduzidos na figura 6.

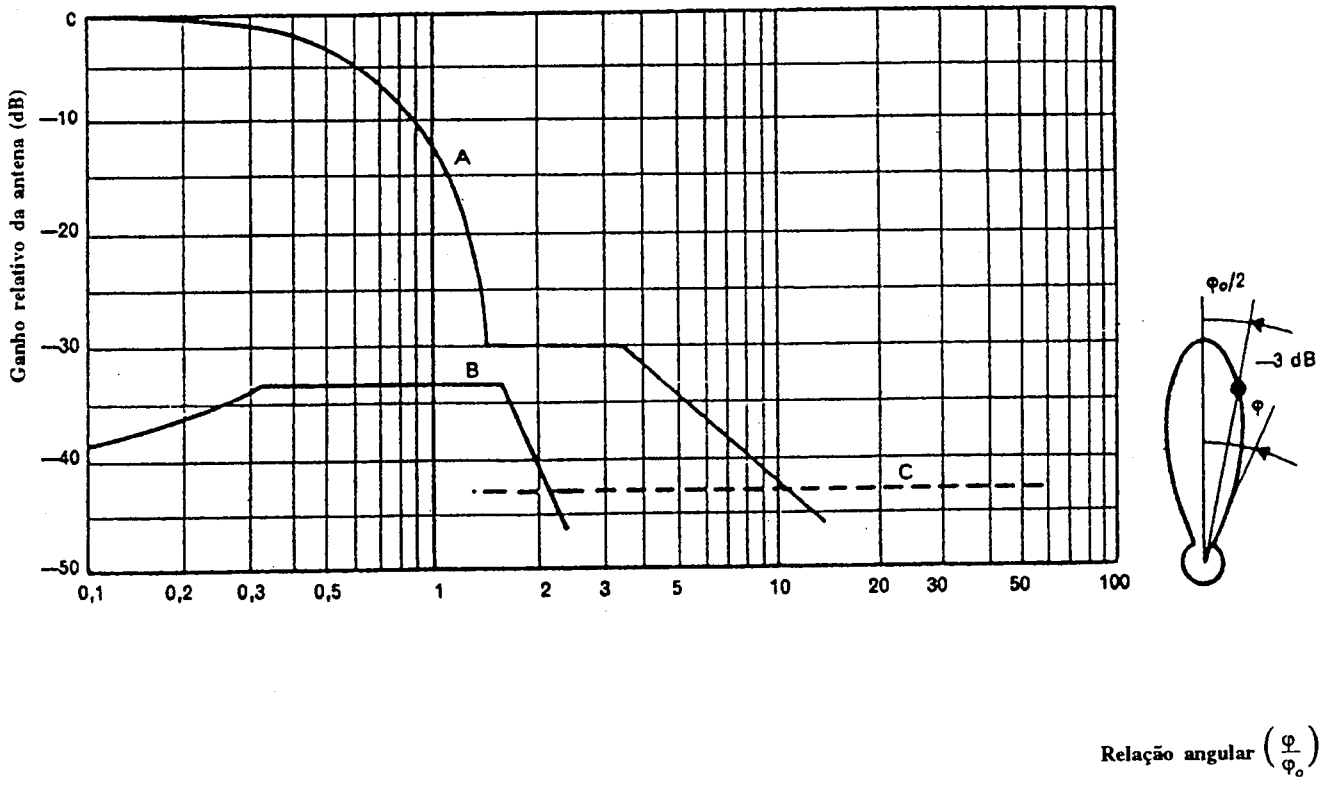


Fig. 6 — Diagramas de referência copolar e contrapolar da antena de emissão do satélite

Curva A — Componente copolar:

— $12\left(\frac{\varphi}{\varphi_o}\right)^2$ para $0\ \varphi_o \leq \varphi \leq 1{,}58\ \varphi_o$;

— 30 para $1{,}58\ \varphi_o < \varphi \leq 3{,}16\ \varphi_o$;

— $\left[17{,}5 + 25\ \log_{10}\left(\frac{\varphi}{\varphi_o}\right)\right]$ para $3{,}16\ \varphi_o < \varphi$, a seguir à intersecção com a curva C: como a curva C.

Curva B — Componente contrapolar:

— $\left(40 + 40\ \log_{10}\left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $0 \leq \varphi \leq 0{,}33\ \varphi_o$;

— 33 para $0{,}33\ \varphi_o < \varphi \leq 1{,}67\ \varphi_o$;

— $\left(40 + 40\ \log_{10}\left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ para $1{,}67\ \varphi_o < \varphi$, a seguir à intersecção com a curva C: como a curva C.

Curva C — Oposto algébrico do ganho no eixo do feixe principal.

3.14. *Precisão de orientação das antenas de satélite.*

3.14.1. O afastamento do feixe da antena relativamente à sua direcção de orientação nominal não deve exceder o valor de 0,1° em todas as direcções. Por outro lado, a rotação angular de um feixe de emissão em torno do seu eixo não deve exceder o valor de ± 2°. Não é necessário indicar este limite no caso dos feixes de secção circular que utilizam a polarização circular.

3.14.2. A zona coberta à superfície da Terra pelo feixe do satélite sofre outras deslocações devidas aos seguintes factores:

Imperfeição da manutenção em posição do satélite;
Efeito mais pronunciado das variações devidas às tolerâncias de orientações mencionadas acima nas zonas de coberturas associadas a baixos ângulos de elevação;
Aumento da importância do erro de desvio do eixo à medida que a elipse do feixe se torna mais alongada.

3.14.3. Convém avaliar caso por caso o efeito dessas variações eventuais, porque a sua influência global na zona coberta depende da modificação da geometria do feixe do satélite e não seria razoável especificar para todas as situações um valor único da deslocação da zona coberta.

3.14.4. No caso de uma emissão em polarização rectilínea, o erro de desvio do eixo contribui significativamente para intensificar a componente emitida em polarização cruzada, o que provoca o aumento da interferência com as outras portadoras inicialmente em polarização cruzada com essa emissão.

3.15. *Limitação da potência de saída do emissor do satélite.*

A potência de saída de um emissor de uma estação espacial do serviço de radiodifusão por satélite não deve exceder o seu valor nominal em mais de 0,25 dB durante toda a duração de utilização do satélite.

3.16. *Densidade de fluxo de potência no limite da zona de cobertura.*

O valor da densidade de fluxo de potência no limite da zona de cobertura durante 99 % do mês mais desfavorável é de:

103 dB(W/m²) para a recepção individual nas Regiões 1 e 3;
105 dB(W/m²) para a recepção individual na Região 2;
111 dB(W/m²) para a recepção comunitária em todas as Regiões.

3.17. *Diferença entre a p. i. r. e. dirigida para o limite da zona de cobertura e a p. i. r. e. no eixo do feixe.*

Para a planificação, considera-se que o valor absoluto da diferença entre a p. i. r. e. dirigida para o limite da zona de cobertura e a p. i. r. e. no eixo do feixe deve, de preferência, ser de 3 dB.

Se a área do feixe for superior à zona de cobertura, esse valor passa a ser inferior a 3 dB.

3.18. *Utilização da dispersão da energia.*

Para a planificação, adopta-se um valor da dispersão de energia que reduz em 22 dB a densidade espectral de densidade de fluxo de potência medida numa faixa de 4 kHz em relação a essa densidade medida em toda a faixa. Esta redução corresponde a um desvio ponta a ponta de 600 kHz.

ANEXO 9

Critérios de partilha entre serviços

1. *Características de protecção para a partilha entre serviços que utilizam a faixa de 12 GHz.*

1.1. A determinação dos critérios de partilha entre os diferentes serviços que utilizam a faixa de 12 GHz deve basear-se nas características de protecção especificadas no quadro seguinte:

Serviço útil (1)	Sinal útil (1)	Serviço interferente (1)	Sinal interferente (1)	Características de protecção (2)	
				Valor aceitável da interferência por diversos níveis (3)	Valor para uma contribuição única de interferência
SRS	TV/MF	SRS, SFS, SF e SR	TV/MF	*C/I* = 30 dB (4) (7)	*C/I* = 35 dB (4)
SFS	MRF/MF	SRS	TV/MF	*N* = 500 pWOp (8)	*N* = 300 pWOp
SFS	TV/MF	SRS e SFS	TV/MF	*C/I* = 32 dB (5)	*C/I* = 37 dB (5)
SFS	4φ-MDP	SRS e SFS	TV/MF	*C/I* = 30 dB	*C/I* = 35 dB
SFS	MRF/MF	SFS	MRF/MF	*N* = 1000 pWOp	*N* = 400 pWOp
SF	MRF/MF	SFS	TV/MF	*N* = 1000 pWOp	— 125 dB (W/m²/4 kHz) (6)
SR	TV/BLR	SFS	TV/MF	*C/I* = dB	Sem objecto

(1) SRS = Serviço de radiodifusão por satélite; SFS = Serviço fixo por satélite; SR = Serviço de radiodifusão; SF = Serviço fixo; TV = Televisão; MF = Modulação de frequência; MRF = Multiplexagem por repartição em frequência; 4φ-MDP = Modulação por variação de fase em quatro estados, e BLR = Faixa lateral residual.

(2) Estes limites abrangem simultaneamente a contribuição do trajecto ascendente e a do trajecto descendente. São expressos, consoante o caso:

Em decibéis quando se trata da relação portadora interferência;
Em pWOp quando se trata de ruído;
Em dB (W/m²/4 kHz) quando se trata da densidade de fluxo de potência numa faixa de 4 kHz.

(3) Os valores expressos em decibéis são os das relações de protecção para o conjunto dos sinais interferentes. Os valores expressos em pWOp são os do ruído observado na via telefónica mais desfavorecida e resultante do conjunto dos sinais interferentes.

(4) Para os satélites de radiodifusão situados nos limites da Região 2 com a Região 1 ou a Região 3, as relações *C/I* devem ser aumentadas de 1 dB.

(5) V. o parecer n.º 483 da CCIR.

(6) Este valor pode ser convenientemente modificado no caso das regiões tropicais, para ter em conta a atenuação devida às precipitações. Pode, igualmente, atender-se à discriminação de polarização.

(7) *C/I* = Relação entre a potência do sinal útil e a potência do sinal interferente.

(8) *N* = Potência de ruído.

1.2. Os valores indicados como aceitáveis são os valores necessários para proteger o sinal útil. Os valores indicados para uma contribuição única de interferência são os que convém utilizar como guia para fixar os critérios de partilha. É necessário calcular a interferência total devida a todas as fontes interferentes. Com efeito, respeitando para cada fonte os critérios aplicáveis a uma contribuição única de interferência, como se garante forçosamente que a interferência total corresponda às características de protecção indicadas acima. Uma contribuição única de interferência define-se como sendo o conjunto das emissões de uma estação que entram no receptor do serviço útil no canal a proteger.

1.3. A relação portadora/interferência *(C/I)* é a relação entre a potência do sinal útil e a potência do sinal interferente, à entrada do receptor que, no solo, sofre a interferência. Para o serviço fixo por satélite, o valor indicado deve ser sempre excedido, excepto em 20 % do mês mais desfavorável; para o serviço de radiodifusão e o serviço de radiodifusão por satélite, a percentagem correspondente é de 1 %.

1.4. O símbolo *N* designa a potência de ruído após a desmodulação num ponto de nível relativo 0 dBm0 do tom de medida numa qualquer via telefónica de um sistema telefónico MRF/MF. O valor indicado não deve ser excedido durante mais de 20 % do mês mais desfavorável.

1.5. Os valores especificados para a relação de protecção (quer dizer, a relação de potência portadora/interferência que corresponde a uma dada qualidade de imagem) são aplicáveis, para a planificação, aos sinais de televisão, seja qual for a norma utilizada.

1.6. Para os sistemas do serviço de radiodifusão por satélite nos quais o sinal útil é um sinal de televisão modulado em frequência, as relações de protecção são dadas para condições de referência especiais, das quais as mais importantes são:

a) Desvio de frequência do sinal útil (12 MHz ponta à ponta);
b) Qualidade do serviço útil (nível 4,5) (1);
c) Portadora do mesmo canal ou na mesma via (sem deslocação de frequências portadoras).

(1) Segundo a escala de avaliação de cinco notas definida no parecer n.º 500 da CCIR.

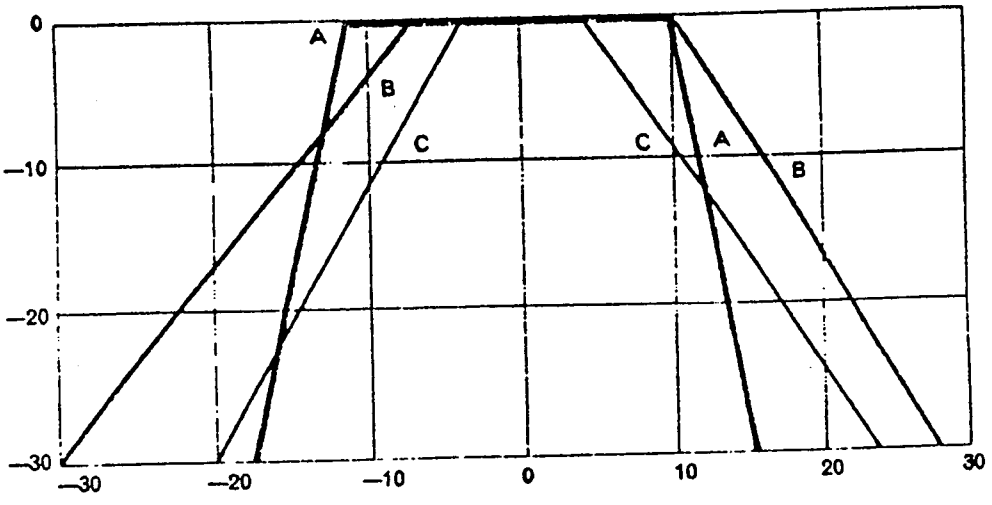
1.7. Se a concepção do sistema se basear em condições diferentes das condições *a*) e *b*) indicadas acima, a relação de protecção do sinal de televisão modulado em frequência é dada pela fórmula:

$$R = 12{,}5 - 20 \log (D_V/12) - Q + 1{,}1\ Q^2 \text{ (dB)}$$

na qual

D_V é o desvio de frequência nominal ponta a ponta (MHz);
Q é o nível de degradação respeitante somente às interferências.

1.8. Quando as portadoras estão deslocadas em frequência, não se pode aplicar a condição *c*). As relações de protecção do canal adjacente devem ser ajustadas em função da deslocação de frequência, como indica a figura 1. Por exemplo, para uma deslocação de 20 MIIz, o valor total aceitável da relação de protecção contra as interferências causadas a um sinal de televisão modulado em frequência por um sinal do mesmo tipo é de 13 dB; o valor correspondente para uma contribuição única de interferência é de 18 db.



Deslocação das frequências portadoras ∇f = (MHz)

$\nabla f = (f_{br} - F_u$

Fig. 1 Relação de protecção nas condições de referência em função da deslocação de frequência

Curva A — Para um sinal útil TV/BLR e um sinal interferente TV/MF.
Curva B — Para um sinal útil TV/MF e um sinal interferente TV/MF.
Curva C — Para um sinal útil TV/MF e um sinal interferente TV/BLR.

2. *Diâmetro de antena de referência no caso de uma estação terrena do serviço fixo por satélite a utilizar para o cálculo das interferências causadas pelas estações espaciais do serviço de radiodifusão por satélite.*

2.1. No serviço fixo por satélite, para uma antena de diâmetro superior a 2,5 m, o ganho dos lóbulos laterais é dado pela fórmula: $32 - 25 \log \theta$, na qual θ representa o ângulo de mira (parecer n.° 465 da CCIR). Esse ganho é independente do diâmetro da antena.

2.2. Todavia, relativamente às estações terrenas de emissão, o nível de interferência que afecta o trajecto ascendente dos outros sistemas de satélites é inversamente proporcional ao quadrado do diâmetro da antena. Portanto, a interferência diminui quando o diâmetro da antena aumenta. Contudo, no serviço fixo por satélite, estando a faixa de 11,7-12,2 GHz reservado às emissões no sentido espaço para Terra, esta questão não diz respeito directamente ao serviço de radiodifusão por satélite.

2.3. Tratando-se de antenas cujo diâmetro excede 100 λ, não parece, portanto, necessário fixar um diâmetro mínimo para as antenas das estações terrenas de recepção do serviço fixo por satélite na faixa partilhada de 11,7-12,2 GHz. Para o planeamento da partilha desta faixa pode considerar-se usual uma antena de 4,5 m com um rendimento de 60 % e um ganho de 53 dB no eixo do feixe. Todavia, convém notar que as administrações da Região 2 estudam a possibilidade de utilizar antenas com diâmetros compreendidos entre 3 m e 10 m.

3. *Utilização da dispersão de energia no serviço de radiodifusão por satélite.*

3.1. A dispersão artificial da energia contribui para facilitar a partilha entre o serviço de radiodifusão por satélite e os outros serviços a que a faixa está igualmente atribuída.

3.2. Esta dispersão da energia obtém-se juntando, na faixa de base, um sinal triangular ao sinal vídeo. Resulta daí uma faixa de base compósita, que, por sua vez, serve para modular em frequência a portadora no trajecto ascendente. A frequência do sinal triangular é geralmente sincronizada com um submúltiplo de frequência de quadro do sinal de televisão e o seu valor está normalmente compreendido entre 12,5 Hz e 30 Hz.

3.3. O quadro seguinte indica a redução relativa da densidade espectral de fluxo de potência numa faixa de 4 kHz em função do desvio ponta a ponta devido ao sinal de dispersão da energia. Os valores indicados neste quadro foram calculados utilizando a fórmula:

$$\text{Redução relativa (em decibéis) numa faixa de 4 kHz} = 10 \log \frac{\nabla F_{pp} + \delta f_{rms}}{4}$$

em que

ΔF_{pp} = desvio ponta a ponta devido ao sinal de dispersão da energia (kHz);
δ_{frms} = desvio eficaz devido à dispersão «natural» da energia (kHz).

Na elaboração do quadro admitiu-se para δ_{frms} um valor de 40 kHz, tendo em conta que é de 10 dB o valor dado para a dispersão «natural» no quadro 4 do projecto de Relatório n.º 631 (Rev. 76) da CCIR.

Redução da densidade espectral de densidade de fluxo de potência numa faixa de 4 kHz

Desvio ponta a ponta (kHz)	Redução relativa (dB)
0	10
100	15,44
200	17,78
300	19,29
400	20,41
500	21,30
600	22,04
700	22,67
800	23,22
900	23,71
1 000	24,15

3.4. O valor da dispersão da energia no serviço de radiodifusão por satélite foi determinado de modo a reduzir 22 dB à densidade espectral da densidade de fluxo de potência medida numa faixa de 4 kHz em relação a essa densidade medida em toda a faixa. Esta redução corresponde a um desvio ponta a ponta de 600 kHz.

ANEXO 10

Restrições aplicáveis às posições na órbita

Aplicando o procedimento descrito no artigo 4 para introduzir modificações no plano, as administrações devem respeitar os critérios enunciados a seguir:

1) Nenhum satélite de radiodifusão, que sirva uma zona da Região 1 utilizando uma frequência da faixa de 11,7-12,2 GHz, deve ocupar uma posição nominal na órbita mais ocidental que 37° O. Ou mais oriental que 146° E.;
2) Qualquer nova posição nominal na órbita, introduzida no plano na parte do arco de órbita compreendida entre 37° O. e 10° E. e associada a uma nova consignação, ou resultante de uma modificação feita a uma consignação que figura no plano, deve coincidir com uma posição nominal, na órbita, indicada no plano, na data de entrada em vigor dos actos finais (1), ou encontrar-se no máximo a 1° a este da dita posição na órbita.

Em caso de uma modificação a qualquer consignação que figure no plano, a utilização de nova posição nominal na órbita, que não coincida com qualquer das posições nominais na órbita indicadas no plano à data de entrada em vigor dos actos finais, será acompanhada de uma redução de p. i. r. e. de 8 dB em relação ao valor da p. i. r. e. inscrita no plano para a consignação antes da modificação desta.

(1) Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977), entrados em vigor em 1 de Janeiro de 1979.

ANEXO 11

Método de cálculo da densidade de fluxo da potência produzida nos territórios da Região 2 por estações espaciais do serviço de radiodifusão das Regiões 1 e 3

Método de cálculo

1. Utilizando os dados seguintes, pode-se calcular a densidade de fluxo de potência produzida pela estação espacial, em condições de propagação em espaço livre, num ponto dado P situado á superfície da Terra:

1.1. Posição nominal na órbita;

1.2. P. i. r. e. (dBW);

1.3. Características do feixe de antena a meia potência (quer dizer, o eixo maior e o eixo menor, assim como a orientação da elipse correspondente).

1.4. Coordenadas geográficas do ponto de mira (B).

1.5. Coordenadas geográficas do ponto P.

2. Os valores relativos aos pontos 1.1 a 1.4 anteriores estão indicados no plano. Quanto ao ponto P, pode escolher-se conforme o objectivo dos cálculos. Para os cálculos que se seguem, as coordenadas geográficas no ponto P são 35° O. e 8° S.

3. Para obter o valor da densidade de fluxo de potência [decibéis (watts por metro quadrado)] produzida no ponto P calcula-se:

A distância d (m) entre o satélite e o ponto P;

O factor de dispersão A para a distância d:

$$A = 10 \log \frac{1}{4\pi d^2}$$

O ângulo φ, visto a partir do satélite, entre os pontos B e P;

A abertura φ do feixe a meia distância na direcção de P (no caso de um feixe circular, φ_o é independente da direcção);

O ganho relativo de antena δG (decibéis), para os valores de φ e φ_o, utilizando o diagrama de referência copolar da antena de emissão do satélite.

A densidade de fluxo de potência p_s, produzida no ponto P, é dada pela expressão (1):

$$p_s \text{ [dB (W/m}^2\text{)}] = \text{p. i. r. e.} + \delta G + A$$

Resultados

Figuram no seguinte quadro as densidades de fluxo de potência produzidas nos pontos de coordenadas 35° O. e 8° S. pelas estações espaciais de radiodifusão das Regiões 1 e 3, às quais foram consignadas no plano as posições nominais na órbita compreendidas entre 37° O. e 5° E. e os canais 1 a 25:

Densidade de fluxo de potência (DFP) produzida na Região 2 no ponto de coordenadas: longitude = 35° O., latitude = 8.° S.

Posição nominal na órbita — 37,0			Posição nominal na órbita — 31,0			Posição nominal na órbita — 25,0			Posição nominal na órbita — 19,0		
Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)
AND 341	4, 8, 12, 16 e 20	— 146,35	AZR 134	3, 7, 11, 15 e 19	— 140,72	ALG 251	2, 6, 10, 14 e 18	— 135,17	AUT 016	4, 8, 12, 16 e 20	— 143,67
CVA 085	23	— 141,92	CNR 130	23	— 140,93	ALG 252	4, 8, 12, 16 e 20	— 130,26	BEL 018	21 e 25	— 144,97
GMB 302	3, 7, 11, 15 e 19	— 137,17	CPV 301	4, 8, 12, 16 e 20	— 137,14	GHA 108	23	— 134,45	BEN 233	3, 7, 11, 15 e 19	— 140,20
GUI 192	1, 5, 9, 13 e 17	— 132,98	CTI 237	22	— 132,20	LBY 280	1, 5, 9, 13 e 17	— 138,64	D 087	2, 6, 10, 14 e 18	— 140,17
LIE 253	3, 7, 11, 15 e 19	— 146,00	E 129	23	— 137,48	LBY 321	3, 7, 11, 15 e 19	— 139,00	F 093	1, 5, 9, 13 e 17	— 138,67

(1) Nesta expressão, a p. i. r. e. refere-se ao ponto de mira. O ganho de antena δG é considerado em relação ao ganho de antena na direcção do ponto de mira, e, portanto, δG é negativo.

Posição nominal na órbita — 37,0			Posição nominal na órbita — 31,0			Posição nominal na órbita — 25,0			Posição nominal na órbita — 19,0		
Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)
MCO 116	21 e 25	— 145,75	G 027	4, 8, 12, 16 e 20	— 140,02	MRC 209	21 e 25	— 128,74	GNE 303	23	— 141,30
MLI 327	2, 6, 10, 14 e 18	— 132,79	GNP 304	2, 6, 10, 14 e 18	— 137,07	NGR 115	24	— 127,77	HOL 213	23	— 144,77
MLI 328	4, 8, 12, 16 e 20	— 131,06	HVO 107	21 e 25	— 131,90	TGO 226	2, 6, 10, 14 e 18	— 141,45	I 082	24	— 138,57
MTN 223	22	— 129,20	IRL 211	2, 6, 10, 14 e 18	— 144,38	TUN 150	22	— 141,14	LUX 114	3, 7, 11, 15 e 19	— 145,56
MTN 288	24	— 135,68	ISL 049	21 e 25	— 142,72				NIG 119	22	— 129,39
SEN 222	21 e 25	— 133,19	LBR 244	3, 7, 11 e 15	— 137,10				NMB 025	25	— 130,13
SMR 311	1, 5, 9, 13 e 17	— 145,92	POR 133	3, 7, 11, 15 e 19	— 142,35				SUI 140	22	— 143,10
			SRL 259	23	— 136,72				ZAI 322	4, 8, 12, 16 e 20	— 130,94
									ZAI 323	2, 6, 10, 14 e 18	— 130,05

Posição nominal na órbita — 13,0			Posição nominal na órbita — 7,0			Posição nominal na órbita — 1,0			Posição nominal na órbita — 5,0		
Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)	Número da IFRB	Canais números	DFP decibéis (watts por metro quadrado)
AGL 295	23	— 129,57	ALB 296	22	— 146,49	BOT 297	2, 6, 10, 14 e 18	— 134,49	CYP 086	21 e 25	— 147,47
CAF 258	24	— 130,81	EGY 026	4, 8, 12, 16 e 20	— 136,59	BUL 020	4, 8, 12, 16 e 20	— 144,97	DNK 089	12, 16 e 20	— 143,42
GME 300	1, 5, 9, 13 e 17	— 132,87	SDN 231	22	— 133,37	DDR 216	21 e 25	— 145,17	DNK 090	24	— 135,20
COG 235	22	— 134,83	SDN 230	23	— 136,84	HNG 106	22	— 145,07	FNL 103	2, 6, 10	— 138,17
GAB 260	3, 7, 11, 15 e 19	— 136,65	SDN 232	24	— 134,23	IFB 135	22	— 136,51	FNL 104	22	— 135,20
ISR 110	25	— 145,02	YUG 148	21 e 25	— 140,79	MOZ 307	4, 8, 12, 16 e 20	— 135,37	GRC 105	3, 7, 11, 15 e 20	— 140,87
MLT 147	4, 8, 12, e 16	— 148,55	YUG 149	23	— 140,79	MWJ 308	24	— 142,67	IFB 021	21 e 25	— 132,06
STP 241	4, 8, 12, 16 e 20	— 144,70				POL 132	1, 5, 9, 13 e 17	— 142,67	ISL 050	23	— 137,87
TCD 143	2, 6, 10, 14 e 18	— 132,89				ROU 136	2, 6, 10, 14 e 18	— 143,17	LSO 305	24	— 145,06
						SWZ 313	1, 5, 9, 13 e 17	— 147,30	NOR 120	14 e 18	— 139,42
						TCH 144	3, 7, 11, 15 e 19	— 143,27	S 138	4 e 8	— 138,94
						ZMB 314	3, 7, 11, 15 e 19	— 134,29	TUR 145	1, 5, 9, 13 e 17	— 138,47

APÊNDICE 31

Quadro das frequências a utilizar nas faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4 MHz e 27,5 MHz

(V. o artigo 60)

No *quadro*, consoante o caso, as frequências a consignar numa dada faixa para cada uma das utilizações consideradas:

São designadas pela frequência mais baixa e pela frequência mais alta a consignar. Estas duas frequências são indicadas em normando;

São regularmente espaçadas entre si. O número de frequências a consignar e o valor do seu espaçamento, expresso em kilohertzes, são indicados por uma menção em itálico.

Quadro das frequências a utilizar nas faixas atribuídas

(kHz)

Faixa (MHz)	Limite	Frequências a consignar às estações de navio para telefonia funcionamento dúplex (*a*) (*)	Limite	Frequências a consignar às estações de navio e às estações costeiras para telefonia funcionamento *simplex* (*a*)	Limite	Frequências (não emparelhadas) a consignar às estações de navio para sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação que não excedam 100 bauds (*b*)	Limite	Frequências a consignar às estações de navio, sistemas de telegrafia de faixa larga, de fac-símile e sistemas especiais de transmissão
4	4 063	4 064,4 - - - 4 141,9 *26 frequências espaçadas de 3,1*	4 143,6	4 145 *1 frequência*	4 146,6		4 146,6	4 148,6 - - - 4 160,6 *4 frequências espaçadas de 4*
6	6 200	6 201,4 - - - 6 216,9 *6 frequências espaçadas de 3,1*	6 218,6	6 220 e 6 223 *2 frequências espaçadas de 3*	6 224,6		6 224,6	6 22,6 - - - 6 242,6 *5 frequências espaçadas de 4*
8	8 195	8 196,4 - - - 8 289,4 *31 frequências espaçadas de 3,1*	8 291,1	8 292,5 e 8 295,6 *2 frequências espaçadas de 3,1*	8 297,3	8 297,6 - - - 8 299,6 *5 frequências espaçadas de 0,5*	8 300	8 302 - - - 8 326 *7 frequências espaçadas de 4*
12	12 330	12 331,4 - - - 12 427,5 *32 frequências espaçadas de 3,1*	12 429,2	12 430,6 - - - 12 436,8 *3 frequências espaçadas de 3,1*	12 439,5		12 439,5	12 441,5 - - - 12 477,5 *10 frequências espaçadas de 4*
16	16 460	16 461,4 - - - 16 585,5 *41 frequências espaçadas de 3,1*	16 587,1	16 588,5 - - - 16 594,7 *3 frequências espaçadas de 3,1*	16 596,4		16 596,4	16 598,4 - - - 16 634,4 *10 frequências espaçadas de 4*
22	22 000	22 001,4 - - - 22 122,3 *40 frequências espaçadas de 3,1*	22 124	22 125,4 - - - 22 137,8 *5 frequências espaçadas de 3,1*	22 139,5		22 139,5	22 142 - - - 22 158 *5 frequências espaçadas de 4*

(*) Para as notas (*a*) a (*h*) v. p. 4610-(434).

exclusivamente ao serviço móvel marítimo 4 e 23 MHz

Limite	Frequências a consignar às estações de navio para transmissão de dados oceanográficos (*c*)	Limite	Frequências a consignar às estações de navio, sistemas de telegrafia de faixa larga, de fac-símile e sistemas especiais de transmissão	Limite	Frequências (emparelhadas) a consignar às estações de navio para os sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação que não excedam 100 bauds (*d*)	Limite	Frequências (não emparelhadas) a consignar às estações de navio para os sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação que não excedam 100 bauds (*d*)	Limite
4 162,5	4 162,5 - - - 4 165,6 *10 frequências espaçadas de 0,3*	4 166	4 168 *1 frequência*	4 170	4 170,5 - - - 4 177 *14 frequências espaçadas de 0,5*	4 177,25	4 177,5 - - - 4 179,5 *5 frequências espaçadas de 0,5*	4 179,75
6 244,5	6 244,9 - - - 6 247,6 *10 frequências espaçadas de 0,3*	6 248	6 250 e 6 254 *2 frequências espaçadas de 4*	6 256	6 256,5 - - - 6 267,5 *23 frequências espaçadas de 0,5*	6 267,75	6 268 - - - 6 269,5 *4 frequências espaçadas de 0,5*	6 269,75
8 328	8 328,4 - - - 8 331,1 *10 frequências espaçadas de 0,3*	8 331,5	8 333,5 - - - 8 341,5 *3 frequências espaçadas de 4*	8 343,5	8 344 - - - 8 357 *5 frequências espaçadas de 0,5*	8 357,25	8 357,5 *1 frequência*	8 357,75
12 479,5	12 479,9 - - - 12 482,6 *10 frequências espaçadas de 0,3*	12 483	12 4850 e 12 489 *2 frequências espaçadas de 4*	12 491	12 491,5 - - - 12 519,5 *57 frequências espaçadas de 0,5*	12 519,75	12 520 - - - 12 526,5 *14 frequências espaçadas de 0,5*	12 357,75
16 636,5	16 636,9 - - - 16 639,6 *10 frequências espaçadas de 0,3*	16 640	16 642 - - - 16 658 *5 frequências espaçadas de 4*	16 660	16 660,5 - - - 16 694,5 *69 frequências espaçadas de 0,5*	16 694,75	16 695 - - - 16 705,5 *22 frequências espaçadas de 0,5*	16 705,8
22 160,5	22 160,9 - - - 22 163,6 *10 frequências espaçadas de 0,3*	22 164	22 166 - - - 22 190 *7 frequências espaçadas de 4*	22 192	22 192,5 - - - 22 225,5 *67 frequências espaçadas de 0,5*	22 225,75	22 226 e 22 226,5 *2 frequências espaçadas de 0,5*	22 227

Faixa (MHz)	Limite	Frequências de trabalho a consignar às estações de navio para telegrafia morse da classe A1B ou A1B (e) (*)	Limite	Frequências de chamada a consignar e às estações de navio para telegrafia morse da classe A1A ou A1B (g) (h)	Limite	Frequências a consignar às estações de navio para chamada selectiva digital	Limite	Frequências de chamada a consignar e às estações de navio para telegrafia morse da classe A1A ou A1B (e) (f)
4	4 179,75		4 179,75		4 187,2	4 187,6 *1 frequência*	4 188	4 188,5 - - - 4 219 *62 frequências espaçadas de 0,5*
6	6 269,75		6 269,75		6 280,8	6 281,4 *1 frequência*	6 282	6 282,75 - - - 6 324,75 *57 frequências espaçadas de 0,75*
8	8 357,75	8 358,5 - - - 8 359,5 *3 frequências espaçadas de 0,5*	8 359,75		8 374,4	8 375,2 *1 frequência*	8 376	8 377 - - - 8 435 *117 frequências espaçadas de 0,5*
12	12 526,75	12 528 - - - 12 538,5 *22 frequências espaçadas de 0,5*	12 539,6		12 561,6	12 562,3 e 12 562,8 *2 frequências espaçadas de 0,5*	12 564	12 565,5 - - - 12 651 *172 frequências espaçadas de 0,5*
16	16 705,8	16 707 - - - 16 719 *25 frequências espaçadas de 0,5*	16 719,8		16 748,8	16 749,9 e 16 750,4 *2 frequências espaçadas de 0,5*	16 752	16 754 - - - 16 858 *209 frequências espaçadas de 0,5*
22	22 227		22 227		22 247	22 248 e 22 248,5 *2 frequências espaçadas de 0,5*	22 250	22 250,5 - - - 22 309 *118 frequências espaçadas de 0,5*

(*) Para as notas (*a*) a (*h*) v. p. 4610-(434).

Limite	Frequências a consignar às estações costeiras para telegrafia morse da classe A1A ou A1B, telegrafia de faixa larga, fac-símile, sistemas especiais de transmissão, transmissão de dados e telegrafia com impressão directa	Limite	Frequências (emparelhadas) a consignar às estações costeiras para os sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados com velocidades de modulação que não excedam 100 bauds (*d*)	Limite	Frequências a consignar às estações costeiras para chamada selectiva digital	Limite	Frequências a consignar às estações costeiras para telefonia funcionamento dúplex (*a*)	Limite
4 219,4		4 349,4	4 350 - - - 4 356,5 *14 frequências espaçadas de 0,5*	4 356,75	4 357 *1 frequência*	4 357,4	4 358,8 - - - 4 436,3 *26 frequências espaçadas de 3,1*	4 438
6 325,4		6 493,9	6 494,5 - - - 6 505,5 *23 frequências espaçadas de 0,5*	6 505,75	6 506 *1 frequência*	6 506,4	6 507,8 - - - 6 523,3 *6 frequências espaçadas de 3,1*	6 525
8 435,4		8 704,4	8 705 - - - 8 718 *27 frequências espaçadas de 0,5*	8 718,25	8 718,5 *1 frequência*	8 718,9	8 720,3 - - - 8 813,3 *31 frequências espaçadas de 3,1*	8 815
12 652,3		13 070,8	13 071,5 - - - 13 099,5 *57 frequências espaçadas de 0,5*	13 099,75	13 100 e 13 100,5 *2 frequências espaçadas de 0,5*	13 100,8	13 102,2 - - - 13 198,3 *32 frequências espaçadas de 3,1*	13 200
16 859,4		17 196,9	17 197,5 - - - 17 231,5 *69 frequências espaçadas de 0,5*	17 231,75	17 232 e 17 232,5 *2 frequências espaçadas de 0,5*	17 232,9	17 234,3 - - - 17 358,3 *41 frequências espaçadas de 3,1*	17 360
22 310,5		22 561	22 561,5 - - - 22 594,5 *67 frequências espaçadas de 0,5*	22 594,75	22 595 e 22 595,5 *2 frequências espaçadas de 0,5*	22 596	22 597,4 - - - 22 718,3 *40 frequências espaçadas de 3,1*	22 720

Quadro das frequências a consignar às estações de navio na faixa de 25 MHz

(kHz)

Limite	Frequências de chamada a consignar às estações de navio para telegrafia morse da classe A1A ou A1B (*g*)	Limite	Frequências (não emparelhadas) a consignar às estações de navio para os sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados, com velocidades de modulação que não excedam 100 bauds (*b*)	Limite	Frequências de trabalho a consignar às estações de navio para telegrafia morse da classe A1A ou A1B (*e*)	Limite
			25 076,3 · · · 25 089,8		25 091,5 · · · 25 108,5	
25 070	—	25 076	*28 frequências espaçadas de 0,5*	25 090,1	*35 frequências espaçadas de 0,5*	25 110

(*a*) V. o apêndice 16.
(*b*) V. o apêndice 33.
(*c*) Estas faixas podem também ser utilizadas pelas estações de bóias para a transmissão de dados oceanográficos e pelas estações que interrogam essas bóias, de acordo com as disposições da Resolução n.º 314.
(*d*) V. o apêndice 32.
(*e*) Nas faixas de frequência a utilizar pelas estações de navio para a telegrafia morse da classe A1A com uma velocidade de modulação que não exceda 40 bauds, as administrações podem consignar frequências suplementares intercaladas entre as frequências externas a consignar. Todas as frequências assim consignadas devem ser múltiplos de 100 Hz. As administrações devem assegurar uma repartição uniforme destas consignações nas faixas e evitar, na medida do possível, consignar as duas frequências que se encontram a ± 100 Hz de cada uma das frequências em relação harmónica indicada na primeira linha de cada série no apêndice 35.
(*f*) V. o apêndice 35.
(*g*) V. o apêndice 34.
(*h*) Para as condições de utilização da frequência 8364 kHz (v. o n.º 2988).

APÊNDICE 32

Disposição das vias a utilizar pelos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados nas faixas do serviço móvel marítimo compreendidas entre 400 e 23 000 kHz (frequências emparelhadas)

(V. o artigo 60 e a Resolução n.º 300)

A cada estação costeira que utiliza frequências emparelhadas são consignados um ou vários pares de frequência das séries seguintes. Cada par compreende uma frequência de emissão e uma frequência de recepção.

Quadro das frequências das estações costeiras para funcionamento a duas frequências

(kHz)

Série número	Faixa dos 4 MHz		Faixa dos 6 MHz		Faixa dos 8 MHz	
	Emissão	Recepção	Emissão	Recepção	Emissão	Recepção
1	4 350	4 170,5	6 494,5	6 256,5	8 705	8 344
2	4 350,5	4 171	6 495	6 257	8 705,5	8 344,5
3	4 351	4 171,5	6 495,5	6 275,5	8 706	8 345
4	4 351,5	4 172	6 496	6 258	8 706,5	8 345,5
5	4 352	4 172,5	6 496,5	6 258,5	8 707	8 346
6	4 352,5	4 173	6 497	6 259	8 707,5	8 346,5
7	4 353	4 173,5	6 497,5	6 259,5	8 708	8 347
8	4 353,5	4 174	6 498	6 260	8 708,5	8 347,5
9	4 354	4 174,5	6 498,5	6 260,5	8 709	8 348
10	4 354,5	4 175	6 499	6 261	8 709,5	8 348,5
11	4 355	4 175,5	6 499,5	6 261,5	8 710	8 349
12	4 355,5	4 176	6 500	6 262	8 710,5	8 349,5
13	4 356	4 176,5	6 500,5	6 262,5	8 711	8 350
14	4 356,5	4 177	6 501	6 263	8 711,5	8 350,5
15	–	–	6 501,5	6 263,5	8 712	8 351
16	–	–	6 502	6 264	8 712,5	8 351,5
17	–	–	6 502,5	6 264,5	8 713	8 352
18	–	–	6 503	6 265	8 713,5	8 352,5
19	–	–	6 503,5	6 265,5	8 714	8 353
20	–	–	6 504	6 266	8 714,5	8 353,5
21	–	–	6 504,5	6 266,5	8 715	8 354
22	–	–	6 505	6 267	8 715,5	8 354,5
23	–	–	6 505,5	6 267,5	8 716	8 355
24	–	–	–	–	8 716,5	8 355,5
25	–	–	–	–	8 717	8 356
26	–	–	–	–	8 717,5	8 356,5
27	–	–	–	–	8 718	8 357

Série número	Faixa dos 12 MHz		Faixa dos 16 MHz		Faixa dos 22 MHz	
	Emissão	Recepção	Emissão	Recepção	Emissão	Recepção
1	13 071,5	12 491,5	17 197,5	16 660,5	22 561,5	22 192,5
2	13 072	12 492	17 198	16 661	22 562	22 193
3	13 072,5	12 492,5	17 198,5	16 661,5	22 562,5	22 193,5
4	13 073	12 493	17 199	16 662	22 563	22 194
5	13 073,5	12 493,5	17 199,5	16 662,5	22 563,5	22 194,5
6	13 074	12 494	17 200	16 663	22 564	22 195
7	13 074,5	12 494,5	17 200,5	16 663,5	22 564,5	22 195,5
8	13 075	12 495	17 201	16 664	22 565	22 196
9	13 075,5	12 495,5	17 201,5	16 664,5	22 565,5	22 196,5
10	13 076	12 496	17 202	16 665	22 566	22 197
11	13 076,5	12 496,5	17 202,5	16 665,5	22 566,5	22 197,5
12	13 077	12 497	17 203	16 666	22 567	22 198
13	13 077,5	12 497,5	17 203,5	16 666,5	22 567,5	22 198,5
14	13 078	12 498	17 204	16 667	22 568	22 199
15	13 078,5	12 498,5	17 204,5	16 667,5	22 568,5	22 199,5
16	13 079	12 499	17 205	16 668	22 569	22 200
17	13 079,5	12 499,5	17 205,5	16 668,5	22 569,5	22 200,5
18	13 080	12 500	17 206	16 669	22 570	22 201
19	13 080,5	12 500,5	17 206,5	16 669,5	22 570,5	22 201,5
20	13 081	12 501	17 207	16 670	22 571	22 202
21	13 081,5	12 501,5	17 207,5	16 670,5	22 571,5	22 202,5
22	13 082	12 502	17 208	16 671	22 572	22 203
23	13 082,5	12 502,5	17 208,5	16 671,5	22 572,5	22 203,5
24	13 083	12 503	17 209	16 672	22 573	22 204
25	13 083,5	12 503,5	17 209,5	16 672,5	22 573,5	22 204,5
26	13 084	12 504	17 210	16 673	22 574	22 205
27	13 084,5	12 504,5	17 210,5	16 673,5	22 574,5	22 205,5
28	13 085	12 505	17 211	16 674	22 575	22 206
29	13 085,5	12 505,5	17 211,5	16 674,5	22 575,5	22 206,5
30	13 086	12 506	17 212	16 675	22 576	22 207
31	13 086,5	12 506,5	17 212,5	16 675,5	22 576,5	22 207,5
32	13 087	12 507	17 213	16 676	22 577	22 208
33	13 087,5	12 507,5	17 213,5	16 676,5	22 577,5	22 208,5
34	13 088	12 508	17 214	16 677	22 578	22 209
35	13 088,5	12 508,5	17 214,5	16 677,5	22 578,5	22 209,5
36	13 089	12 509	17 215	16 678	22 579	22 210
37	13 089,5	12 509,5	17 215,5	16 678,5	22 579,5	22 210,5
38	13 090	12 510	17 216	16 679	22 580	22 211
39	13 090,5	12 510,5	17 216,5	16 679,5	22 580,5	22 211,5
40	13 091	12 511	17 217	16 680	22 581	22 212
41	13 091,5	12 511,5	17 217,5	16 680,5	22 581,5	22 212,5
42	13 092	12 512	17 218	16 681	22 582	22 213
43	13 092,5	12 512,5	17 218,5	16 681,5	22 582,5	22 213,5
44	13 093	12 513	17 219	16 682	22 583	22 214
45	13 093,5	12 513,5	17 219,5	16 682,5	22 583,5	22 214,5
46	13 094	12 514	17 220	16 683	22 584	22 215
47	13 094,5	12 514,5	17 220,5	16 683,5	22 584,5	22 215,5
48	13 095	12 515	17 221	16 684	22 585	22 216
49	13 095,5	12 515,5	17 221,5	16 684,5	22 585,5	22 216,5
50	13 096	12 516	17 222	16 685	22 586	22 217
51	13 096,5	12 516,5	17 222,5	16 685,5	22 586,5	22 217,5
52	13 097	12 517	17 223	16 686	22 587	22 218
53	13 097,5	12 517,5	17 223,5	16 686,5	22 587,5	22 218,5
54	13 098	12 518	17 224	16 687	22 588	22 219
55	13 098,5	12 518,5	17 224,5	16 687,5	22 588,5	22 219,5
56	13 099	12 519	17 225	16 688	22 589	22 220
57	13 099,5	12 519,5	17 225,5	16 688,5	22 589,5	22 220,5
58	–	–	17 226	16 689	22 590	22 221
59	–	–	17 226,5	16 689,5	22 590,5	22 221,5
60	–	–	17 227	16 690	22 591	22 222
61	–	–	17 227,5	16 690,5	22 591,5	22 222,5
62	–	–	17 228	16 691	22 592	22 223
63	–	–	17 228,5	16 691,5	22 592,5	22 223,5
64	–	–	17 229	16 692	22 593	22 224
65	–	–	17 229,5	16 692,5	22 593,5	22 224,5

Série número	Faixa dos 12 MHz		Faixa dos 16 MHz		Faixa dos 22 MHz	
	Emissão	Recepção	Emissão	Recepção	Emissão	Recepção
66	–	–	17 230	16 693	22 594	22 225
67	–	–	17 230,5	16 693,5	22 594,5	22 225,5
68	–	–	17 231	16 694	–	–
69	–	–	17 231,5	16 694,5	–	–

APÊNDICE 33

Disposição das vias a utilizar pelos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados nas faixas do serviço móvel marítimo compreendidas entre 4000 e 27 500 kHz (frequências não emparelhadas).

(V. o artigo 60 e a Resolução n.º 301)

São consignadas a cada estação de navio uma ou várias frequências como frequências de emissão.

Quadro das frequências de emissão das estações de navio

(kHz)

Série número	Faixa de frequências						
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25 MHz
1	4 177,5	6 268	8 297,6	12 520	16 695	22 226	25 076,3
2	4 178	6 268,5	8 298,1	12 520,5	16 695,5	22 226,5	25 076,8
3	4 178,5	6 269	8 298,6	12 521	16 696	–	25 077,3
4	4 179	6 269,5	8 299,1	12 521,5	16 696,5	–	25 077,8
5	4 179,5	–	8 299,6	12 522	16 697	–	25 078,3
6	–	–	8 357,5	12 522,5	16 697,5	–	25 078,8
7	–	–	–	12 523	16 698	–	25 079,3
8	–	–	–	12 523,5	16 698,5	–	25 079,8
9	–	–	–	12 524	16 699	–	25 080,3
10	–	–	–	12 524,5	16 699,5	–	25 080,8
11	–	–	–	12 525	16 700	–	25 081,3
12	–	–	–	12 525,5	16 700,5	–	25 081,8
13	–	–	–	12 526	16 701	–	25 082,3
14	–	–	–	12 526,5	16 701,5	–	25 082,8
15	–	–	–	–	16 702	–	25 083,3
16	–	–	–	–	16 702,5	–	25 083,8
17	–	–	–	–	16 703	–	25 084,3
18	–	–	–	–	16 703,5	–	25 084,8
19	–	–	–	–	16 704	–	25 085,3
20	–	–	–	–	16 704,5	–	25 085,8
21	–	–	–	–	16 705	–	25 086,3
22	–	–	–	–	16 705,5	–	25 086,8
23	–	–	–	–	–	–	25 087,3
24	–	–	–	–	–	–	25 087,8
25	–	–	–	–	–	–	25 088,3
26	–	–	–	–	–	–	25 088,8
27	–	–	–	–	–	–	25 089,3
28	–	–	–	–	–	–	25 089,8

APÊNDICE 34

Quadro das frequências de chamada a consignar às estações de navio para a telegrafia morse de classe A1A, com velocidades de modulação que não excedam 40 bauds

(V. o artigo 60 e a Resolução n.º 312)

(kHz)

Grupo	Séries de vias	Faixa dos 4 MHz — Largura de via 0,4 (*a*)	Faixa dos 6 MHz — Largura de via 0,6 (*a*)	Faixa dos 8 MHz — Largura de via 0,8 (*a*)	Faixa dos 12 MHz — Largura de via 1,2 (*a*)	Faixa dos 16 MHz — Largura de via 1,6 (*a*)	Série de vias (22 MHz)	Faixa dos 22 MHz — Largura de via 2,0 (*a*)	Faixa dos 254 MHz — Largura de via 2,0 (*a*)
I	1	4 180 -4 180,4	6 270 -6 270,6	8 360 -8 360,8	12 540 -12 541,2	16 720 -16 721,6			Via A 25 070-25 072 Grupos I e II
	2	4 180,4-4 180,8	6 270,6-6 271,2	8 360,8-8 361,6	12 541,2-12 542,4	16 721,6-16 723,2	1	22 227-22 229	
	3	4 180,8-4 181,2	6 271,2-6 271,8	8 361,6-8 362,4	12 542,4-12 543,6	16 723,2-16 724,8	2	22 229-22 231	
	4	4 181,2-4 181,6	6 271,8-6 272,4	8 362,4-8 363,2	12 543,6-12 544,8	16 724,8-16 726,4			
Via comum	5	4 181,6-4 182	6 272,4-6 273	8 363,2-8 364	12 544,8-12 546	16 726,4-16 728	3	22 231-22 233	Via comum C 25 072-25 074
Via comum	6	4 182,0-4 182,4	6 273 -6 273,6	8 364 -8 364,8	12 546 -12 547,2	16 728 -16 729,6	4	22 233-22 235	
II	7	4 182,4-4 182,8	6 273,6-6 274,2	8 364,8-8 365,6	12 547,2-12 548,4	16 729,6-16 731,2			Via A 25 070-25 072 Grupos I e II
	8	4 182,8-4 183,2	6 274,2-6 274,8	8 365,6-8 366,4	12 548,4-12 549,6	16 731,2-16 732,8	5	22 235-22 237	
	9	4 183,2-4 183,6	6 274,8-6 275,4	8 366,4-8 367,2	12 549,6-12 550,8	16 732,8-16 734,4	6	22 237-22 239	
	10	4 183,6-4 184	6 275,4-6 276	8 367,2-8 368	12 550,8-12 552	16 734,4-16 736			
III	11	4 184 -4 184,4	6 276 -6 276,6	8 368 -8 368,8	12 552 -12 553,2	16 736 -16 737,6			Via B 25 074-25 076 Grupos III e IV
	12	4 184,4-4 184,8	6 276,6-6 277,2	8 368,8-8 369,6	12 553,2-12 554,4	16 737,6-16 739,2	7	22 239-22 241	
	13	4 184,8-4 185,2	6 277,2-6 277,8	8 369,6-8 370,4	12 554,4-12 555,6	16 739,2-16 740,8	8	22 241-22 243	
	14	4 185,2-4 185,6	6 277,8-6 278,4	8 370,4-8 371,2	12 555,6-12 556,8	16 740,8-16 742,4			
IV	15	4 185,6-4 186	6 278,4-6 279	8 371,2-8 372	12 556,8-12 558	16 742,4-16 744			
	16	4 186 -4 186,4	6 279 -6 279,6	8 372 -8 372,8	12 558 -12 559,2	16 744 -16 745,6	9	22 243-22 245	
	17	4 186,4-4 186,8	6 279,6-6 280,2	8 372,8-8 373,6	12 559,2-12 560,4	16 745,6-16 747,2	10	22 245-22 247	
	18	4 186,8-4 187,2	6 280,2-6 280,8	8 373,6-8 374,4	12 560,4-12 561,6	16 747,2-16 748,8			

(*a*) Convém que as administrações consignem a frequência central de cada via do grupo apropriado e ou vias comuns às estações de navio que não estejam equipadas com osciladores de quartzo e que utilizem a relação harmónica para a chamada em telegrafia morse da classe A1A. As administrações podem, todavia, subdividir as vias do grupo apropriado e as vias comuns em frequência de chamada específicas, começando a 100 Hz da extremidade inferior da via e terminando a 100 Hz da extremidade superior (v. o exemplo abaixo) e consignar essas frequências a navios equipados de emissores com sintetizadores de frequência. As administrações devem evitar, na medida do possível, consignar as duas frequências situadas a ± 100 Hz de cada umas das frequências centrais em relação harmónica indicadas neste apêndice.

Exemplos de subdivisão de vias (frequências centrais em itálico):

4/1/a	4 180,1
4/1/b	*4 180,2*
4/1/c	4 180,3

6/1/a	6 270,1
6/1/b	6 270,2
6/1/c	*6 270,3*
6/1/d	6 270,4
6/1/e	6 270,5

8/1/a	8 360,1
8/1/b	8 360,2
8/1/c	8 360,3
8/1/d	*8 360,4*
8/1/e	8 360,5
8/1/f	8 360,6
8/1/g	8 360,7

12/1/a	12 540,1
12/1/b	12 540,2
12/1/c	12 540,3
12/1/d	12 540,4
12 /1/e	12 540,5
12/1/f	*12 540,6*
12/1/g	12 540,7
12/1/h	12 540,8
12/1/i	12 540,9
12/1/j	12 541,0
12/1/k	12 541,1

16/1/a	16 720,1
16/1/b	16 720,2
16/1/c	16 720,3
16/1/d	16 720,4
16/1/e	16 720,5
16/1/f	16 720,6
16/1/g	16 720,7
16/1/h	*16 720,8*
16/1/i	16 720,9
16/1/j	16 721,0
16/1/k	16 721,1
16/1/l	16 721,2
16/1/m	16 721,3
16/1/n	16 721,4
16/1/o	16 721,5

(*b*) Nas faixas dos 22 e 25 MHz as vias não estão em relação harmónica com as das faixas dos 4 a 16 MHz. Aplica-se, todavia, o princípio da subdivisão das vias em frequências de chamada específicas, começando a 100 Hz da extremidade inferior da via e terminando a 100 Hz da extremidade superior.

APÊNDICE 35

Quadro das frequências de trabalho, em kilohertzes, a consignar às estações de navio para a telegrafia morse de classe A1A, com velocidades de modulação que não excedam 40 bauds

[V. igualmente a nota *e*) do apêndice 31]

Nota. — A primeira linha de cada série, até à série 53, inclusive, indica as frequências em relação harmónica a consignar nas faixas de 4, 6, 8, 12 e 16 MHz. As outras frequências não estão necessariamente em relação harmónica.

(kHz)

Série número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
1	4 188,5	6 282,75	8 377	12 565,5	16 754
a)	–	–	–	12 566	16 754,5
b)	–	–	8 377,5	–	16 755
c)	–	–	–	12 566,5	16 755,5
2	4 189	6 283,5	8 378	12 567	16 756
a)	–	–	–	12 567,5	16 756,5
b)	–	–	8 378,5	–	16 757
c)	–	–	–	12 568	16 757,5
3	4 189,5	6 284,25	8 379	12 568,5	16 758
a)	–	–	–	12 569	16 758,5
b)	–	–	8 379,5	–	16 759
c)	–	–	–	12 569,5	16 759,5
4	4 190	6 285	8 380	12 570	16 760
a)	–	–	–	12 570,5	16 760,5
b)	–	–	8 380,5	–	16 761
c)	–	–	–	12 571	16 761,5
5	4 190,5	6 285,75	8 381	12 571,5	16 762
a)	–	–	–	12 572	16 762,5
b)	–	–	8 381,5	–	16 763
c)	–	–	–	12 572,5	16 763,5
6	4 191	6 286,5	8 382	12 573	16 764
a)	–	–	–	12 573,5	16 764,5
b)	–	–	8 382,5	–	16 765
c)	–	–	–	12 574	16 765,5
7	4 191,5	6 287,25	8 383	12 574,5	16 766
a)	–	–	–	12 575	16 766,5
b)	–	–	8 383,5	–	16 767
c)	–	–	–	12 575,5	16 767,5
8	4 192	6 288	8 384	12 576	16 768
a)	–	–	–	12 576,5	16 768,5
b)	–	–	8 384,5	–	16 769
c)	–	–	–	12 577	16 769,5
9	4 192,5	6 288,75	8 385	12 577,5	16 770
a)	–	–	–	12 578	16 770,5
b)	–	–	8 385,5	–	16 771
c)	–	–	–	12 578,5	16 771,5
10	4 193	6 289,5	8 386	12 579	16 772
a)	–	–	–	12 579,5	16 772,5
b)	–	–	8 386,5	–	16 773
c)	–	–	–	12 580	16 773,5

Série número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
11	4 193,5	6 290,25	8 387	12 580,5	16 774
a)	–	–	–	12 581	16 774,5
b)	–	–	8 387,5	–	16 775
c)	–	–	–	12 581,5	16 775,5
12	4 194	6 291	8 388	12 582	16 776
a)	–	–	–	12 582,5	16 776,5
b)	–	–	8 388,5	–	16 777
c)	–	–	–	12 583	16 777,5
13	4 194,5	6 291,75	8 389	12 583,5	16 778
a)	–	–	–	12 584	16 778,5
b)	–	–	8 389,5	–	16 779
c)	–	–	–	12 584,5	16 779,5
14	4 195	6 292,5	8 390	12 585	16 780
a)	–	–	–	12 585,5	16 780,5
b)	–	–	8 390,5	–	16 781
c)	–	–	–	12 586	16 781,5
15	4 195,5	6 293,25	8 391	12 586,5	16 782
a)	–	–	–	12 587	16 782,5
b)	–	–	8 391,5	–	16 783
c)	–	–	–	12 587,5	16 783,5
16	4 196	6 294	8 392	12 588	16 784
a)	–	–	–	12 588,5	16 784,5
b)	–	–	8 392,5	–	16 785
c)	–	–	–	12 589	16 785,5
17	4 196,5	6 294,75	8 393	12 589,5	16 786
a)	–	–	–	12 590	16 786,5
b)	–	–	8 393,5	–	16 787
c)	–	–	–	12 590,5	16 787,5
18	4 197	6 295,5	8 394	12 591	16 788
a)	–	–	–	12 591,5	16 788,5
b)	–	–	8 394,5	–	16 789
c)	–	–	–	12 592	16 789,5
19	4 197,5	6 296,25	8 395	12 592,5	16 790
a)	–	–	–	12 593	16 790,5
b)	–	–	8 395,5	–	16 791
c)	–	–	–	12 593,5	16 791,5
20	4 198	6 297	8 396	12 594	16 792
a)	–	–	–	12 594,5	16 792,5
b)	–	–	8 396,5	–	16 793
c)	–	–	–	12 595	16 793,5
21	4 198,5	6 297,75	8 397	12 595,5	16 794
a)	–	–	–	12 596	16 794,5
b)	–	–	8 397,5	–	16 795
c)	–	–	–	12 596,5	16 795,5
22	4 199	6 298,5	8 398	12 597	16 796
a)	–	–	–	12 597,5	16 796,5
b)	–	–	8 398,5	–	16 797
c)	–	–	–	12 598	16 797,5

Série número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
23	4 199,5	6 299,25	8 399	12 598,5	16 798
a)	–	–	–	12 599	16 798,5
b)	–	–	8 399,5	–	16 799
c)	–	–	–	12 599,5	16 799,5
24	4 200	6 300	8 400	12 600	16 800
a)	–	–	–	12 600,5	16 800,5
b)	–	–	8 400,5	–	16 801
c)	–	–	–	12 601	16 801,5
25	4 200,5	6 300,75	8 401	12 601,5	16 802
a)	–	–	–	12 602	16 802,5
b)	–	–	8 401,5	–	16 803
c)	–	–	–	12 602,5	16 803,5
26	4 201	6 301,5	8 402	12 603	16 804
a)	–	–	–	12 603,5	16 804,5
b)	–	–	8 402,5	–	16 805
c)	–	–	–	12 604	16 805,5
27	4 201,5	6 302,25	8 403	12 604,5	16 806
a)	–	–	–	12 605	16 806,5
b)	–	–	8 403,5	–	16 807
c)	–	–	–	12 605,5	16 807,5
28	4 202	6 303	8 404	12 606	16 808
a)	–	–	–	12 606,5	16 808,5
b)	–	–	8 404,5	–	16 809
c)	–	–	–	12 607	16 809,5
29	4 202,5	6 303,75	8 405	12 607,5	16 810
a)	–	–	–	12 608	16 810,5
b)	–	–	8 405,5	–	16 811
c)	–	–	–	12 608,5	16 811,5
30	4 203	6 304,5	8 406	12 609	16 812
a)	–	–	–	12 609,5	16 812,5
b)	–	–	8 406,5	–	16 813
c)	–	–	–	12 610	16 813,5
31	4 203,5	6 305,25	8 407	12 610,5	16 814
a)	–	–	–	12 611	16 814,5
b)	–	–	8 407,5	–	16 815
c)	–	–	–	12 611,5	16 815,5
32	4 204	6 306	8 408	12 612	16 816
a)	–	–	–	12 612,5	16 816,5
b)	–	–	8 408,5	–	16 817
c)	–	–	–	12 613	16 817,5
33	4 204,5	6 306,75	8 409	12 613,5	16 818
a)	–	–	–	12 614	16 818,5
b)	–	–	8 409,5	–	16 819
c)	–	–	–	12 614,5	16 819,5
34	4 205	6 307,5	8 410	12 615	16 820
a)	–	–	–	12 6157,5	16 820,5
b)	–	–	8 410,5	–	16 821
c)	–	–	–	12 616	16 821,5

Série número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
35	4 205,5	6 308,25	8 411	12 616,5	16 822
a)	–	–	–	12 617	16 822,5
b)	–	–	8 411,5	–	16 823
c)	–	–	–	12 617,5	16 823,5
36	4 206	6 309	8 412	12 618	16 824
a)	–	–	–	12 618,5	16 824,5
b)	–	–	8 412,5	–	16 825
c)	–	–	–	12 619	16 825,5
37	4 206,5	6 309,75	8 413	12 619,5	16 826
a)	–	–	–	12 620	16 826,5
b)	–	–	8 413,5	–	16 827
c)	–	–	–	12 620,5	16 827,5
38	4 207	6 310,5	8 414	12 621	16 828
a)	–	–	–	12 621,5	16 828,5
b)	–	–	8 414,5	–	16 829
c)	–	–	–	12 622	16 829,5
39	4 207,5	6 311,25	8 415	12 622,5	16 830
a)	–	–	–	12 623	16 830,5
b)	–	–	8 415,5	–	16 831
c)	–	–	–	12 623,5	16 831,5
40	4 208	6 312	8 416	12 624	16 832
a)	–	–	–	12 624,5	16 832,5
b)	–	–	8 416,5	–	16 833
c)	–	–	–	12 625	16 833,5
41	4 208,5	6 312,75	8 417	12 625,5	16 834
a)	–	–	–	12 626	16 834,5
b)	–	–	8 417,5	–	16 835
c)	–	–	–	12 626,5	16 835,5
42	4 209	6 313,5	8 418	12 627	16 836
a)	–	–	–	12 627,5	16 836,5
b)	–	–	8 418,5	–	16 837
c)	–	–	–	12 628	16 837,5
43	4 209,5	6 314,25	8 419	12 628,5	16 838
a)	–	–	–	12 629	16 838,5
b)	–	–	8 419,5	–	16 839
c)	–	–	–	12 629,5	16 839,5
44	4 210	6 315	8 420	12 630	16 840
a)	–	–	–	12 630,5	16 840,5
b)	–	–	8 420,5	–	16 841
c)	–	–	–	12 631	16 841,5
45	4 210,5	6 315,75	8 421	12 631,5	16 842
a)	–	–	–	12 632	16 842,5
b)	–	–	8 421,5	–	16 843
c)	–	–	–	12 632,5	16 843,5
46	4 211	6 316,5	8 422	12 633	16 844
a)	–	–	–	12 633,5	16 844,5
b)	–	–	8 422,5	–	16 845
c)	–	–	–	12 634	16 845,5

Série número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
47	4 211,5	6 317,25	8 423	12 634,5	16 846
a)	–	–	–	12 635	16 846,5
b)	–	–	8 423,5	–	16 847
c)	–	–	–	12 635,5	16 847,5
48	4 212	6 318	8 424	12 636	16 848
a)	–	–	–	12 636,5	16 848,5
b)	–	–	8 424,5	–	16 849
c)	–	–	–	12 637	16 849,5
49	4 212,5	6 318,75	8 425	12 637,5	16 850
a)	–	–	–	12 638	16 850,5
b)	–	–	8 425,5	–	16 851
c)	–	–	–	12 638,5	16 851,5
50	4 213	6 319,5	8 426	12 639	16 852
a)	–	–	–	12 639,5	16 852,5
b)	–	–	8 426,5	–	16 853
c)	–	–	–	12 640	16 853,5
51	4 213,5	6 320,25	8 427	12 640,5	16 854
a)	–	–	–	12 641	16 854,5
b)	–	–	8 427,5	–	16 855
c)	–	–	–	12 641,5	16 855,5
52	4 214	6 321	8 428	12 642	16 856
a)	–	–	–	12 642,5	16 856,5
b)	–	–	8 428,5	–	16 857
c)	–	–	–	12 643	16 857,5
53	4 214,5	6 321,75	8 429	12 643,5	(*) *16 858*
a)	–	–	–	12 644	–
b)	–	–	8 429,5	–	–
c)	–	–	–	12 644,5	–
54	4 215	6 322,5	8 430	12 645	–
a)	–	–	–	12 645,5	–
b)	–	–	8 430,5	–	–
c)	–	–	–	12 646	–
55	4 215,5	6 323,25	8 431	12 646,5	–
a)	–	–	–	12 647	–
b)	–	–	8 431,5	–	–
c)	–	–	–	12 647,5	–
56	4 216	6 324	8 432	12 648	–
a)	–	–	–	12 648,5	–
b)	–	–	8 432,5	–	–
c)	–	–	–	12 649	–
57	4 216,5	(*) *6 324,75*	8 433	12 649,5	–
a)	–	–	–	12 650	–
b)	–	–	8 433,5	–	–
c)	–	–	–	12 650,5	–
58	4 217	–	8 434	(*) *12 651*	–
a)	–	–	–	–	–
b)	–	–	8 434,5	–	–

Sem número	Faixas				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
59	4 217,5	–	(*) *8 435*	–	–
60	4 218	–	–	–	–
61	4 218,5	–	–	–	–
62	(*) *4 219*	–	–	–	–

(*) Esta frequência é a mais elevada a consignar na faixa.

APÊNDICE 36

Aparelhos automáticos destinados à recepção dos sinais de alarme radiotelegráfico e radiotécnico

(V. a secção II do artigo 41)

1. Os aparelhos automáticos destinados à recepção do sinal de alarme radiotelegráfico devem satisfazer as condições seguintes:

a) O aparelho deve funcionar sob a acção do sinal de alarme transmitido por radiotelegrafia em emissão das classes A2B e H2B, pelo menos (v. o n.º **4216**);
b) O aparelho deve registar o sinal de alarme, apesar das interferências (com a condição de que essas interferências não sejam contínuas) provocadas pelos parasitas atmosféricos e por sinais potentes diferentes do sinal de alarme, sem que seja, de preferência, necessária qualquer regulação manual, durante os períodos em que a vigília é assegurada com este aparelho;
c) O aparelho não deve entrar em funcionamento com parasitas atmosféricos ou com sinais potentes diferentes do sinal de alarme;
d) O aparelho deve possuir um mínimo de sensibilidade tal que, se os parasitas atmosféricos forem de pouca importância, ele possa funcionar sob a pressão do sinal de alarme transmitido pelo emissor de socorro de uma estação de navio, a qualquer distância dessa estação até ao alcance normal fixado para o dito emissor pela Convenção Internacional para Salvaguarda da Vida Humana no Mar e preferivelmente a distâncias superiores;
e) O aparelho deve sinalizar qualquer avaria que possa impedir o seu funcionamento normal durante os períodos de vigília.

2. Os aparelhos automáticos destinados à recepção do sinal de alarme radiotelefónico devem satisfazer as condições seguintes:

a) O aparelho deve funcionar sob a acção do sinal de alarme apesar das interferências intermitentes provocadas pelos parasitas atmosféricos e por sinais potentes diferentes do sinal de alarme, sem que seja, de preferência, necessária qualquer regulação manual durante os períodos em que a vigília é asseguradas com este aparelho;
b) O aparelho não deve entrar em funcionamento com parasitas atmosféricos ou com sinais potentes diferentes do sinal de alarme;
c) O aparelho deve poder funcionar para além da distância em que a transmissão da palavra é satisfatória. Deve, tanto quanto seja praticável, comportar um dispositivo que sinalize as avarias susceptíveis de impedir o seu funcionamento normal durante os períodos de vigília.

APÊNDICE 37

Características técnicas das radiobalizas de localização de sinistros que funcionam na frequência portadora de 2182 kHz

(V. a secção I do artigo 41)

As radiobalizas de localização de sinistros devem satisfazer as seguintes condições:

a) A potência radiada pelas radiobalizas de pequena potência (tipo L) deve ter o valor necessário para produzir, ao nível do mar e a uma distância de 30 milhas marítimas, um campo cuja intensidade seja igual ao inferior a 10 μV/m, sendo a intensidade de campo inicial de, pelo menos, 2,5 μV/m;

b) A potência radiada pelas radiobalizas de grande potência (tipo H) deve ter o valor necessário para produzir, ao nível do mar e a uma distância de 30 milhas marítimas, um campo cuja intensidade seja superior a 10 $_{\mu}V/m$;

c) Após um período de 48 horas de funcionamento contínuo, a potência radiada não deve ser inferior a 20 % do seu valor inicial;

d) As radiobalizas devem poder efectuar emissões da classe A2A (ou A2B) ou H2A (ou H2B), com uma taxa de modulação compreendida entre 30 % e 90 %;

e) As tolerâncias das frequências acústicas das emissões das radiobalizas de localização de sinistros (v. n.os **3256** a **3258**) são:

± 20 Hz para a frequência de 1300 Hz;
± 35 Hz para a frequência de 220 Hz;

f) O material deve ser concebido de maneira a estar de acordo com os pareceres pertinentes da CCIR.

APÊNDICE 38

Aparelhos de faixa estreita de telegrafia com impressão directa

(V. os artigos 59, 60, 63 e 64)

Os aparelhos de faixa estreita de telegrafia com impressão directa utilizados no serviço móvel marítimo devem satisfazer as condições seguintes:

a) Os aparelhos devem funcionar com os sinais do alfabeto telegráfico internacional n.º 2, com uma velocidade de modulação de 50 bauds, e fornecer na saída sinais do mesmo tipo susceptíveis de serem em seguida transmitidos pela rede telegráfica pública;

b) A rapidez de modulação no trajecto radioeléctrico não deve exceder 100 bauds;

c) As emissões devem ser da classe F1B, sendo o deslocamento da frequência de 170 Hz (1);

d) A tolerância de frequência do sinal emitido deve ser de ± 40 Hz para as estações de navio e de ± 15 Hz no caso das estações costeiras (2) (3) (4);

e) A frequência emitida superior deve corresponder a «espaço» (arranque) e a frequência emitida inferior deve corresponder a «marca» (paragem), de acordo com o parecer pertinente da CCIR;

f) Quando se utilize um sistema de correcção de erros, o aparelho deve estar equipado com um dispositivo simples para curto-circuitar esse sistema, a fim de permitir a emissão e a recepção, no trajecto radioeléctrico, de sinais não corrigidos de acordo com as disposições da alínea *a*) acima;

g) No serviço móvel marítimo, quando a telegrafia com impressão directa utiliza um sistema de detecção e correcção de erros, deve ser utilizado um sistema ARQ de 7 unidades ou um sistema, também de 7 unidades, sem circuito de retorno e com recepção em diversidade de tempo, utilizando o mesmo código. Convém que as restantes características do equipamento de detecção e correcção de erros estejam de acordo com os pareceres pertinentes da CCIR;

h) Se uma estação estiver equipada com um sistema de chamada selectiva de acordo com as disposições do apêndice 39 e com um sistema com impressão directa conforme com as disposições do presente apêndice, e utilizar um sinal de chamada a dois blocos, ser-lhe-á consignado para dois sistemas o mesmo número de identificação ou de chamada selectiva, em conformidade com as disposições dos n.os **2088** e **2143** a **2146**;

i) Se uma estação estiver equipada com um sistema com impressão directa de acordo com as disposições do presente apêndice, e utilizar um sistema de chamada a dois blocos, e se ainda não lhe tiver sido consignado um número em conformidade com as disposições dos n.os **2088** e **2143** a **2146**, convém consignar-lhe o referido número para o sistema de impressão directa;

j) A conversão da identificação numérica em combinações de 28 bits (quatro características) efectua-se de acordo com os pareceres pertinentes da CCIR.

---

(1) Quando se efectua a manipulação por deslocamento de frequência através da injecção de sinais de frequência acústica na entrada de um emissor de faixa lateral única, convém que se procure suprimir suficientemente a portadora residual da emissão de faixa lateral única. Por outro lado, uma escolha criteriosa da frequência acústica central permitirá reduzir ao mínimo a possibilidade de a portadora residual causar interferências nas vias vizinhas. Por esta razão, algumas administrações escolheram 1700 Hz para a frequência central.

(2) Para fins de exploração, convém que o equipamento de recepção associado seja compatível com a estabilidade de frequência dos emissores.

(3) Estas tolerâncias são aplicáveis aos equipamentos instalados depois de 1 de Janeiro de 1976 e a todos os equipamentos a partir de 1 de Janeiro 1985. Relativamente aos equipamentos instalados antes de 2 de Janeiro de 1976, a tolerância é de 100 Hz para os emissores de estação de navio (com uma deriva máxima de 40 Hz para períodos curtos da ordem de quinze minutos) e de 40 Hz para os emissores de estação costeira.

(4) Talvez possa ser oportuno fixar limites de tolerância mais restritos em função do método de exploração do serviço e do material utilizado.

APÊNDICE 39

Sistema de chamada selectiva a utilizar no serviço móvel marítimo

(V. os artigos 25, 62, 63 e 65 e o apêndice 9)

1. No caso em que seja necessário satisfazer as necessidades imediatas em matéria selectiva, o sistema utilizado deve apresentar as seguintes características:

1.1. O sinal de chamada selectiva deve conter cinco algarismos representando o número de chamada selectiva consignado a um navio para a chamada selectiva.

1.2. O sinal de frequência acústica aplicado à entrada do emissor da estação costeira deve ser constituído por uma série de impulsos de frequência acústica de acordo com as seguintes disposições:

1.2.1. As frequências acústicas que servem para representar os algarismos do número de chamada selectiva consignado a um navio devem estar de acordo com a série seguinte:

Algarismo	1	2	3	4	5	6	7	8	9	0	Repetição de algarismo
Frequência acústica (H3)	1 124	1 197	1 275	1 358	1 446	1 540	1 640	1 747	1 860	1 981	2 110

Por exemplo, a série de impulsos de frequência acústica correspondente ao número de chamada selectiva 12 133 seria 1124-1197-1124-1275-2110 Hz e a série correspondente ao n.º 22 222 seria 1197-2110-1197-2110-1197 Hz.

1.2.2. Se os números de chamada selectiva representados por apenas duas frequências — escolhidas entre as indicadas no § 1.2.1 — forem reservados para a chamada de grupos predeterminados de navios, poder-se-á dispor de cem combinações diferentes, a atribuir segundo as necessidades das administrações.

1.2.3. Os sinais produzidos pelos geradores de frequências acústicas devem ser essencialmente sinusoidais, com uma distorção harmónica total que não exceda 2 %.

1.2.4. Os impulsos de frequência acústica devem ser transmitidos em sequência.

1.2.5. A diferença entre as amplitudes máximas de dois impulsos quaisquer não deve exceder 1 dB.

1.2.6. A duração de cada impulso de frequência acústica, medida entre os pontos a 50 % da amplitude máxima deve ser de 100 ms ± 10 ms.

1.2.7. O intervalo de tempo entre dois impulsos consecutivos, medido entre os pontos a 50 % da amplitude máxima, deve ser de 3 ms ± 2 ms.

1.2.8. O tempo de estabelecimento e o tempo de extinção de cada impulso, medidos entre os pontos a 10 % e a 90 % da amplitude máxima, deve ser de 1,5 ms ± 1 ms.

1.2.9. A tolerância das frequências acústicas indicadas no § 1.2.1 deve ser de ± 4 Hz.

1.2.10. O sinal de chamada selectiva (número de chamada selectiva consignado à estação do navio) deve ser emitido duas vezes, com um intervalo de 900 ms ± 100 ms entre o fim do primeiro sinal e o começo do segundo (figura 1).

1.2.11. O intervalo entre as chamadas de uma estação costeira a navios diferentes deve ser, no mínimo, de um segundo (figura 1).

2. As informações suplementares que se seguem ao sinal de chamada selectiva devem ser transmitidas pela forma seguinte:

2.1. Quatro algarismos para identificar a estação costeira que chama.

2.2 Dois zeros seguidos de dois algarismos para indicar a via de transmissão em ondas métricas na qual deva ser dada a resposta (v. o apêndice 18).

2.3. As características dos sinais devem estar de acordo com as disposições dos §§ 1.2.1 e 1.2.3 a 1.2.9, inclusive.

2.4. A composição do sinal deve estar de acordo com o diagrama da figura 2, sendo de ± 30 ms a tolerância no intervalo de 350 ms.

3. Um sinal especial «Chamada a todos os navios», destinado a accionar os selectores de recepção instalados a bordo de todos os navios, qualquer que seja o seu número de chamada selectiva, deve comportar a emissão contínua da sequência das onze frequências acústicas indicadas no § 1.2.1. As características dos impulsos de frequência acústica devem satisfazer as disposições dos §§ 1.2.3, 1.2.4, 1.2.5 e 1.2.9. A duração de cada um desses impulsos, medida entre os pontos a 50 % da amplitude máxima, deve ser de 17 ms ± 1 ms; o intervalo de tempo entre os dois impulsos consecutivos, medido entre os pontos a 50 % da amplitude máxima, não deve exceder a 1 ms. Convém que a duração total do sinal «Chamada a todos os navios» tenha, no mínimo, cinco segundos.

4. Os selectores de recepção instalados a bordo dos navios deverão ter uma boa fiabilidade de funcionamento em todas as condições que permitam obter comunicações de qualidade satisfatória.

5. O selector de recepção deve ser concebido para receber os sinais definidos no § 1. Todavia, tendo em conta o facto de que as estações costeiras podem emitir sinais suplementares (por exemplo, para identificação da estação costeira), importa que a duração do regresso ao repouso do descodificador seja de 250 ms ± 40 ms.

6. Este selector deveria ser concebido, realizado e mantido de tal modo que pudesse funcionar em presença de ruídos atmosféricos e de outros sinais perturbadores, incluindo os sinais de chamada selectiva diferentes daquele para o qual foi ajustado o descodificador.

7. O selector de recepção deve comportar um dispositivo que forneça uma indicação acústica ou visual da recepção de uma chamada e, se exigido, um dispositivo complementar que permita determinar a identidade da estação de onde provém a chamada ou a via de transmissão em ondas métricas a utilizar para a resposta, segundo as necessidades das administrações.

8. Este dispositivo indicador deve entrar em funcionamento quando da recepção correcta do sinal de chamada, quer o registo correcto tenha sido feito quando da emissão do primeiro sinal de chamada pela estação costeira ou quando da sua repetição, ou em ambos os casos.

9. O dispositivo indicador deve manter-se em posição de funcionamento até ser reposto manualmente em descanso.

10. Convém que o selector de recepção seja tão simples quanto possível e possa funcionar de maneira segura durante longos períodos com um mínimo de manutenção, havendo toda a vantagem em que comporte meios que permitam efectuar o seu ensaio sem contribuição exterior.

FIGURA 1

Composição dos sinais de chamada selectiva, sem informações suplementares

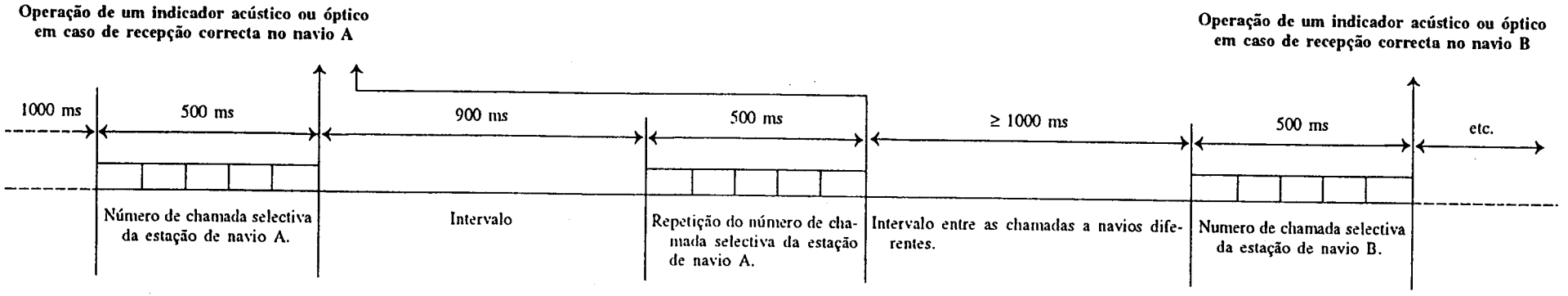
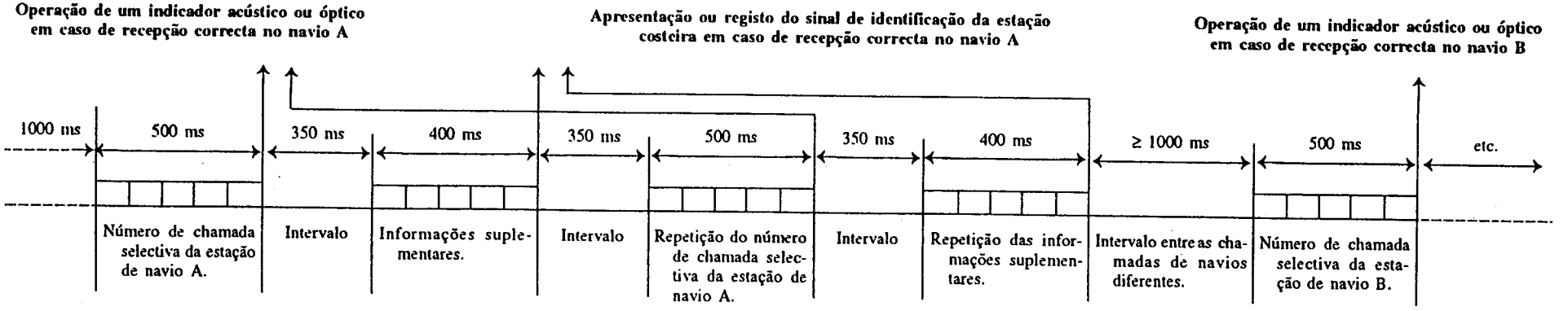


FIGURA 2

Composição dos sinais de chamada selectiva, com informações suplementares



APÊNDICE 40

Sistemas de compressores e expansores acoplados

(V. a secção IV do artigo 60 e o apêndice 17)

Quando o serviço móvel marítimo radiotelefónico internacional recorre a sistemas de compressores e expansores acopulados:

a) As características do equipamento de compressores e expansores devem estar de acordo com as disposições dos pareceres da CCIR;

b) Para se obter o resultado óptimo, as características dos equipamentos de faixa lateral única utilizados com sistemas de compressores e expansores acopulados devem estar de acordo com as disposições do apêndice 17 e convém, além disso, que satisfaçam as condições seguintes:

1) A estabilidade de frequência em períodos curtos (da ordem de quinze minutos) dos emissores de estação costeira é de ± 2 Hz;
2) A estabilidade de frequência em períodos curtos (da ordem de quinze minutos) dos emissores de estação de navio é de ± 5 Hz;
3) Para que a estabilidade do ganho total seja suficiente durante o período de uma comunicação é necessário que os receptores da estação costeira estejam equipados com dispositivos que permitam manter o erro de frequência de uma extremidade à outra num valor compreendido entre ± 2 Hz e que os receptores de estação de navio estejam equipados com dispositivos que permitam manter esse erro num valor compreendido entre ± 5 Hz;
4) A máxima variação admissível da amplitude do emissor na faixa das frequências acústicas de 350-2700 Hz, na emissão, é de 6 dB; o atraso diferencial não deve exceder 3 ms. No que respeita a estes requisitos, o receptor deve ter, pelo menos, as mesmas características de funcionamento;
5) Quando se utilizar a portadora piloto de uma emissão da classe R3E para produzir um sinal contínuo destinado a estabilizar a frequência e a comandar o ganho do receptor, no caso de uma emissão da classe J3E, por exemplo, o procedimento inicial de sintonização deve incluir, durante um curto período, a emissão de uma frequência acústica de referência apropriada (por exemplo, 1000 Hz ± 1 Hz) num nível da ordem de — 10 dBm0 ± 0,5 dB;
6) Caso se pretenda utilizar inversores ou qualquer outro tipo de dispositivos de segredo, há que ter em atenção o facto de que a frequência acústica superior da via telefónica é de 2380 Hz.

APÊNDICE 41

Procedimento para a obtenção dos azimutes radiogoniométricos e das posições

(V. o artigo 35)

SECÇÃO I

Instruções gerais

§ 1. As estações de serviço móvel aeronáutico utilizarão os procedimentos especiais que possam vigorar em aplicação de acordos concluídos pelas administrações. Contudo, deverão seguir as disposições deste apêndice se lhes for necessário participar em operações de radiogoniometria com estações do serviço móvel marítimo.

§ 2. Antes de chamar uma ou mais estações radiogoniométricas para lhes pedir o seu azimute ou a sua posição, a estação móvel deve procurar na nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais:

a) Os indicativos de chamada das estações a chamar para obter os azimutes ou a posição que deseja;

b) A frequência em que as estações radiogoniométricas escutam e a ou as frequências em que determinam os azimutes;

c) As estações radiogoniométricas que, por meio de ligações por circuitos especiais, podem funcionar em grupo com a estação radiogoniométrica a chamar.

§ 3. O procedimento que a estação móvel deverá seguir depende de diversas circunstâncias. De modo geral, a estação móvel deve ter em atenção o seguinte:

a) Se as estações radiogoniométricas não escutarem na mesma frequência (quer seja a frequência em que determinam o azimute ou qualquer outra frequência), devem pedir-se os azimutes separadamente a cada estação ou grupo de estações que utilizam uma dada frequência;

b) Se todas as estações radiogonoimétricas interessadas escutarem na mesma frequência e se estiverem em condições de determinar azimutes numa frequência comum (que pode ser diferente da frequência de escuta), a estação móvel deve chamá-las conjuntamente, para que todas essas estações determinem simultaneamente os azimutes na mesma emissão;

c) Se várias estações radiogoniométricas estiverem agrupadas por meio de circuitos especiais, apenas se deve chamar uma delas, designada «estação radiogoniométrica de comando», mesmo que todas estejam agrupadas com aparelhos emissores. Contudo, neste caso, a estação móvel deve, se necessário, mencionar na chamada, por meio dos respectivos indicativos de chamada, as estações radiogoniométricas de que deseja obter azimutes.

§ 4. A nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais contém as indicações relativas:

a) Ao tipo de sinal e à classe de emissão a empregar para obter os azimutes;

b) À duração das emissões que a estação móvel deve efectuar;

c) À hora utilizada pela estação radiogoniométrica considerada, se essa hora for diferente da do tempo universal coordenado (UTC).

SECÇÃO II

Regras de procedimento

§ 5. As seguintes regras de procedimento, aplicáveis à radiotelegrafia e à radiotelefonia, fundam-se no emprego da radiotelegrafia. Em radiotelefonia, as abreviaturas regulamentares podem ser substituídas por frases apropriadas.

Obtenção de um azimute

§ 6. (1) A estação móvel chama a estação radiogoniométrica ou a estação radiogoniométrica de comando na frequência de escuta indicada pela nomenclatura das estações de radiodeterminação e das estações que efectuam serviços especiais. Conforme o tipo de informação que pretenda, a estação que chama transmite a abreviatura regulamentar apropriada, seguida, se a estação radiogoniométrica for uma estação móvel, da abreviatura regulamentar QTH? Se necessário, indica a frequência em que vai emitir para permitir determinar o seu azimute e, em seguida, aguarda instruções.

(2) Utilizando a abreviatura regulamentar apropriada, a estação radiogoniométrica convida a estação que chama a efectuar a emissão necessária para o azimute. Se necessário, indica a frequência a utilizar para este efeito e o número de vezes que se deve repetir a emissão.

(3) Depois de ter ajustado, se necessário, a sua nova frequência de emissão, a estação que chama transmite dois traços de aproximadamente dez segundos, seguido, cada um deles, do seu indicativo de chamada. Repete estes sinais tantas vezes quantas lho tenha pedido a estação radiogoniométrica.

(4) A estação radiogoniométrica determina a direcção e, se possível, o sentido do azimute e a sua classe (v. o § 7).

(5) Se a estação radiogoniométrica não ficar satisfeita com a operação, pede à estação que chama que repita a emissão indicada na alínea (3).

(6) A estação radiogoniométrica transmite as informações à estação que chama pela seguinte ordem:

a) Abreviatura regulamentar apropriada;

b) Três algarismos indicando, em graus, o azimute verdadeiro em relação à estação radiogoniométrica;

c) A classe do azimute;

d) A hora da observação;

e) Se a estação radiogoniométrica for móvel, a sua própria posição e latitude e longitude, precedida da abreviatura regulamentar QHT.

(7) Logo que a estação que chama receba o resultado da observação, repete a mensagem se considerar necessário obter confirmação. A estação radiogoniométrica confirma então a exatidão da repetição ou, se for caso disso, rectifica, repetindo a mensagem. Quando a estação radiogoniométrica adquiriu a certeza de que a estação móvel recebeu correctamente a mensagem, transmite o sinal «fim de trabalho». A estação que chama repete então o sinal para indicar que a operação está terminada.

(8) Não havendo indicações contrárias, a estação que chama considera que foi determinado o sentido do azimute. Se a estação radiogoniométrica não determinou esse sentido, menciona isso na transmissão da informação ou então indica as duas direcções opostas que determinou.

Classificação dos azimutes

§ 7. Para apreciar a precisão e determinar a classe correspondente de um azimute:

a) Convém, em geral e especialmente no serviço radiogoniométrico móvel mantido nas frequências inferiores a 3000 kHz, que o operador utilize as características-tipo dos azimutes indicados no quadro seguinte;

b) Os operadores de uma estação radiogoniométrica podem, quando a natureza do equipamento e o tempo o permitirem, ter em conta a probabilidade de erro do azimute. Considera-se um azimute como pertencendo a uma dada classe se houver uma probabilidade inferior a $^1/_{20}$ de que o erro do azimute exceda os valores numéricos especificados para essa classe no quadro seguinte. Convém que essa probabilidade seja avaliada por meio da análise dos cinco componentes da variância total do azimute (instrumento, localização, propagação, amostragem dos azimutes e condições de observação).

Obtenção de uma posição determinada por duas ou mais estações radiogoniométricas organizadas em grupo

§ 8. (1) Se a estação que chama desejar ser informada da sua posição por um grupo de estações radiogoniométricas, chama a estação de comando como indicado na alínea (1) do § 6 acima e pede a sua posição utilizando a abreviatura regulamentar apropriada.

(2) A estação de comando responde à chamada e, logo que estejam prontas as estações radiogoniométricas, utilizando a abreviatura regulamentar apropriada, convida a estação que chama a emitir. Determinada a posição, a estação de comando transmite à estação que chama:

a) A abreviatura regulamentar apropriada;
b) A posição em latitude e longitude ou, se apropriado, em relação a um ponto geográfico conhecido;
c) A classe da posição, definida na alínea seguinte;
d) A hora da observação.

(3) Segundo a sua apreciação da precisão das suas observações, a estação de comando classifica a posição numa das quatro classes seguintes:

Classe A — Posições que o operador pode razoavelmente considerar como com um erro inferior a 5 milhas náuticas;
Classe B — Posições que o operador pode razoavelmente considerar como com um erro inferior a 20 milhas náuticas;
Classe C — Posições que o operador pode razoavelmente considerar como com um erro inferior a 50 milhas náuticas;
Classe D — Posições que o operador não pode considerar como com um erro inferior a 50 milhas náuticas.

(4) Contudo, para frequências superiores a 3000 kHz, no caso em que não convenham os limites de distância fixados na alínea precedente, a estação de comando pode classificar a posição segundo os pareceres da CCIR.

Obtenção de azimutes simultâneos de duas ou várias estações radiogoniométricas organizadas em grupo.

§ 9. A um pedido de azimutes, a estação de comando de um grupo de estações radiogoniométricas procede como o § 8 indica e transmite em seguida os azimutes determinados por cada estação do grupo, fazendo preceder cada azimute do indicativo de chamada da estação que o determinou.

QUADRO

Classificação dos azimutes

Classe	Erro absoluto do azimute (graus)	Características-tipo observadas					
		Intensidade dos sinais	Indicação do azimute	Desvanecimento	Interferência	Oscilação do azimute (graus)	Duração da observação
A	± 2	Muito boa ou boa	Nítida (zero bem definido).	Insignificante	Insignificante	Menos de 3	Suficiente.
B	± 5	Suficiente	Vaga	Ligeiro	Ligeiro	Mais de 3 menos de 5.	Breve.
C	± 10	Fraca	Muito vaga	Intenso	Grande	Mais de 5 menos de 10.	Muito breve.
D	Mais de ± 10	Quase inperceptível.	Mal definida	Muito intenso	Muito grande	Mais de 10	Insuficiente.

APÊNDICE 42

Quadro de atribuição das séries internacionais de indicativos de chamada (*a*)

(V. o artigo 25)

Séries de indicativos	Atribuídos a
AAA-ALZ	Estados Unidos da América.
AMA-AOZ	Espanha.
APA-ASZ	Paquistão (República islâmica do).
ATA-AWS	Índia (República da).
AXA-AXZ	Austrália.
AYA-AZZ	Argentina (República da).
A2A-A2Z	Botswana (República do).
A3A-A3Z	Tonga (Reino das).
A4A-A4Z	Omã (Sultanato de).
A5A-A5Z	Butão (Reino do).
A6A-A6Z	Emiratos Árabes Unidos.
A7A-A7Z	Qatar (Estado do).
A8A-A8Z	Libéria (República da).
A9A-A9Z	Bahrein (Estado do).
BAA-BZZ	China (República Popular da).
CAA-CEZ	Chile.
CFA-CKZ	Canadá.
CLA-CMZ	Cuba.
CNA-CNZ	Marrocos (Reino de).
COA-COZ	Cuba.
CPA-CPZ	Bolívia (República da).
CQA-CUZ	Portugal.
CVA-CXZ	Urugai (República Oriental do).
CYA-CZZ	Canadá.
C2A-C2Z	Nauru (República de).
C3A-C3Z	Andorra (Principiado de).
C4A-C4Z	Chipre (República de).
C5A-C5Z	Gâmbia (República da).
C6A-C6Z	Baamas (Comunidade das).
C7A-C7Z (*)	Organização Meteorológica Mundial.
C8A-C9Z	Moçambique (República Popular de).
DAA-DRZ	Alemanha (República Federal da).
DSA-DTZ	República da Coreia.
DUA-DZZ	Filipinas (República das).
D2A-D3Z	Angola (República Popular de).
D4A-D4Z	Cabo Verde (República de).
D5A-D5Z	Libéria (República da).
D6A-D6Z	Comores (República Federal e Islâmica das).
D7A-D9Z	República da Coreia.
EAA-EHZ	Espanha.
EIA-EJZ	Irlanda.
EKA-EKZ	União das Repúblicas Socialistas Soviéticas.
ELA-ELZ	Libéria (República da).
EMA-EOZ	União das Repúblicas Socialistas Soviéticas.
EPA-EQZ	Irão (República Islâmica do).
ERA-ESZ	União das Repúblicas Socialistas Soviéticas.
ETA-ETZ	Etiópia.
EUA-EWZ	Bielo Rússia (República Socialista Soviética da).
EXA-EZZ	União das Repúblicas Socialistas Soviéticas.
FAA-FZZ	França.
GAA-GZZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
HAA-HAZ	Hungria (República Popular da).
HBA-HBZ	Suíça (Confederação).
HCA-HDZ	Equador.
HEA-HEZ	Suíça (Confederação).
HFA-HFZ	Polónia (República Popular da).
HGA-HGZ	Hungria (República Popular da).
HHA-HHZ	Haiti (República do).
HAIA-RIZ	Dominicana (República).
HJA-HKZ	Colômbia (República da).
HLA-HLZ	República da Coreia (*a*).
HMA-HMZ	República Popular Democrática da Coreia (*a*).
HNA-HNZ	Iraque (República do).
HOA-HPZ	Panamá (República do).
HQA-HRZ	Honduras (República das)
HSA-HSZ	Tailândia.
HTS-HTZ	Nicarágua.
HUA-HUZ	El Salvador (República de).
HVA-HVZ	Cidade do Vaticano (Estado da).
HWA-HYZ	França.
HZA-HZZ	Arábia Saudita (Reino da).
H2A-H2Z	Chipre (República de).
H3A-H3Z	Panamá (República do).
H4A-H4Z	Salomão (Ilhas).
H6A-H7Z	Nicarágua.
H8A-H9Z	Panamá (República do).
IAA-IZZ	Itália.
JAA-JSZ	Japão.
JTA-JVZ	Mongólia (República Popular da).
JWA-JXZ	Noruega.
JYA-JYZ	Jordânia (Reino Hachemita da).
JZA-JZZ	Indonésia (República da).
J2A-J2Z	Djibuti (República de).
J3A-J3Z	Granada.
J4A-J4Z	Grécia.
J5A-J5Z	Guiné-Bissau (República da).
J6A-J6Z	Santa Luzia.
J7A-J7Z	Dominica.
KAA-KZZ	Estados Unidos da América.
LAA-LNZ	Noruega.
LOA-LWZ	Argentina (República).
LXA-LXZ	Luxemburgo.
LYA-LYZ	União das Repúblicas Socialistas Soviéticas.
LZA-LZZ	Bulgária (República Popular da).
L2A-L9Z	Argentina (República).
MAA-MZZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
NAA-NZZ	Estados Unidos da América.
OAA-OCZ	Peru.
ODA-ODZ	Líbano.
OEA-OEZ	Áustria.
OFA-OJZ	Finlândia.
OKA-OMZ	Checoslováquia (República Socialista da).
ONA-OTZ	Bélgica.
OUA-OZZ	Dinamarca.
PAA-PIZ	Países Baixos (Reino dos).
PJA-PJZ	Antilhas Holandesas.
PKA-POZ	Indonésia (República da).
PPA-PYZ	Brasil (República Federativa do).
PZA-PZZ	Suriname (República de).
P2A-P2Z	Papuásia-Nova Guiné.
P3A-P3Z	Chipre (República de).
P4A-P4Z	Antilhas Holandesas.
P5A-P9Z	República Popular Democrática da Coreia.
QAA-QZZ	(Abreviaturas regulamentares.)
RAA-RZZ	União das Repúblicas Socialistas Soviéticas.
SAA-SMZ	Suécia.
SNA-SRZ	Polónia (República Popular da).
SSA-SSM	Egipto (República Árabe do).
SSN-STZ	Sudão (República Democrática do).
SUA-SUZ	Egipto (República Árabe do).
SVA-SZZ	Grécia.
S2A-S3Z	Bangladesh (República Popular do).
S6A-S6Z	Singapura (República de).
S7A-S7Z	Seychelles (República das).
S9A-S9Z	São Tomé e Príncipe (República Democrática de).
TAA-TCZ	Turquia.
TDA-TDZ	Guatemala (República da).
TEA-TEZ	Costa Rica.
TFA-TFZ	Islândia.
TGA-TGZ	Guatemala (República da)
THA-THZ	França.
TIA-TIZ	Costa Rica.
TJA-TJZ	Camarões (República Unida dos).
TKA-TKZ	França.
TLA-TLZ	Centro-Africana (República).
TMA-TMZ	França.
TNA-TNZ	Congo (República Popular do).
TOA-TQZ	França.

Séries de indicativos	Atribuídos a
TRA-TRZ	Gabonesa (República).
TSA-TSZ	Tunísia.
TTA-TTZ	Chade (República do).
TUA-TUZ	Costa de Marfim (República da).
TVA-TXZ	França.
TYA-TYZ	Benim (República Popular do).
TZA-TZZ	Mali (República do).
T2A-T2Z	Tuvalu.
T3A-T3Z	Kiribati (República de).
T4A-T4Z	Cuba.
T5A-T5Z	Somália (República Democrática da).
T6A-T6Z	Afeganistão (República Democrática do).
UAA-UQZ	União das Repúblicas Socialistas Soviéticas.
URA-UTZ	República Socialista Soviética da Ucrânia.
UUA-UZZ	União das Repúblicas Socialistas Soviéticas.
VAA-VGZ	Canadá.
VHA-VNZ	Austrália.
VOA-VOZ	Canadá.
VPA-VSZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
VTA-VWZ	Índia (República da).
VXA-VYZ	Canadá.
VZA-VZZ	Austrália.
WAA-WZZ	Estados Unidos da América.
XAA-XIZ	México.
XJA-XOZ	Canadá.
XPA-XPZ	Dinamarca.
XQA-XRZ	Chile.
XSA-XSZ	China (República Popular da).
XTA-XTZ	Alto Volta (República do).
XUA-XUZ	Kampuchea Democrática.
XVA-XVZ	Vietname (República Socialista do).
XWA-XWZ	Laos (República Democrática Popular do).
XXA-XXZ	Portugal.
XYA-XZZ	Birmânia (República Socialista da União da).
YAA-YAZ	Afeganistão (República Democrática do).
YBA-YHZ	Indonésia (República da).
YIA-YIZ	Iraque (República do).
YJA-YJZ	Novas Hébridas.
YKA-YKZ	República Árabe Síria.
YLA-YLZ	União das Repúblicas Socialistas Soviéticas.
YMA-YMZ	Turquia.
YNA-YNZ	Nicarágua.
YOA-YRZ	Roménia (República Socialista da).
YSA-YSZ	El Salvador (República de).
YTA-YUZ	Jugoslávia (República Socialista Federativa da).
YVA-YYZ	Venezuela (República da).
YZA-YZZ	Jugoslávia (República Socialista Federativa da).
Y2A-Y92	República Democrática Alemã.
ZAA-ZAZ	Albânia (República Popular Socialista da).
ZBA-ZJZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
ZKA-ZMZ	Nova Zelândia.
ZNA-ZOZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
ZPA-ZPZ	Paraguai (República do).
ZQA-ZQZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
ZRA-ZUZ	República da África do Sul.
ZVA-ZZZ	Brasil (República Federal do).
2AA-2ZZ	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
3AA-3AZ	Mónaco.
3BA-3BZ	Maurícias.
3CA-3CZ	Guiné Equatorial (República da).
3DA-3DM	Suazilândia (Reino da).
3DN-3DZ	Fiji.
3EA-3FZ	Panamá (República do).
3GA-3GZ	Chile.
3HA-3UZ	China (República Popular da).
3VA-3VZ	Tunísia.
3WA-3WZ	Vietname (República Socialista do).
3XA-3XZ	Guiné (República Popular Revolucionária da).
3YA-3YZ	Noruega.
3ZA-3ZZ	Polónia (República Popular da).
4AA-4CZ	México.
4DA-4IZ	Filipinas (República das).
4JA-4MZ	União das Repúblicas Socialistas Soviéticas.
4MA-4AZ	Venezuela (República da).
4NA-4OZ	Jugoslávia (República Socialista Federativa da).
4PA-4SZ	Sri-Lanka (República Socialista Democrática do).
4TA-4TZ	Peru.
4UA-4UZ (*)	Organização das Nações Unidas.
4VA-4VZ	Haiti (República do).
4WA-4WZ	Iémene (República Árabe do).
4XA-4XZ	Israel (Estado de).
4YA-4YZ (*)	Organização da Aviação Civil Internacional.
4ZA-4ZZ	Israel (Estado de).
5AA-5AZ	Líbia (Jamahiriya Árabe, Líbia Popular Socialista).
5BA-5BZ	Chipre (República de).
5CA-5GZ	Marrocos (Reino de).
5HA-5IZ	Tanzânia (República Unida da).
5JA-5KZ	Colômbia (República da).
5LA-5MZ	Libéria (República da).
5NA-5OZ	Nigéria (República Federal da).
5PA-5QZ	Dinamarca.
5RA-5SZ	Madagáscar (República Democrática de).
5TA-5TZ	Mauritânia (República Islâmica da).
5UA-5UZ	Níger (República do).
5VA-5VZ	Togolesa (República).
5WA-5WZ	Samoa Ocidental.
5XA-5XZ	Uganda (República da).
5YA-5ZZ	Quénia (República do).
6AA-6BZ	Egipto (República Árabe do).
6CA-6CZ	República Árabe Síria.
6DA-6JZ	México.
6KA-6NZ	República da Coreia.
6OA-6OZ	Somália (República Democrática da).
6PA-6SZ	Paquistão (República Islâmica do).
6TA-6UZ	Sudão (República Democrática do).
6VA-6WZ	Senegal (República do).
6XA-6XZ	Madagáscar (República Democrática de).
6YA-6YZ	Jamaica.
6ZA-6ZZ	Libéria (República da).
7AA-7IZ	Indonésia (República da).
7JA-7NZ	Japão.
7OA-7OZ	Iémene (República Democrática Popular do).
7PA-7PZ	Lesotho (Reino do).
7QA-7QZ	Malawi (República do).
7RA-7RZ	Argélia (República Argelina Democrática e Popular).
7SA-7SZ	Suécia.
7TA-7YZ	Argélia (República Argelina Democrática e Popular).
7ZA-7ZZ	Arábia Saudita (Reino da).
8AA-8IZ	Indonésia (República da).
8OA-8OZ	Botswana (República do).
8PA-8PZ	Barbados.
8QA-8QZ	Maldivas (República das).
8RA-8RZ	Guiana.
8SA-8SZ	Suécia.
8TA-8YZ	Índia (República da).
8ZA-8ZZ	Arábia Saudita (Reino da).
9AA-9AZ	São Marino (República de).
9BA-9DZ	Irão (República Islâmica do).
9EA-9FZ	Etiópia.
9GA-9GZ	Ghana.
9HA-9HZ	Malta (República de).
9IA-9JZ	Zâmbia (República da).
9KA-9KZ	Koweit (Estado do).
9LA-9LZ	Serra Leoa.
9MA-9MZ	Malásia.
9NA-9NZ	Nepal.
9OA-9TZ	Zaire (República do).
9UA-9UZ	Burundi (República do).
9VA-9VZ	Singapura (República de).
9WA-9WZ	Malásia.
9XA-9XZ	Ruandesa (República).
9YA-9ZZ	Trindade e Tobago.

(*) As séries de indicativos de chamada precedidas de um asterisco são atribuídas a organizações internacionais.

(*a*) As duas administrações interessadas comprometem-se a modificar a sua utilização actual das séries de indicativos de chamada HLA-HLZ e HMA-HMZ para, logo que possível, passarem a estar em conformidade com o quadro de atribuição de 1979, fim de indicarem claramente as outras administrações os seus arranjos de exploração. Nesse sentido, a administração da República da Coreia tomará as medidas apropriadas para modificar os indicativos de chamadas registados na UIT na série HMA-HMZ à medida que sejam efectuadas modificações na utilização dos indicativos de chamada desta série. A aplicação das medidas indicadas anteriormente deverá, em todo o caso, estar concluída em Janeiro de 1984.

APÊNDICE 43

Identidades no serviço móvel marítimo

1. *Considerações gerais.*

1.1. No serviço móvel marítimo, as identidades são constituídas por uma série de nove algarismos transmitidos no trajecto radioeléctrico para identificar de modo único as estações de navio, as estações terrenas de navio, as estações costeiras, as estações terrenas costeiras e as chamadas de grupo.

1.2. As identidades das estações de navio devem estar em conformidade com os pareceres pertinentes da CCIR e CCITT.

1.3. Essas entidades são constituídas de tal modo que a entidade ou uma parte da entidade permita aos utentes dos serviços telefónico ou telex, ligados à rede geral das telecomunicações, chamarem navios automaticamente no sentido estação costeira-navio.

1.4. Há três categorias de identidades no serviço móvel marítimo:

i) Identidades de estações de navio;
ii) Identidades de chamadas de grupos;
iii) Identidades de estações costeiras.

1.5. A nacionalidade ou o pavilhão de uma estação é indicado por um grupo de três algarismos, os algarismos de identificação de nacionalidade (NID).

2. *Algarismos de identificação de nacionalidade (NID).*

O quadro I dá os algarismos de identificação de nacionalidade atribuídos a cada país. Em conformidade com o n.° **2087** do Regulamento das Radiocomunicações, o secretário-geral está autorizado a atribuir algarismos de identificação de nacionalidade aos países que não figuram no quadro (1).

3. *Identidade da estação de navio.*

A identidade da estação de navio é composta por nove algarismos, como se indica a seguir:

N I D X X X X X X
1 2 3 4 5 6 7 8 9

em que:

N I D
1 2 3

representam os algarismos de identificação de nacionalidade. Cada X representa um algarismo compreendido entre 0 e 9.

4. *Identidade da chamada de grupo.*

A identidade da chamada de grupo utilizada para chamar simultaneamente diversos navios é formada como segue:

0 N I D X X X X X
1 2 3 4 5 6 7 8 9

sendo o primeiro caracter um zero e representando cada X um algarismo compreendido entre 0 e 9.

O NID representa apenas o país que consignou a identidade de grupo e, portanto, não impede que se chamem grupos compostos de navios de diferentes nacionalidades.

5. *Identidade da estação costeira.*

A identidade da estação costeira é composta como segue:

0 0 N I D X X X X
1 2 3 4 5 6 7 8 9

sendo os dois primeiros caracteres zeros e representando cada X um algarismos compreendido entre 0 e 9.

O NID representa o país onde se situa a estação costeira ou a estação terrena costeira.

QUADRO I

Algarismos de identificação de nacionalidade (1)

País	Algarismos

(1) Os pormenores relativos à atribuição dos números de identificação de nacionalidade (NID) deverão ser elaborados pelo secretário-geral, em estreita cooperação com a CCIR e a CCITT, de acordo com a Resolução n.° 313 e com as disposições do presente apêndice. Até que essas informações possam ser apresentadas à próxima conferência competente para decisão, o secretário-geral poderá efectuar atribuições provisórias. Essas atribuições serão, por consequência, objecto de exame ou de revisão pela conferência acima mencionada.

APÊNDICE 44

Números de chamada selectiva das estações de navio e números de identificação das estações costeiras

PARTE I

Quadro dos grupos de números de chamada selectiva das estações de navio e dos números de chamada selectiva para grupos de estações de navio que foram fornecidos às administrações

Grupos (*) de números de chamada selectiva das estações de navio e números de chamada selectiva para grupos de estações de navio	Fornecidos a
00 000 (*)	Argentina (República).
00 001–00 499	Argentina (República).
00 900–00 999	Arábia Saudita (Reino da).
01 010 (*)	Austrália.
01 100–01 199	Austrália.
01 800–01 899	Singapura (República de).
01 900–01 999	Singapura (República de).
02 020 (*)	Argentina (República).
03 200–03 299	Canadá.
04 040 (*)	Canadá.
05 200–05 399	Chipre (República de).
05 900–05 999	Bulgária (República Popular da).
06 300–07 069	Dinamarca.
07 070 (*)	Dinamarca.
07 071–07 999	Dinamarca.
08 080 (*)	Dinamarca.
08 400–08 499	Espanha.
10 400–11 110	Estados Unidos da América.
11 111 (*)	Estados Unidos da América.
11 112–11 399	Estados Unidos da América.
14 000–14 140	Finlândia.
14 141 (*)	Finlândia.
14 142–14 199	Finlândia.
14 700–15 150	França.
15 151 (*)	França.
15 152–16 099	França.
16 161 (*)	França.
16 700–17 170	Grécia.
17 171 (*)	Grécia.
17 172–17 699	Grécia.
18 181 (*)	China (República Popular da).
19 000–19 099	Chile.
19 191 (*)	China (República Popular da).
19 400–19 499	Ghana.
19 700–20 199	China (República Popular da).
20 202 (*)	China (República Popular da).
20 300–20 799	Itália.
21 212 (*)	Itália.
22 222 (*)	Itália.
22 300–22 399	Iraque (República do).
22 400–22 599	Koweit (Estado do).
22 700–22 899	Iraque (República do).
23 500–23 999	Índia (República da).
24 300–25 199	Libéria (República da).
26 000–26 261	Suécia.
26 262 (*)	Suécia.
26 263–26 999	Suécia.
31 900–31 999	Malta (República de).
32 000–32 099	Cuba.
32 400–33 332	Noruega.
33 333 (*)	Noruega.
33 334–34 342	Noruega.
34 343 (*)	Noruega.
34 344–34 499	Noruega.
36 000–36 099	Irlanda.
36 200–36 299	Luxemburgo.
36 400–37 372	Países Baixos (Reino dos).
37 373 (*)	Países Baixos (Reino dos).
37 374–38 382	Países Baixos (Reino dos).
38 383 (*)	Países Baixos (Reino dos).
38 384–38 399	Países Baixos (Reino dos).
38 400–39 392	Alemanha (República Federal da).
39 393 (*)	Alemanha (República Federal da).
39 394–40 403	Alemanha (República Federal da).
40 404 (*)	Alemanha (República Federal da).
40 405–41 413	Alemanha (República Federal da).
41 414 (*)	Alemanha (República Federal da).
41 415–41 499	Alemanha (República Federal da).
41 900–42 199	Panamá (República do).
42 424 (*)	Panamá (República do).
43 000–43 433	Polónia (República Popular da).
43 434 (*)	Polónia (República Popular da).
43 435–43 499	Polónia (República Popular da).
43 500–44 099	Suécia.
44 444 (*)	Panamá (República do).
45 500–46 463	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
46 464 (*)	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
46 465–46 899	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
47 474 (*)	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
50 400–50 499	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
50 500–50 504	Israel (Estado de).
50 505 (*)	Israel (Estado de).
50 506–50 699	Israel (Estado de).
51 100–51 499	Suíça (Confederação).
52 600–53 534	União das Repúblicas Socialistas Soviéticas.
53 535 (*)	União das Repúblicas Socialistas Soviéticas.
53 536–54 544	União das Repúblicas Socialistas Soviéticas.
54 546–55 554	União das Repúblicas Socialistas Soviéticas.
55 556–56 099	União das Repúblicas Socialistas Soviéticas.
56 200–56 299	Malásia.
56 800–57 099	Jugoslávia (República Socialista Federativa da).
57 800–57 899	Venezuela (República da).
58 100–58 199	Argélia (República Argelina Democrática e Popular).
58 200–58 299	Áustria.
59 400–59 499	Líbia (Jamahiriya Árabe, Líbia Popular Socialista).
59 700–59 899	Nova Zelândia.
59 900–59 999	Mónaco.
60 100–60 599	República Democrática Alemã.
61 000–61 099	Antilhas Holandesas.
61 100–61 199	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
61 500–61 599	Baamas (Comunidade das).
62 000–62 099	Jordânia (Reino Hachemita da).
63 000–63 099	Qatar (Estado de).
63 200–63 299	Bahrein (Estado do).
63 400–63 499	Emirados Árabes Unidos.
64 600–64 645	República da África do Sul.
64 646 (*)	República da África do Sul.
64 647–64 799	República da África do Sul.
65 700–64 799	Turquia.
66 000–66 665	União das Repúblicas Socialistas Soviéticas.
66 667–67 675	União das Repúblicas Socialistas Soviéticas.
67 677–68 685	União das Repúblicas Socialistas Soviéticas.
68 686 (*)	União das Repúblicas Socialistas Soviéticas.
68 687–69 695	União das Repúblicas Socialistas Soviéticas.

Grupos (*) de números de chamada selectiva das estações de navio e números de chamada selectiva para grupos de estações de navio	Fornecidos a	Grupos (*) de números de chamada selectiva das estações de navio e números de chamada selectiva para grupos de estações de navio	Fornecidos a
69 697–70 706	União das Repúblicas Socialistas Soviéticas.	78 700–78 786	México.
70 707 (*)	União das Repúblicas Socialistas Soviéticas.	78 787 (*)	México.
70 708–71 716	União das Repúblicas Socialistas Soviéticas.	78 788–78 799	México.
71 717 (*)	União das Repúblicas Socialistas Soviéticas.	79 000–79 099	Omã (Sultanato de).
71 718–72 499	União das Repúblicas Socialistas Soviéticas.	79 200–79 399	República Árabe Síria.
72 500–72 726	Bélgica.	82 828 (*)	Malta (República de).
72 727 (*)	Bélgica.	83 838 (*)	Malta (República de).
72 728–73 736	Bélgica.	84 848 (*)	Países Baixos (Reino dos).
73 737 (*)	Bélgica.	86 868 (*)	Itália.
73 738–73 999	Bélgica.	87 878 (*)	Itália.
74 700–74 746	Serra Leoa.	88 888 (*)	Itália.
74 742 (*)	Serra Leoa.	89 898 (*)	Itália.
74 748–74 799	Serra Leoa.	90 909 (*)	Itália.
75 500–75 756	Islândia.	91 919 (*)	Itália.
75 756–75 999	Islândia.	92 929 (*)	Itália.
77 500–77 699	Iemene (República Democrática Popular do).	93 939 (*)	Itália.
77 700–77 776	México.	94 949 (*)	Israel (Estado de).
77 777 (*)	México.	95 959 (*)	Israel (Estado de).
77 778–77 799	México.	96 969 (*)	Israel (Estado de).
78 000–78 199	Egipto (República Árabe do)	97 979 (*)	República Democrática Alemã.
		98 989 (*)	República Democrática Alemã.

(*) Os números compostos quer pelo mesmo algarismo repetido cinco vezes, quer por dois algarismos diferentes repetidos alternadamente, são reservados à chamada de grupos predeterminados de estações de navio. Estes números não devem ser considerados como fazendo parte dos grupos de número de chamada selectiva das estações de navio fornecidos às administrações.

PARTE II

Quadro dos grupos de números de identificação das estações costeiras que foram fornecidos às administrações

Grupos de números de identificação	Fornecidos a	Grupos de números de identificação	Fornecidos a
0100–0119	Argentina (República da).	2830–2849	Alemanha (República Federal da).
0270–0279	Argélia (República Argelina Democrática e Popular).	2930–2949	Polónia (República Popular da).
0330–0339	Austrália.	2950–2959	Suécia.
0480–0489	Bélgica.	3200–3259	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
0580–0589	Canadá.	3450–3459	Israel (Estado de).
0810–0819	Bulgária (República Popular da).	3500–3509	Suíça (Confederação).
0830–0899	Dinamarca.	3620–3769	União das Repúblicas Socialistas Soviéticas.
0990–1089	Espanha.	3800–3809	Malásia.
1090–1109	Estados Unidos da América.	3850–3859	Jugoslávia (República Socialista Federativa da).
1590–1609	Finlândia.	3910–3919	Venezuela (República da).
1630–1669	França.	4330–4349	República da África do Sul.
1780–1789	Grécia.	4360–4369	Turquia.
1860–1889	Chile.	4400–4599	União das Repúblicas Socialistas Soviéticas.
1920–1929	Ghana.	4600–4619	República Democrática Alemã.
1980–1989	Irlanda.	4620–4629	Singapura (República de).
2010–2019	China (República Popular da).	4630–4639	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
2070–2109	Itália.	4640–4649	Serra Leoa.
2130–2149	Iraque (República do).	4650–4659	Bahrein (Estado do).
2180–2189	Koweit (Estado do).	4660–4669	Seychelles (República das).
2280–2289	Líbia (Jamahiriya Árabe, Líbia Popular Socialista).	4690–4699	Qatar (Estado de).
2300–2339	Índia (República da).	4710–4719	Emirados Árabes Unidos.
2480–2489	Malta (República de).	4810–4819	Iémene (República Democrática Popular do).
2500–2509	Mónaco.	4820–4829	Egipto (República Árabe do).
2510–2519	Cuba.	4830–4839	Arábia Saudita (Reino da).
2550–2599	Noruega.	4900–4939	México.
2740–2749	Islândia.	4980–4999	República Árabe Síria.
2770–2779	Países Baixos (Reino dos).	5010–5019	Omã (Sultanato de).

PROTOCOLO FINAL

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), os delegados abaixo assinados tomam nota das seguintes declarações, formuladas por algumas delegações signatárias:

N.º 1

República das Honduras

Por intermédio da sua delegação à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a República das Honduras deseja formular as seguintes reservas:

1) O seu Governo reserva-se o direito de tomar as medidas que julgue necessárias para proteger os seus interesses se outros Membros da União não se conformarem com as disposições do Regulamento das Radiocomunicações, dos seus anexos e dos protocolos que lhes estão agregados;
2) De igual modo declara que o seu Governo se reserva o direito de formular qualquer reserva até à data da ratificação dos Actos Finais da presente Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979).

N.º 2

República da Guatemala

A delegação da República da Guatemala:

a) Reserva para o seu Governo o direito de aceitar e de ratificar na totalidade ou em parte os Actos Finais da presente Conferência, bem como a aplicação destes no quadro territorial reconhecido pela Constituição da República;
b) Não aceita as reservas expressas por outros países se forem contrárias aos seus interesses nacionais, conforme apreciação definitiva que o Governo da República da Guatemala formule no momento de aceitar e de ratificar os Actos Finais da Conferência.

N.º 3

República do Chade

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República do Chade declara, relativamente à protecção dos seus interesses em matéria de telecomunicações, que a soberania do seu Estado não poderá de nenhum modo ser afectada pela disposições adoptadas pela presente Conferência ou pelas reservas formuladas por outros Estados Membros da União.

Por consequência, reserva para o seu Governo o direito de tomar as medidas que julgue necessárias para proteger os seus serviços de telecomunicações.

N.º 4

República Argelina Democrática e Popular, Reino da Arábia Saudita, Estado do Bahrein, República Popular do Bangladesh, Emirados Árabes Unidos, República Islâmica do Irão, República do Iraque, Reino Hachemita da Jordânia, Estado do Koweit, Líbano, Líbia (Jamahiriya Árabe, Líbia Popular Socialista), Reino de Marrocos, Sultanato de Omã, República Islâmica do Paquistão, Estado de Qatar, República Árabe Síria, República Democrática da Somália, República Democrática do Sudão e República Democrática Popular do Iémene.

As delegações dos países acima mencionados declaram que a assinatura e a eventual aprovação posterior pelos seus Governos respectivos dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), não implicam, de modo nenhum, o reconhecimento de Israel.

N.º 5

Bélgica

A administração belga tenciona pôr rapidamente em serviço uma rede de estações de radiodifusão na faixa dos 100-104 MHz.

Solicita instantemente às administrações interessadas que encarem desde já as medidas que tornem possível essa entrada em serviço.

N.° 6

República Popular do Benim

A delegação da República Popular do Benim reserva para o seu Governo o direito de tomar todas as medidas necessárias para proteger os seus interesses, se reservas formuladas por outras delegações vierem a comprometer o bom funcionamento dos seus serviços de telecomunicações.

N.° 7

Chile

Referindo-se às decisões tomadas pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) acerca das consignações de frequência que virão a figurar no Ficheiro de Referência Internacional das Frequências, tendo em conta igualmente as disposições do artigo 4, n.° 2, do Tratado do Antárctico, assinado em Washington em 1 de Dezembro de 1959, e reiterando os termos do n.° VIII do protocolo final da Convenção Internacional das Telecomunicações assinada em Málaga, Torremolinos, 1973, a delegação do Chile declara que o território antárctico chileno, território sobre que exerce soberania, o seu governo reserva-se o direito de consignar e de reconhecer as frequências que considere necessárias para os serviços de radiocomunicação, presentes e futuros, que funcionem nos limites do referido território.

N.° 8

Cuba

A delegação de Cuba, representando o seu Governo e em nome deste, declara não reconhecer qualquer valor jurídico ou moral à assinatura dos Actos Finais pelos representantes do regime de Pol Pot à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), com base nas seguintes considerações:

O regime genocida de Pol Pot não representa os interesses legítimos do povo do Kampuchea e não exerce qualquer autoridade nesse país;

A inscrição do regime de Pol Pot na presente Conferência é puramente formal e foi motivada por interesses exclusivamente políticos, sendo testemunho disso a ausência de participação nos trabalhos e debates da Conferência. Pelo facto de não dispor de qualquer autoridade sobre o território desse país e de não exercer aí qualquer jurisdição esse regime não pode regulamentar o funcionamento das telecomunicações.

A delegação de Cuba considera que, na ausência de representantes legítimos do povo do Kampuchea, o Conselho Popular Revolucionário, os Actos Finais da Conferência não devem conter qualquer assinatura de uma representação do Kampuchea.

N.° 9

Cuba

Ao assinar e ao aceitar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) em nome da Governo da República de Cuba, a delegação de Cuba declara que isso não significa de modo algum que reconhece a notificação, a inscrição e a utilização, pelo Governo norte-americano, de frequências na parte do território cubano da província de Guantanamo, que está ocupada ilegalmente e contra a vontade do povo cubano.

A utilização, pelo Governo dos Estados Unidos, de frequências radioeléctricas no território que usurpa em Guantanamo, Cuba, constitui um obstáculo aos serviços de telecomunicações de Cuba e ao exercício da soberania do nosso país sobre o espectro das frequências radioeléctricas, que constitui um recurso limitado.

O Governo de Cuba reserva-se o direito de tomar todas as medidas necessárias para a salvaguarda dos seus legítimos interesses.

N.° 10

República Islâmica do Irão

Esta Conferência não esteve em condições de responder satisfatoriamente às necessidades de radiodifusão em ondas decamétricas, nas atribuições de faixas de frequências revistas, especialmente nas faixas dos 6 e 7 MHz. Se a projectada Conferência de Radiodifusão em Ondas Decamétricas não estiver habilitada, pela sua agenda, a dispor de

certas partes do espectro atribuídas ao serviço fixo, ficará na impossibilidade de planificar a utilização de todas as faixas de frequências de modo a permitir aos países assegurarem os seus serviços de radiodifusão em caso de variações das condições de propagação em toda a extensão do ciclo de actividade solar. Na falta de um plano adequado, a administração da República Islâmica do Irão reserva-se o direito de tomar as medidas necessárias para utilizar as porções das faixas de 5850-5950 kHz e 7300-7400 kHz igualmente para os serviços de radiodifusão, conforme as necessidades desta administração.

N.º 11

República Democrática do Afeganistão

A delegação da República Democrática do Afeganistão reserva para o seu Governo o direito de continuar a utilizar os serviços fixo e móvel nas faixas atribuídas exclusivamente ao serviço móvel marítimo abaixo de 10 MHz. Essas faixas serão utilizadas para as necessidades internas do Afeganistão e de modo a não causar interferências prejudiciais ao serviço móvel marítimo.

N.º 12

República Islâmica da Mauritânia

A delegação da República Islâmica da Mauritânia declara que a assinatura dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), assim como a eventual ratificação posterior dos referidos Actos Finais pelo seu Governo, não implica de modo nenhum o reconhecimento do Estado de Israel.

N.º 13

República Islâmica do Paquistão

Considerando:

a) Que o estabelecimento de um plano de radiodifusão em ondas decamétricas é a condição indispensável do respeito pela legalidade e a ordem nessa parte do espectro;
b) Que todos os esforços até aqui feitos para elaborar um tal plano não tiveram êxito devido a atribuições inadequadas ao serviço de radiodifusão na faixa das ondas decamétricas, especialmente nas faixas das frequências mais baixas;
c) Que não foi aprovado pela presente Conferência qualquer alargamento das faixas de radiodifusão de 6 e 7 MHz, especialmente importantes;
d) Que a nota 531, relativa à parte alargada das faixas atribuídas ao serviço de radiodifusão, é demasiadamente rígida e não deixa qualquer margem de manobra à próxima Conferência Administrativa Mundial das Radiocomunicações;
e) Que é excessivamente longo o período de transferência das consignações deslocadas devido ao alargamento das faixas atribuídas ao serviço de radiodifusão;
f) Que as emissões de radiodifusão de um pequeno número de países nas faixas de 6 e 7 MHz já estão a invadir as faixas adjacentes atribuídas aos serviços fixos, com uma potência total de 12,5 MW;
g) Que, por razões de equidade, essas emissões de radiodifusão fora da faixa se multiplicarão no caso de a proposta Conferência Administrativa Mundial das Radiocomunicações não conseguir, por falta de atribuições satisfatórias, estabelecer um plano aceitável de radiodifusão em ondas decamétricas;
h) Que já não será possível, antes de muito tempo, corrigir esses erros de atribuição,

a delegação do Governo do Paquistão à presente Conferência Administrativa Mundial das Radiocomunicações da União Internacional das Telecomunicações não pode aceitar nem as atribuições que figuram no quadro de atribuição para as faixas de 5830-5950 kHz e de 7300-7500 kHz, nem a nota 531 e suas consequências. Sendo assim, reserva para o seu Governo o direito de tomar todas as medidas que considere necessárias para salvaguardar os seus interesses.

A referida delegação garante, no entanto, a cooperação e a participação plena e inteira da sua Administração na preparação do plano de radiodifusão em ondas decamétricas, em conformidade com a decisão da presente Conferência. Garante igualmente que as reservas expostas acima caducarão logo que seja elaborado e aplicado um plano aceitável de radiodifusão em ondas decamétricas.

Por outro lado, a delegação da República Islâmica do Paquistão reserva para o seu Governo o direito de aceitar ou não as consequências que possam advir do desrespeito por qualquer outro Membro da União das disposições dos Actos Finais da Conferência e do Regulamento das Radiocomunicações. Em tal caso, o Paquistão reserva-se o direito de tomar as medidas necessárias para proteger os seus interesses.

N.° 14

Grécia e República Socialista Federativa da Jugoslávia

Na faixa de 415-495 kHz, a presente Conferência adoptou, para a Região 1, atribuições diferentes das das Regiões 2 e 3. Os dois serviços a que esta faixa está atribuída, a saber, o serviço de radionavegação aeronáutica e o serviço móvel marítimo, são ambos extremamente importantes sob o ponto de vista da segurança. As delegações dos dois países acima mencionados pensam, portanto, que tal decisão suscitará graves problemas no que respeita à salvaguarda da vida humana.

Para evitar qualquer repercussão dessa decisão, as delegações dos países mencionados acima propuseram, em todas as fases das deliberações da presente Conferência, soluções visando garantir a protecção absoluta desses serviços e em especial do serviço de radionavegação aeronáutica. Como essas soluções não foram aceites pela presente Conferência, as delegações em questão declaram que as suas administrações não podem assumir a responsabilidade pelas eventuais consequências da utilização desta faixa tal como foi decidida, devido ao carácter internacional dos dois serviços.

Além disso, as delegações mencionadas acima declaram que reservam para as suas administrações o direito de modificar as consignações de frequência das suas estações costeiras na faixa de 415-435 kHz até à data de entrada em vigor de uma versão revista do Plano de Copenhaga, que especificará frequências de substituição na faixa de 435-495 kHz, seja qual for a data fixada.

N.° 15

República Oriental do Uruguai

A delegação da República Oriental do Uruguai declara que, em face da redução da largura das faixas de frequências atribuídas ao serviço fixo entre 4 e 27,5 kHz e dado que não foi previsto qualquer procedimento de reconsignação de frequências que permitisse garantir a certeza da continuidade de funcionamento das estações radioeléctricas do Uruguai quando o serviço de radiodifusão e o serviço móvel marítimo utilizarem as partes das faixas que foram retiradas ao serviço fixo, o seu Governo reserva-se o direito de adoptar as medidas que considere necessárias para continuar a utilizar convenientemente as frequências do serviço fixo que estão inscritas em nome do Uruguai no Ficheiro de Referência Internacional das Frequências — frequências que se revestem de importância vital para o país — até que sejam fornecidas novas frequências de substituição capazes de assegurar o bom funcionamento dos serviços de radiocomunicação do Uruguai.

A delegação da República Oriental do Uruguai duvida que, nas faixas do serviço fixo assim reduzidas, e especialmente em certas zonas ou sub-regiões em que o espectro está já congestionado, seja possível reconsignar as vias a transferir, apesar da redução dos valores dos parâmetros técnicos aplicáveis aos seus circuitos.

Por outro lado, a delegação da República Oriental do Uruguai reserva para o seu Governo o direito de adoptar as medidas que julgue necessárias para proteger os seus interesses caso as frequências de substituição atribuídas a qualquer outra administração venham a comprometer o seu sistema de radiocomunicação.

N.° 16

Japão

As interferências causadas por certas estações de radiodifusão da Região 1 que funcionam na faixa das ondas quilométricas comprometem o bom funcionamento das estações de radiofarol aeronáuticas do Japão.

Essas interferências aumentarão consideravelmente quando novos emissores de radiodifusão em ondas quilométricas sejam postos em serviço ou quando sejam introduzidas modificações nas características das consignações existentes a estações de radiodifusão em ondas quilométricas.

Como vem mencionado explicitamente nos considerandos da Resolução n.° 7 da Conferência Administrativa Regional de Radiodifusão em Ondas Quilométricas e Hectométricas (Genebra, 1975) e no § 4.4.4.1 do relatório da reunião especial preparatória da CCIR (Genebra, 1978), a utilização da faixa das ondas quilométricas pelas estações de radiodifusão da Região 1 pode influenciar desfavoravelmente as estações de outros serviços de radiocomunicação a que esta faixa está atribuída noutras regiões, especialmente as estações do serviço de radionavegação aeronáutica utilizadas para a salvaguarda da vida humana.

Todavia, a presente Conferência não resolveu o problema acima mencionado relativamente à utilização da faixa das ondas quilométricas. Além disso, adoptou uma Resolução relativa á modificação das frequências portadoras das estações de radiodifusão em ondas quilométricas na Região 1 sem ter tomado devidamente em consideração as possibilidades suplementares de interferência que daí possam resultar para as estações de radiofarol aeronáuticas da Região 3.

Consequentemente, a delegação do Japão reserva para o seu Governo o direito de tomar todas as medidas necessárias, incluindo um novo arranjo das suas consignações de frequências na faixa compreendida entre 130 e 526,5 kHz, sem ter em conta as atribuições feitas no Regulamento das Radiocomunicações, no caso de estações de radiodifusão da Região 1 prejudicarem gravemente o bom funcionamento das estações de radiofarol aeronáuticas do Japão na faixa de frequências compreendida entre 190 e 285 kHz.

N.° 17

República Federal da Nigéria

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Federal da Nigéria reserva para o seu Governo o direito de tomar todas as medidas que considere necessárias para salvaguardar os seus interesses no caso de as reservas ou as interpretações erróneas dos Actos Finais feitas por outros países ou organizações constituírem ameaça para os serviços de telecomunicação da República Federal da Nigéria ou os prejudicarem.

Em especial, a delegação da República Federal da Nigéria não pode aceitar a decisão tomada por esta Conferência relativamente às ligações de conexão do serviço de radiodifusão por satélite, na faixa de 14-14,8 GHz, pelas seguintes razões:

a) A Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite, de 1977, elaborou um plano para as ligações descendentes na faixa de 11,7-12,5 GHz, com uma largura de faixa de 800 MHz;

b) A largura de faixa que foi atribuída exclusivamente às ligações de conexão do serviço de radiodifusão por satélite na nossa faixa de frequências preferida (14,5-15,3 GHz) é apenas de 300 MHz na faixa de 14,5-14,8 GHz aceite pela Conferência. Esta largura de faixa não será suficiente, dado o grande número de administrações por posição orbital.

N.° 18

República do Zaire

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República do Zaire reserva para o seu Governo o direito de tomar todas as medidas que julgue necessárias para assegurar a protecção dos seus serviços de radiocomunicações no caso de certos Membros da União não observarem as disposições do Regulamento das Radiocomunicações ou se as reservas formuladas pelas delegações de outros países vierem a comprometer o bom funcionamento dos serviços de radiocomunicações zairenses.

N.° 19

Canadá

a) Satélites do serviço móvel que funcionam na faixa das ondas decimétricas:

O Canadá concorda que os sistemas móveis de satélites que venha a pôr em serviço de acordo com o n.º **641** do Regulamento das Radiocomunicações devem ser coordenados e notificados relativamente aos artigos 11, 13 e 14. Mas, uma vez postos em serviço esses satélites, o Canadá considera que funcionarão no quadro de uma atribuição a título primário durante toda a duração da sua vida útil.

b) Radiodifusão em ondas decamétricas:

O Canadá considera que a presente Conferência não trouxe solução à grave saturação das faixas atribuídas ao serviço de radiodifusão em ondas decamétricas abaixo de 9 MHz. A Conferência rejeitou, por muito escassa maioria, uma proposta do Canadá que visava acrescentar em todo o mundo uma faixa de 100 kHz, entre 7300 e 7400 kHz, às frequências atribuídas a este serviço, quando essa adição teria permitido resolver o problema. É por isso que, ao assinar os presentes Actos Finais, o Canadá se reserva o direito de dar resposta a algumas das suas necessidades de radiodifusão recorrendo á faixa de 7300-7400 kHz. Certamente que, na medida do possível, o Canadá respeitará os direitos das administrações cujos serviços sejam explorados de acordo com os Actos Finais da presente Conferência.

N.° 20

República Popular da China

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Popular da China declara o seguinte, em nome do Governo Chinês:

A delegação da China toma nota da decisão tomada pela presente Conferência acerca da convocação de uma Conferência Administrativa Mundial da Radiocomunicações encarregada de elaborar um plano para as faixas de ondas decamétricas atribuídas ao serviço de radiodifusão e pensa que se trata de uma medida eficaz que permitirá resolver o problema da saturação nas faixas atribuídas à radiodifusão em ondas decamétricas e o das emissões fora de faixa. Todavia, por razões de natureza histórica, a Administração da China reserva-se o direito de continuar a empregar as frequências que utiliza actualmente para a radiodifusão na faixa de 5060-27 500 kHz até à elaboração e à aplicação do proposto plano de radiodifusão em ondas decamétricas.

N.° 21

Chile

A delegação do Chile à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) declara, acerca das obrigações decorrentes do Regulamento das Radiocomunicações revisto, e mais especialmente no que respeita à transferência das atribuições actuais do serviço fixo em benefício de outros serviços na faixa das ondas decamétricas, que fará todos os esforços necessários para aplicar a nova regulamentação.

Contudo, reserva para o seu Governo o direito de tomar todas as medidas que julgue necessárias para manter em serviço, no interior do território nacional, as ligações do serviço fixo que, por razões técnicas, económicas ou outras, não possam ser transferidas nos prazos fixados pela presente Conferência.

N.° 22

República da Índia

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República da Índia não aceita as repercussões, sejam elas quais forem, das reservas que possa formular qualquer outra administração relativamente às disposições dos Actos Finais. A delegação da República da Índia reserva para o seu Governo o direito de tomar as medidas que julgue necessárias para proteger os seus interesses no caso de uma administração não observar as disposições do Regulamento das Radiocomunicações tais como foram revistas pela presente Conferência.

N.° 23

México

A delegação do México, ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), expressa a intenção da sua Administração de cumprir as disposições do Regulamento das Radiocomunicações, tais como adoptadas pela dita Conferência. Contudo, declara que o seu Governo se reserva o direito de tomar as medidas que considere necessárias para proteger os seus interesses no caso de um Membro da União não respeitar as disposições do referido Regulamento.

De igual modo, a delegação do México declara que a sua Administração fará todos os esforços para que a transferência das estações dos serviços fixo e móvel terrestre, actualmente registadas de acordo com o Quadro de atribuição das faixas de frequências em vigor, se faça nos prazos adoptados, para que a sua utilização esteja conforme com o novo Quadro. Todavia, se, na sequência das decisões tomadas pela presente Conferência para reduzir as faixas atribuídas a esses serviços ou para limitar a sua operação nas faixas de ondas decamétricas em proveito de outros serviços, as referidas estações não puderem continuar a funcionar eficazmente nas faixas que lhes foram consignadas ou nas faixas de substituição eventuais, o Governo do México reserva-se o direito de adoptar as medidas que julgue apropriadas para assegurar o funcionamento satisfatório dessas estações.

N.° 24

República da Costa do Marfim

A delegação da República da Costa do Marfim reserva para o seu Governo o direito de tomar todas as disposições que julgue necessárias para assegurar a protecção e o bom funcionamento dos seus serviços de telecomunicações em caso de não observância pelos outros Membros da União das disposições contidas no Regulamento das Radiocomunicações (Genebra, 1979).

N.° 25

República Islâmica do Irão

Relativamente às atribuições na faixa de 150-285 kHz inscritas no Quadro de atribuição das faixas de frequências e aprovadas pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação do Irão declara:

a) Que as estações de radiodifusão em ondas quilométricas de grande potência da Região 1 causam já interferências prejudiciais à radionavegação aeronáutica;

b) Que modificações das características de potência ou das frequências dos emissores de radiodifusão em ondas quilométricas, ou então a entrada em serviço de novas consignações na faixa das ondas quilométricas (150-285 kHz), aumentarão essas interferências e tornarão, por consequência, muito mais difícil no Irão a utilização actual da radionavegação aeronáutica;

c) Que, consequentemente, a Administração da República do Irão reserva para o seu país o direito de tomar as medidas necessárias para assegurar a protecção do serviço de radionavegação aeronáutica;

d) Que reserva igualmente o seu direito de utilizar também a porção de 160-190 kHz da faixa de 150-285 kHz para o serviço de radiodifusão em ondas quilométricas de acordo com as necessidades do Irão.

N.º 26

República da Venezuela

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da Venezuela expressa a intenção da sua administração de cumprir as disposições do Regulamento das Radiocomunicações revisto. Contudo, declara que o seu Governo se reserva o direito de adoptar as medidas que considere necessárias para proteger os seus interesses, muito especialmente no que se refere aos serviços fixo e móvel abaixo de 9975 kHz, bem como no caso em que um Membro da União não observe as disposições do Regulamento das Radiocomunicações (Genebra, 1979), ou no caso em que as reservas formuladas por outros países prejudiquem os seus serviços de telecomunicações actuais ou em projecto.

N.º 27

Estado da Cidade do Vaticano, Itália, Portugal e Turquia

Na opinião das Administrações pré-citadas, a presente Conferência não adoptou disposições apropriadas para dar resposta às necessidades do serviço de radiodifusão em ondas decamétricas, especialmente nas faixas de 6 e 7 MHz. Por este facto, a Conferência prevista na Resolução n.º 508 não poderá estabelecer um plano para todas as faixas de frequências atribuídas à radiodifusão em ondas decamétricas, e estes países não poderão, portanto, assegurar uma exploração contínua do seu serviço de radiodifusão em ondas decamétricas em face das condições de propagação variáveis ao longo do ciclo solar.

Consequentemente, as administrações pré-citadas reservam-se o direito de tomar as medidas necessárias para dar resposta às necessidades do seu serviço de radiodifusão em ondas decamétricas.

N.º 28

França, Principado do Listenstaina e Confederação Suíça

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), as delegações dos países supramencionados declaram reservar-se o direito de tomar qualquer medida considerada necessária para proteger os seus interesses se reservas apresentadas ou outras medidas tomadas vierem a ter consequências que prejudiquem o bom funcionamento dos seus serviços de radiocomunicações ou se certos Membros vierem a não cumprir as disposições em vigor do Regulamento das Radiocomunicações, especialmente no caso de eles estabelecerem ou explorarem, ou então deixarem estabelecer ou explorar, em seu território, sem coordenação prévia, estações do serviço de radiodifusão que não respeitem as disposições do n.º **2666** do Regulamento das Radiocomunicações.

N.º 29

República Federativa do Brasil

A presente Conferência adoptou a Resolução n.º 4, relativa ao período de validade das consignações de frequência às estações espaciais que utilizam a órbita dos satélites geostacionários. Sobre o assunto, a delegação da República Federativa do Brasil deseja formular as seguintes observações:

a) É inútil adoptar, na presente Conferência, o procedimento experimental descrito na Resolução em questão, tendo em conta as existentes disposições regulamentares do artigo 13;

b) O período fixado para a aplicação do procedimento experimental, que vai de 1 de Julho de 1980 até à próxima Conferência Mundial das Radiocomunicações Espaciais, não corresponde ao período muito mais longo que seria necessário para a aplicação completa desse procedimento, de modo a obter resultados significativos que permitissem avaliar a sua utilidade;

c) Os procedimentos adoptados nos termos da Resolução em questão podem facilmente levar a pensar que um dado país ou grupo de países tem um direito de prioridade permanente e pode apropriar-se das consignações de frequência e das posições orbitais, o que é contrário aos princípios expostos no artigo 33 da Convenção Internacional das Telecomunicações da UIT (Málaga, Torremolinos, 1973) e nas Resoluções n.ºs 2 e 3 adoptadas pela presente Conferência.

Por consequência, ao assinar os Actos Finais da presente Conferência, a delegação da República Federativa do Brasil reserva os direitos do seu Governo relativamente à aplicação da Resolução n.º 4 por um dado país ou grupo de países sempre que essa aplicação for considerada contrária às disposições dos artigos 11 e 13 adoptadas pela presente Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979).

N.º 30

Estado de Israel

A delegação de Israel declara que a assinatura que ela porá no Acordo e a eventual aprovação deste Acordo pela sua Administração só terá efeito e só obrigará Israel relativamente às administrações que apliquem as disposições da Convenção nas suas relações com o Estado de Israel.

Israel considera-se igualmente, e para todos os efeitos, incluído nas notas 621 (174-223 MHz) e 866 (15,7-17,3 GHz) — a despeito das objecções infundadas de um grupo muito pequeno de delegações.

Sem deixar de apoiar o princípio de uma planificação das faixas de ondas decamétricas para o serviço de radiodifusão, em conformidade com a Resolução n.º 508 da presente Conferência, a delegação de Israel nota:

a) Que as faixas de ondas decamétricas atribuídas pela presente Conferência ao serviço de radiodifusão não são suficientes para assegurar uma base apropriada para tal planificação;

b) Que a presente Conferência não tomou qualquer disposição contra a «interferência intencional» — quando é notório que certos Membros da União causam deliberadamente interferências prejudiciais aos serviços de radiodifusão;

c) Que esta prática de interferência intencional inutiliza mais de 50 % do espectro das frequências atribuído ao serviço de radiodifusão, que é absolutamente incompatível com a própria noção de planificação e que constitui violação flagrante da letra e do espírito da Convenção da UIT e do Regulamento das Radiocomunicações.

Nestas condições, Israel reserva-se o direito de tomar todas as medidas necessárias para assegurar o bom funcionamento e a protecção adequada dos seus serviços de radiodifusão. Ao fazê-lo, Israel não deixará de se esforçar por, na medida do possível, respeitar os direitos das administrações cujos serviços são explorados em conformidade com a Convenção e com os Actos Finais da presente Conferência.

N.º 31

Turquia

Ao assinar os Actos Finais da presente Conferência em nome do seu Governo, a delegação da Turquia à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) declara oficialmente que o Governo da Turquia não aceita qualquer obrigação decorrente da atribuição adicional (nota 694) da faixa de frequências de 645-862 MHz ao serviço de radionavegação aeronáutica a título permitido, a fim de assegurar a protecção do serviço de radionavegação aeronáutica contra as estações de radiodifusão existentes ou em projecto que funcionem em conformidade com o Quadro de atribuição das faixas de frequências na zona situada a leste de 40° E.

N.º 32

República Federal da Alemanha, Bélgica, Dinamarca, Estados Unidos da América, Grécia, Islândia, Itália, Luxemburgo, Noruega, Reino dos Países Baixos, Portugal, Reino Unido da Grã-Bretanha e da Irlanda do Norte e Turquia

As administrações dos países supramencionados reservam-se o direito de explorar sistemas, no serviço móvel por satélite, na faixa de frequência de 235-399,9 MHz, nos termos das disposições da nota do quadro de atribuição das faixas de frequências pertinente, com a única reserva do procedimento de coordenação previsto no artigo 14. A disposição suplementar dessa nota impõe uma condição de ausência de interferência que poderia conduzir a que fosse exigida a interrupção da exploração de um sistema de satélites que tivesse já sido objecto de uma coordenação se uma administração, apesar de ter aprovado o sistema de satélites em questão, viesse a pôr em serviço, ou simplesmente a projectar pôr em serviço, um sistema susceptível de sofrer interferências prejudiciais. As administrações supramencionadas não aceitam essa condição.

N.º 33

Áustria, Dinamarca, Espanha, Finlândia, França, Principado do Listenstaina, Noruega, Portugal, Suécia e Confederação Suíça

Ao assinar os Actos Finais da Conferência, as delegações da Áustria, Dinamarca, Espanha, Finlândia, França, Listenstaina, Noruega, Portugal, Suécia e Suíça desejam fazer a seguinte declaração:

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) recusou-se a incluir no Regulamento das Radiocomunicações uma disposição que teria permitido atribuir ao serviço móvel aeronáutico de certos países da Região 1 e da Região 2 a faixa de frequência de 862-960 MHz. A disposição proposta limitava claramente a exploração desse serviço a um pequeno número de vias no interior dessa faixa, no quadro de um sistema radiotelefónico público e sob reserva de acordos obtidos em conformidade com o procedimento previsto no artigo 14.

A disposição proposta destinava-se a favorecer a integração eventual de certas estações de aeronaves numa rede radiotelefónica pública integrada no solo e a proteger ao mesmo tempo os outros serviços que funcionam em conformidade com o quadro de atribuição das faixas de frequências.

São numerosos os países que têm urgente necessidade de serviços móveis telefónicos públicos, e o aumento dessas necessidades acelerar-se-á com a melhoria das redes telefónicas públicas tradicionais.

As delegações supramencionadas, notando com muita preocupação que tenha sido recusado o reconhecimento internacional a essa atribuição, reservam para as suas administrações o direito de utilizarem um número limitado de frequências no interior da faixa de 862-960 MHz para comunicar com as aeronaves no quadro de uma rede do serviço móvel telefónico público em conformidade com as condições descritas.

Serão tomadas medidas para garantir que os serviços mencionados acima não causem interferência prejudicial aos serviços que funcionam em conformidade com o quadro de atribuição das faixas de frequências nos outros países.

N.º 34

República Socialista Soviética da Bielorrússia, República Socialista Soviética da Ucrânia e União das Repúblicas Socialistas Soviéticas

No quadro de atribuição das faixas de frequências revisto pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) foram feitas atribuições ao serviço de radiodifusão na faixa das ondas decamétricas em prejuízo das atribuições ao serviço fixo.

Dado que, na URSS, as estações do serviço fixo funcionam de há muito nessas faixas de frequência, as delegações da União das Repúblicas Socialistas Soviéticas, da República Socialista Soviética da Ucrânia e da República Socialista Soviética da Bielorrússia estão autorizadas a declarar que na URSS as faixas de ondas decamétricas atribuídas adicionalmente em exclusivo ao serviço de radiodifusão serão também utilizadas pelo serviço fixo.

N.º 35

República Federal da Alemanha

Ao assinar os Actos Finais desta Conferência, a delegação da República Federal da Alemanha declara que a atribuição revista do espectro das faixas de ondas decamétricas ao serviço fixo ao serviço de radiodifusão e ao serviço marítimo não satisfaz as necessidades desses serviços na República Federal da Alemanha, tais como formuladas nos documentos pertinentes apresentados à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979).

A solução dos problemas existentes está condicionada pela transferência satisfatória desses serviços e pela elaboração de um plano de radiodifusão em ondas decamétricas aceite internacionalmente e que permita, nas faixas atribuídas ao serviço de radiodifusão, a inclusão necessária de todas as emissões fora de faixa e satisfaça as necessidades do serviço de radiodifusão em ondas decamétricas da República Federal da Alemanha.

Por consequência, no que se refere ao espectro das faixas de ondas decamétricas, a República Federal da Alemanha reserva-se o direito de tomar as medidas necessárias para fazer face às necessidades mínimas dos seus serviços respectivos.

N.º 36

Reino da Arábia Saudita, República de Chipre, Espanha, Estados Unidos da América, Grécia, Reino Unido da Grã-Bretanha e da Irlanda do Norte, República Socialista Democrática do Sri Lanka e República da Zâmbia

Os países supramencionados consideram que esta Conferência não esteve em condições de dar resposta satisfatória às necessidades do serviço de radiodifusão em ondas decamétricas, nas atribuições de faixas de frequências revistas, especialmente nas faixas de 6 e 7 MHz. Se a proposta Conferência de Radiodifusão em Ondas Decamétricas não estiver habilitada, pela sua agenda, a dispor de certas partes do espectro atribuídas ao serviço fixo, ficará impossibilitada de planear a utilização de todas as faixas de frequências de modo a permitir aos países assegurarem os seus serviços de radiodifusão em caso de variações das condições de propagação ao longo de todo o ciclo de actividade solar. Na falta de um plano adequado, as administrações supramencionadas reservam-se o direito de tomar as medidas necessárias para satisfazer as necessidades dos respectivos serviços de radiodifusão em ondas decamétricas.

N.º 37

República da Coreia

A delegação da República da Coreia, em nome do seu Governo, reserva para este o direito de tomar qualquer decisão que julgue necessária para salvaguardar os seus interesses, se outros Membros não observarem as disposições do Regulamento das Radiocomunicações (Genebra, 1979) ou dos seus anexos, ou se as reservas formuladas por outros países comprometerem o bom funcionamento dos seus serviços de telecomunicação.

N.º 38

Estados Unidos da América

A delegação dos Estados Unidos da América declara oficialmente que, ao assinar os presentes Actos Finais em nome dos Estados Unidos da América, não aceita certas decisões tomadas pela presente Conferência relativamente ao quadro de atribuição das faixas de frequências e às notas associadas a esse quadro. Por consequência:

1) Dado que a presente Conferência não previu atribuições suficientes para o serviço de radiodifusão em ondas decamétricas, especialmente nos 6 e 7 MHz, os Estados Unidos da América põem reservas sobre esta questão, como indicado na Declaração n.º 36, apresentada juntamente com as delegações da Arábia Saudita, de Chipre, da Espanha, da Grécia, do Reino Unido, do Sri Lanka e da Zâmbia;
2) Os Estados Unidos da América reservam-se o direito de explorar estações do serviço móvel por satélite na faixa de frequências de 235 a 399,9 MHz, como indicado na Declaração n.º 32, apresentada juntamente com as delegações da República Federal da Alemanha, da Bélgica, da Dinamarca, da Grécia, da Islândia, da Itália, do Luxemburgo, da Noruega, dos Países Baixos, de Portugal, do Reino Unido e da Turquia;
3) Na exploração das estações do serviço de localização, a título primário, nas faixas de 430-440 MHz, 5650-5850 MHz, 8500-8750 MHz, 8850-9000 MHz, 9200-9300 MHz, 9500-9800 MHz, 10 000-10 500 MHz, 13,4-14 GHz, 15,7-17,3 GHz e 33,4-36 GHz, os Estados Unidos não podem garantir a protecção de outros serviços nem a coordenação com outros serviços;
4) Os Estados Unidos da América reservam-se o direito de explorar estações do serviço fixo, do serviço móvel e do serviço de radiolocalização, a título primário, nas faixas especificadas nas notas relativas às faixas de frequências de 470-806 MHz e 890-960 MHz, sem a condição indicada nessas notas, que tornam tal exploração sujeita a um acordo nos termos do artigo 14. Os Estados Unidos coordenarão a utilização desses serviços com as administrações dos países vizinhos que são afectados;
5) Dado que a Conferência não efectuou atribuições suficientes para o serviço móvel marítimo em ondas decamétricas, especialmente abaixo de 12 MHz, os Estados Unidos declaram a sua intenção de satisfazer as necessidades do serviço móvel marítimo nas diferentes faixas de ondas decamétricas inferiores a 10 MHz que foram atribuídas ao serviço móvel a título primário.

N.º 39

Estados Unidos da América

A administração dos Estados Unidos da América chama a atenção para o facto de que algumas das suas emissões de radiodifusão nas faixas de ondas decamétricas atribuídas ao serviço de radiodifusão sofrem, da parte de Administrações signatárias dos presentes Actos Finais, interferências prejudiciais intencionais, interferências que são incompatíveis com a utilização racional e equitativa dessas faixas. Declara que enquanto essas interferências existirem se reserva o direito de tomar, a respeito delas, as medidas necessárias e apropriadas para proteger os interesses dos seus serviços de radiodifusão. No entanto, ao fazê-lo, tenciona, respeitar, na medida do possível, os direitos das administrações cujos serviços são explorados em conformidade com os presentes Actos Finais.

N.º 40

República da Colômbia, República Popular do Congo, Equador, República Gabonesa, República do Quénia, República da Uganda, República Democrática da Somália e República do Zaire

As delegações dos países supramencionados ratificam, na sua totalidade, a Reserva n.º 51 formulada na Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (1977) e, por consequência, reiteram o conteúdo dessa reserva no que diz respeito à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979).

De igual modo, as delegações pré-citadas desejam afirmar que a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), não têm competência para tratar ou decidir sobre questões de carácter territorial nem sobre aspectos relacionados com a soberania dos Estados.

Por outro lado, as delegações pré-citadas declaram mais uma vez que a posição dos países equatoriais relativamente às questões relacionadas com os segmentos da órbita dos satélites geostacionários situados por cima dos seus respectivos territórios se destina a trazer um benefício autêntico aos povos dos seus respectivos países, à comunidade internacional e, especialmente, aos países em desenvolvimento. Ao mesmo tempo, essas delegações expressam a sua oposição a que continue a ser aplicado o princípio «primeiro chegado, primeiro servido», que aproveita apenas a um pequeno número de países, beneficiários exclusivos desse natural limitado, em detrimento dos outros membros da comunidade internacional e, em particular, dos países em desenvolvimento.

Finalmente, as delegações dos países supramencionados declaram oficialmente que não aceitam e que, por consequência, não se consideram obrigadas, após a assinatura dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) e, em nenhuma circunstância, pelas resoluções, recomendações, acordos e decisões desta Conferência relativos ao posicionamento dos satélites geostacionários nos segmentos da órbita que correspondem aos territórios sobre os quais se exercem os direitos soberanos desses países.

N.º 41

República da Colômbia

Em nome do seu Governo, a delegação da Colômbia à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) reserva-se o direito de tomar, quando considerar necessário, as medidas apropriadas a propósito das obrigações que decorrem do Regulamento das Radiocomunicações, tal como revisto pela presente Conferência, e em especial acerca da transferência das consignações de frequências às estações do serviço fixo nas partes das faixas de ondas decamétricas que foram atribuídas a outros serviços.

Do mesmo modo, a delegação da Colômbia reserva-se o direito de continuar a utilizar, no interior do território nacional, as ligações do serviço fixo que funcionam em conformidade com o Regulamento em vigor e que, por razões técnicas, económicas e outras, não podem ser transferidas nos prazos previstos na presente Conferência.

N.º 42

República da Indonésia

A delegação da República da Indonésia à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979):

a) Reserva para o seu Governo o direito de tomar qualquer decisão ou qualquer medida de conservação visando salvaguardar os seus interesses em caso de os Actos Finais elaborados pela presente Conferência se acharem em contravenção com a Constituição, as leis e os direitos da República da Indonésia tais como existem actualmente ou possam resultar dos princípios formulados em 3 de Dezembro de 1976 na Declaração de Bogotá pelos países equatoriais, assim como de qualquer outro princípio do direito internacional. Ao fazer isso, o Governo da República da Indonésia terá em conta os interesses legítimos dos outros países, a fim de promover a cooperação internacional no que respeita à utilização pacífica do espaço para o bem de toda a humanidade;

b) Reserva igualmente o direito do seu Governo a tomar qualquer decisão e qualquer medida de conservação visando salvaguardar os seus interesses no caso em que Membros da União não observem as disposições dos Actos Finais da Conferência, ou em que reservas formuladas por outros Membros venham a comprometer os seus direitos.

N.º 43

Áustria

Ao assinar os Actos Finais da Conferência, a delegação da Áustria deseja fazer a seguinte declaração:

A Áustria não aprova as atribuições das faixas de ondas decamétricas de 5850-5950 kHz e 7300-7400 kHz aos serviços fixo e móvel, dado que não existe qualquer atribuição adicional ao serviço de radiodifusão nas faixas de 6 e 7 MHz.

Por consequência, a administração austríaca considera que a proposta Conferência da Radiodifusão em Ondas Decamétricas não estará em condições de planificar todas as faixas de frequências de modo a permitir aos países assegurarem um funcionamento regular dos respectivos serviços de radiodifusão, tendo em conta as condições de propagação variáveis durante o ciclo solar.

Por isso a delegação austríaca reserva para a sua administração o direito de tomar as medidas necessárias para salvaguardar os interesses dos seus serviços de radiodifusão em ondas decamétricas. Ao fazê-lo, a administração austríaca terá em conta, na medida do possível, os interesses dos serviços de outros países.

N.º 44

República Popular de Angola

A delegação da República Popular de Angola reserva para o seu Governo o direito de tomar todas as medidas que considere necessárias para proteger os interesses das suas telecomunicações se certos Membros não observarem as disposições do Regulamento das Radiocomunicações ou se reservas formuladas por outros países comprometerem o bom funcionamento dos seus serviços de telecomunicações.

N.º 45

República Argentina

A) A delegação da República Argentina declara que o seu Governo se reserva o direito de adoptar as medidas que considere pertinentes para assegurar o bom funcionamento dos seus serviços de telecomunicações se os seus interesses

estiverem comprometidos pelas decisões da presente Conferência, especialmente no que se refere à aplicação do procedimento de libertação de partes da faixa atribuída ao serviço fixo nas ondas decamétricas entre 4000 e 27 500 kHz e da transferência das estações do dito serviço das partes da faixa em questão para outras faixas de frequências.

De igual modo, a delegação da Argentina declara que se as reservas formuladas por outros países vierem a prejudicar os seus serviços de telecomunicações, a República Argentina reserva-se o direito de tomar as disposições necessárias para proteger os seus serviços.

B) A delegação da República Argentina declara que o seu Governo não reconhece as consignações de frequência que possam ser feitas directa ou indirectamente a quaisquer serviços, em qualquer parte do espectro radioeléctrico, para as ilhas Malvinas, a ilha da Geórgia do Sul, as ilhas Sandwich do Sul e o Antárctico argentino entre 25° e 74° de longitude oeste de Greenwich, ao sul de 60° de latitude sul, se essas consignações forem feitas em nome de um ou vários outros Estados, pois a República Argentina exerce direitos de soberania sobre esses territórios. De qualquer modo, a República Argentina reserva-se o direito de utilizar conforme entenda as frequências radioeléctricas consignadas nas condições pré-citadas.

C) Em nome do seu Governo, a delegação da República Argentina declara que a ocupação ilícita das ilhas Malvinas, das ilhas da Geórgia do Sul e Sandwich do Sul pelo Reino Unido foi conhecida pela Organização das Nações Unidas, que nas suas Resoluções n.^{os} 2065 (XX), 3160 (XXVIII) e 31/49 tem pedido instantemente que sejam activadas as negociações entre os dois Governos para acabar com uma situação de tipo colonial.

N.º 46

República Democrática Popular do Iémene

Ao assinar os Actos Finais da Conferência Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Popular do Iémene, ao mesmo tempo que reafirma o seu apoio à cooperação internacional no domínio das telecomunicações, reserva para o seu Governo o direito de tomar todas as medidas que considere necessárias para proteger os seus interesses se um país não observar, seja de que modo for, as disposições dos Actos Finais da Conferência acima mencionada ou se reservas formuladas por outros países vierem a comprometer os seus serviços de telecomunicações.

N.º 47

República do Iraque e República Árabe Síria

As administrações dos países acima mencionados confirmam que, de acordo com a Resolução n.º 1, a IFRB não deveria aceitar qualquer notificação de consignação de frequências a estações situadas num território ocupado quando essas notificações são apresentadas pela administração do país ocupante.

N.º 48

Irlanda e Reino Unido da Grã-Bretanha e da Irlanda do Norte

Dado que não foi possível, na presente Conferência, obter a inclusão da Irlanda na nota 621, as delegações acima mencionadas declaram que as administrações aplicarão o Regulamento das Radiocomunicações como se a Irlanda tivesse sido mencionada na referida nota.

N. º 49

República Unida da Tanzânia

O Governo da República Unida da Tanzânia reserva-se o direito de tomar qualquer decisão que considere necessária para proteger os seus interesses se houver Membros que não observem de qualquer modo as disposições do Regulamento das Radiocomunicações — Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) — ou se reservas formuladas por outros países vierem a comprometer o bom funcionamento dos seus serviços de radiocomunicações.

N. º 50

República Popular de Moçambique

A delegação da República Popular de Moçambique reserva o direito do seu Governo de tomar todas as medidas necessárias para proteger os seus interesses se qualquer país não observar as disposições do Regulamento das Radiocomunicações elaborado pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), ou se as reservas formuladas por qualquer país vierem a comprometer o bom funcionamento dos seus serviços de telecomunicações.

N. º 51

República da Zâmbia

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República da Zâmbia reserva para o seu Governo o direito de tomar todas as medidas que considere necessárias para proteger os seus interesses em matéria de telecomunicações se qualquer Membro da UIT não observar, seja de que modo for, as disposições do Regulamento das Radiocomunicações.

N. º 52

República do Níger

À luz das reservas já apresentadas, a delegação do Níger à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) reserva ao seu Governo o direito de tomar todas as medidas úteis para proteger os seus interesses em matéria de radiocomunicações se não forem respeitadas as disposições dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) e do Regulamento das Radiocomunicações saído da referida Conferência.

N. º 53

República Popular do Congo

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação congolesa toma nota com apreensão das reservas formuladas por outras delegações no que se refere à utilização e à aplicação do Regulamento das Radiocomunicações.

Por consequência, a delegação da República Popular do Congo reserva para o seu Governo o direito de tomar medidas necessárias para a salvaguarda dos seus interesses no caso de os países signatários dos Actos Finais não observarem as disposições do Regulamento das Radiocomunicações, ou se as reservas formuladas pelas delegações de outros países vierem a comprometer o bom funcionamento dos seus serviços de radiocomunicações.

N. º 54

República Popular e Revolucionária da Guiné

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Popular e Revolucionária da Guiné notou com apreensão as reservas feitas por certos Membros, especialmente no que se refere às atribuições inscritas no quadro de atribuição das faixas de frequências e ao respeito pelas disposições do Regulamento das Radiocomunicações.

Por consequência, reserva para o seu Governo o direito de tomar todas as medidas que considere úteis para salvaguardar os seus interesses em matéria de telecomunicações.

N. º 55

República Socialista Democrática do Sri Lanka

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Socialista Democrática do Sri Lanka notou que várias administrações emitiram reservas relativamente a diversas disposições dos Actos Finais da Conferência encarregada de remodelar o Regulamento das Radiocomunicações.

A delegação da República Socialista Democrática do Sri Lanka reserva, portanto, para o seu Governo o direito de tomar todas as medidas que julgue necessárias para proteger os seus interesses no caso de as reservas em questão causarem prejuízo grave aos serviços de telecomunicações da República Socialista Democrática do Sri Lanka.

N. º 56

República Centro-Africana

A delegação da República Centro-Africana notou com apreensão certas reservas apresentadas quanto à aplicação das disposições do Regulamento das Radiocomunicações e especialmente no quadro de atribuições das faixas de frequências. Por consequência, reserva para o seu Governo o direito de tomar todas as medidas que julgue necessárias para proteger os seus serviços de telecomunicações e de aprovar o novo Regulamento das Radiocomunicações.

N. º 57

Ghana

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação do Ghana tomou nota das diversas reservas formuladas por outros países e está muito preocupada com as atribuições de frequências e as novas notas.

A delegação do Ghana reserva para o seu Governo o direito de proteger os seus interesses em matéria de telecomunicações e não aceita nenhuma das consequências das reservas formuladas por outros Governos que possam provocar um aumento da sua participação nos gastos da União.

N. º 58

República Socialista da Roménia

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Socialista da Roménia notou com inquietação as reservas formuladas por outros países, especialmente no que respeita às atribuições no quadro de atribuição das faixas de frequências, assim como à aplicação do Regulamento das Radiocomunicações.

A delegação da República Socialista da Roménia reserva, portanto, para o seu Governo o direito de tomar todas as medidas que considere necessárias para proteger os seus interesses caso as reservas acima mencionadas venham a prejudicar os seus serviços de telecomunicações.

N. º 59

República da Libéria

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República da Libéria nota com preocupação as reservas formuladas por outros países no que respeita tanto às atribuições inscritas no quadro de atribuição das faixas de frequências como à aplicação do Regulamento das Radiocomunicações.

A delegação da República da Libéria reserva, portanto, para o seu Governo o direito de tomar todas as medidas que julgue necessárias para proteger os seus interesses no caso de essas reservas virem a prejudicar os seus serviços de telecomunicações.

N. º 60

Tailândia

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da Tailândia faz a seguinte declaração, em nome do seu Governo:

a) Ela verifica que numerosos países se reservam o direito de utilizar as porções das faixas de 5850-5950 kHz e de 7300-7400 kHz para serviços de radiodifusão;

b) Não aceita as reservas formuladas por outros países no que respeita à utilização das porções das faixas de 5859-5950 kHz e 7300-7400 kMz para serviços de radiodifusão e reserva para o seu Governo o direito de tomar todas as medidas firmes que possa julgar necessárias para proteger os seus serviços de telecomunicações;

c) Reservas para o seu Governo o direito de explorar estações do serviço móvel, excepto móvel aeronáutico, a título primário, nas faixas de 435-438 MHz e tomará as medidas necessárias para garantir que os serviços funcionem em conformidade com o quadro de atribuição das faixas de frequências noutros países não sofram qualquer interferência prejudicial provocada pelo serviço mencionado.

N. º 61

República Unida dos Camarões

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República Unida dos Camarões notou com grande preocupação as reservas feitas por outros países relativamente às atribuições feitas no quadro de atribuição das faixas de frequências e também relativamente à aplicação do Regulamento das Radiocomunicações.

A delegação da República Unida dos Camarões reserva, por consequência para o seu Governo o direito de tomar medidas julgadas necessárias para salvaguardar os seus interesses caso as reservas acima mencionadas venham a causar prejuízo aos seus serviços de telecomunicações.

N. º 62

Maurícia

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da Maurícia nota com preocupação as reservas formuladas por outras delegações especialmente no que respeita tanto às atribuições inscritas no quadro de atribuição das faixas de frequências como à aplicação do Regulamento das Radiocomunicações.

Por consequência, a delegação da Maurícia reserva para o seu Governo o direito de tomar qualquer medida que considere necessária para proteger os interesses do seu serviço de radiodifusão e dos outros serviços de telecomunicações caso essas reservas venham a comprometer, seja de que modo for, o bom funcionamento desses serviços.

N. º 63

República de Singapura

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), e após ter tomado nota das reservas apresentadas por outras delegações, especialmente no que respeita ao quadro de atribuições das faixas de frequências, a delegação da República de Singapura reserva para o seu Governo direito de tomar qualquer medida que considere necessária para proteger os seus interesses se um Membro não observar, seja de que modo for, as disposições do Regulamento das Radiocomunicações estabelecido pela referida Conferência, ou se as reservas mencionadas acima vierem a comprometer o bom funcionamento dos seus serviços de telecomunicações.

N. º 64

República das Filipinas

A delegação da República das Filipinas, após ter tomado nota das reservas formuladas por certas delegações, especialmente no que diz respeito à utilização do espectro das frequências, reserva para o seu Governo direito de tomar, se for caso disso, qualquer medida que possa ser necessária para proteger os seus interesses se alguns Membros não observarem as disposições dos Actos Finais da presente Conferência, dos seus anexos e do protocolo que lhe está agregado, ou se as reservas formuladas por outros países puderem ter consequências prejudiciais para os interesses das Filipinas.

N. º 65

Costa Rica

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da Costa Rica declara que a sua Administração procurará respeitar as disposições do Regulamento das Radiocomunicações adoptado no decurso da presente Conferência. Todavia, tendo em atenção as reservas formuladas por certos países, reserva para o seu Governo o direito:

a) De adoptar as medidas necessárias para proteger os serviços de radiocomunicações da Costa Rica no caso de a não observância do Regulamento, dos seus anexos e protocolos associados vir a causar prejuízo ao funcionamento dos seus serviços;

b) De não aceitar as reservas formuladas pelos diferentes países que não protegem os serviços fixo e móvel, dado que, especialmente nas faixas de ondas decamétricas, os referidos serviços têm importância capital para a Costa Rica e devem ser protegidos contra todos os tipos de interferências.

N. º 66

Equador

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação do Equador declara que a sua Administração se esforçará por respeitar todas as disposições do Regulamento que foi adoptado na presente Conferência. Contudo, tendo em atenção as reservas formuladas por outros países, reserva para o seu Governo o direito:

a) De adoptar as medidas que julgue necessárias para proteger os serviços de radiocomunicações do Equador, caso a não observância do Regulamento, dos seus anexos por outros países membros da União venha a prejudicar o funcionamento desses serviços;

b) De não aceitar as reservas formuladas por outros países se forem contrárias aos interesses nacionais do Equador;

c) De continuar a utilizar algumas das consignações actuais dos seus serviços fixo e móvel em ondas decamétricas se, por razões técnicas, económicas ou outras, não for possível transferi-los nos prazos previstos na presente Conferência.

N. º 67

República do Alto Volta

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República do Alto Volta notou com apreensão as reservas formuladas por certos países relativamente a certas disposições do Regulamento das Radiocomunicações.

Em consequência disso, reserva para o seu Governo o direito de tomar as medidas que julgue necessárias para salvaguardar os seus interesses, no caso de virem a ser comprometidos.

N. º 68

Reino Hachemita da Jordânia, Líbano e República Árabe Síria

As delegações pré-citadas à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), declaram-se solenemente obrigadas pelas disposições adoptadas pela presente Conferência, em conformidade com as disposições da Convenção Internacional das Telecomunicações.

Por consequência, rejeitam quaisquer declarações ou medidas que não estejam de acordo com as decisões formadas pela referida Conferência.

Em especial, afirmam que a declaração que figura na Reserva n.º 30, a propósito das notas relativas às faixas de 174-223 MHz e 15,7-17,3 GHz, é inaceitável, pois é contrária às decisões tomadas pela Conferência, a qual reconheceu inteiramente a justeza das objecções de ordem técnica formuladas pela delegação do Reino Hachemita da Jordânia contra a inclusão de Israel nas notas em questão.

N. º 69

República do Quénia

Devido às reservas apresentadas por certos países que procuram explorar certos serviços violando as disposições do Regulamento das Radiocomunicações estabelecido pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), a delegação da República do Quénia reserva para o seu Governo o direito de tomar as medidas que possa considerar necessárias para proteger os seus serviços de telecomunicações se outros Membros não observarem as disposições do Regulamento das Radiocomunicações, tal como revisto pela presente Conferência, em especial devido às Reservas n.^{os} 13, 32, 33, 36, 38 e 43 contidas no Protocolo final.

N. º 70

República Islâmica do Irão

A delegação da República Islâmica do Irão declara que a sua administração não aceita qualquer consequência das reservas formuladas por qualquer outra administração ou grupo de administrações relativamente às disposições dos Actos Finais. A delegação da Republica Islâmica do Irão reserva para o seu país o direito que o seu Governo tem de tomar todas as medidas que possa julgar necessárias para proteger os seus interesses se uma outra administração, especialmente em consequência de uma das Reservas n.^{os} 11, 32, 34 ou 38 do Protocolo final, não observar ou violar as disposições do Regulamento das Radiocomunicações, revisto pela presente Conferência e, mais particularmente, se tais actos prejudicarem as necessidades ou os interesses da República Islâmica do Irão.

N. º 71

República do Mali

Depois de ter tomado nota das reservas apresentadas por outras delegações, especialmente as que se relacionam com o quadro de atribuição das faixas de frequências, a delegação da República do Mali reserva para o seu Governo o direito de tomar as medidas que considere necessárias para salvaguardar os seus interesses se essas reservas ou o desrespeito das disposições do Regulamento das Radiocomunicações vierem a comprometer o bom funcionamento dos seus serviços de radiocomunicações.

N. º 72

Estados Unidos da América

Em referência à Reserva n.º 9 do Governo da República de Cuba, o Governo dos Estados Unidos da América nota que a presença dos Estados Unidos em Guantanamo está em conformidade com um tratado em vigor.

Os Estados Unidos reservam-se o direito de satisfazer, como no passado, as suas necessidades de radiocomunicações, em Guantanamo.

N. º 73

Bélgica, França, Luxemburgo, Reino dos Países Baixos e Confederação Suíça

Tomando nota das reservas expressas por diversas delegações acerca das atribuições insuficientes feitas ao serviço de radiodifusão na parte inferior da faixa das ondas decamétricas e das medidas que, como consequência, as suas respectivas administrações se propõem tomar, as delegações dos países supramencionados declaram que as suas administrações se reservam o direito de tomar todas as medidas necessárias tanto para assegurar o funcionamento satisfatório dos serviços a que essa porção do espectro está atribuída como para lhes permitir uma utilização equitativa da faixa decamétrica para o seu serviço de radiodifusão.

N.º 74

República Argelina Democrática e Popular, Reino da Árabia Saudita, Estado do Bahrein, Emirados Árabes Unidos, República do Iraque, Reino Hachemita da Jordânia, Estado do Koweit, Líbano, Líbia (Jamahiriya Árabe, Líbia Popular Socialista), Reino de Marrocos, Sultanato de Omã, Estado de Qatar, República Árabe Síria, República Democrática da Somália, República Democrática do Sudão e República Democrática Popular do Iémene.

Tendo tomado nota das reservas já apresentadas, as delegações dos países pré-citados reservam os direitos dos seus Governos de tomarem as medidas que julguem necessárias para proteger os seus interesses se um ou vários Membros da União não observarem as disposições dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), ou se as reservas formulados por esses Membros vierem a prejudicar os seus serviços de telecomunicações.

N.º 75

República Federal da Alemanha, Austrália, Áustria, Bélgica, Canadá, Dinamarca, Estados Unidos da América, Finlândia, França, Grécia, Irlanda, Itália, Japão, Principado do Listenstaina, Luxemburgo, Noruega, Nova Zelândia, Papuásia-Nova Guiné, Reino dos Países Baixos, Portugal, Reino Unido da Grã-Bretanha e da Irlanda do Norte, Suécia e Confederação Suíça.

As declarações pré-citadas, referindo-se às reservas formuladas pela República da Colômbia, a República Popular do Congo, o Equador, a República Gabonesa, a República do Quénia, a República da Uganda, a República Democrática da Somália e a República do Zaire na Declaração n.º 40 e pela República da Indonésia na Declaração n.º 42, expressam opinião de que, na medida em que essas duas declarações se referem à declaração de Bogotá de 3 de Dezembro de 1976 subscrita pelos países equatoriais e às suas reivindicações ao exercício de direitos de soberania sobre secções de órbita dos satélites geostacionários, as referidas reivindicações não podem ser reconhecidas pela presente Conferência e de que as decisões por ela adoptadas acerca da consignação e da utilização de frequências e de posições orbitais na órbita dos satélites geostacionários estão plenamente em conformidade com a Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973), que obriga a presente Conferência.

As delegações supramencionadas desejam igualmente declarar que a Resolução n.º 3, ao referir-se às «questões técnicas pertinentes relativas à situação geográfica especial de certos países», não implica o reconhecimento de reivindicações relativas a quaisquer direitos preferenciais no que concerne à órbita dos satélites geostacionários.

N.º 76

Reino Unido da Grã-Bretanha e da Irlanda do Norte

Referindo-se à declaração feita pela República da Argentina no n.º 45 do Protocolo final, o Governo do Reino Unido da Grã-Bretanha e da Irlanda do Norte não duvida da soberania do Reino Unido sobre as ilhas Falkland e suas dependências e sobre o território antárctico britânico. A este respeito convém chamar a atenção para o artigo IV do Tratado do Antárctico, de que o Reino Unido e a Argentina são signatários, que impede as pretensões territoriais no Antárctico.

O Governo do Reino Unido não aceita, portanto, a declaração da República da Argentina que contesta a soberania do Reino Unido sobre os territórios acima mencionados. Por outro lado, o Reino Unido tem o direito de possuir frequências consignadas aos seus serviços de radiocomunicações que funcionam a partir dos ditos territórios e consideraria qualquer utilização, pela República Argentina, de frequências a causar interferências prejudiciais às referidas consignações como uma violação da Convenção e do Regulamento das Radiocomunicações. O Reino Unido não aceita a alegação contida no último parágrafo da declaração da Argentina segundo a qual «a ocupação ilícita das ilhas da Geórgia do Sul e das ilhas Sandwich do Sul pelo Reino Unido foi reconhecida pela Organização das Nações Unidas». As resoluções das Nações Unidas pediram simplesmente a solução do desacordo mediante negociações entre os dois Governos.

N.º 77

Reino Unido da Grã-Bretanha e da Irlanda do Norte

Referindo-se à declaração feita pela República da Guatemala no n.º 2 do Protocolo final, o Governo do Reino Unido da Grã-Bretanha e da Irlanda do Norte não tem qualquer dúvida relativamente à soberania do Reino Unido sobre Belize e deseja reservar oficialmente os seus direitos sobre o assunto.

N.º 78

Reino Unido da Grã-Bretanha e da Irlanda do Norte

A delegação do Reino Unido da Grã-Bretanha e da Irlanda do Norte não aceita o n.º 7 do Protocolo final, do Chile, na medida em que este contesta a soberania do Governo de Sua Majestade do Reino Unido sobre o território antárctico britânico. A delegação faz referência ao artigo IV do Tratado do Antárctico, que impede as pretensões territoriais no Antárctico.

N.º 79

República da Colômbia, República Popular do Congo, Equador, República Gabonesa, República do Quénia, República da Uganda, República Democrática da Somália e República do Zaire

As delegações dos países supramencionados chamam a atenção para o facto de o ponto *e*) e a 2.ª parte do § 3.2 do dispositivo da Resolução n.º 3, aprovada pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), também se referirem à situação geográfica especial dos países equatoriais no que respeita à órbita dos satélites geostacionários, como se deduz das discussões havidas no seio do grupo de trabalho *ad hoc* e da comissão que trataram deste assunto.

Nestas condições, as delegações acima mencionadas aceitaram os termos da resolução pré-citada, que trata da utilização da órbita dos satélites geostacionários, tendo em conta — e de outro modo não podia ser — as circunstâncias pertinentes devidas à situação geográfica especial dos países cujo território é atravessado pelo equador terrestre.

Por consequência, seja qual for a planificação ou a regulamentação tendente a racionalizar a utilização da órbita dos satélites geostacionários pelo acesso equitativo de todos os países a essa órbita, será necessário ter em conta as considerações que os países equatoriais formularam sobre o assunto.

N.º 80

Papuásia-Nova Guiné

Ao assinar os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra 1979), a delegação da Papuásia-Nova Guiné reserva para o seu Governo o direito de tomar todas as medidas que julgue necessárias para salvaguardar os interesses dos seus serviços de radiocomunicação se outros países não observarem as disposições adoptadas pela Conferência e causem, por esse facto, interferências prejudiciais aos sistemas de radiocomunicação dependentes do Governo da Papuásia-Nova Guiné.

N.º 81

Japão

No que se refere às reservas formuladas pela delegação chilena e pela delegação argentina acerca das consignações de frequências na Antárctica, a delegação do Japão reafirma a posição do Governo Japonês relativamente ao artigo IV do Tratado do Antárctico.

N.º 82

República Democrática da Somália

A delegação da República Democrática da Somália à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) declara que o seu Governo não aceitará nunca quaisquer medidas ou situações que, resultantes de reservas já apresentadas por outras administrações, possam comprometer os interesses dos serviços de telecomunicações da Somália.

N.º 83

Cuba

Se, em consequência das reservas formuladas nos n.os 36 e 38 do Protocolo final da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), no que respeita à utilização do serviço de radiodifusão nas faixas atribuídas a serviços diferentes do serviço pré-citado, nas vizinhanças de 6 e 7 MHz, essas novas faixas não puderem ser utilizadas de modo apropriado pelos serviços a que estão atribuídas, a administração da República de Cuba reserva-se o direito de as utilizar da forma que melhor corresponda aos seus interesses.

(Seguem-se as assinaturas.)

RESOLUÇÕES

Nota do secretário-geral

Em aplicação das decisões tomadas pela Conferência, as Resoluções foram classificadas e numeradas pelas categorias e segundo o sistema de numeração indicadas abaixo, Além disso, na aplicação deste processo de classificação verificou-se que certas Resoluções, pertencentes a um dado grupo, estavam directamente relacionadas com Resoluções que figuram noutros grupos. Este facto foi tido em conta para facilitar a consulta dos textos.

Números

Resoluções de aplicação geral 1-99
Princípios, procedimentos gerais e cooperação 1-20
Referem-se igualmente: n.os 35, 36 e 37.
Procedimentos específicos 30-39
Referem-se igualmente: n.os 1, 6, 7, 8, 9, 100, 101, 102, 200, 201, 202, 502, 503, 504, 506, 507, 700 e 701.
Questões técnicas 60-69
Serviço fixo/serviço fixo por satélite 100-199
Referem-se igualmente: n.os 8, 9, 31, 32, 33, 34, 502, 503, 504, 506, 507, 700 e 701.
Serviço móvel/serviço móvel por satélite 200-299
Referem-se igualmente: n.os 38, 305 e 315.
Serviço móvel marítimo/serviço móvel marítimo por satélite 300-399
Referem-se igualmente: n.os 200 e 201.
Serviço móvel aeronáutico/serviço móvel aeronáutico pos satélite 400-499
Serviço de radiodifusão/serviço de radiodifusão por satélite 500-599
Referem-se igualmente: n.os 31, 32, 33, 34, 100, 102, 700 e 701.
Outros serviços 600-699
Relativas a mais de um serviço 700-799
Referem-se igualmente: n.os 31, 32, 33, 34, 100, 101, 102, 502, 503, 504, 506 e 507.

V. igualmente a este respeito, o «Índice analítico» elaborado pelo Secretário-Geral.

RESOLUÇÃO N.º 1

Relativa à notificação das consignações de frequência (1)

A conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

referindo-se

Ao «preâmbulo» da Convenção (2);
Ao artigo 31 da Convenção (2) (acordos especiais);
Ao artigo 7 do Regulamento das Radiocomunicações (acordos especiais);
Ao artigo 12 do Regulamento das Radiocomunicações (notificado e inscrição, no ficheiro de referência internacional das frequências, das consignações de frequência às estações de radiocomunicação de Terra);

(1) Substitui a Resolução n.º 5 da Conferência Administrativa das Radiocomunicações (Genebra, 1979).
(2) Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973).

Ao artigo 13 do Regulamento das Radiocomunicações (notificação e inscrição, no ficheiro de referência internacional das frequências, das consignações de frequência às estações de radioastronomia e às estações de radiocomunicação espacial, com excepção das estações do serviço de radiodifusão por satélite);

Ao artigo 17 do regulamento das Radiocomunicações (procedimento relativo às faixas atribuídas em exclusão ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz);

decide

que salvo indicação contrária especificamente estipulada em acordos especiais comunicados à União pelas administrações, qualquer notificação de uma consignação de frequência a uma estação deve ser feita pela administração do país em cujo território se situa a estação.

RESOLUÇÃO N.º 2

Relativa à utilização equitativa por todos os países com igualdade de direitos da órbita dos satélites geostacionários e das faixas de frequência atribuídas aos serviços de radiocomunicação espacial (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que todos os países têm o mesmo direito de utilizar as frequências radioeléctricas atribuídas aos diferentes serviços de radiocomunicação espacial, assim como a órbita dos satélites geostacionários para os referidos serviços;

tendo em conta o facto

de que o espectro das frequências radioeléctricas e a órbita dos satélites geostacionários constituem recursos naturais limitados e de que convém utilizá-los o mais eficaz e economicamente possível;

consciente do facto

de que a utilização, pelos diversos países ou grupos de países, de faixas de frequência atribuídas, assim como de localizações fixas na órbita dos satélites geostacionários, pode começar em datas diferentes, segundo as necessidades desses países e segundo os meios técnicos de que possam dispor;

decide

1. Que o registo na IFRB de consignações de frequência para os serviços de radiocomunicação espacial e a utilização dessas consignações não podem conferir prioridade permanente a este ou àquele país ou grupo de países e impedir a criação de sistemas espaciais por outros países;

2. Que, por consequência, convém que um país ou grupo de países em nome do qual tenham sido registadas pela IFRB consignações de frequência para os seus serviços de radiocomunicação espacial tome todas as medidas praticamente possíveis para deixar a outros países ou grupos de países que o desejem a possibilidade de utilizar novos sistemas espaciais;

3. Que convém que as administrações e os organismos permanentes da União tenham em conta as disposições contidas nos n.os 1 e 2 da presente Resolução.

RESOLUÇÃO N.º 3

Relativamente à utilização da órbita dos satélites geostacionários e à planificação dos serviços espaciais que utilizam essa órbita

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a órbita dos satélites geostacionários e o especto das frequências radioeléctricas são recursos naturais limitados e que são utilizados pelos serviços espaciais;

b) Que é necessário assegurar o acesso equitativo a esses recursos e a sua utilização eficaz e económica por todos os países, como prevêem o artigo 33 da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973) e a Resolução n.º 2;

c) Que diversos países ou grupos de países podem utilizar as frequências radioeléctricas e a órbita dos satélites geostacionários diferentes, conforme as suas necessidades e os recursos de que dispõem;

---

(1) Substitui a Resolução Spa2-1 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

d) Que, em todo o Mundo, são cada vez mais numerosas as necessidades e consignação de posição orbital e de frequência para os serviços espaciais;

e) Que conviria, no que respeita à utilização da órbita dos satélites geostacionários por serviços espaciais, prestar atenção às questões técnicas pertinentes relativas à situação geográfica especial de certos países;

decide

1. Que seja convocada, o mais tardar em 1984, uma Conferência Administrativa Mundial das Radiocomunicações, com a finalidade de garantir concretamente a todos os países o acesso equitativo à órbita dos satélites geostacionários e às faixas de frequências atribuídas aos serviços espaciais;

2. Que essa Conferência se realize em duas sessões;

3. Que a primeira sessão deverá:

3.1. Decidir quais os serviços espaciais e as faixas de frequências para que convém estabelecer planos;

3.2. Decidir os princípios, os parâmetros técnicos e os critérios aplicáveis à planificação, especialmente no que se refere às consignações de órbita e de frequência para os serviços espaciais e às faixas de frequências indicadas no § 3.1, tendo em conta as questões técnicas pertinentes relativas à situação geográfica especial de certos países, e, por outro lado, estabelecer princípios directivos relativamente aos procedimentos regulamentares associados;

3.3. Elaborar os princípios orientadores em matéria de procedimentos regulamentares aplicáveis aos serviços e às faixas de frequências não indicadas no § 3.2;

3.4. Examinar outras iniciativas capazes de permitir alcançar o objectivo enunciado no ponto 1 desta resolução;

4. Que a segunda sessão se realize no mínimo 12 meses e no máximo 18 meses depois da primeira sessão, a fim de proceder à aplicação das decisões tomadas na primeira sessão;

convida

1. *A CCIR*, a efectuar estudos preparatórios e a fornecer à 1.ª Sessão da Conferência informações técnicas relativas aos princípios, aos critérios e aos parâmetros técnicos, incluídos aqueles de que haja necessidade para a planificação dos serviços espaciais;

2. *A IFRB*, a elaborar um relatório sobre a aplicação dos procedimentos dos artigos 11 e 13, incluindo informações sobre as dificuldades eventualmente assinaladas à IFRB pelas administrações que procuram obter acesso a posições orbitais e frequências apropriadas, e a distribuir esse relatório pelas administrações, pelo menos, um ano antes da 1.ª Sessão da Conferência.

3. *A IFRB*, a encarregar-se da preparação técnica da Conferência, em conformidade com as disposições do Regulamento das Radiocomunicações;

4. *As administrações*, a examinarem todos os aspectos da questão a fim de apresentarem propostas à Conferência e a cooperarem activamente nos trabalhos supramencionados da CCIR e da IFRB;

5. *O Conselho de Administração*, a tomar todas as medidas necessárias com vista à convocação da Conferência em conformidade com a presente Resolução.

RESOLUÇÃO N.º 4

Relativa ao prazo de validade das consignações de frequência às estações espaciais que utilizam a órbita dos satélites geostacionários

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário utilizar racional e eficazmente o espectro das frequências e a órbita dos satélites geostacionários e que convém tomar em consideração as disposições da Resolução n.º 2 relativa à utilização por todos os países, com igualdade de direitos, das faixas de frequências atribuídas aos serviços de radiocomunicação espacial;

b) Que a limitação do período de validade das consignações de frequência às estações espaciais que utilizam a órbita dos satélites geostacionários é um conceito que, aplicado, poderia permitir uma aproximação dos objectivos acima mencionados;

c) Que a amortização dos grandes investimentos efectuados para o desenvolvimento das radiocomunicações espaciais constitui um encargo especialmente pesado para todas as administrações e que esses investimentos devem ser feitos ao longo de um período predeterminado;

d) Que se deve procurar incitar as administrações que têm possibilidade desenvolver técnicas destinadas a melhorar a utilização do espectro das frequências e da órbita dos satélites geostacionários; com vista a aumentar os meios de radiocomunicações postos à disposição da comunidade mundial;

e) Que uma Conferência Administrativa Mundial das Radiocomunicações Especiais deve, por alturas de 1984, tratar da utilização da órbita dos satélites geostacionários e da planificação dos serviços espaciais que utilizam essa órbita;

f) Que seria útil estabelecer, a título experimental, um procedimentos que permitisse retirar ensinamentos da aplicação do novo conceito de notificação do período de validade de uma consignação nas

radiocomunicações espaciais, mas que não é desejável impor às administrações um período fixo regulamentarmente e idêntico em todos os casos, e que é preciso, antes, deixar às administrações o cuidado de serem elas próprias a proporem esse período de validade em função das suas necessidades e do interesse geral;

decide

1. Que entre 1 de Julho de 1980 e a Conferência Administrativa Mundial das Radiocomunicações Espaciais (v. a Resolução n.º 3), as consignações de frequência a estações de radiocomunicação espacial situadas na órbita das satélites geostacionários sejam tratadas como segue:

1.1. Uma consignação de frequência a uma estação espacial (1) instalada a bordo de um satélite geostacionário é considerada como abandonada definitivamente logo que expire o período de funcionamento indicado, na ficha de notificação, contado a partir da data da entrada em serviço dessa consignação. Este período é limitado àquele para o qual foi concebida a rede de satélite. A Comissão convida, então, a administração notificadora a proceder à anulação dessa consignação. Se, no prazo de 3 meses a contar da expiração desse período de funcionamento, a Comissão não tiver obtido resposta, inscreve na coluna «Observações» do ficheiro de referência um símbolo a indicar que a consignação não está em conformidade com a presente Resolução;

1.2. Se uma administração notificadora desejar prolongar o período de funcionamento, indicado inicialmente na ficha de notificação, de uma consignação de frequência a uma estação espacial (1) existente, informa disso a Comissão mais de 3 anos antes do fim do período em questão e, se todas as outras características fundamentais continuarem sem modificação, a Comissão modifica, em conformidade com o pedido, o período de funcionamento inicialmente inscrito no ficheiro de referência e publica essa informação numa secção especial da circular semanal;

1.3. Se, pelo menos, 3 anos antes do fim do período de funcionamento inscrito no ficheiro de referência de uma consignação de frequência a uma estação espacial (1) existente, uma administração empreender o procedimento de coordenação previsto no n.º **1060** para pôr em serviço uma nova estação espacial utilizando a mesma frequência consignada e a mesma posição orbital mas com características técnicas diferentes, e se a Comissão concluir, após a notificação, que a nova consignação está em conformidade com as disposições do n.º **1503** e que não aumenta, em relação à consignação anterior, a probabilidade de interferência em prejuízo de uma consignação recebe uma conclusão favorável e inscreve-se no ficheiro de referência;

1.4. Uma administração notificadora que deseje introduzir qualquer modificação às características fundamentais de uma consignação de frequência a uma estação espacial (1) inscrita no ficheiro de referência deve, em todos os casos, excepto nos previstos nos §§1.2 e 1.3, empreender o procedimento correspondente a essa modificação de acordo com as disposições dos n.os **1547** a **1551**;

2. Que, para a aplicação das disposições do § 1.1 anterior, as informações relativas ao período de validade das consignações de frequência às estações espaciais devem ser notificadas em adição às informações que figuram nos apêndices 3 e 4 do Regulamento das Radiocomunicações;

3. Que a aplicação da presente resolução não prejudicará, de nenhum modo, as decisões da Conferência Administrativas das Radiocomunicações Espaciais mencionada na Resolução n.º 3;

convida

a Conferência Administrativa Mundial das Radiocomunicações Espaciais prevista pela Resolução n.º 3 a tomar conhecimentos dos primeiros resultados da aplicação da presente resolução.

RESOLUÇÃO N.º 5

Relativa à cooperação técnica com os países em desenvolvimento no domínio dos estudos de propagação nas regiões tropicais

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo notado

que a assistência fornecida pela União aos países em desenvolvimento concertadamente com outras instituições especializadas das Nações Unidas, tais como o PNUD, no domínio das telecomunicações, permite fazer bons augúrios para o futuro;

consciente

a) Do facto de que os países em desenvolvimento especialmente os situados em regiões tropicais, têm necessidade de possuir um melhor conhecimento da propagação das ondas radioeléctricas nos seus territórios para a utilização racional e económica de espectro radioeléctrico;

b) Do papel importante da propagação nas radiocomunicações;

---

(1) A expressão «estação especial» pode aplicar-se a mais de um satélite, com a condição de que esteja em funcionamento um único satélite num momento qualquer e de que as estações instaladas a bordo dos satélites sucessivos tenham características fundamentais idênticas.

c) Da importância dos trabalhos das CCI na evolução das telecomunicações em geral e das radiocomunicações em particular;

considerando

a) A necessidade que os países em desenvolvimento têm de ser eles próprios a fazer estudos sobre a telecomunicação em geral e sobre a propagação em particular nos seus territórios, pois, é esse, para eles o melhor meio de adquirirem as técnicas das telecomunicações e de planificarem os seus sistemas de modo racional, tendo em conta as condições especiais nas regiões tropicais;
b) Os poucos meios de que dispõem esses países;

decide convidar o secretário-geral

1. A oferecer a assistência da União aos países em desenvolvimento situados em regiões tropicais e que estejam a procurar fazer estudos no seu próprios território a fim de melhorarem e aperfeiçoarem as suas radiocomunicações;
2. A ajudar esses países, se necessário com a colaboração de organizações internacionais e regionais, tais como a União Africana dos Correios e Telecomunicações (UAPT), a União Panafricana das Telecomunicações (UAPT) e a União das Radiodifusões e Televisões Nacionais de África (URTNA), que possam interessar-se pela questão, a organizarem as campanhas nacionais de medidas de propagação, incluindo recolhas de dados meteorológicos apropriados, efectuadas na base dos pareceres, questões e programas de estudos da CCIR a fim de melhorar a utilização de espectro radioeléctrico;
3. A procurar obter fundos e recursos para este fim junto do PNUD ou de outras formas de financiamento, de modo a permitir que a União leve aos países interessados assistência técnica ao mesmo tempo suficiente e eficaz para os fins da presente Resolução;

convida instantemente as administrações

a apresentar à CCIR os resultados dessas medidas de propagação para que sejam examinados no quadro dos estudos da Comissão;

convida o conselho de administração

a acompanhar os progressos das campanhas de medida de propagação e os resultados obtidos e a tomar quaisquer providências que julgue necessárias.

RESOLUÇÃO N.º 6

Relativa à preparação de um manual destinado a explicar e ilustrar os procedimentos do Regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A complexidade dos procedimentos regulamentares especificados no capítulo IV do Regulamento das Radiocomunicações;
b) A necessidade, para muitas administrações, de disporem de um manual que permita ao seu pessoal compreender melhor esses procedimentos para facilitar a sua aplicação;
c) O recurso possível a diagramas, organigramas e outras ilustrações gráficas susceptíveis de facilitar a compreensão de procedimentos complexos;

reconhecendo

1.Que por falta de tempo, é difícil à Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) elaborar elementos explicativos e diagramas para incluir ou juntar aos Actos Finais;
2. Que é necessário um esforço especial para elaborar um manual que satisfaça adequadamente as necessidades mencionadas na alínea *b*);
3. Que há interesse em que formato de um tal manual seja compatível com o do Regulamento das Radiocomunicações;

decide

que a IFRB deve, logo que possível após a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), elaborar um manual que incorpore ilustrações gráficas apropriadas, inclusive organigramas, destinadas a auxiliar o pessoal das administrações na aplicação dos procedimentos regulamentares previstos no capítulo IV do Regulamento das Radiocomunicações;

encarrega o secretário-geral

1. De publicar o manual elaborado pela IFRB;

2. De concluir de modo apropriado nas edições publicadas do Regulamento das Radiocomunicações os organigramas, quando estiverem disponíveis, acompanhados de uma nota a precisar que se destinam a facilitar a compreensão dos procedimentos mas que não fazem parte do Regulamento das Radiocomunicações.

RESOLUÇÃO N.º 7

Relativa ao desenvolvimento de uma gestão nacional das frequências radioeléctricas

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o Regulamento das Radiocomunicações contém, entre outras disposições, procedimentos de coordenação, de notificação e de registo das frequências que determinam os direitos e obrigações dos países membros;
b) Que a aplicação desses procedimentos torna necessário um serviço de gestão de frequências radioeléctricas em cada país membro;
c) Que a existência de um tal serviço ajuda os países membros a salvaguardarem os seus direitos e a cumprirem as suas obrigações em conformidade com o Regulamento das Radiocomunicações;
d) Que a aplicação do Regulamento por intermédio de um tal serviço é do interesse de toda a comunidade internacional;

notando

que um tal serviço de gestão de frequências radioeléctricas precisa de pessoal devidamente qualificado e em número suficiente;

notando, por outro lado,

que as administrações de numerosos países em desenvolvimento têm necessidade de criar ou de reforçar um tal serviço adaptado à sua estrutura administrativa e de o encarregar da aplicação do Regulamento das Radiocomunicações no plano nacional e internacional;

recomenda

às administrações desses países que tomem medidas para esse efeito;

decide

1. Que se organizem reuniões entre representantes da IFRB e da CCIR e participantes interessados pelas questões relativas à gestão das frequências nas administrações dos países em desenvolvimento e dos países desenvolvidos;
2. Que o objectivo dessas reuniões seja o de elaborar modelos de estruturas adaptadas às administrações de países em desenvolvimento e de discutir os meios de os pôr em prática e de explorar esses serviços de gestão de frequências;
3. Que o objectivo dessas reuniões deveriam também identificar as necessidades especiais de países em desenvolvimento para estabelecer tais serviços e os meios necessários para satisfazer essas necessidades;

recomenda

aos países em desenvolvimento que prevejam, quando da planificação da utilização dos fundos recebidos especialmente de instâncias internacionais, e participação nas reuniões, bem como a criação e o desenvolvimento desses serviços;

convida o Conselho de Administração

a tomar as medidas necessárias para a organização de tais reuniões;

encarrega o secretário-geral

1. De difundir a presente Resolução junto dos Membros da União, chamando-lhes a atenção para a sua importância;
2. De difundir os resultados dessas reuniões, especialmente junto dos países em desenvolvimento;
3. De indicar a esses países as formas de auxílio que a UIT está em condições de colocar à disposição deles para a implementação da estrutura que desejem;

chama a atenção da próxima Conferência de plenipotenciários para

1. Os problemas especiais identificados na presente Resolução;
2. A necessidade de ser empreendida, no mais curto prazo possível, uma acção eficaz com vista à sua solução;
3. A necessidade de tomar todas as medidas práticas para assegurar os recursos para esse efeito.

RESOLUÇÃO N.º 8

Relativa à aplicação das modificações de atribuições nas faixas compreendidas entre 4000 kHz e 27 500 kHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que um certo número de faixas de frequências compreendidas entre 4000 kHz e 27 500 kHz e que estavam atribuídas antes, em exclusivo ou em partilha, ao serviço fixo foram reatribuídas a outros serviços;

b) Que as consignações existentes às estações dos serviços fixos e móvel devem ser progressivamente eliminadas dessas faixas reatribuídas para dar lugar a outros serviços;

c) Que as consignações que devem ser deslocadas, chamadas «consignações a transferir», devem ser reclassificadas noutras faixas de frequências;

consciente

das dificuldades que encontrarão as administrações e a IFRB durante a passagem dessas antigas atribuições para as da presente Conferência;

decide

1. Que o procedimento de transição do anexo A da presente Resolução seja utilizado para assegurar a passagem ordenada e equitativa das antigas atribuições para as que são feitas pela presente Conferência;

2. Que as disposições do n.º **1242** e as disposições associadas do artigo 12 relativas ao exame e à inscrição no ficheiro de referência das consignações nas faixas compreendidas entre 4000 kHz e 27 500 kHz atribuídas em exclusivo ou por partilha ao serviço fixo sejam suspensas de 1 de Janeiro de 1982 a 30 de Junho de 1984;

3. Que o procedimento provisório do anexo B da presente Resolução seja utilizado a fim de ter em conta qualquer consignação de frequência nova e urgente, nas faixas em causa, durante o período de suspensão das disposições do artigo 12 indicado no ponto 2 desta Resolução;

4. Que o procedimento de revisão do anexo C da presente Resolução seja utilizado para examinar, no final do período de transição, qualquer nova consignação de carácter urgente notificada durante o período de suspensão das disposições do artigo 12 indicado no ponto 2 desta Resolução;

5. Que se aplique, e termine em 1 de Fevereiro de 1983, um procedimento especial de transferência, descrito na Resolução n.º 404, às estações do serviço fixo aeronáutico que funcionam na faixa de 21 924-22 000 kHz, faixa que a presente Conferência atribuiu em exclusivo ao serviço móvel aeronáutico (R);

convida as administrações

1. A que, ao procurarem reinstalar as suas consignações do serviço móvel que se encontram na faixa compreendida entre 4000 kHz e 27 500 kHz reatribuídas a outros serviços, não se poupem a esforços para encontrar consignações de substituições nas faixas atribuídas em exclusivo ao serviço móvel em causa;

2. A facilitar a cooperação, abstendo-se de apresentar fichas de notificação relativas a consignações nas faixas em causa, durante o período de suspensão das disposições do artigo 12 indicado no ponto 2 das decisões desta Resolução, excepto no caso de consignações urgentes e novas a tratar no quadro do procedimento provisório;

pede à IFRB

que, durante o período de suspensão das disposições do artigo 12 no ponto 2 das decisões desta Resolução, não examine, nos termos desse artigo, fichas de notificação nas faixas em causa além daquelas que impliquem a supressão de consignações existentes.

ANEXO A À RESOLUÇÃO N.º 8

Procedimento de transição relativo à escolha e à aprovação das consignações de substituição

PARTE I

Fase preparatória

SECÇÃO I

Preparação e publicação pela IFRB de um conjunto de propostas relativas às consignações de substituição

1. Para fins desta Resolução, a expressão «consignação a transferir» refere-se a uma consignação de frequência a uma estação do serviço fixo nas partes das faixas de frequências anteriormente atribuídas ao serviço fixo e agora atribuídas a outros serviços, e para a qual deve ser encontrada uma consignação de substituição em conformidade com a presente Resolução.

2. A Comissão, logo que possível após o fim da aplicação do procedimento descrito no anexo à Resolução n.º 9, estabelece um conjunto de propostas com vista à substituição de todas as consignações a transferir, inscritas na secção provisória do ficheiro de referência nas faixas compreendidas entre 4000 kHz e 27 500 kHz e que a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) transferiu do serviço fixo para outros serviços.

3. As consignações a transferir são tratadas pela ordem das datas inscritas na coluna 2d, como indicado na Resolução n.º 9. Por outro lado, todas as consignações a transferir que tenham a mesma data revista são tratadas pela ordem seguinte:

1) Consignações para utilização nacional;
2) Consignações para utilização internacional.

Quando da aplicação desta disposição, as consignações a transferir serão tratadas por lotes, sem que seja concedida prioridade às consignações de qualquer administração.

4. As consignações a transferir de classe de funcionamento C só são tratadas quando tenham sido encontradas soluções para todas as consignações transferidas das classes de funcionamento A ou B.

5. As consignações a tranferir de classe de fucionamento C serão repartidas, tanto quanto possível, uniformente pelas faixas que estão ainda atribuídas ao serviço fixo.

6. Quando aplicar as disposições da presente secção, e para proteger as consignações inscritas, a Comissão utilizará apenas o ficheiro de referência reestruturado em conformidade com o procedimento descrito no anexo à Resolução n.º 9.

7. Em 1 de Julho de 1983, a Comissão envia a cada administração um documento a indicar todas a consignações relativas a essa administração, explicitando aquelas que estão inscritas na secção provisória do ficheiro de referência e as que se propõem em substituição.

Secção II

Exame e aprovação das consignações propostas

8. Ao receber o documento mencionado no § 7, cada administração acusa a sua recepção e examina as consignações de substituição propostas para se certificar de que são aceitáveis. Logo que possível informa a Comissão:

Do seu acordo; ou
Das consignações que considera inaceitáveis.

Neste último caso, a administração dá, o mais rapidamente possível, as suas razões à Comissão.

9. A Comissão examina as respostas recebidas de acordo com o § 8 e procura satisfazer as administrações interessadas, no que se refere às consignações propostas consideradas inaceitáveis, procedendo de preferência a pequenas modificações. Para isso procede do seguinte modo:

Durante 6 meses a partir de 1 de Julho de 1983 reúne todas as respostas recebidas de acordo com o § 8 e a seguir trata-as em conjunto e sem dar prioridade à resposta de qualquer administração. Depois,
Reúne todas as respostas recebidas, de acordo com o § 8, entre 6 e 9 meses a partir de 1 de Julho de 1983, e a seguir trata a segunda série como indicado acima para a primeira série.

10. O procedimento descrito na presente secção termina a 1 de Julho de 1984.

Secção III

Medida a tomar pela Comissão

11. Quando estiver terminado o procedimento prescrito nas secções I e II do presente anexo, a Comissão inscreve no ficheiro de referência todas as consignações de substituição aceites pelas administrações, com uma anotação a indicar:

Que terão o mesmo estatuto que as consignações que não foram transferidas, em conformidade com as disposições da Resolução n.º 9;
O seu carácter provisório, em conformidade com as disposições no n.º **1311**.

12. Em todas as consignações mencionadas no § 11 a Comissão inscreve a data apropriada na coluna 2d do ficheiro de referência, em conformidade com o § 6.3 do anexo à Resolução n.º 9.

13. A Comissão publica a seguir, em forma de suplementos recapitulativos à Lista Internacional das Frequências, todas as consignações de substituição efectuadas em conformidade com o procedimento prescrito na parte I do presente anexo.

14. Depois da publicação dos suplementos prescitos no § 13, a Comissão informa por telegrama todas as administrações cujas consignações a transferir, de classe de funcionamento A, ainda em suspenso não puderam ser transferidas.

Secção IV

Entrada em vigor do artigo 12

15. A partir de 1 de Julho de 1984, as disposições do artigo 12 aplicar-se-ão às faixas de frequências atribuídas ao serviço fixo entre 4000 kHz e 27 500 kHz.

16. Depois dessa data, uma administração que tenha sido informada pela Comissão, em aplicação do § 14, de que algumas das suas considerações a transferir não foram substituídas em conformidade com o procedimento de transição, poderá escolher novas consignações, tendo em conta as consignações inscritas no ficheiro de referência em aplicação do § 11, e apresentará à Comissão novas notificações de acordo com o artigo 12.

PARTE II

Fase de transferência

SECÇÃO V

Medidas a tomar pelas administrações

17. Depois de ter recebido e aceitado as consignações de substituição das suas consignações inscritas e transferidas por decisão da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), uma administração efectua a passagem da antiga consignação para a nova, o mais tardar:

Em 1 de Julho de 1989, no caso das faixas de frequência superiores a 10 MHz;
Em 1 de Julho de 1994, no caso das faixas de frequência inferiores a 10 MHz.

18. Depois de ter efectuado a passagem da antiga consignação para a consignação de substituição, uma administração informa rapidamente do facto a Comissão, e esta suprime, no ficheiro de referência, o símbolo especial inscrito em frente da consignação de substituição em conformidadde com o n.º **1311** (v. o § 11 acima), o que indica que a transferência foi efectuada, e inscreve a data da substituição na coluna 2c. A data que figurava inicialmente na coluna 2c em frente da consignação transferida é inscrita na coluna «Observações».

19.1 Se, depois de ter efectuado a passagem a uma consignação de substituição de classe de funcionamento A, uma administração sofrer interferência prejudicial ou receber uma queixa de interferência prejudicial relativa a uma outra consignação de classe de funcionamento A, essa administração:

a) Procurará resolver o problema com qualquer outra administração em causa;
b) E, não sendo possível encontrar uma solução, pode escolher e propor à Comissão uma consignação de substituição (1).

19.2 Se, após ter efectuado a passagem a uma consignação de substituição de classe de funcionamento B, uma administração sofrer interferência prejudicial a essa classe de funcionamento, pode escolher e apresentar à Comissão uma ou outra consignação de substituição (1).

20. Após parecer favorável da Comissão relativamente à consignação de substituição escolhida em aplicação dos §§ 19.1, alínea *b*), ou 19.2, essa administração pode pedir a inscrição na coluna 2d do ficheiro de referência, em frente dessa consignação, da data comum de 1 de Janeiro de 1982 para a classe de funcionamento A e de 2 de Janeiro de 1982 para a classe de funcionamento B.

SECÇÃO VI

Significado das datas inscritas no ficheiro de referência

21. O significado das datas relativas às consignações transferidas é mencionado no anexo à Resolução n.º 9 e no artigo 12.

ANEXO B À RESOLUÇÃO N.º 8

Procedimento provisório relativo às fichas de notificação de frequência nas faixas atribuídas em exclusivo ou em partilha ao serviço fixo entre 4000 kHz e 27 500 kHz

1. Durante o período compreendido entre 1 de Janeiro de 1982 e 30 de Junho de 1984 qualquer administração que tenha necessidade de uma consignação com urgência tal que não possa aguardar o fim do período de transição poderá notificar uma nova consignação nas faixas atribuídas em exclusivo ou em partilha ao serviço fixo entre 4000 kHz e 27 500 kHz. As fichas de notificação assim apresentadas devem conter as informações indicadas na secção pertinente do apêndice 1.

2. Considera-se que qualquer administração que apresente uma ficha de notificação em conformidade com o § 1 anterior aceita que a sua consignação:

a) Seja de natureza provisória;
b) Seja submetida ao procedimento de revisão descrito no anexo C da presente Resolução e deva, se for caso disso, ser modificada, tendo em conta os resultados dessa revisão;

(1) Se uma administração lhe pedir, a Comissão ajudá-la-á a aplicar o procedimento descrito nos §§ 19.1, alínea *b*), ou 19.2.

c) Não cause interferência prejudicial a qualquer consignação inscrita no ficheiro de referência e com direito a protecção.

3. Ao receber uma ficha de notificação completa e em conformidade com o § 1, a Comissão examina-a relativamente ao n.º **1240** e devolve à administração notificadora qualquer ficha de notificação que não esteja em conformidade com essa disposição, indicando os motivos dessa devolução.

4. As fichas de notificação conformes com o n.º **1240** são inscritas numa secção especial da circular semanal com uma anotação a indicar que estão sujeitas ao procedimento provisório e ao procedimento de revisão descritos, respectivamente, no presente anexo e no anexo C à presente Resolução. As consignações notificadas em aplicação do n.º **1218** são, além disso, anotadas em conformidade.

5. A Comissão elabora e mantém em dia a lista especial de todas as fichas de notificação tratadas de acordo com o § 4.

ANEXO C À RESOLUÇÃO N.º 8

Procedimento de revisão relativo às consignações de frequência a estações do serviço fixo nas faixas compreendidas entre 4000 kHz e 27 500 kHz

1. A partir de 1 de Julho de 1984 a Comissão examinará, em conformidade com as disposições apropriadas do artigo 12, todas as consignações provisórias da lista especial elaborada de acordo com o anexo B à presente Resolução, com vista à sua inscrição no ficheiro de referência.

2. Para fins deste exame, as consignações serão tratadas sem que seja dada prioridade a qualquer administração. Todavia, as consignações notificadas nos termos do n.º **1218** serão tratadas em primeiro lugar.

3. Todas as consignações provisórias devem ser examinadas pela Comissão tendo em conta a probabilidade de interferência prejudicial originária de consignações inscritas no ficheiro de referência a título provisório em aplicação das disposições do anexo A da presente Resolução e tendo em conta a probabilidade de interferência prejudicial causada a estas últimas consignações. Segundo as conclusões formuladas pela Comissão na sequência deste exame serão tomadas as seguintes medidas:

4. *Conclusão favorável relativamente ao § 3 anterior.*

4.1. As consignações provisórias notificadas nos termos do n.º **1218** são inscritas no ficheiro de referência com a data de 1 de Julho de 1984, na coluna 2d.

4.2. As outras consignações provisórias devem ser examinadas em conformidade com o n.º **1242** com respeito às consignações de frequência inscritas no ficheiro de referência à data do início do procedimento provisório descrito no anexo B à presente resolução. Conforme as conclusões da Comissão, assim se aplicam as disposições pertinentes do artigo 12. Quando tais consignações devam ser inscritas, a data de 1 de Julho de 1984 inscrever-se-á na coluna 2d.

5. *Conclusão desfavorável relativamente ao § 3 anterior.*

Tendo em conta a classe de funcionamento da consignação e o conteúdo do ficheiro de referência reestruturado, a Comissão propõe consignações de substituição apropriadas e inscreve-as provisoriamente com data de 1 de Julho de 1984 na coluna 2d.

6. Quando terminar esse exame, a Comissão elabora e publica sob a forma de anexo à sua circular semanal uma lista temporária de consignações inscritas e de consignações de substituição propostas, e envia um exemplar dessa lista, assim como um extracto por país, a cada uma das administrações que tenha consignações provisórias na lista especial mencionada no § 1 do presente anexo.

7. Ao receberem a lista mencionada no § 6, as administrações estudam as consignações propostas em substituição das suas consignações temporárias e, no prazo de 5 meses a contar da data de publicação da lista temporária, comunicarão à Comissão se as consignações propostas são aceitáveis. Se as consignações propostas não forem aceitáveis, as administrações devem indicar os motivos.

8. Ao aceitarem as consignações propostas, as administrações devem indicar a data mais tardia em que as vão pôr ao serviço. Essa data não deve exceder o prazo de um ano a contar da publicação da lista temporária.

9. Ao examinar as respostas dadas em aplicação do § 7, a Comissão procura, se necessário por meio de pequenos ajustamentos, dar satisfação às administrações interessadas relativamente às consignações propostas e julgadas inaceitáveis, e propõe-lhes frequências de substituição. Simultaneamente, a Comissão substitui a inscrição provisória pertinente pela nova frequência proposta.

10. Se, à data de 1 de Julho de 1985, as inscrições provisórias efectuadas por força dos §§ 5 ou 9 não tiverem sido aceites pelas administrações interessadas, a Comissão substitui-as pelas consignações provisórias correspondentes com uma anotação apropriada. A partir dessa data não são tidas em consideração nem a lista especial nem a lista temporária.

11. As administrações que tenham consignações provisórias para as quais não tenha sido possível encontrar consignações de substituição aceitáveis são livres de escolher novas consignações de substituição e enviam novas fichas de notificação em conformidade com as disposições do artigo 12. A Comissão auxilia a administração que lho peça a aplicar o procedimento descrito no presente parágrafo.

RESOLUÇÃO N.º 9

Relativa à revisão de certas partes do ficheiro de referência internacional das frequências nas faixas de frequências atribuídas ao serviço fixo compreendidas entre 3000 kHz e 27 500 kHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário melhorar a precisão e a fiabilidade do ficheiro de referência internacional das frequências, especialmente nas faixas atribuídas em exclusivo ou em partilha ao serviço fixo compreendidas entre 3000 kHz e 27 500 kHz;
b) Que iniciativas anteriores da IFRB mostraram que é possível, graças à cooperação das administrações, melhorar sensivelmente a precisão e a fiabilidade do ficheiro de referência;

reconhecendo

a) Que para resolver este problema é preciso atáca-lo à escala mundial num espírito de cooperação activa;
b) Que para rever certas partes do ficheiro de referência é necessário definir um procedimento que preveja a cooperação de todas as administrações e da IFRB;

reconhecendo, por outro lado,

a) Que parte importante das consignações relativas ao serviço fixo se destina a utilizações diferentes da exploração regular;
b) Que a identificação da classe de funcionamento dessas consignações no ficheiro de referência facilitaria a gestão internacional das faixas de frequências atribuídas ao serviço fixo nessa parte do espectro e deveria constituir uma característica tipo ficheiro de referência;
c) Que a determinação dos horários regulares de funcionamento facilitaria igualmente a gestão desse serviço;
d) Que esta maneira de identificar a classe de funcionamento e o horário regular de funcionamento dessas consignações deveria ser aplicada a qualquer procedimento destinado à revisão;
e) Que, uma vez aplicadas , estas medidas constituiriam uma base sólida para a adopção dos arranjos de transição necessários à substituição das consignações às estações do serviço fixo a transferir de acordo com decisões da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979):

decide

adoptar o procedimento descrito em anexo à presente Resolução tendo em vista a revisão das partes do ficheiro de referência relativas às faixas atribuídas ao serviço fixo entre 3000 kHz e 27 500 kHz;

decide, por outro lado,

que a presente resolução entre em vigor em 1 de Janeiro de 1980;

convida as administrações e a IFRB

a colaborarem sem reservas, e prontamente, na aplicação deste procedimento.

ANEXO DA RESOLUÇÃO N.º 9

Procedimento aplicável à revisão das inscrições no ficheiro de referência nas faixas atribuídas ao serviço fixo entre 3000 kHz e 27 500 kHz

1. A Comissão extrai do ficheiro de referência e comunica a cada administração, logo que possível depois de 1 de Janeiro de 1980, uma lista nacional (1) individual de todas as consignações (2) inscritas no ficheiro de referência em nome dessa administração ou para as quais foram recebidas fichas de notificação antes dessa data, nas faixas atribuídas em exclusivo ou em partilha ao serviço fixo entre 3000 kHz e 27 500 kHz. Ao mesmo tempo, a Comissão indica a essa administração as consignações para as quais pareça disponível um outro meio de telecomunicação.

2. Ao receber a lista mencionada no § 1 anterior cada administração acusa a sua recepção enviando um telegrama à Comissão. Uma administração que não tenha recebido a sua lista nacional até 1 de Abril de 1980 informa disso imediatamente

(1) A Comissão determina por um inquérito prévio o número de exemplares da lista nacional a enviar a cada administração. A lista nacional é apresentada da mesma maneira que a Lista Internacional das Frequências, mas o modo de envio da lista pode variar conforme as circunstâncias, em função dos pedidos das administrações e sob reserva do acordo da Comissão.

(2) Para as necessidades do presente procedimento, as consignações a estações do serviço fixo aeronáutico são consideradas como estações do serviço fixo na ou nas faixas em causa.

a Comissão, que envia sem demora a essa administração um outro exemplar. A Comissão deve certificar-se de que cada uma das administrações recebeu de facto a lista nacional relativa às suas próprias consignações.

3. Depois, de ter acusado a recepção da sua lista nacional, cada administração examina esta e:

a) Suprime qualquer inscrição que já não seja necessária;

b) Classifica as inscrições restantes do serviço fixo utilizando os símbolos seguintes:

Símbolo A — consignação destinada a ser utilizada para exploração regular que não é assegurada por um outro meio satisfatório de telecomunicação;

Símbolo B — consignação destinada a ser utilizada como consignação de reserva de um outro meio de telecomunicação;

Símbolo C — consignação para utilização ocasional de reserva que não exiga protecção internacionalmente reconhecida contra interferências prejudiciais;

c) Indica as horas normais (UTC) de funcionamento da consignação ou indica-as em serviço de dia (HJ), serviço de noite (HN) ou serviço de transição (HT).

4. Depois de ter aplicado as disposições referidas nos §§ 2 e 3 anteriores, cada administração devolve a sua lista nacional anotada à Comissão logo que possível e o mais tardar até 31 de Março de 1981.

5. A Comissão envia a cada administração um aviso de recepção da sua lista nacional anotada. No caso de dificuldade especial ou a pedido das administrações, a Comissão dá-lhes a assistência ou os conselhos que, consoante o caso, as circunstâncias justifiquem.

6. Em 1 de Outubro de 1981 a Comissão publicará uma secção provisória do ficheiro de referência referente unicamente às consignações nas faixas atribuídas ao serviço fixo entre 3000 kHz e 27 500 kHz. Essa secção incluirá todas as consignações que figuram nas listas nacionais, tais como anotadas pelas administrações, e as consignações que figuram nas listas nacionais que não terão sido devolvidas à Comissão, com excepção das consignações que tenham sido objecto de uma conclusão desfavorável relativamente ao n.º **1240,** sem referência ao n.º **342.** As consignações incritas nessa secção provisória serão anotadas como a seguir se indica:

6.1. Todas as consignações levarão um símbolo a indicar uma referência à presente Resolução.

6.2. As datas inscritas nas colunas 2a, 2b ou 2d ou o símbolo inscrito na coluna 2d e as conclusões que figuram na parte apropriada da coluna 13 serão modificadas como indicado no quadro anexo.

6.3. As consignações de frequência às estações do serviço fixo nas partes de faixas reatribuídas a outros serviços levarão um símbolo a indicar tratarem-se de consignações para as quais se encontrarão consignações de substituição em conformidade com a Resolução n.º 8, mantendo a data e o estatuto indicados no quadro anexo.

7. Antes de aplicar os §§ 1.2 e 2.2 do quadro anexo às consignações dos países com um pequeno número de consignações, a Comissão consulta a administração cuja consignação motivou uma conclusão desfavorável para se certificar de que não foi produzida qualquer interferência real desde a inscrição da consignação. Se a administração responder que não foi produzida qualquer interferência, a Comissão inscreverá o símbolo correspondente à classe de funcionamento A da consignação e modificará a conclusão desfavorável. Em qualquer outro caso aplicará as disposições do n.º **1218** para encontrar uma outra frequência e substituirá a frequência consultando a administração interessada.

8. Logo que possível, depois de 1 de Janeiro de 1982, a Comissão deverá:

8.1. Publicar um suplemento à secção provisória do ficheiro de referência contendo as consignações para as quais tenham sido recebidas fichas de notificação entre 1 de Janeiro de 1980 e 31 de Dezembro de 1981 e inscritas no ficheiro de referência.

8.2. Enviar às administrações um exemplar da respectiva lista nacional.

8.3. Incorporar no ficheiro de referência a secção provisória mencionada no § 6, conluindo as consignações mencionadas no § 8.1 anterior em substituição das inscrições correspondentes nas faixas de frequência em questão.

9. Depois de ter cumprido estas tarefas, a Comissão publicará um relatório a indicar os resultados obtidos graças a este procedimento.

QUADRO ANEXO

	Coluna 13a	Coluna 2	Coluna 13c
1. Faixas de frequências inferiores a 3900 kHz (Região 1), 3950 kHz (Região 3) e 4000 kHz (Região 2)			
1.1. Listas devolvidas à Comissão:			
Classe de funcionamento A das consignações	Suprimir todos os símbolos a indicar as conclusões relativamente ao n.º **1241.**	Substituir a data em 2a ou 2b por 1 de Janeiro de 1982 em 2a.	RES 9 SUP RR 515
Classes de funcionamento B ou C das consignações	Idem	Substituir a data em 2a ou 2b por 2 de Janeiro de 1982 em 2b.	RES 9 SUP RR 515
Inscrições de acordo com o n.º **342** do Regulamento das Radiocomunicações.	INA	Substituir a data por 5 de Janeiro de 1982 em 2b.	RES 9

	Coluna 13a	Coluna 2	Coluna 13c
1.2. Listas não devolvidas à Comissão:			
Consignações inscritas com uma data em 2a	INA	Substituir a data por 3 de Janeiro de 1982 em 2a.	RES 9
Consignações inscritas com uma data em 2b	INA	Substituir a data de 4 de Janeiro de 1982 por 2b.	RES 9
Inscrições de acordo om o n.º **342** do Regulamento das Radiocomunicações.	INA	Substituir a data por 5 de Janeiro de 1982 em 2b.	RES 9
2. Faixas de frequências superiores a 3900 kHz (Região 1), 3950 kHz (Região 3) e 4000 kHz (Região 2)			
2.1. Listas devolvidas à Comissão:			
Classe de funcionamento A das consignações	Suprimir todos os símbolos a indicar as conclusões relativamente ao n.º **1242.**	Substituir a data ou o símbolo em 2d por 1 de Janeiro de 1982.	RES 9 SUP RR 515
Classes de funcionamento B ou C das consignações	Idem	Substituir a data ou o símbolo em 2d por 2 de Janeiro de 1982.	RES 9 SUP RR 515
Inscrições de acordo com o n.º **342** do Regulamento das Radiocomunicações.	INA	Substituir a data ou o símbolo em 2d por 5 de Janeiro de 1982.	RES 9
2.2. Listas não devolvidas à Comissão:			
Conclusão favorável relativamente ao n.º **1240**	INA	Substituir a data ou o símbolo em 2d por 3 de Janeiro de 1982.	RES 9
Inscrições de acordo om o n.º **342** do Regulamento das Radiocomunicações.	INA	Substituir a data ou o símbolo em 2d por 5 de Janeiro de 1982.	RES 9

RESOLUÇÃO N.º 10

Relativa à utilização de ligações radiotelegráficas e radiotelefónicas pelas organizações da Cruz Vermelha, do Crescente Vermelho e do Leão-e-Sol Vermelho

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a obra universal de socorro das organizações da Cruz Vermelha, do Crescente Vermelho e do Leão-e-Sol Vermelho assume importância crescente e é muitas vezes indispensável;

b) Que, nessas circunstâncias, acontece frequentemente que os meios normais de comunicações estão sobrecarregados, avariados, completamente interrompidos ou indisponíveis;

c) Que é necessário facilitar por todos os meios possíveis a intervenção eficaz dessas organizações nacionais e internacionais;

d) Que nas intervenções dessas organizações são essenciais meios de ligação rápidos e autónomos;

e) Que é necessário que as organizações nacionais da Cruz Vermelha, do Crescente Vermelho e do Leão-e-Sol Vermelho, empenhadas numa acção de socorro internacional, possam comunicar entre si e com a Comissão Internacional da Cruz Vermelha e a Liga das Sociedades da Cruz Vermelha:

decide solicitar instantemente às administrações

1. Que tomem em consideração as necessidades eventuais das organizações da Cruz Vermelha, do Crescente Vermelho e do Leão-e-Sol Vermelho em meios de radiocomunicação se os meios normais de comunicação estiverem interrompidos ou indisponiveís;

2. Que consignem a essas organizações o número mínimo de frequências de trabalho necessárias, em conformidade com o quadro de atribuição das faixas de frequências. Para os circuitos fixos entre 3 MHz e 30 MHz escolher-se-á, na medida do possível, frequências adjacentes às faixas do serviço de amador;

3. Que tomem todas as medidas praticáveis para proteger essas ligações contra interferências prejudiciais.

RESOLUÇÃO N.º 11

Relativa à utilização das radiocomunicações para a segurança dos navios e das aeronaves dos Estados não envolvidos num conflito armado (1)

A Conferência Administrativa Mundial das Radiocomunciações (Genebra, 1979),

considerando

a) Que o direito internacional reconhece que os Estados não envolvidos num conflito armado, chamados daqui em diante Estados neutros, o direito de exercer com segurança actividades comerciais normais sem risco de danos causados por Estados envolvidos num conflito armado;
b) Que, na vizinhança do local de um conflito armado, os navios e aeronaves de um Estado neutro correm um risco considerável;
c) Que, para a salvaguarda da vida humana, é desejável, nessas circunstâncias, poder identificar esses navios e aeronaves e determinar a sua posição;
d) Que as radiocomunicações oferecem um meio rápido de identificar e de localizar os navios e aeronaves antes de entrarem numa zona de conflito armado e enquanto atravessam essa zona;

tendo em conta

a) Que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) adoptou uma recomendação relativa aos transportes sanitários e à segurança dos navios e aeronaves dos Estados não envolvidos num conflito armado; e
b) Que a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) tratou em profundidade da questão dos transportes sanitários no quadro do Regulamento das Radiocomunicações, acrescentando uma nova secção II ao artigo 40, mas que não tomou disposições para a segurança dos navios e aeronaves dos Estados neutros:

decide convidar as administrações

1. A terem presentes as condições a satisfazer para identificar e localizar os navios e aeronaves dos Estados neutros e para comunicar com eles, e especialmente a possibilidade de utilizar os radares secundários aeronáuticos de vigilância e os equipamentos de resposta de radar marítimos;

2. A estudarem se é necessário estabelecer um procedimento aceitável e, na afirmativa, a defini-lo de modo a contribuir para garantir a segurança dos navios e aeronaves dos Estados neutros em período de conflito armado, recorrendo ao anexo à presente Resolução que descreve um procedimento possível;

convida o Conselho de Administração

a considerar a inscrição desta questão na agenda da próxima conferência administrativa mundial das radiocomunicações competente;

encarrega o secretário-geral

a comunicar o conteúdo da presente resolução à OMCI e à OACI para que tomem as medidas apropriadas.

ANEXO À RESOLUÇÃO N.º 11

Procedimento possível para a identificação e a localização dos navios e aeronaves dos Estados neutros

Para os fins de anunciar e de identificar navios e aeronaves do Estado não envolvidos num conflito armado, mencionados daqui em diante como transportes neutros, uma transmissão completa dos sinais de urgência descritos nos n.ºs **3196** e **3197** será seguida, em radiotelegrafia, pelo grupo único «NNN» e, em radiotelefonia, unicamente pela palavra «NEUTRAL» pronunciada como em francês.

As frequências enumeradas no n.º **3201** podem ser utilizadas pelos transportes neutros para fins de auto-identificação e de estabelecimento das comunicações. Logo que possível, deve transferir-se a comunicação para uma frequência de trabalho apropriada.

A utilização do sinal como descrito no § 1.º indica que a mensagem que se segue diz respeito a um transporte neutro. A mensagem deve conter os seguintes dados:

a) O indicativo de chamada ou qualquer outro meio reconhecido de identificação do veículo de transporte neutro;
b) A posição do veículo de transporte neutro;
c) O número e o tipo de veículos de transporte neutro;

---

(1) Substitui a Recomendação Mar2-17 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

d) O itinerário previsto;
e) A duração estimada do percurso e as horas de partida e chegada previstas, consoante o caso;
f) Qualquer outra informação, tal como altitude de voo, frequências radioeléctricas de escuta, línguas utilizadas, modos e códigos dos sistemas de radares secundários de vigilância.

As disposições da secção I do artigo 40 apilcam-se, se necessário, à utilização de sinais de urgência por transportes neutros.

A identificação e a localização de navios podem efectuar-se utilizando equipamentos de resposta de radar marítimos normalizados.

A identificação e a localização de aeronaves neutras podem efectuar-se utilizando o sistema de radar secundário de vigilância (SSR), tal como especificado no anexo 10 à Convenção de Chicago de 7 de Dezembro de 1944, relativa à Aviação Civil Internacional, actualizado periodicamente. O modo e o código SSR a reservar para uso exclusivo das aeronaves neutras devem ser definidos pelas partes no conflito ou uma das partes no conflito, agindo de comum acordo ou isoladamente, em conformidade com procedimentos recomendados pela Organização de Aviação Civil Internacional.

A utilização das radiocomunicações para anunciar e identificar os transportes neutros é facultativa. Contudo, se forem utilizadas, aplicam-se as disposições do Regulamento das Radiocomunicações e, em especial, as dos artigos 37 e 38.

RESOLUÇÃO N.º 12

Relativa às novas regras de formação dos indicativos de chamada

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que numerosos países, em especial os países em desenvolvimento, têm necessidade urgente de novos indicativos de chamada;
b) Que o Regulamento das Radiocomunicações (Genebra, 1979) contém, no artigo 25, novas regras de formação dos indicativos de chamada;
c) Que, de acordo com o artigo 69 do Regulamento, essas regras entrarão em vigor em 1 de Janeiro de 1981;

solicita instantemente às administrações interessadas

que utilizem as novas regras de formação dos indicativos de chamada contidas no artigo 25 do Regulamento, logo que necessário e mesmo antes da data fixada para a sua entrada em vigor;

encarrega o secretário-geral

de publicar as informações recebidas dessas administrações sobre a utilização das novas regras de formação dos indicativos de chamada.

RESOLUÇÃO N.º 13

Relativa à formação dos indicativos de chamada e à atribuição de novas séries internacionais (1)

A Conferência Adminisitrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A recomendação da Conferência Internacional das Radiocomunicações (Atlantic City, 1947) relativa à formação dos indicativos de chamada;
b) O pedido crescente de indicativos de chamada devido tanto ao aumento do número dos Membros da União como ao das necessidades dos países já Membros;
c) As informações fornecidas pelo secretário-geral no que se refere à atribuição de séries de indicativos de chamada desde 1947 e as possibilidades do sistema de formação dos indicativos de chamada actualmente utilizado;

pensando

que convém, tanto quanto possível, evitar modificar os indicativos de chamada actualmente em uso;

notando

a) Que, estando esgotadas as antigas séries de indicativos de chamada, formadas quer por três letras, quer por um algarismo e duas letras, se recorreu a novas séries, compostas por uma letra, um algarismo e uma letra, não podendo em nenhum caso esse algarismo ser 0 ou 1;

---

(1) Substitui a Resolução n.º 8 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

b) Que o método mencionado na alínea *a*) não se aplica às séries começadas pelas seguintes letras: B, F, G, I, K, M, N, R, U e W;
c) Que foi apresentada à presente Conferência uma proposta visando formar novas séries de indicativos de chamada, substituindo o terceiro caracter, que é uma letra, por um algarismo;
d) Que isso provocaria, contudo, modificações sucessivas à secção III do artigo 25:

decide

1. Que o secretário-geral continue a convidar instantemente as administrações:
1.1. A utilizarem ao máximo as possibilidades das séries que lhes estão actualmente atribuídas, a fim de evitar, tanto quanto possível, novos pedidos;
1.2. A reexaminarem os indicativos de chamada consignados até ao presente, com vista a libertar eventualmente certas séries e a colocá-las à disposição da União;
2. Que o secretário-geral forneça todos os conselhos úteis às administrações que lhos peçam sobre os meios de empregar nas melhores condições de economia, como é de regra, as séries que lhes estão atribuídas;
3. Que se, apesar de tudo, parecer que devem esgotar-se todas as possibilidades do sistema actual de formação dos indicativos de chamada antes da próxima Conferência Administrativa Mundial das Radiocominicações competente, o secretário-geral:
3.1. Estude a possibilidade de formar novas séries de indicativos de chamada na base das propostas mencionadas na alínea *c*);
3.2. Difunda uma circular:
3.2.1. A expor a situação;
3.2.2. A convidar instantemente as administrações a enviarem-lhe propostas sobre os meios de resolver essa situação;
4. Que, auxiliado pelas informações assim reunidas, o secretário-geral estabeleça e apresente à próxima Conferência Administrativa Mundial das Radiocomunicações competente um relatório que inclua os seus comentários e sugestões.

RESOLUÇÃO N.º 14

Relativa à transferência de tecnologia

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Os termos da Resolução relativa ao desenvolvimento e à cooperação económica internacional (n.º 3362.S-VII), adoptada pela Assembleia Geral das Nações Unidas quando da sua 7.ª secção extraordinária, bem como os termos da secção III dessa Resolução, que realça o papel da ciência e da tecnologia ao serviço do desenvolvimento;
b) Os termos da Resolução n.º 32/160 da Assembleia Geral, que proclama um Decénio dos Transportes e das Comunicações em África durante o período de 1978-1987 e que prevê que um ano desse Decénio seja proclamado Ano Mundial das Comunicações;
c) As decisões da Assembleia Geral relativas à preparação de uma estratégia de desenvolvimento internacional durante o Terceiro Decénio da Nações Unidas para o desenvolvimento, fixado para os anos 80 (Resolução n.º 33/193);

notando

que, aquando da recente Conferência das Nações Unidas sobre a Aplicação da Ciência e da Tecnologia ao Desenvolvimento (Viena, Agosto de 1979), os governos adoptaram uma Declaração relativa a um programa de acção, com vista a acelerar a aplicação da ciência e da tecnologia ao desenvolvimento;

consciente

da importância de que se reveste a aplicação da ciência e da tecnologia no domínio das telecomunicações para o desenvolvimento dos serviços e da realização de objectivos sociais, económicos e culturais;

consciente igualmente

da importância do papel da UIT como instituição especializada das Nações Unidas encarregada de empreender acções para a realização dos objectivos enunciados na Convenção Internacional das Telecomunicações:

decide convidar instantemente

1. Os governos dos países Membros, especialmente os dos países em desenvolvimento, e as suas administrações a tomarem medidas para estabelecerem políticas de desenvolvimento das telecomunicações nacionais com vista a reforçarem as suas actividades de cooperação técnica para a realização de uma transferência eficaz da tecnologia das telecomunicações, a fim de melhorar todos os tipos de serviços de telecomunicações, especialmente no domínio das radiocomunicações;

2. As administrações a participarem, tanto quanto lhes seja praticamente possível, nos grupos de estudo das Comissões Consultivas Internacionais da União, que são lugares importantes para a transferência de informações sobre o progresso e a aplicação das telecomunicações à tecnologia;

decide encarregar o secretário-geral

1. De intensificar ainda mais as actividades de cooperação técnica visando a planificação, o estabelecimento e a exploração de sistemas de telecomunicações, assim como a formação de pessoal para esses fins, com vista a acelerar a transferência e a boa aplicação da tecnologia em benefício do desenvolvimento, tendo em conta as necessidades próprias de cada país;

2. De procurar obter, no plano internacional, recursos que permitiam acelerar esses programas de cooperação técnica, especialmente fundos que pudessem ser atribuídos no quadro do Programa de Acção de Viena;

3. De levar a presente Resolução ao conhecimento de todos os países membros da União e dos órgãos competentes das Nações Unidas;

convida o conselho de administração

a acompanhar os progressos alcançados na realização dos objectivos enunciados pela presente Resolução e, se necessário, a apresentar um relatório sobre esses progressos à próxima Conferência de Plenipotenciários.

RESOLUÇÃO N.º 15

Relativa à cooperação internacional e à assistência técnica no domínio das radiocomunicações espaciais (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra,1979),

considerando

a) Que grande número de países membros da União Internacional das Telecomunicações não estão em condições de beneficiar imediatamente das vantagens proporcionadas pela técnica dos satélites para o desenvolvimento dos seus serviços de telecomunicações;

b) Que esses países poderiam retirar enormes vantagens dos programas de assistência técnica executados sob os auspícios da União;

notando

a) Que os sistemas internacionais de telecomunicações por satélite estão sujeitos às disposições da Convenção e dos Regulamentos da União e que todos os países, incluindo especialmente os países em desenvolvimento, podem, por esse facto, participar nos sistemas de telecomunicações espaciais;

b) Que terão de ser resolvidos alguns problemas para que os países em desenvolvimento possam participar efectivamente nos sistemas internacionais de telecomunicações espaciais e integrar esses sistemas nas suas redes de telecomunicações nacionais;

decide convidar o conselho de administração

1. A chamar a atenção das administrações para os meios que lhes permitem beneficiar de assistência técnica no domínio da aplicação das telecomunicações espaciais;

2. A estudar a melhor maneira de os países membros da União poderem formular e apresentar pedidos de assistência a fim de receberem o máximo de auxílio financeiro e outros;

3. A estudar a melhor maneira de poderem ser utilizados os fundos tornados disponíveis pela Organização das Nações Unidas em aplicação da sua Resolução n.º 1721, a fim de prestar assistência sob forma técnica e outras às administrações dos países membros da União, para que estas possam utilizar efectivamente as telecomunicações espaciais;

4. A estudar como os trabalhos das comissões consultivas e outros organismos da União poderão ser utilizados mais eficazmente para fornecer às administrações dos países membros da União informações e assistência para o desenvolvimento das radiocomunicações espaciais.

RESOLUÇÃO N.º 16

Relativamente ao papel das telecomunicações no desenvolvimento rural integrado

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) Substitui a Resolução Spa 4 da Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1963).

lembrando

a Resolução n.º 3362 (S-VII) da 7.ª Sessão Extraordinária da Assembleia Geral das Nações Unidas, que, entre outras coisas, pediu aos Estados membros que encoragem o desenvolvimento rural integrado nos países em desenvolvimento;

lembrando, por outro lado,

a importância atribuída ao desenvolvimento rural por diversas conferências intergovernamentais durante o 2.º Decénio das Nações Unidas para o Desenvolvimento, que reconheceram a necessidade de intensificar os esforços de desenvolvimento com vista a satisfazer as aspirações das comunidades rurais e a acelerar o desenvolvimento das infra-estruturas nas zonas rurais;

As Resoluções n.ºs 799 (Aplicação da estratégia internacional do desenvolvimento para o 2.º Decénio das Nações Unidas para o desenvolvimento) e 800 (As telecomunicações — un factor importante do desenvolvimento económico e social — papel desempenhado pela UIT neste domínio) do conselho de administração da União e a importância das telecomunicações para o desenvolvimento social e económico, assim como os diversos projectos e estudos empreendidos pela União para alcançar esses objectivos;

convencida

da importância das telecomunicações como elemento essencial da infra-estrutura das zonas rurais;

reconhecendo

a) Que à maior parte dos países em desenvolvimento faltam ainda recursos apropriados no domínio das telecomunicações;
b) Que actualmente numerosas regiões rurais do mundo não beneficiam das vantagens da técnica das telecomunicações;
c) Que as populações de numerosos países vivem isoladas umas das outras devido a obstáculos geográficos, tais como oceanos, montanhas, florestas e desertos;
d) Que as telecomunicações modernas e, em especial, as radiocomunicações, incluindo as técnicas espaciais, podem contribuir para vencer essas dificuldades e integrar as comunidades rurais no processo de desenvolvimento;
e) Que numerosos países em desenvolvimento não estão em condições de estabelecer completamente, utilizando os seus próprios recursos, redes modernas de telecomunicação;

notando

as possibilidades demonstradas das técnicas modernas das telecomunicações, que proporcionam o meio de levar às zonas rurais os serviços de ensino, de saúde e de protecção social, factores importantes de desenvolvimento social;

notando, além disso,

que uma rede rural adequada de telecomunicações pode contribuir largamente para estimular o desenvolvimento das actividades agrícolas e o de outros sectores importantes para o progresso económico e social;

dirige um apelo instante aos governos dos países membros

para que intensifiquen os seus esforços no domínio da cooperação técnica com vista ao desenvolvimento acelerado das telecomunicações em benefício das comunidades rurais, tendo em conta os recursos insuficientes de diversos países em desenvolvimento;

apela também para as administrações

a fim de que participem nos estudos efectuados pelos grupos autónomos especializados (GAS 3 e GAS 5) da CCITT/CCIR relativamente ao desenvolvimento das telecomunicações rurais;

pede ao secretário-geral

1. Que continue a dispensar atenção especial às actividades de assistência técnica da União com vista à planificação pormenorizada, à exploração e à manutenção da infra-estrutura das telecomunicações rurais, e à aplicação das técnicas apropriadas;

2. Que chame a atenção dos órgãos competentes das Nações Unidas para a presente Resolução; e

3. Que continue a cooperar com as instituições especializadas e as organizações do sistema das Nações Unidas no domínio do desenvolvimento rural integrado;

convida o conselho de administração

a examinar a presente Resolução, a velar por que seja aplicada e a dar conta dos progressos realizados no Relatório anual sobre as actividades da União.

RESOLUÇÃO N.º 17

Relativa à determinação da estrutura das comissões que uma conferência administrativa das radiodeterminações possa criar em função da sua agenda

A Conferência Administrativa Mundial das Radiocomuniações (Genebra, 1979),

considerando

a) Que certas administrações, por não disporem de pessoal suficiente, experimentam dificuldades em constituir as delegações que as representarão nas conferências administrativas das radiocomunicações, na razão de, pelo menos, um delegado por comissão constituída;

b) Que é hoje difícil às administrações preverem o número e o nome das comissões que serão constituídas em cada conferência antes da reunião desta, assim como os assuntos que convirá atribuir a cada uma;

c) Que a experiência adquirida em conferências precedentes pertinentes mostra que é desejável que o secretário-geral prepare com suficiente antecedência um projecto de estruturação para a conferências futuras;

reconhecendo

a) Que a organização dos trabalhos de uma conferência administrativa das radiocomunicações só pode ser decidida por essa conferência em função da sua agenda e das propostas e dos outros documentos que lhe são apresentados;

b) Que, no entanto, a organização de conferências anteriores pode proporcionar uma orientação útil para a de uma nova conferência e que as informações relativas à organização dos trabalhos de conferências passadas podem, por consequência, facilitar às administrações os preparativos com vista a conferências futuras:

decide

1. Que, uma vez fixada pelo Conselho de Administração a agenda de uma conferência administrativa das radiocomunicações, o secretário-geral envie às administrações, simultaneamente como um exemplar da resolução que contém essa agenda, um convite a comunicar a sua opinião sobre a estrutura que a conferência deveria ter tendo em conta a agenda;

2. Que, depois de ter recebido a resposta das administrações, o secretário-geral elebore para a conferência, em consulta com a IFRB e com o director da CCIR e tendo em conta a experiência adquirida em conferências anteriores de carácter análogo, um projecto de estrutura a indicar, simultaneamente com as comissões sugeridas, os artigos, apêndices, resoluções, recomendações e outros assuntos contidos na agenda que devem ser tratados por cada comissão;

3. Que o secretário-geral informe desse projecto de documento o Conselho de Administração e o envie como documento de informação a todas as administrações.

RESOLUÇÃO N.º 30

Relativa à revisão de inscrições do ficheiro de referência internacional das frequências a pedido de conferências anteriores

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1951) adoptou uma Lista Internacional das Frequências em que figuravam inscrições não conformes com o Quadro de Repartição das Faixas de Frequências de Atlantic City (1947);

b) Que a Conferência Administrativa das Radiocomunicações (Genebra, 1959) introduziu os conceitos de serviço primário e de serviço secundário, modificando, assim, o Quadro de Repartição das Faixas de Frequências de Atlantic City (1947), privando certas inscrições da Lista Internacional das Frequências do seu carácter prioritário;

c) Que a Conferência Administrativa das Radiocomunicações (Genebra, 1959), no estabelecimento do Ficheiro de Referência Internacional das Frequências, considerou e tratou de modo especial a transferência dessas inscrições do Ficheiro de Referência das Frequências em conformidade com as disposições da Resolução n.º 4 (Genebra, 1959);

d) Que no período compreendido entre 1 de Janeiro de 1952 e 31 de Março de 1953 foram introduzidas nessa lista consignações sem exame, com um símbolo na coluna 2d e que a Comissão tem essas consignações em conta quando do exame de qualquer ficha de notificação;

considerando, além disso,

e) Que tinha sido pedido instantemente às administrações que tomassem as medidas necessárias;

f) Que a presente Conferência tinha sido convidada a reexaminar a situação;

decide

1. Que a Comissão examine, sob o ponto de vista da sua conformidade com o novo Quadro de Atribuição das Faixas de Frequências, as consignações de frequência às quais era aplicada a Resolução n.º 4 da Conferência das Radiocomunicações (Genebra, 1959) e corrija, em conformidade, as suas conclusões a contar da data de entrada em vigor dos Actos Finais da presente Conferência. Quando uma tal conclusão for modificada em aplicação da presente Resolução, inscreve-se uma observação apropriada na coluna «Observações»;

2. Que as consignações que comportam um símbolo na coluna 2d e que não são abrangidas pela Resolução n.º 9 sejam examinadas com vista a substituir esse símbolo pela data de 1 de Abril de 1953;

3. Que a Comissão informe as administrações interessadas das medidas que vier a tomar relativamente às suas consignações inscritas na lista.

RESOLUÇÃO N.º 31

Relativa à aplicação de certas disposições dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) para ter em conta as modificações introduzidas pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) no quadro de atribuição das faixas de frequências para a Região 2, na faixa de 11,7-12,7 GHz.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971) atribuiu, na Região 2, a faixa de frequências de 11,7-12,2 GHz ao serviço fixo por satélite, ao serviço de radiodifusão por satélite, ao serviço fixo, ao serviço móvel (excepto móvel aeronáutico) e ao serviço de radiodifusão;

b) Que a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) estabeleceu disposições e um plano associado para o serviço de radiodifusão por satélite na faixa de 11,7-12,5 GHz (Região 1) e na faixa de 11,7-12,2 GHz (Região 3);

c) Que essa Conferência também definiu critérios de partilha inter-regionais na base das atribuições de faixas de frequências então em vigor;

d) Que as atribuições de faixas de frequências ao serviço fixo por satélite e ao serviço de radiodifusão por satélite, na faixa de 12 GHz na Região 2, foram alargadas e modificadas pela presente Conferência;

e) Que a presente Conferência também decidiu incorporar no Regulamento das Radiocomunicações, como apêndice 30, as disposições e o plano associado adoptados pela Conferência de 1977;

reconhecendo

a) Que essas modificações do Quadro de atribuição das faixas de frequências não implicam, em princípio, novos casos de partilha inter-regionais diferentes do caso visado na alínea *b*) seguinte;

b) Que as disposições do apêndice 30 podem ser aplicadas directamente, como indicado acima, a todos os casos de partilha diferentes da partilha entre o serviço fixo por satélite nas Regiões 1 e 3 e o serviço de radiodifusão por satélite na Região 2, na faixa de frequências de 12,2-12,7 GHz;

c) Que o caso único visado na alínea *b*) é objecto da Resolução n.º 700;

decide

1. Que as disposições do artigo 4 e o anexo ao apêndice 30 relativos à modificação do plano estabelecido para o serviço de radiodifusão por satélite nas Regiões 1 e 3 se apliquem também à protecção do serviço de radiodifusão por satélite na faixa de 12,2-12,5 GHz, e do serviço fixo por satélite na faixa de 12,2-12,3 GHz atribuídas a esses serviços na Região 2;

2. Que as disposições do artigo 6 e o anexo 3 ao apêndice 30 relativos ao procedimento de coordenação e de notificação das consignações de frequência às estações de Terra que afectam as consignações de frequência às estações do serviço de radiodifusão por satélite se apliquem também na faixa de 12,2-12,7 GHz no que respeita ao serviço de radiodifusão por satélite na Região 2;

3. Que as disposições do artigo 7 e o anexo 4 ao apêndice 30, bem como a Resolução n.º 503, relativos aos procedimentos preliminares e à coordenação, notificação e inscrição das consignações de frequência às estações do serviço fixo por satélite e do serviço de radiodifusão por satélite na Região 2, se apliquem também à faixa de 12,2-12,3 GHz atribuída ao serviço fixo por satélite e à faixa de 12,2-12,5 GHz atribuída ao serviço de radiodifusão por satélite na Região 2;

4. Que as disposições do artigo 9 e o anexo ao apêndice 30, que especificam os valores limitados da densidade de fluxo de potência entre 11,7 GHz e 12,2 GHz para proteger os serviços de Terra nas Regiões 1 e 3 contra as emissões das estações espaciais do serviço de radiodifusão por satélite na Região 2, se apliquem também à faixa de 12,2-12,5 GHz;

5. Que, até a conferência regional de 1983 para a Região 2 tome decisões finais relativamente à faixa de 12,5--12,7 GHz:

a) O artigo 9 e os valores limites indicados no anexo 5, alínea *l*), do apêndice 30 se apliquem às estações espaciais do serviço de radiodifusão por satélite a funcionar na Região 2, e

b) Os valores limites da densidade de fluxo de potência indicada no n.º **2574** se apliquem às estações espaciais do serviço fixo por satélite, a funcionar na Região 2, no que respeita aos países mencionados dos n.ºs **848** e **850** e na Região 3;

pede à CCIR

1. Que estude com urgência a questão da protecção adequada dos serviços de Terra em cada região influenciada, na faixa de 12,2-12,7 GHz, com vista a assegurar a planificação eficaz do serviço de radiodifusão por satélite na Região 2 em conformidade com os n.ºs 4 e 5 da presente Resolução;

2. Que elabore um relatório especial sobre a questão com a antecedência necessária para poder ser examinado pelas reuniões preparatórias competentes e forneça directivas para os trabalhos da dita conferência regional.

RESOLUÇÃO N.º 32

Relativa à utilização das consignações de frequência às estações de radiocomunicação de Terra e de radiocomunicação espacial nas faixas de 11,7-12,2 GHz na Região 3 e de 11,7-12,5 GHz na Região 1 (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) adoptou a Resolução Sat-2;

b) Que, de acordo com as disposições do n.º **838** do Regulamento das Radiocomunicações, o serviço fixo, o serviço móvel e o serviço de radiodifusão existentes e futuros a funcionarem na faixa de 11,7-12,2 GHz na Região 3 e na faixa de 11,7-12,5 GHz na Região 1 não devem causar interferência prejudicial às estações de radiodifusão por satélite de acordo com as decisões da dita Conferência;

c) Que as decisões da dita Conferência compreendem um plano para as estações do serviço de radiodifusão por satélite;

d) Que os procedimentos de coordenação previstos na Resolução n.º 33 só deverão ser aplicados até à data de entrada em vigor dos planos estabelecidos em execução da Resolução n.º 507;

decide

1. Que todas as administrações que utilizem ou tencionem utilizar consignações de frequência a estações de Terra nas faixas abrangidas pelo plano determinem, sempre que possível, se essas consignações afectam ou não as consignações de frequência conformes com o plano (se necessário, com a assistência da IFRB);

2. Que as administrações possam continuar a utilizar consignações de frequência não conformes com o plano de radiodifusão por satélite, com a condição de que se ponham de acordo com as administrações cujas estações de radiodifusão por satélite são afectadas;

3. Que as administrações que desejem incluir um acordo comuniquem o teor desse acordo à IFRB;

4. Que, ao receber essas informações, a IFRB inscreva um símbolo na coluna «Observações» do ficheiro de referência, para indicar a duração especificada no acordo, a qual deverá ser igualmente publicada numa secção especial da circular semanal da IFRB;

5. Que a Resolução Sat-2 seja revogada e substituída pela presente resolução;

convida a IFRB

a prestar assistência às administrações para lhes permitir aplicarem as disposições da presente Resolução.

RESOLUÇÃO N.º 33

Relativa à entrada em serviço de estações espaciais do serviço de radiodifusão por satélite antes da entrada em vigor de acordos e de planos associados para o serviço de radiodifusão por satélite (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) Substitui a Resolução Sat-2 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

(2) Substitui a Resolução Spa2-3 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

considerando

a) Que a Resolução n.º 507 considera o estabelecimento de planos para o serviço de radiodifusão por satélite, mas que algumas administrações podem, contudo, sentir necessidade de pôr em serviço estações deste serviço antes do estabelecimento desses planos;

b) Que convém que as administrações evitem, na medida do possível, a proliferação de estações espaciais do serviço de radiodifusão por satélite antes de tais planos terem sido estabelecidos;

c) Que uma estação espacial do serviço de radiodifusão por satélite é susceptível de causar interferências prejudiciais às estações de Terra que funcionam na mesma faixa de frequências, mesmo que estas estações estejam fora da zona de serviço da estação espacial;

d) Que os procedimentos especificados no artigo 11 do Regulamento das Radiocomunicações não contêm disposições relativas à coordenação entre estações espaciais do serviço de radiodifusão por satélite e estações de Terra, nem entre estações espaciais do serviço de radiodifusão por satélite e sistemas espaciais dependentes de outras administrações;

decide

1. Que seja aplicado o procedimento seguinte, excepto quando tenham sido estabelecidos e postos em vigor acordos e planos associados para o serviço de radiodifusão por satélite:

SECÇÃO A

Procedimento de coordenação entre estações espaciais do serviço de radiodifusão por satélite e estações de Terra

2.1. Antes de notificar à IFRB ou de pôr em serviço uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite numa faixa de frequências, quando essa faixa de frequências for atribuída, com igualdade de direitos, ao serviço de radiodifusão por satélite e a um serviço de radiocomunicações de Terra, quer na mesma Região ou Sub-Região, quer em Regiões ou Sub-Regiões diferentes, uma administração coordena a utilização dessa consignação com qualquer outra administração cujos serviços de radiocomunicações de Terra sejam susceptíveis de ser afectados. Para o efeito, comunica à Comissão todas as características técnicas dessa estação tais como estão indicadas nas secções pertinentes do apêndice 3 ao Regulamento das Radiocomunicações, que são necessárias para avaliar os riscos de interferência a um serviço de radiocomunicações de Terra (1).

2.2. A Comissão publica essas informações numa secção especial da sua circular semanal e, quando a circular semanal contiver informações dessa natureza, avisa do facto as administrações por telegrama-circular.

2.3. Qualquer administração que considere que os seus serviços de radiocomunicação de Terra são susceptíveis de ser afectados apresenta as suas observações à administração que procura a coordenação e, em todos os casos, à Comissão. Essas observações deverão ser enviadas num prazo de quatro meses a contar da data da circular semanal pertinente da IFRB. Entende-se que qualquer administração que não tenha apresentado as suas observações dentro deste prazo considerou que os seus serviços de radiocomunicação de Terra não são susceptíveis de ser afectados.

2.4 . Qualquer administração que tenha apresentado observações sobre a estação em projecto deve, quer comunicar o seu acordo, com uma cópia, à Comissão, quer, se isso não for possível, enviar à administração que procura a coordenação todos os dados em que se fundamentam as suas observações, assim como todas as sugestões que possa fazer com vista a uma solução satisfatória do problema.

2.5. A administração que projecte pôr em serviço uma estação espacial do serviço de radiodifusão por satélite, assim como qualquer outra administração que considere que os seus serviços de radiocomunicação de Terra são susceptíveis de ser afectados pela estação em questão, podem pedir a ajuda da Comissão em qualquer momento durante o procedimento de coordenação.

2.6. Excepto nos casos em que tenha sido pedida a assistência da Comissão, quando haja desacordo persistente entre a administração que procura a coordenação e a administração junto da qual foi procurada a coordenação, a administração que procura a coordenação adia por seis meses, a contar da data de publicação das informações a que se refere o § 2.2, o envio à Comissão da sua ficha de notificação respeitante à consignação em projecto.

SECÇÃO B

Procedimento de coordenação entre estações espaciais do serviço de radiodifusão por satélite e sistemas espaciais dependentes de outras administrações

3. Uma administração que tenha a intenção de pôr em serviço uma estação espacial do serviço de radiodifusão por satélite aplica, para efeitos da coordenação com os sistemas espaciais de outras administrações, as seguintes disposições do artigo 11.º do Regulamento de Radiocomunicações;

---

(1) Convém que os métodos de cálculo e os critérios de interferência a utilizar para avaliar a interferência se baseiem nos pareceres pertinentes da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outro modo. Em caso de desacordo sobre um parecer da CCIR, ou na ausência de tal parecer, os métodos e critérios são objecto de acordos entre as administrações interessadas. Tais acordos deverão fazer-se sem causar prejuízo às outras administrações.

3.1. N.os **1041** a **1058**, inclusive.

3.2.1. N.os **1060** a **1965** (1).

3.2.2. Não é requerida qualquer coordenação nos termos do § 3.2.1 quando uma administração se proponha modificar as características de uma consignação existente de tal modo que não seja com isso aumentada a probabilidade de interferências prejudiciais causadas a estações do serviço de radiocomunicação espacial de outras administrações.

3.2.3. N.os **1074** a **1105**, inclusive.

SECÇÃO B

Notificação, exame e inscrição no ficheiro de referência das consignações às estações espaciais do serviço de radiodifusão por satélite tratadas na presente Resolução

4.1. Deve ser notificada à Comissão qualquer consignação de frequência (2) a uma estação espacial do serviço de radiodifusão por satélite. Para o efeito, a administração notificadora aplica as disposições dos n.os **1495** a **1497** do Regulamento das Radiocomunicações.

4.2. As notificações feitas nos termos do § 4.1 são tratadas inicialmente em conformidade com as disposições do n.º **1498**.

5.1. A Comissão examina cada ficha de notificação:

5.2. *a*) Relativamente à sua conformidade com as cláusulas da Convenção, com o quadro de atribuição das faixas de frequências e com as outras cláusulas do Regulamento das Radiocomunicações, com excepção das relativas aos procedimentos de coordenação e à probabilidade de interferências prejudiciais, que são objecto dos §§ 5.3, 5.4 e 5.5;

5.3. *b*) Se for caso disso, relativamente à sua conformidade com as disposições do § 2.1 da secção A anterior, as quais dizem respeito à coordenação da utilização da consignação de frequência com as outras administrações interessadas;

5.4. *c*) Se for caso disso, relativamente à sua conformidade com as disposições do § 3.2.1 da secção B anterior, as quais dizem respeito à coordenação da utilização da consignação de frequência com as outras administrações interessadas;

5.5. *d*) Se for caso disso, relativamente à probabilidade de interferência prejudicial em detrimento do serviço assegurado por uma estação de um serviço de radiocomunicações espaciais ou de um serviço de radiocomunicações de Terra para a qual já tenha sido inscrita no ficheiro de referência uma consignação de frequência conforme com as disposições dos n.os **1240** ou **1503**, consoante o caso, do Regulamento das Radiocomunicações, se essa consignação de frequência não causou, de facto, interferência prejudicial ao serviço assegurado por uma estação que tenha sido objecto de uma consignação anteriormente inscrita no ficheiro de referência e que esteja ela própria conforme com os n.os **1240** ou **1503**, consoante o caso.

6.1. Segundo as conclusões a que chegue a Comissão na sequência do exame previsto nos §§ 5.2, 5.3, 5.4 e 5.5, o procedimento continuará pela forma seguinte:

6.2. Quando a Comissão formular uma conclusão desfavorável relativamente ao § 5.2, a ficha de notificação é devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivam a conclusão da Comissão e com as sugestões que possa fazer para chegar a uma solução satisfatória do problema.

6.3. Quando a Comissão formular uma conclusão favorável relativamente ao § 5.2 ou quando formular a mesma conclusão depois de a ficha de notificação ter sido apresentada de novo, examina a ficha relativamente às disposições dos §§ 5.3 e 5.4.

6.4. Quando a Comissão concluir que os procedimentos de coordenação de que tratam os §§ 5.3 e 5.4 foram aplicados com êxito relativamente a todas as administrações cujos serviços podem ser afectados, a consignação é inscrita no ficheiro de referência. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d do ficheiro de referência, com uma observação na coluna «Observações» a indicar que essa inscrição não prejudica de nenhum modo as decisões a incluir nos acordos e planos associados de que trata a Resolução n.º 507.

6.5. Quando a Comissão concluir que os procedimentos de que tratam os §§ 5.3 ou 5.4, consoante o caso, não foram aplicados ou foram aplicados sem êxito, a ficha de notificação é devolvida imediatamente pelo correio aéreo à administração notificadora com a indicação das razões que motivam essa devolução e com as sugestões que a Comissão possa fazer para chegar a uma solução satisfatória do problema.

6.6. Quando a administração notificadora apresentar de novo a sua ficha de notificação declarando que não teve êxito na tentativa de efectuar a coordenação, a Comissão examina a ficha sob o ponto de vista do § 5.5.

6.7. Quando a administração notificadora apresentar de novo a sua ficha de notificação e se a Comissão concluir que os procedimentos de coordenação foram aplicados com êxito relativamente a todas as administrações cujos serviços podem ser afectados, a consignação é tratada como se indica no § 6.4.

---

(1) Convém que os métodos de cálculo e os critérios de interferências a utilizar para avaliar a interferência se baseiem nos pareceres pertinentes da CCIR aceites pelas administrações interessadas em aplicação da Resolução n.º 703 ou de outro modo. Em caso de desacordo sobre um parecer da CCIR, ou na ausência de tal parecer, os métodos e critérios são objecto de acordos entre as administrações interessadas. Tais acordos deverão fazer-se sem causar prejuízo às outras administrações.

(2) A expressão «consignação de frequência», sempre que figure na presente Resolução, deve ser entendida como referindo-se quer a uma nova consignação de frequência, quer a uma modificação a uma consignação já inscrita no ficheiro de referência internacional das frequências (denominado daqui em diante «ficheiro de referência»).

6.8. Quando a Comissão formular uma conclusão favorável relativamente ao § 5.5, a consignação é inscrita no ficheiro de referência. O símbolo apropriado representativo da conclusão da Comissão indica que, se for caso disso, os procedimentos de coordenação de que tratam os §§ 2.1 ou 3.2.1 não foram coroados de êxito. A data de recepção pela Comissão da ficha de notificação é inscrita na coluna 2d do ficheiro de referência, com a observação mencionada no § 6.4.

6.9. Quando a Comissão formular uma conclusão desfavorável relativamente ao § 5.5, a ficha de notificação é devolvida imediatamente pelo correio aéreo à administração notificadora, com a indicação das razões que motivam a conclusão da Comissão e com as sugestões que possa fazer para chegar a uma solução satisfatória do problema.

6.10. Se a administração apresentar novamente a sua ficha não modificada e se insistir em novo exame dessa ficha, mas se a conclusão da Comissão relativamente ao § 5.5 continuar a ser a mesma, a consignação é inscrita no ficheiro de referência. Mas esta inscrição só será feita se a administração notificadora avisar a Comissão de que a consignação esteve em serviço durante, pelo menos, quatro meses sem que daí tenha resultado qualquer queixa de interferência prejudicial. A data de recepção pela Comissão da ficha de notificação original é inscrita na coluna 2d do ficheiro de referência, com a observação mencionada no § 6.4. Inscreve-se uma observação apropriada na coluna 13 para indicar que a consignação não está conforme com as disposições dos §§ 5.3, 5.4 ou 5.5, consoante o caso. No caso de a administração interessada não receber qualquer queixa de interferência prejudicial relativa ao funcionamento da estação em causa durante o período de um ano após a sua entrada em serviço, a Comissão reexamina a sua conclusão.

6.11. Se a utilização de uma consignação de frequência a uma estação espacial, que foi inscrita no ficheiro de referência de acordo com as disposições do § 6.10 da presente Resolução ou do n.º **1544,** causar efectivamente interferência prejudicial à recepção de uma estação espacial do serviço de radiodifusão para a qual foi inscrita anteriormente uma consignação de frequência no ficheiro de referência, na sequência de uma conclusão favorável relativamente aos §§ 5.2, 5.3, 5.4 e 5.5 da presente Resolução, consoante o caso, a estação interferente deverá fazer cessar imediatamente a interferência prejudicial logo que for avisada dessa interferência.

6.12. Se a utilização de uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite, que foi inscrita no ficheiro de referência de acordo com as disposições do § 6.10 da presente Resolução, causar efectivamente interferência prejudicial à recepção de uma estação de radiocomunicação espacial para a qual foi inscrita anteriormente uma consignação de frequência no ficheiro de referência na sequência de uma conclusão favorável relativamente aos n.ºs **1503** a **1512**, consoante o caso, a estação interferente deverá fazer cessar imediatamente a interferência prejudicial logo que for avisada dessa interferência.

6.13. Se a utilização de uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite, que foi inscrita no ficheiro de referência de acordo com as disposições do § 6.10 da presente Resolução, causar efectivamente interferência prejudicial à recepção de uma estação de Terra para a qual foi inscrita anteriormente uma consignação de frequência no ficheiro de referência na sequência de uma conclusão favorável relativamente ao n.º **1240** a estação interferente deverá fazer cessar imediatamente a interferência prejudicial logo que for avisada dessa interferência.

6.14. Se a utilização de uma consignação de frequência não conforme com as disposições dos n.ºs **1240, 1352** ou **1503** causar efectivamente interferência prejudicial à recepção de qualquer estação que funcione em conformidade com as disposições do § 5.2 da presente Resolução, a estação que utilizar a consignação de frequência não conforme com as disposições dos números pré-citados deverá fazer cessar imediatamente a interferência prejudicial logo que for avisada dessa interferência.

RESOLUÇÃO N.º 34

Relativa ao estabelecimento de serviços de radiodifusão por satélite na faixa de 12,5-12,75 GHz (Região 3) e à partilha com os serviços espaciais e de Terra (Regiões 1, 2 e 3)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que atribui a faixa de 12,5-12,75 GHz ao serviço de radiodifusão por satélite para fins de recepção comunitária na Região 3;

reconhecendo

que, nos termos da Resolução n.º 507, o Conselho de Administração poderá querer habilitar uma futura conferência administrativa das radiocomunicações competente a estabelecer um plano para o serviço de radiodifusão por satélite na faixa de 12,5-12,75 GHz na Região 3;

decide

1. Que, até que seja estabelecido um plano para o serviço de radiodifusão por satélite na faixa de 12,5-12,75 GHz na Região 3, continuem a aplicar-se as disposições da Resolução n.º 33 e o artigo 11 à coordenação entre as estações de serviço de radiodifusão por satélite na Região 3 e:

1) As estações espaciais do serviço de radiodifusão por satélite e do serviço fixo por satélite nas Regiões 1, 2 e 3;
2) As estações de Terra nas Regiões 1, 2 e 3;

2. Que convém que a CCIR estude urgentemente as disposições técnicas que possam ser aplicadas à partilha entre as estações do serviço de radiodifusão por satélite na Região 3 e:

1) As estações espaciais do serviço de radiodifusão por satélite e do serviço fixo por satélite nas Regiões 1 e 2;
2) As estações de Terra nas Regiões 1 e 2;

3. Que, até que disposições técnicas sejam elaboradas pela CCIR e aceites pelas administrações interessadas nos termos da Resolução n.º 703, a partilha entre as estações espaciais do serviço de radiodifusão por satélite na Região 3 e os serviços de Terra nas Regiões 1, 2 e 3 se baseie nos seguintes critérios:

1) A densidade de fluxo de potência produzida à superfície da Terra pelas emissões de uma estação espacial do serviço de radiodifusão por satélite na Região 3, sejam quais forem as condições e os métodos de modulação, não deve exceder os limites indicados no anexo 5 ao apêndice 30, sendo de notar que o subparágrafo 2) só se aplicará à protecção do serviço de radiodifusão;
2) Além do critério do subparágrafo 1), devem aplicar-se as disposições do n.º **2574** aos países mencionados nos n.ºs **848** e **850**;
3) Os limites indicados nos subparágrafos 1) e 2) anteriores podem ser excedidos no território de um país, com a condição de que a administração desse país os tenha aceitado.

RESOLUÇÃO N.º 35

Relativa ao procedimento a seguir para pôr termo a um desacordo acerca das normas técnicas ou das regras de procedimento da Comissão Internacional de Registo de Frequências

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, em conformidade com as disposições do n.º **1001.1**, as normas técnicas e as regras de procedimento da IFRB são comunicadas a todos os membros da União e podem ser objecto de comentários das administrações;
b) Que uma administração pode estar em desacordo quanto ao fundo desses documentos;
c) Que, no caso de um desacordo não pode ser resolvido, deveria haver um procedimento que permitisse superar as divergências;

reconhecendo

a) Que, no que se refere às normas técnicas, a CCIR poderia constituir a melhor fonte de pareceres competentes;
b) Que, no que se refere às regras de procedimento, uma conferência administrativa mundial das radiocomunicações poderia constituir a melhor fonte de interpretação do Regulamento das Radiocomunicações;

decide

1. Que, no caso de desacordo persistente quanto ao fundo das normas técnicas da IFRB, a Comissão, com o acordo da administração interessada, apresente a questão à CCIR, para estudos internacionais e elaboração de um parecer pertinente pela assembleia plenária seguinte da CCIR;

2. Que se a CCIR não estiver em condições de emitir tal parecer ou se existir um desacordo persistente quanto ao fundo das regras de procedimento da IFRB, a questão possa nos dois casos ser enviada ao Conselho de Administração para ser inscrita na agenda da conferência administrativa mundial das radiocomunicações seguinte;

3. Que, enquanto a questão não for resolvida, a Comissão continue a aplicar a norma técnica ou a regra de procedimento em litígio, mas que uma vez resolvida a questão por um parecer da CCIR ou por uma decisão de uma conferência administrativa mundial das radiocomunicações, a Comissão tome sem demora as medidas que se imponham, incluindo o reexame de todas as conclusões formuladas sobre o assunto.

RESOLUÇÃO N.º 36

Relativa ao estabelecimento, pela Comissão Internacional do Registo de Frequências, de documentação explicativa acerca da aplicação do novo método de designação das emissões nos procedimentos de notificação e à revisão, que daí resulta, do ficheiro de referência internacional das frequências.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo adoptado

o artigo 4 e o apêndice 6, que contêm um novo sistema de designação das emissões;

considerando

a) Que essas designações se revestem de importância fundamental para os procedimentos de notificação especificados no Regulamento das Radiocomunicações;
b) Que é essencial que esse novo sistema de designação das emissões seja aplicado não somente às novas designações de frequência como também às inscrições existentes no ficheiro de referência;
c) Que certas novas designações são mais pormenorizadas do que as antigas;
d) Que a IFRB não possui meios para substituir automaticamente todas as designações antigas pelas novas;

notando

a) Que certas administrações poderão experimentar dificuldades em aplicar o novo método de designação das emissões quando da sua primeira aplicação;
b) Que essas administrações terão necessidade de informações explicativas sobre este assunto muito antes da entrada em vigor dos Actos Finais da presente Conferência;

decide

1. Que a IFRB elabore documentação explicativa que inclua exemplos acerca da aplicação do novo método de designação, com vista à sua utilização nos procedimentos de notificação especificados no Regulamento das Radiocomunicações e ponha essa documentação à disposição das administrações o mais cedo possível e o mais tardar em 1 de Outubro de 1980;

2. Que a IFRB proceda à conversão dos dados inscritos no ficheiro de referência em consulta com as administrações e na base das informações que elas forneçam;

3. Que se num prazo razoável a IFRB não tiver recebido de uma administração as informações indicadas no § 2, converta os dados inscritos no ficheiro de referência tão exactamente quanto possível e acrescente na coluna «Observações» uma nota a mencionar que a conversão foi efectuada em conformidade com o presente parágrafo;

4. Que a partir da entrada em vigor da presente revisão do Regulamento das Radiocomunicações só se utilizem para os procedimentos de coordenação e de notificação as designações das emissões que figuram no artigo 4;

Entretanto, se a Comissão receber ulteriormente informações ou notificações contendo o tipo de designação antigo, não as considerará incompletas por essa única razão. Se for praticável, a Comissão modificará a designação, e se forem necessários esclarecimentos, consultará a administração interessada.

RESOLUÇÃO N.º 37

Relativa à introdução e ao desenvolvimento da utilização das técnicas informáticas para facilitar a gestão do espectro radioeléctrico pelas administrações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A Resolução n.º 7, relativa ao desenvolvimento da gestão nacional do espectro radioeléctrico;
b) A Resolução n.º 6, relativa à elaboração de um manual destinado a explicar e a ilustrar certas disposições do Regulamento das Radiocomunicações;
c) A Recomendação n.º 31, destinada à CCIR relativa à elaboração de um manual sobre a aplicação das técnicas informáticas à gestão do espectro radioeléctrico;

considerando, por outro lado,

a) O valor potencial das técnicas informáticas para numerosos aspectos da gestão do espectro;
b) A necessidade de uma assistência complementar às administrações, especialmente nos países em desenvolvimento, para lhes permitir introduzir e desenvolver os equipamentos informáticos ou tirar rendimento óptimo dos seus equipamentos informáticos existentes com vista à gestão do espectro radioeléctrico;

decide que o secretário-geral

organize rapidamente um exame desses problemas de modo que as medidas seguintes sejam tomadas o mais eficazmente possível:

1. Organização de ciclos de estudos regionais consagrados especialmente à formação neste domínio, tendo em conta as necessidades nacionais das administrações;

2. Utilização de todos os recursos pedagógicos de que a União dispõe para assegurar uma formação complementar neste domínio em função das necessidades nacionais das administrações;

3. Estabelecimento, no quadro das instâncias existentes da UIT, de disposições apropriadas destinadas a auxiliar as administrações a identificar os problemas especiais neste domínio e a solucioná-los utilizando o melhor possível as técnicas informáticas;

convida o conselho de administração

a examinar as recomendações do secretário-geral e a encontrar os recursos necessários.

RESOLUÇÃO N.º 38

Relativa à reconsignação de frequências às estações dos serviços fixo e móvel que funcionam nas faixas atribuídas aos serviços de radiolocalização e de amador na Região 1

(1625-1635 kHz, 1800-1810 kHz, 1810-1850 kHz e 2160-2170 kHz)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que a presente Conferência adoptou modificações na atribuição das faixas de frequências compreendidas entre 1606,5 kHz e 2850 kHz;

notando

a) Que a aplicação do quadro revisto de atribuição das faixas de frequências apresenta dificuldades, especialmente para as estações de serviço móvel na Região 1, nas faixas 1625-1635 kHz, 1800-1810 kHz e 2160-2170 kHz, postas à disposição dos serviços de radiolocalização, e na faixa de 1810-1850 kHz, posta à disposição do serviço de amador;

b) Que a presente Conferência recomendou a convocação, o mais tardar em 1982, de uma conferência administrativa das radiocomunicações para os serviços móveis em geral;

sublinhando

a necessidade de elaborar planos de consignação de frequência para a faixa de 1606,5 -2850 kHz na Região 1, a fim de aplicar as disposições dos n.os **486** e **492** do Regulamento das Radiocomunicações;

convida a conferência para os serviços móveis

mencionada acima a dar prioridade à adopção de um novo plano de consignação de frequências na faixa de 1606,5 -2850 kHz para o serviço móvel marítimo na Região 1;

decide

1. Que na Região 1, com excepção dos países e das faixas de frequências mencionadas (1) nos n.os **485, 490, 491, 493** e **499,** a partir da data de entrada em vigor do plano de consignação de frequências para o serviço móvel marítimo que figurará nos actos finais da conferência competente, terminem todas as operações de estações dos serviços fixo e móvel nas faixas de 1625-1635 kHz, 1810-1850 kHz e 2160-2170 kHz;

2. Que o plano de consignação de frequências mencionado acima indique as frequências de substituição para as estações do serviço móvel marítimo, bem como as disposições relativas ao seu implemento;

3. Que as administrações em nome das quais estejam inscritas consignações às estações dos serviços fixo, móvel terrestre ou móvel aeronáutico (OR) nas faixas respectivas escolham as consignações de substituição apropriadas e as notifiquem à IFRB e que, quando a conclusão da Comissão seja favorável relativamente aos n.os **1240** e **1241**, a consignação tenha a mesma data e o mesmo estatuto que aquela que substitui no que se refere às consignações dos países da Região 1;

4. Que a protecção assegurada às estações dos serviços fixo e móvel de acordo com os n.os **486** e **492** continue a aplicar-se até que consignações de substituição satisfatórias tenham sido encontradas e postas ao serviço de acordo com as disposições da presente Resolução;

5. Que a partir da data de entrada em vigor do plano de consignação de frequências para o serviço móvel marítimo, contido nos actos finais da conferência competente, as consignações de frequência que não tenham sido transferidas de acordo com o ponto 3 da presente Resolução só continuem a funcionar na base das disposições do n.º **342**.

---

(1) N.º **485**, faixas de 1625-1635 kHz, 1800-1810 kHz e 2160-2170 kHz, n.º **490**, faixa de 1810-1830 kHz, n.º **491**, faixa de 1810-1830 kHz, n.º **493**, faixa de 1810-1850 kHz, e n.º **499**, faixa de 2160-2170 kHz.

RESOLUÇÃO N.º 60

Relativa às informações sobre a propagação das ondas radioeléctricas utilizadas para determinar a zona de coordenação

(V. o apêndice 28)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o apêndice 28 do Regulamento das Radiocomunicações descreve um método de determinação da zona de coordenação que faz intervir certa documentação relativa à propagação das ondas radioeléctricas;

b) Que as informações sobre a propagação contidas nesse apêndice se baseiam, directa ou indirectamente, em dados de propagação que figuram nos textos da CCIR;

c) Que os estudos da CCIR sobre a propagação estão ainda em curso, de modo que as suas conclusões estão sujeitas a modificação e poderão, no futuro, levar à modificação das secções do apêndice 28 que contêm as informações de propagação;

d) Que em certas partes do Mundo não foi efectuada qualquer medida da propagação das ondas radioeléctricas;

reconhecendo

a) Que, geralmente, são necessários vários anos para reunir dados suficientes de que se possam tirar conclusões seguras acerca da propagação;

b) Que, por razões administrativas, é conveniente que não sejam revistas muito frequentemente informações sobre a propagação utilizadas para a determinação da zona de coordenação e que, de qualquer forma, essa revisão se não faça, excepto se for suficientemente importante o seu efeito sobre as dimensões da zona de coordenação;

c) Que a determinação da zona de coordenação efectuada de acordo com o apêndice 28 não necessita de conhecimento pormenorizado das características de propagação sobre trajectos individuais e que é conveniente que assim se continue a proceder;

convida a CCIR

a prosseguir no estudo dos dados sobre a propagação com interesse para a determinação da zona de coordenação e a manter os textos correspondentes com uma apresentação que permita a sua inserção directa no apêndice 28 em substituição das actuais secções 3, 4 e 6 ou do anexo III;

decide

1. Que todas as assembleias plenárias da CCIR deverão chegar a uma conclusão quanto a saber se, com base nas informações sobre a propagação contidas nos pareceres mais recentes da CCIR, se justifica uma revisão das secções 3, 4 e 6 ou do anexo III do apêndice 28 ao Regulamento das Radiocomunicações;

2. Que, quando uma assembleia plenária da CCIR tenha chegado à conclusão de que se justifica uma revisão das secções 3, 4 e 6 ou a do apêndice 28, o director da CCIR informe do facto o secretário-geral da UIT e lhe transmita as modificações propostas ao apêndice 28;

pede

1. Que o Conselho de Administração inscreva, então, na agenda da próxima conferência administrativa mundial das radiocomunicações um ponto extraordinário versando sobre o exame da referida conclusão da CCIR;

2. Que, se a pré-citada conferência administrativa mundial das radiocomunicações decidir que devem ser revistas as informações sobre a propagação utilizadas no apêndice 28, o secretário-geral, em consulta com a IFRB, inclua as emendas decididas por tal conferência num documento que dê o novo texto das secções 3, 4 e 6 ou do anexo III do apêndice 28, publicado com uma forma tal que possa substituir directamente a versão do apêndice 28 então em vigor, e envie esse documento a todas as administrações;

decide, além disso,

que, a partir da data que a referida conferência fixe, o texto revisto sirva de base a todas as determinações ulteriores da zona de coordenação feitas, utilizando o apêndice 28.

RESOLUÇÃO N.º 61

Relativa à divisão do Mundo em zonas climáticas para o cálculo das características de propagação

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a propagação das ondas radioeléctricas, especialmente nas frequências superiores a 1 GHz, é influenciada significativamente pelas precipitações, assim como pelas tempestades de areia e de poeira;
b) Que, para certas regiões geográficas, não se dispõe de valores medidos nem de estatísticas a curto prazo relativamente à intensidade das precipitações;
c) Que existem muito poucos dados sobre a ocorrência e sobre os efeitos das tempestades de areia e de poeira;
d) Que, para a avaliação das características de propagação, a CCIR dividiu o Mundo em cinco zonas hidrometeorológicas, correspondentes de um modo geral às características das precipitações, e que essa divisão já não é apropriada:
e) Que a divisão actual do Mundo num número tão reduzido de zonas hidrometeorológicas não tem provavelmente a precisão necessária para permitir uma avaliação correcta do desvanecimento e da difusão provocados pelas precipitações em certas partes do Mundo;
f) Que os efeitos das tempestades de areia e de poeira não têm sido objecto de estudos e de avaliações apropriadas, quanto à gravidade ou quanto às suas variações no tempo;
g) Que a CCIR está actualmente a efectuar certos estudos sobre os efeitos das precipitações e das tempestades de areia e de poeira:

pede à CCIR

1. Que acelere e alargue os seus trabalhos sobre os efeitos das precipitações e atribua mais importância ao estudo das tempestades de areia e de poeira;
2. Que dê pareceres sobre a natureza dos estudos necessários nas regiões geográficas para as quais sejam insuficientes os dados;
3. Que, tendo em conta os novos dados de que possa dispor, preste especial atenção à revisão da classificação actual do Mundo em zonas hidrometeorológicas;

convida instantemente as administrações

1. A encorajarem e a empreenderem urgentemente nos seus países, medidas das taxas de precipitações e das variações no espaço e no tempo dessas precipitações, designadamente da sua estrutura celular;
2. A encorajarem e a empreenderem, igualmente com urgência, medidas da influência das tempestades de areia e de poeira sobre a propagação;
3. A comunicarem os resultados dessas medidas à CCIR para que esta possa descrever de modo mais precioso e mais pormenorizado os fenómenos que entram em jogo e estabelecer uma classificação melhorada das tempestades de areia e de poeira, assim como das regiões hidrometeorológicas, para aplicação aos problemas das radiocomunicações.

RESOLUÇÃO N.º 62

Relativa à utilização experimental das ondas radioeléctricas pelos satélites de pesquisa inosférica (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a pesquisa sobre a ionosfera terrestre se reveste de enorme importância para o estudo das relações entre o Sol e a Terra e igualmente para a utilização racional das ondas radioeléctricas que se propagam pela ionosfera;
b) Que se efectuarem pesquisas coroadas de êxito com satélites, tais como o *Alouette 1* e *2*, o *ISIS 1* e *2* e o *ISS*, munidos de aparelhos de sondagem ionosférica por cima;
c) Que serão postos em serviço satélites de pesquisa ionosférica semelhantes aos citados anteriormente, para continuar as pesquisas na ionosfera e acima desta;
d) Que os aparelhos de sondagem por cima funcionam a maior parte deles em regime de impulsos com varrimento de frequência;

(1) Substitui a Resolução Spa2-4 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

e) Que os satélites em causa são geralmente utilizados intermitentemente, durante uma fracção do dia, segundo as características da órbita;

f) Que o sistema de sondagem pode ser telecomandado com precisão, e quando se quiser, a partir da estação terrena correspondente;

decide

que as administrações podem continuar a autorizar a emissão de ondas radioeléctricas a partir de satélites de pesquisa ionosférica colocados em órbitas por cima da ionosfera nas faixas de ondas hectométricas e decamétricas desde que se disponha de meios apropriados para comandar as emissões desse satélites, como estipula o n.º **2612** do Regulamento das Radiocomunicações, a fim de impedir que sejam causadas interferências prejudiciais e outros serviços.

RESOLUÇÃO N.º 63

Relativa à protecção dos serviços de radiocomunicação contra as interferências causadas pela radiação dos aparelhos industriais, científicos e médicos (ISM)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que os aparelhos ISM geram e utilizam localmente energia radioeléctrica e que nem sempre é possível evitar que parte dessa energias seja radiada para o exterior;

b) Que existe um número crescente de aparelhos ISM, que funcionam em diversas frequências, repartidas por todo o espectro;

c) Que, em certos casos, uma fracção importante da energia pode ser radiada por um aparelho ISM fora da sua frequência de trabalho;

d) Que, certos serviço radioeléctricos, especialmente aqueles que utilizam intensidades de campo pequenas, correm o risco de sofrer interferências causadas pela radiação de aparelhos ISM e que esse risco, é inaceitável, especialmente quando se trata de serviços de radionavegação ou de outros serviços de segurança;

e) Quem, para limitar os riscos de interferência em determinadas partes do espectro:

i) As precedentes conferências de radiocomunicações (Atlantic City, 1947; Genebra, 1959) designaram algumas faixas de frequências no interior das quais os serviços de radiocomunicação devem aceitar as interferências prejudiciais produzidas pelos aparelhos ISM;

ii) A presente Conferência só aceitou aumentar o número de faixas de frequências utilizáveis pelos aparelhos ISM com a condição de que sejam definidos limites da radiação desses aparelhos no interior das faixas recentemente designadas para utilização mundial e no exterior do conjunto das faixas utilizáveis pelos aparelhos ISM;

decide

que, para garantir protecção conveniente aos serviços de radiocomunicação, é necessário que se proceda urgentemente a estudos destinados a definir os limites a impor às radiações dos aparelhos ISM em todo o espectro radioeléctrico, e mais especialmente nas faixas recentemente designadas;

convida a CCIR

1. A prosseguir, em colaboração com a CISPR e a CEI, nos estudos que empreendeu acerca da radiação dos aparelhos ISM em todo os espectro radioeléctrico, com vistas a assegurar protecção conveniente aos serviços de radiocomunicação;

2. A especificar, tão rapidamente quanto possível, em pareceres, os limites a impor à radiação dos aparelhos ISM no interior e no exterior das faixas que lhes estão destinadas no Regulamento das Radiocomunicações.

Deveria ser dada prioridade a estudos que permitam chegar a um parecer relativo às faixas de frequências recentemente designadas pela presente Conferência para os aparelhos ISM e que são as seguintes:

6765-6795 kHz;
433,05-434,79 MHz;
61-61,5 GHz;
122-123 GHz;
244-246 GHz;

convida a próxima conferência administrativa mundial das radiocomunicações competente

a resolver o problema das interferências causadas pelos aparelhos ISM aos serviços de radiocomunicação, tendo em conta os pareceres da CCIR.

RESOLUÇÃO N.º 64

Relativa ao estudo pela CCIR da protecção dos equipamentos radioeléctricos contra o raio

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que existem no Mundo zonas em que, apesar da instalação de dispositivos de protecção contra o raio, os equipamentos são constantemente danificados, e muitas vezes com extrema gravidade, em consequência de descargas que se dão durante tempestades eléctricas ou trovoadas violentas;
b) Que, devido às circunstâncias, às condições climáticas, à poluição do ambiente pelo homem, etc., os estudos realizados não chegaram a resultados seguros;
c) A falta de meios materiais e de experiência dos técnicos confrontados com este fenómeno;

considerando, além disso,

o n.º 72 da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973);

convida a CCIR

1. A estudar este fenómeno em consulta com a CCITT e a emitir um parecer sobre o assunto;
2. A incluir, na medida do possível, no estudo deste fenómeno, a fim de facilitar a aplicação das técnicas de protecção, estatísticas sobre as descargas de raio em função das zonas climáticas onde elas se manifestam, sobre a frequência dessas manifestações e as grandezas características do raio, medidas em forma de tensões ou de correntes induzidas, assim como as constantes de tempo associadas;

e convida as administrações

a apresentarem à CCIR os dados técnicos e os resultados dos estudos efectuados neste domínio.

RESOLUÇÃO N.º 65

Relativa à difusão de informações actualizadas sobre os pareceres da CCIR mencionados no Regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notado

a) Que o Regulamento das Radiocomunicações se refere a pareceres determinados da CCIR, bem como a «pareceres pertinentes da CCIR»;
b) Que a Resolução n.º 703 prevê consultas quanto à aplicabilidade dos pareceres da CCIR relativos aos critérios técnicos de partilha de faixas de frequências entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra ou entre serviços de radiocomunicação espacial;
c) Que os pareceres da CCIR podem ser revistos pelas assembleias plenárias da CCIR, o que provoca uma modificação dos números de referência;

considerado

a) Que, para aplicarem bem o Regulamento das Radiocomunicações, as administrações devem saber quais os pareceres da CCIR que são de tomar em consideração;
b) Que as informações sobre a actualização desses pareceres são da maior importância;

convida a CCIR

1. A identificar . a fazer uma lista das disposições do Regulamento das Radiocomunicações que contêm uma referência a um parecer determinado da CCIR ou a um «parecer pertinente da CCIR», indicando ao mesmo tempo os números de referência e os títulos desses pareceres;
2. A encarregar o director da CCIR de fornecer ao secretário-geral as informações necessárias à actualização dessa lista;

solicita ao secretário-geral

que comunique a todas as administrações a lista desses pareceres, bem como qualquer actualização ulterior.

RESOLUÇÃO N.º 66

Relativa à divisão do Mundo em Regiões tendo em vista a atribuição das faixas de frequências

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a divisão actual do Mundo em Regiões 1, 2 e 3 para efeitos de atribuição das faixas de frequências remonta a 1947 e que as bases técnicas em que essa divisão assenta não estavam então claramente definidas;
b) Que, desde 1947, as técnicas das radiocomunicações fizeram progressos consideráveis e apareceu grande número de novos países;

consciente

de que a divisão do Mundo em três Regiões, tal como existe, talvez corresponda de forma apropriada e equitativa às necessidades de todos os países;

reconhecendo

que não é possível, durante a presente Conferência, proceder com êxito à revisão da divisão existente do Mundo em Regiões:

decide

que essa divisão deve ser revista tendo em conta os progressos mais importantes alcançados na técnica das radiocomunicações e o aumento do número dos Membros da União que se encontram em graus diferentes de desenvolvimento;

pede a CCIR

que empreenda um estudo das bases técnicas e operacionais de uma eventual divisão do Mundo para efeitos de atribuição das faixas de frequências radioeléctricas, estudo esse baseado em todos os factores pertinentes, tais como a propagação das ondas radioeléctricas, as condições climáticas, a configuração geográfica natural do Mundo, o nível de desenvolvimento económico e técnico, e que permita uma utilização mais eficaz do espectro das frequências por todos os países Membros da União;

pede instantemente a todos os Membros da União

que participem activamente no estudo acima mencionado, contribuindo para os trabalhos em vista;

pede, além disso, à CCIR

que dê por concluído esse estudo e apresente os resultados dele o mais tardar na sua XVI Assembleia Plenária e, em qualquer caso, que elabore um relatório para ser examinado pela próxima assembleia plenária;

convida o conselho de administração

a acompanhar os progressos desse estudo e a dar pareceres à Conferência de Plenipotenciários para que a questão possa ser resolvida, como convém, numa futura conferência administrativa mundial das radiocomunicações da União.

RESOLUÇÃO N.º 67

Relativa ao aperfeiçoamento da concepção e da utilização dos materiais radioeléctricos

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o espectro das frequências é um recurso natural limitado que só tem interesse na medida em que seja explorado;
b) Que a utilização eficaz do espectro pode ser comprometida pelas características dos materiais de emissão e de recepção;
c) Que as condições de funcionamento dos sistemas radioeléctricos podem também causar prejuízo à utilização eficaz do espectro;
d) Que o progresso constante da electrónica e dos ramos conexos permitem produzir sistemas de radiocomunicação que utilizem mais racionalmente o espectro das frequências:

decide

que as administrações deveriam encorajar o aperfeiçoamento da concepção e da construção dos materiais radioelétricos, bem como do modo de exploração dos sistemas, com vista a utilizar da melhor maneira o espectro das frequências radioeléctricas.

RESOLUÇÃO N.º 68

Relativa à nova definição de certos termos contidos no anexo 2 à Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973) e aplicáveis ao regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo examinado e adoptado

os termos e definições contidos no artigo 1 do Regulamento das Radiocomunicações (Genebra, 1979), que contém certo número de termos já definidos no anexo 2 à Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973), intitulado «Definição de certos termos empregados na Convenção e nos Regulamentos da União Internacional das Telecomunicações»;

julgando

que as definições de certos termos, como «interferência nociva» (no presente Regulamento «interferência prejudicial»), «telegrafia» e «telefonia», assim como termos associados que figuram igualmente no anexo 2 à Convenção e que se revestem de certa importância para o Regulamento das Radiocomunicações, deveriam ser revistas para as tornar mais precisas e mais em conformidade com as técnicas actuais;

reconhecendo, todavia

que, tendo em conta o artigo 51 e especialmente o n.º **167** da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973), só uma conferência de plenipotenciários da União Internacional das Telecomunicações está habilitada a modificar os termos contidos no anexo 2 à referida Convenção, assim como as suas definições;

recomenda

à Conferência de Plenipotenciários da União Internacional das Telecomunicações (Nairobi, 1982) que reexamine a definição, no anexo 2 à Convenção Internacional das Telecomunicações, dos termos «interferência nociva», «telegrafia» e «telefonia» e dos termos associados, tendo em conta os termos e definições adoptados para uso do Regulamento das Radiocomunicações pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979), assim como propostas eventualmente apresentadas pela CCIR e a CCITT em aplicação da Resolução n.º 44 da Conferência de Plenipotenciários (Málaga, Torremolinos, 1973);

encarrega o secretário-geral

1. De apresentar esta questão à atenção da referida Conferência de Plenipotenciários;
2. De indicar por notas, na versão publicada do Regulamento das Radiocomunicações, as definições que divergem do anexo 2 da Convenção, acentuando o facto de que as definições correspondentes que figuram nesse anexo prevalecerão sobre as que figuram no Regulamento das Radiocomunicações, na medida em que apresentem diferenças;
3. De modificar ou de suprimir essas notas para ter em conta decisões da Conferência de Plenipotenciários.

RESOLUÇÃO N.º 100

Relativa à coordenação, à notificação e à inscrição no Ficheiro de Referência Internacional das Frequências das consignações a estações do serviço fixo por satélite em relação às estações do serviço de radiodifusão por satélite na Região 2 (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que o regulamento das Radiocomunicações não contém qualquer disposição que trate da coordenação, da notificação e da inscrição no Ficheiro de Referência Internacional das Frequências das consignações de frequência às estações do serviço fixo por satélite na faixa de 12,1-12,3 GHz no que respeita à sua interacção com as estações de serviço de radiodifusão por satélite na Região 2;

decide

que as disposições dos artigos 11 e 13 do Regulamento das Radiocomunicações sejam aplicadas nesses casos até que a questão possa ser examinada por uma conferência administrativa das radiocomunicações competente.

---

(1) Substitui a Resolução Sat-6 da Conferência Administrativa Mundial Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

RESOLUÇÃO N.º 101

Relativa à conclusão de acordos e à preparação de planos associados para ligações de conexão com estações espaciais do serviço de radiodifusão por satélite a funcionar na faixa dos 12 GHz, em conformidade com o plano adoptado pela Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) para as Regiões 1 e 3.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que convém utilizar o mais eficazmente possível a órbita dos satélites geostacionários e as faixas de frequências atribuídas ao serviço fixo por satélite;

b) Que a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) elaborou e adoptou disposições e um plano associado de atribuição de canais e de posições orbitais nas faixas de frequências de 11,7-12,5 GHz para a Região 1 e de 11,7-12,2 GHz para a Região 3, que figuram no apêndice 30;

c) Que as ligações de conexão com os satélites de radiodifusão fazem parte do serviço fixo por satélite e que a utilização das faixas de frequências nessas ligações é actualmente regida pela disposições dos artigos 11 e 13 do Regulamento das Radiocomunicações;

d) Que a presença de numerosas satélites de radiodifusão a funcionar em posições da órbita dos satélites geostacionários determinadas pelos planos pré-citados será causa de grandes dificuldades para a coordenação com os sistemas do serviço fixo por satélite, da utilização das faixas de frequências nas ligações de conexão para a transmissão de programas;

e) Que os critérios de partilha existentes no artigo 27 não foram elaborados especialmente para as ligações de conexão para o serviço de radiodifusão por satélite nas faixas em que a utilização do serviço fixo por satélite por satélite é reservada exclusivamente às ligações de conexão para o serviço de radiodifusão por satélite;

notando

a) Que a presente Conferência reconheceu certas faixas de frequências como disponíveis para as ligações de conexão com os satélites de radiodifusão (v. o quadro das atribuições de faixas de frequências e as notas associadas, n.ºs **835, 858, 863 e 869**);

b) Que a escolha de faixas de frequências para as ligações de conexão com os satélites de radiodifusão deve ser deixada às administrações interessadas.

decide

1. Que as ligações de conexão com os satélites de radiodifusão a funcionar nas faixas de 11,7-12,5 GHz na Região 1 e de 11,7-12,2 GHz na Região 3 devem ser organizadas e exploradas nas faixas de 10,7-11,7 GHz, 14,5-14,8 GHz (unicamente para os países situados fora da Europa e para Malta) e 17,3-18,1 GHz para a Região 1 e 14,5-14,8 GHz e 17,3-18,1 GHz para a Região 3, em conformidade com os acordos e os planos associados, adoptados por uma conferência administrativa das radiocomunicações em que poderão participar todas as administrações interessadas, assim como as administrações cujos serviços possam ser afectados. Todavia, as administrações podem igualmente utilizar as ligações de conexão com os satélites de radiodifusão na faixa de 14-14,5 GHz (unicamente para os países situados fora da Europa e para Malta) ou noutras faixas de frequências atribuídas ao serviço fixo por satélite (Terra para espaço), com a condição de que seja feita a coordenação com outras redes de serviço fixo ou por satélite;

2. Que, até à entrada em vigor dos acordos e dos planos associados pré-citados, as administrações e a IFRB devem aplicar os procedimentos descritos nos artigos 11 e 13 e na Resolução n.º 102 para as ligações de conexão com os satélites de radiodifusão a funcionar nas faixas mencionadas no § 1 acima;

3. Que, até, à entrada em vigor dos Actos Finais da Conferência Administrativa das Radiocomunicações proposta, os critérios especificados no artigo 27 para a partilha entre os serviços de Terra e o serviço fixo por satélite sejam também aplicados às ligações de conexão de serviço de radiodifusão por satélite nas faixas acima mencionadas;

convida o conselho de administração

a estudar a questão da convocação de uma conferência administrativa das radiocomunicações a fim de fixar a data e o local apropriados, assim como a agenda de tal conferência;

convida a CCIR

1. A estudar as características técnicas mais apropriadas para as ligações de conexão com os satélites de radiodifusão, bem como os métodos de planificação para a atribuição dos canais a essas ligações nas faixas atribuídas pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) (v. a Recomendação n.º 101);

2. A estudar e a determinar com urgência os critérios de partilha apropriados a aplicar entre os serviços fixos e móvel e as ligações de conexão com os satélites de conexão com os satélites de radiodifusão.

RESOLUÇÃO N.º 102

Relativa à coordenação entre administrações das características técnicas das ligações de conexão com as estações espaciais do serviço de radiodifusão por satélite da faixa de 11,7-12,5 GHz (Região 1) e 11,7-12,2 GHZ (Região 3) para o período compreendido entre a entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) e a entrada em vigor dos actos finais da futura conferência de planificação das ligações de conexão com tais estações espaciais.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, antes da convocação de uma conferência de planificação das ligações de conexão, qualquer administração que deseje utilizar uma ligação de conexão com uma estação espacial do serviço de radiodifusão por satélite deveria poder determinar as características técnicas dessa ligação, de acordo com todas as administrações que partilham a mesma posição orbital para tais estações previstas no plano contido nos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) (apêndice 30), tendo em conta os pareceres pertinentes da CCIR;

b) Que qualquer administração que deseje pôr em serviço uma estação espacial do serviço de radiodifusão por satélite e conformidade com as disposições do apêndice 30 e utilizar, para o efeito, uma consignação de frequência para a ligação de conexão, deverá aplicar os procedimentos de publicação antecipada e de coordenação previstos no artigo 11 para essa ligação de conexão:

decide

1. Que a IFRB, quando proceda à publicação antecipada nos termos do n.º **1044** deve também indicar as administrações em nome das quais esteja inscrita, de acordo com o apêndice 30, uma consignação de frequência para a mesma posição orbital;

2. Que o acordo ou as objecções das administrações mencionadas no § 1 anterior sejam comunicados à administração que procura a coordenação num prazo de quatro meses a partir da data da publicação antecipada;

3. Que possa ser efectuado um acordo de pré-coordenação entre as administrações que partilham a mesma posição orbital no plano, se necessário com a assistência da Comissão, numa reunião para que serão convidadas essas administrações e à qual poderão assistir se o desejarem;

4. Que o resultado desse acordo de pré-coordenação seja publicado em complemento dos procedimentos normais de coordenação efectuados em conformidade com as disposições do artigo 11, e que a conferência encarregada futuramente da planificação das ligações de conexão seja informada de todos os acordos de pré-coordenação efectuados em aplicação da presente Resolução, sem prejudicar de modo nenhum as decisões que essa conferência venha a tomar.

RESOLUÇÃO N.º 103

Relativa à melhoria da assistência aos países em desenvolvimento com vista a facilitar o acesso do seu serviço fixo às faixas das ondas decamétricas e a assegurar a protecção das suas consignações contra as interferências prejudiciais.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tomando nota

de outras resoluções adoptadas pela presente Conferência relativas às necessidades especiais dos países em desenvolvimento;

considerando

a) Que, em numerosos casos, os países em desenvolvimento têm necessidade de assistência de natureza altamente especializada, que deve frequentemente ser obtida a curto prazo, em especial no que respeita ao serviço fixo e à utilização de faixas de frequências na gama das ondas decamétricas;

b) Que os conhecimentos técnicos e a experiência que nesse sentido apresentam mais interesse para tais países lhes podem ser fornecidos pela Comissão Internacional do Registo de Frequências ou por intermédio desta;

considerando, além disso,

c) Que os recursos da IFRB são limitados;

decide

1. Que as disposições dos n.ºs **1218, 1260, 1275 a 1304, 1416** e **1963** a **1966** do Regulamento das Radicomunicações se destinem essencialmente a ser utilizadas pelas administrações dos países em desenvolvimento;

2. Que as administrações dos países desenvolvidos deveriam recorrer o menos possível a tais disposições;

3. Que as administrações dos países em desenvolvimento deveriam recorrer o mais possível a tais disposições.

RESOLUÇÃO N.º 200 (¹)

Relativa à utilização das classes de emissão R3E e J3E para fins de perigo e de segurança na frequência portadora de 2182 kHz (²)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que o Regulamento das Radiocomunicações prevê a utilização na frequência portadora de 2182 kHz:

Da classe de emissão A3E ou H3E pelas estações de navio, de aeronave e de engenho de salvamento;
Da classe de emissão H3E pelas estações costeiras;
Das classes de emissão especificadas no apêndice 37 pelas radiobalizas de localização de sinistros;

b) Que essas disposições têm por finalidade principal assegurar a eficácia das comunicações de perigo e de segurança pelo emprego de técnicas já experimentadas com êxito;

tomando nota igualmente

a) Do relatório final do Grupo de Especialistas (Genebra, 1963);
b) Dos estudos pertinentes da CCIR relativos à técnica da faixa lateral única (v. a Questão 26-1/8, os pareceres n.ºs 488, 543 e 544 e o Relatório n.º 744 da CCIR);

reconhecendo

que o emprego das classes de emissão R3E e J3E daria à exploração na frequência portadora de 2182 kHz as vantagens inerentes ao emprego da técnica da faixa lateral única de que já se beneficia noutras frequências;

reconhecendo, todavia,

que a CCIR recomenda que não se utilize a classe de emissão R3E para fins de perigo e de segurança (v. parecer n.º 543 da CCIR);

considerando

a) Que grande número de aparelhos que utilizam as classes de emissão A3E e H3E estarão ainda em uso para o perigo e a segurança em 1 de Janeiro de 1982;
b) Que o material de faixa lateral única deve ser concebido para funcionar com tolerâncias de frequências mais estritas e segundo padrões técnicos mais elevados que o material de dupla faixa lateral;
c) Que o material concebido para a segurança, especialmente o material dos engenhos de salvamento, deve:

Ter um funcionamento seguro em condições exteriores variáveis e após longos períodos de armazenamento;
Ser em todas as circunstâncias de emprego fácil para uma pessoa sem experiência;
Ser de preço relativamente módico;

d) Que se devem satisfazer as necessidades de radiogoniometria e de orientação por outros meios;
e) Que deve ser também satisfeita a necessidade de emitir e de receber os sinais de alarme radiotelefónicos a duas frequências, em especial os sinais das radiobalizas de localização de sinistros, e que, nesse sentido, se devem ter em conta as tolerâncias de frequência indicadas no apêndice 37 e os pareceres pertinentes da CCIR;

decide

1. Que se deve continuar a estudar o emprego das classes de emissão R3E e J3E para o perigo e a segurança;
2. Que convém que esse estudo seja concluído com a antecedência necessária para que a próxima conferência administrativa mundial das radiocomunicações competentes possa tomar uma decisão sobre a data de passagem definitiva às classes de emissão R3E e J3E na frequência portadora de 2182 kHz;

pede à CCIR

que continue a estudar esta questão como assunto urgente e que, se possível, emita pareceres com bastante antecipação antes da conferência pré-citada:

(¹) Nota do secretário-geral: v., também, a Resolução n.º 305.
(²) Substitui a Resolução Mar2-20 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

pede ao secretário-geral

que comunique a presente Resolução à Organização Intergovernamental Consultiva da Navegação Marítima;

convida a Organização Intergovernamental Consultiva da Navegação Marítima

a incluir o exame deste assunto no quadro do estudo actualmente empreendido sobre o sistema de perigo e de segurança marítima.

RESOLUÇÃO N.º 201

Relativa às disposições de exploração, à taxação e à contabilidade da correspondência pública nos serviços móveis

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a CCITT, de acordo com as decisões da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) elaborou dois pareceres relativos à exploração no serviço móvel marítimo e à taxação, à contabilidade e ao reembolso no serviço móvel marítimo;

b) Que a presente Conferência aceitou, no conjunto e na maior parte dos pontos de pormenor, as conclusões do relatório sobre os estudos efectuados pela CCITT, de acordo com as resoluções pertinentes da Conferência Administrativa Mundial da Radiocomunicações Marítimas (Genebra, 1974), que desde então foram ab-rogadas;

c) Que, por isso, o Regulamento Adicional das Radiocomunicações, assim como certas disposições do Regulamento das Radiocomunicações relativas à exploração, à taxação e à contabilidade da correspondência pública nos serviços móveis foram substituídos por disposições que, de um modo geral, tornam aplicáveis os pareceres da CCITT;

d) Que certo número das disposições substituídas se referiam a serviços móveis diferentes do serviço móvel marítimo e do serviço móvel marítimo por satélite;

e) Que as disposições contidas nos dois pareceres acima mencionados da CCITT relativamente à correspondência pública só se aplicam actualmente ao serviço móvel marítimo e ao serviço móvel marítimo por satélite;

f) Que, além disso, em qualquer revisão dos pareceres pertinentes da CCITT é necessário tomar plenamente em consideração os interesses marítimos, deixando às administrações um prazo suficiente que lhes permita efectuar consultas relativas a esses interesses;

reconhecendo

a) Que não existem actualmente disposições especiais previstas para a correspondência pública internacional nos serviços móveis diferentes do serviço móvel marítimo e do serviço móvel marítimo por satélite;

b) Que a correspondência pública internacional poderá, contudo, alargar-se, no futuro, a serviços móveis diferentes do serviço móvel marítimo e do serviço móvel por satélite;

convida a CCITT

a empreender, em caso de necessidade, o estudo de disposições relativas às normas de exploração, de taxação e de contabilidade relativas à correspondência pública nos serviços móveis diferentes do serviço móvel marítimo e do serviço móvel marítimo por satélite, visando harmonizar o mais possível todas as disposições referentes aos serviços móveis em questão;

convida, além disso, a CCITT

a que no prosseguimento dos seus trabalhos relativos ao serviço móvel marítimo e ao serviço móvel marítimo por satélite, tome especialmente em consideração os interesses marítimos;

decide

que, na eventualidade de um serviço de correspondência pública internacional ser aberto num serviço móvel diferente do serviço móvel marítimo e do serviço móvel marítimo por satélite, deverá esse novo serviço satisfazer, tanto quanto seja possível na prática, as disposições actuais de exploração, de taxação e de contabilidade previstas pelo Regulamento das Radiocomunicações, pelo Regulamento Telefónico e pelo Regulamento Telegráfico, bem como pelos pareceres pertinentes da CCITT, até que se possam efectuar as revisões necessárias.

RESOLUÇÃO N.º 202

Relativa à convocação de uma conferência administrativa mundial das radiocomunicações para os serviços móveis

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a Resolução n.º 814 do Conselho de Administração;

considerando

a) Que a agenda da presente Conferência prevê uma revisão parcial do Regulamento das Radiocomunicações e que a revisão completa exigiria a convocação de uma conferência apropriadaa para rever o conteúdo dos artigos restantes, especialmente os que se referem ao serviços móveis;
b) Que, tendo em conta as decisões que ela tomou e a necessidade de harmonizar certas disposições aplicáveis aos serviços móveis aeronáutico, marítimo e terrestre, e, em especial, de melhorar as disposições relativas ao perigo e à segurança, e dados os progressos técnicos e a introdução de novos sistemas, é necessário rever um certo número de disposições relativas aos serviços móveis;
c) Que é necessário ter em conta as novas exigências a que devem fazer face os serviços móveis;
d) Que a presente Conferência formulou diversas recomendações prevendo a convocação de uma conferência que trataria das disposições aplicáveis aos serviços móveis;
e) Que quando forem introduzidas pela presente Conferência modificações às faixas de frequências atribuídas aos serviços móveis, pode ser necessário fazer modificações nos planos das vias e outras subdivisões dessas faixas de frequências para os serviços interessados;

notando, além disso,

que os Actos Finais da Conferência Administrativa Mundial da Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) prevêem um plano de adjudicação para este serviço, que esse plano está em vias de aplicação e que ele não deveria ser modificado num futuro próximo;

decide convidar o conselho de administração

a tomar as disposições necessárias com vista à convocação de uma conferência administrativa mundial das radiocomunicações para os serviços móveis, a fim de rever as disposições do Regulamento das Radiocomunicações que dizem respeito mais particularmente a esses serviços;

convida

1. A CCIR a preparar as bases técnicas e de exploração para a conferência;
2. A IFRB a prestar a sua ajuda técnica para a preparação e a organização da conferência.

RESOLUÇÃO N.º 300

Relativa à utilização e à notificação das frequências emparelhadas reservadas aos sistemas de telegrafia de faixa estreita com impressão directa e de transmissão de dados que funcionam nas faixas de ondas decamétricas atribuídas ao serviço móvel marítimo (1)

(V. apêndice 32)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que certas partes das faixas de ondas decamétricas atribuídas ao serviço móvel marítimo foram reservadas para os sistemas de telegrafia de faixa estreita com impressão directa e de transmissão de dados, desde que tais sistemas utilizem exclusivamente frequências emparelhadas;
b) Que, em cada faixa, o número das frequências emparelhadas é limitado;
c) Que uma futura conferência que para isso tivesse competência poderia atribuir aos sistemas de telegrafia de faixa estreita com impressão directa faixas mais largas que as faixas actuais;
d) Que, por esta razão, a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) não considerou oportuno, quando da sua reunião, estabelecer um plano, mas que tal plano poderia tornar-se necessário ulteriormente em consequência da saturação das vias;
e) Que entretanto, devem ser tomadas medidas provisórias pelas administrações e pela IFRB para assegurar a entrada em serviço ordenada dessas novas frequências emparelhadas;

decide

1. Que as frequências emparelhadas das faixas de ondas decamétricas reservadas aos sistemas de telegrafia de faixa estreita com impressão directa entre estações costeiras e estações de navio utilizadas por estas estações, notificadas e inscritas no Ficheiro de Referência Internacional das Frequências de acordo com as seguintes modalidades:

1.1. As consignações de pares de frequências para a emissão e a recepção far-se-ão exclusivamente às estações costeiras. As estações de navio de qualquer nacionalidade utilizarão legitimamente para as suas emissões as frequências de recepção das estações costeiras com as quais permutem tráfego.

---

(1) Substitui a Resolução Mar2-7 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

1.2. Para obter uma utilização eficaz das frequências, cada administração escolherá os pares de frequências a consignar às estações costeiras de acordo com as suas necessidades, com a ajuda da IFRB.

1.3. As consignações assim escolhidas e postas em serviço serão notificadas à IFRB em fichas cujo modelo figura no apêndice 1 ao Regulamento das Radiocomunicações e as administrações fornecerão as características fundamentais indicadas nas secções A ou B, consoante o caso, do referido apêndice. Se tais consignações estiverem em conformidade com o quadro de atribuição das faixas de frequências e com as disposições conexas do Regulamento das Radiocomunicações, assim como com a presente Resolução, a Comissão, a título de informação, publicá-las-á na parte 1-A da sua circular semanal e inscrevê-las-á no ficheiro de referência. Não inscreverá qualquer data na coluna 2 do ficheiro de referência e não formulará qualquer conclusão resultante de um exame técnico de compatibilidade com uma consignação existente. Contudo, a data em que a Comissão tenha recebido a ficha de notificação será indicada na parte 1-A da circular semanal e na coluna «Observações» do ficheiro de referência. Inscrever-se-á também na coluna «Observações» uma referência à presente Resolução.

1.4. Qualquer ficha de notificação que não esteja de acordo com as disposições pré-citadas do Regulamento das Radiocomunicações ou com a presente Resolução será devolvida pela IFRB à administração notificadora, acompanhada de qualquer sugestão que a Comissão possa fazer sobre o assunto.

1.5. Caso venham a surgir dificuldades entre países que utilizam a mesma via, a questão será resolvida por acordo mútuo entre as administrações interessadas.

2. Que uma futura conferência com competência para isso seja convidada a examinar as dificuldades que possa ter levantado a aplicação da presente Resolução e a tomar, se necessário, uma decisão sobre o estatuto a dar às consignações acima mencionadas ou sobre as condições de preparação de um plano para as faixas e os sistemas em questão. As inscrições feitas no ficheiro de referência em aplicação da presente Resolução não prejudicarão de nenhum modo as decisões que possam vir a ser tomadas pela conferência acima mencionada.

3. Que a presente Resolução se aplique às consignações de frequência emparelhadas reservadas aos sistemas de telegrafia de faixa estreita com impressão directa como indicado no § 1.1 acima, apesar de todas as outras disposições contrárias do Regulamento das Radiocomunicações e das resoluções existentes de conferências administrativas das radiocomunicações.

RESOLUÇÃO N.º 301

Relativa à notificação das frequências não emparelhadas utilizadas pelas estações de navio para os sistemas de telegrafia de faixa estreita com impressão directa e de transmissão de dados (1)

(V. apêndice 33)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que certas partes das faixas de ondas decamétricas atribuídas ao serviço móvel marítimo são reservadas para os sistemas de telegrafia de faixa estreita com impressão directa e de transmissão de dados que utilizam frequências não emparelhadas;

b) Que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) não esteve em condições de decidir até que ponto é necessário regulamentar a utilização racional das frequências para a transmissão, pelas estações de navio, de sinais de telegrafia de impressão directa emitidos em frequências não emparelhadas, nem de decidir sobre que base conviria fundar essa regulamentação;

c) Que há conveniência em que estas questões sejam examinadas por uma futura conferência competente no assunto;

d) Que as disposições actuais do Regulamento das Radiocomunicações não dão às administrações as directivas necessárias para o período compreendido entre a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) e a data de entrada em vigor dos da conferência indicada na alínea *c*) acima;

decide

1. Que durante o período a que se refere a alínea *d*) acima qualquer administração que explore ou ponha em funcionamento, para ser utilizado nos navios, um sistema de telegrafia de faixa estreita com impressão directa ou de transmissão de dados utilizando frequências não emparelhadas deverá notificar à IFRB, para fins de inscrição no Ficheiro de Referência Internacional das Frequências, as frequências em que deverão emitir os navios que participem nesse serviço;

2. Que as fichas de notificaçãso relativas às frequências utilizadas na recepção pelas estações costeiras não sejam objecto de um exame técnico da parte da IFRB e que as consignações notificadas sejam inscritas no ficheiro de referência

(1) Substitui a Resolução Mar2-8 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

unicamente a título de informação, sem data, na coluna 2, mas com a inclusão, na coluna «Observações», de uma observação pertinente que contenha simplesmente uma referência à presente Resolução;

3. Que essas inscrições no ficheiro de referência não prejudicarão, de nenhum modo, as decisões que possa tomar a conferência mencinada na alínea *c*) acima.

RESOLUÇÃO N.º 302

Relativa ao tratamento pela IFRB das fichas de notificação de consignação de frequência às estações oceanográficas (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que adoptou a Resolução n.º 314 relativa ao estabelecimento de um sistema mundial coordenado de reunião de dados respeitantes à oceanografia;

b) Que a IRFB tem necessidade de instruções sobre a notificação das consignações de frequência às estações oceanográficas e a sua inscrição no Ficheiro de Referência Internacional das Frequências:

decide

dar instruções à IFRB no sentido de só aceitar para fins de inscrição no Ficheiro de Referência Internacional das Frequências as fichas de notificação apresentadas por administrações nos termos dos n.ºs **1214** a **1217** e **1219** do Regulamento das Radiocomunicações relativas a estações oceanográficas de emissão e de recepção que estão situadas em terra e estão em conformidade com as disposições da Resolução n.º 314. A IFRB tratará essas fichas de notificação de acordo com as disposições do n.º **1245** do Regulamento das Radiocomunicações. As inscrições pertinentes no ficheiro de referência não prejudicarão, de modo nenhum, as decisões que venha a tomar a próxima conferência administrativa das radiocomunicações competente para tratar do serviço móvel marítimo.

RESOLUÇÃO N.º 303

Relativa às frequências navio-navio nas faixas compreendidas entre 1605 kHz e 3600 kHz na Região 1 (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o Ficheiro de Referência Internacional das Frequências inclui, entre as suas incrições iniciais, as frequências que foram consignadas pela Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1951) a determinados países para comunicações entre navios nas faixas compreendidas entre 1605 kHz e 3600 kHz na Região 1;

b) Que há conveniência em tomar disposições para a notificação e a inscrição no ficheiro de referência da utilização dessas frequências para comunicações entre navios pelas administrações de outros países da Região 1:

decide

1. Que há conveniência em que a utilização das frequências referidas na alínea *a*) por outras administrações seja coordenada pelas administrações interessadas e notificada posteriormente à Comissão Internacional do Registo de Frequências;

2. Que, após ter recebido tal notificação, a Comissão inscreva essas novas consignações no ficheiro de referência internacional das frequências, sem data, na coluna 2a nem na coluna 2b, mas com uma observação pertinente na coluna «Observações», seguida da data de recepção pela Comissão da ficha de notificação;

convida as administrações

a reexaminar as zonas de utilização das consignações de frequência em causa, tais como estão inscritas no ficheiro de referência, a fim de melhorar a possibilidade de partilha;

pede à IFRB

que apresente, se for caso disso, às administrações interessadas as propostas que possa estar em condições de formular, com vista a alcançar o objectivo de que trata o parágrafo precedente.

---

(1) Substitui a Resolução Mar19 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1974).

(2) Substitui a Resolução n.º 15 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

RESOLUÇÃO N.º 304

Relativa à adopção da nova disposição das vias utilizadas para a telegrafia morse da classe A1A nas faixas atribuídas ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que na sua recomendação Mar7, a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967) recomendou às administrações que estudassem as questões relativas à utilização futura da relação harmónica nos aparelhos radioeléctricos de navio;
b) Que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) tomou medidas para que as estações de navio possam utilizar, para a telegrafia morse da classe A1A, frequências de chamada e frequências de trabalho que não estão em relação harmónica;
c) Que é desejável que seja adoptada, logo que possível, a nova disposição das vias;

reconhecendo

a) Que é necessário prever um período de extinção para os aparelhos radioeléctricos cujo funcionamento depende da relação harmónica das frequências de chamada e das frequências de trabalho;
b) Que a evolução e os progressos da técnica, especialmente a dos sintetizadores de frequência, permitiram que se disponha de aparelhos radioeléctricos mais estáveis e mais fiáveis;

decide

1. Que as estações de navio cujo funcionamento depende de frequências de chamada e de frequênicas de trabalho em relação harmónica consignadas antes de 1 de Janeiro de 1976 poderão continuar a utilizar as consignações que se encontrem no interior das faixas indicadas no apêndice 312 para a chamada e trabalho dos navios em telegrafia morse da classse A1A;
2. Que convém que, logo que possível, os navios utilizem aparelhos que possam funcionar de acordo com a nova disposição das vias que figuram no apêndice 35 relativamente às frequências necessárias à execução do seu serviço;
3. Que os aparelhos instalados depois de 1 de Janeiro de 1976 deverão funcionar de acordo com a nova disposição das vias que figuram no apêndice 35 relativamente às frequências necessárias à execução do seu serviço.

RESOLUÇÃO N.º 305 (2)

Relativa à utilização das classes de emissão R3E e J3E nas frequências portadoras de 4125 kHz e 6215,5 kHz utilizadas além das frequência portadora de 2182 kHz para fins de perigo e de segurança (3)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que o Regulamento das Radiocomunicações autoriza até 1 de Janeiro de 1984 a utilização de emissões da classe H3E pelas estações costeiras, as estações de aeronave que emitam nas frequências portadoras de 4125 kHz e 6215,5 kHz (v. os n.ºs **2982** e **2986**);
b) Que essas disposições têm por finalidade principal assegurar a eficácia das comunicações de perigo e de segurança pelo emprego de técnicas já experimentadas com êxito;

tomando igualmente nota

a) Do relatório final do Grupo de Especialistas (Genebra, 1963);
b) Dos estudos pertinentes da CCIR relativos à técnica da faixa lateral única (v. a Questão n.º 26-1/8, os pareceres n.ºs 488, 543 e 544 e o Relatório n.º 744 da CCIR);

reconhecendo

que o emprego das classes de emissão R3E e J3E daria à exploração nas frequências portadoras de 4125 kHz e 6215,5 kHz as vantagens inerentes ao emprego da técnica da faixa lateral única, de que já beneficia noutras frequências;

reconhecendo, todavia,

que a CCIR recomenda que a classe de emissão R3E não seja utilizada para fins de perigo e de segurança (v. parecer n.º 543 da CCIR);

---

(1) Substitui a Resolução Mar2-4 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Nota do secretário-geral: v., também, a Resolução n.º 200.
(3) Substitui a Resolução Mar2-21 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

considerando

a) Que o grande número de aparelhos que utilizam a classe de emissão H3E são ainda utilizados para o perigo e a segurança:
b) Que o material que utiliza as classes de emissão R3E e J3E deve ser concebido para funcionar com tolerâncias de frequência mais estritas e segundo normas técnicas mais elevadas que o material que utiliza a classse de emissão H3E com detecção de envolvente no receptor;
c) Que o material concebido para a segurança deveria , em todas as circunstâncias, ter um funcionamento seguro em condições exteriores variáveis e ser de emprego fácil por uma pessoa sem experiência;

decide

que não é necessário prosseguir o estudo relativo ao emprego das classes de emissão R3E e J3E para o perigo e a segurança nas frequências portadoras de 4125 kHz e 6125,5 kHz (v. os pareceres n.os 543 e 544 da CCIR);

pede ao secretário-geral

que comunique a presente Resolução à Organização Intergovernamental Consultiva da Navegação Marítima;

convida

1. A Organização Intergovernamental Consultiva da Navegação Marítima a incluir o exame deste assunto no quadro do estudo actualmente empreendido sobre o sistema de perigo e de segurança marítima;
2. A próxima conferência administrativa mundial das radiocomunicações competente a continuar o exame deste assunto.

RESOLUÇÃO N.º 306

Relativa ao emprego da técnica da faixa lateral única nas faixas do serviço móvel marítimo radiotelefónico compreendidas entre 1605 kHz e 4000 kHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A Recomendação n.º 28 da Conferência Administrativa das Radiocomunicações (Genebra, 1959);
b) Que a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967) decidiu impor a utilização da técnica da faixa lateral única, excepto em certas circunstâncias;
c) Que é desejável substituir logo que possível as emissões em faixa lateral dupla por emissões em faixa lateral única nas faixas atribuídas ao serviço móvel marítimo entre 1605 kHz e 4000 kHz;

decide

que, salvo disposição contrária nos Actos Finais da presente Conferência, as estações radiotelefónicas do serviço móvel marítimo que funcionam nas faixas compreendidas entre 1605 kHz e 4000 kHz deverão estar em conformidade com as seguintes condições:

1. Nenhuma nova instalação de aparelhos em faixa lateral dupla deve ser autorizada nas estações de navio, com excepção dos casos previstos nos n.os **2973, 4127** e **4130** do Regulamento das Radiocomunicações;

2. Até 1 de Janeiro de 1982, as estações costeiras e as estações de navio equipadas com aparelhos em faixa lateral única deverão igualmente estar equipadas de modo a poderem efectuar emissões da classe H3E compatíveis com o emprego de receptores em faixa lateral dupla.

Subsistirá para além de 1 de Janeiro de 1982 a obrigação de poder efectuar emissões H3E na frequência portadora de 2182 kHz.

3. Após 1 de Janeiro de 1982 só serão autorizadas as emissões das classes R3E e J3E. Todavia, serão também autorizadas as emissões seguintes:

As emissões das classes A3E e H3E para as estações de navio, de aeronave ou de engenho de salvamento emitindo na frequência portadora de 2182 kHz;
As emissões da classe H3E para que as estações costeiras que emitam na frequência portadora de 2182 kHz;
Nas Regiões 1 e 3 e na Gronelândia, a título excepcional, as emissões da classe H3E para as estações costeiras que difundem mensagens de segurança na frequência portadora de 2170,5 kHz;
As emissões das classes H2B, R2B e J2B para as estações costeiras para fins de chamada selectiva na frequência portadora de 2170,5 kHz;
As emissões das classes especificadas no apêndice 37 ao Regulamento das Radiocomunicações para as radiobalizas de localização de sinistros (v. igualmente o n.º **3265** do Regulamento das Radiocomunicações).

---

(1) Substitui a Resolução Mar5 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967).

4. A partir de 1 de Janeiro de 1982 as estações de navio e as estações de aeronave que devem adoptar a técnica da faixa lateral única nas frequências de trabalho do serviço móvel marítimo utilizarão unicamente emissões da classe H3E na frequência portadora de 2182 kHz.

RESOLUÇÃO N.º 307

Relativa à passagem à técnica da faixa lateral única das estações radiotelefónicas do serviço móvel marítimo nas faixas compreendidas entre 1605 kHz e 4000 kHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as estações radiotelefónicas em faixa lateral dupla do serviço móvel marítimo que funcionam nas faixas compreendidas entre 1605 kHz e 4000 kHz utilizam uma largura de faixa da ordem dos 6 kHz;
b) Que essas estações terão de utilizar no futuro a técnica da faixa lateral única;
c) Que devem ser previstas medidas para evitar, tanto quanto possível, durante o período de passagem à técnica da faixa lateral única, interferências prejudiciais entre as estações que utilizam a técnica da faixa lateral dupla e as estações que utilizam a técnica da faixa lateral única;

decide

1. Que a passagem à técnica da faixa lateral única das estações indicadas na alínea *a*) acima se efectue em conformidade com as disposições seguintes:

1.1. A frequência portadora da via em faixa lateral única situada na parte superior da via em faixa lateral dupla seja a mesma que a frequência portadora dessa via;

1.2. A frequência portadora da via em faixa lateral única situada na parte inferior da antiga via em faixa lateral dupla seja de 3 kHz inferior à frequência portadora dessa via quando esta última frequência for, pelo menos, 6 kHz superior à frequência portadora da via radiotelefónica adjacente em faixa lateral dupla;

1.3. Na Região 1, a frequência portadora da via em faixa lateral única situada na parte inferior da antiga via em faixa lateral dupla para as comunicações entre navios seja de 2,5 kHz inferior à frequência portadora dessa via quando esta última frequência estiver afastada 5 kHz da frequência das via radiotelefónica em faixa lateral dupla.

2. Que as emissões da classe H3E não devem ser utilizadas nas vias em faixa lateral únicas situadas na parte inferior das antigas vias em faixa lateral dupla.

RESOLUÇÃO N.º 308

Relativa ao espaçamento das frequências atribuídas ao serviço móvel marítimo na faixa de 156-174 MHz (2)

(V. o apêndice 18 e o artigo 60)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as frequências das faixas de ondas métricas compreendidas entre 156 MHz e 174 MHz são cada vez mais utilizadas no serviço móvel marítimo;
b) Que existe uma necessidade crescente de vias em ondas métricas para uso das operações portuárias;
c) Que existe uma necessidade crescente de vias em ondas métricas para a correspondência pública no serviço móvel marítimo;
d) Que existe necessidade de vias em ondas métricas para o serviço de movimento de navios;
e) Que é necessário prever vias em ondas métricas para utilizações diferentes da radiotelefonia, por exemplo o fac-símile e a telegrafia de faixa estreita com impressão directa;
f) Que as operações de luta contra a poluição, de busca e de salvamento, assim como a exploração dos navios e dos quebra-gelos, exigem vias em ondas métricas para as comunicações entre os helicópteros ou aeronaves ligeiras e os navios;

notando

que, em virtude da revisão do Regulamento das Radiocomunicações (Genebra, 1959) pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967) e pela Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974):

a) O espaçamento das vias atribuídas ao serviço móvel marítimo radiotelefónico em ondas métricas está a ser reduzido de 50 kHz para 25 kHz;

---

(1) Substitui a Resolução Mar4 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967).
(2) Substitui a Resolução Mar2-14 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

b) Se obtiveram vias suplementares, numeradas de 60 a 88, intercalando vias espaçadas de 25 kHz entre as vias espaçadas de 50 kHz do apêndice 18 do Regulamento das Radiocomunicações (Genebra, 1959);
c) Convém atribuir as vias espaçadas de 25 kHz numa base internacional;
d) A passagem de um espaçamento de 50 kHz a um espaçamento de 25 kHz devia processar-se como segue:

1) Data em que se pôde começar a modificar os emissores para que funcionem com um desvio máximo de ± 5 kHz e a modificar os receptores para aumentar, se necessário, o seu ganho de baixa frequência — 1 de Janeiro de 1972;
2) Data em que as modificações indicadas na alínea *d*), parágrafo 1, deviam estar excluídas para todos os aparelhos existentes — 1 de Janeiro de 1973;
3) Data até à qual convinha que as estações costeiras conversassem a possibilidade de receber emissões com desvio máximo de ± 15 kHz, e a partir da qual convinha modificar, o mais depressa possível, os receptores dessas estações para que estivessem, em conformidade com as condições de selectividade exigidas para vias espaçadas de 25 kHz — 1 de Janeiro de 1973;
4) Data a partir da qual todos os novos aparelhos deviam funcionar com um espaçamento de 25 kHz entre vias — 1 de Janeiro de 1973;
5) Data a partir da qual as estações só poderão utilizar aparelhos que satisfaçam o espaçamento de 25 kHz entre vias e a partir da qual se poderão utilizar sem qualquer reserva as vias intercalares — 1 de Janeiro de 1983.

decide

1. Que as administrações poderão, nas zonas em que isso seja necessário, autorizar a utilização das vias 60 a 88, com excepção das vias 75 e 76, reservadas para faixas de guarda da via 16;
2. Que as características técnicas dos aparelhos destinados a funcionar nas vias espaçadas de 25 kHz no serviço móvel marítimo em ondas métricas deverão estar em conformidde com as disposições do apêndice 19;
3. Que em 1 de Janeiro de 1983 todos os aparelhos deverão já satisfazer o espaçamento de 25 kHz entre vias e que a partir dessa data podem ser utlizadas sem qualquer reserva todas as vias intercalares.

RESOLUÇÃO N.º 309

Relativa à utilização não autorizada das frequências atribuídas ao serviço móvel marítimo (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as observações de fiscalização das emissões relativas á utilização das frequências da faixa de 2170-2194 kHz e das faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4063 kHz e 25 110 kHz mostram que um certo número de frequências dessas faixas continua a ser utilizado por estações de serviços diferentes do serviço móvel marítimo, especialmente por estações de radiodifusão de grande potência, das quais algumas são exploradas en contravenção às disposições do n.º **2665** do Regulamento das Radiocomunicações;
b) Que essas estações causam assim interferências prejudiciais às comunicações permutadas nesse serviço e que se observou nas faixas em questão um número muito grande de emissões cujas fontes não puderam ser identificadas com certeza;
c) Que as radiocomunicações constituem o único meio de comunicação de que dispõe o serviço móvel marítimo;

considerando, em especial,

d) Que é essencial que as vias que servem o escoamento do tráfego de perigo e de segurança estejam isentas de interferências prejudiciais, devido à necessidade absoluta de salvaguardar a vida humana e os bens;

decide solicitar instantemente às administrações

1. Que procedam de modo que estações pertencentes a serviços diferentes do serviço móvel marítimo se abstenham de utilizar as frequências situadas nas vias de perigo e de segurança, nas faixas de guarda dessas vias e nas faixas atribuídas em exclusivo ao serviço móvel marítimo, salvo nas condições expressamente estipuladas nos n.ºs **342, 518, 519, 522** ou **956** a **958** do Regulamento das Radiocomunicações;
2. Que continuem a tudo fazer para identificar e localizar a fonte de qualquer emissão não autorizada susceptível de pôr em perigo vidas humanas e bens e que comuniquem à IFRB as informações obtidas;
3. Que participem nos programas de fiscalização das emissões que a IFRB possa organizar em cumprimento das disposições da presente Resolução;

---

(1) Substitui a Resolução Mar2-15 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

4. Que peçam aos respectivos governos que promulguyem toda a legislação que considerem necessária para proibir às estações situadas ao largo das suas costas que transgridam as disposições do n.º **2665** do Regulamento das Radiocomunicações;

encarregar a IFRB

1. De continuar a organizar, a intervalos regulares, programas de fiscalização das emissões nas vias de perigo e de segurança, nas faixas de guarda dessas vias e nas faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4063 kHz e 26 175 kHz, com vista a identificar as estações de outros serviços que funcionem nessas faixas;

2. De tomar as disposições necessárias com vista à eliminação das emissões das estações de outros seviços que funcionem nessas faixas e que causem interferências prejudiciais ao serviço móvel marítimo ou sejam susceptíveis de lhas causarem;

3. De pedir, conforme as necessidades, a colaboração das administrações, por um lado, para identificar as fontes dessas emissões, empregando todos os meios disponíveis, por outro, para obter a suspensão dessas emissões.

RESOLUÇÃO N.º 310

Relativa às frequências a prever com vista à instalação e à futura entrega em serviço de sistemas de telemedida, de telecomando e de permuta de dados para os movimentos dos navios

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A necessidade de especificar frequências radioeléctricas que o serviço móvel marítimo poderá utilizar à escala mundial para satisfazer as necessidades dos movimentos dos navios, por meio de técnicas de permuta automática de dados digitais, de telemedida e de telecomando;

b) Os desenvolvimentos que estão actualmente em curso em diversas partes do espectro das frequências e em razão dos quais será necessário, no futuro,prever faixas de frequências comuns para assegurar a utilização eficaz do espectro;

c) A importância destes sistemas de comunicação a curta distância para a segurança e a eficácia da exploração dos navios;

d) As vantagens que estes sistemas trazem às autoridades portuárias no que respeita à segurança e à eficácia da gestão dos portos e das operações portuárias;

notando

a) Que, de acordo com as conclusões da reunião especial preparatória da CCIR, as frequências de 10 GHz parecem satisfatórias para tais sistemas automáticos para comunicação a curta distância;

b) Que se devem ainda obter informações complementares operacionais e técnicas para permitir determinar a utilização mais eficaz possível do espectro, bem como os critérios de partilha;

decide

1. Que a próxima conferência administrativa mundial das radiocomunicações competente deverá examinar as frequências que possam ser utilizadas para essas operações, à luz dos estudos que tenham sido efectuados;

2. Que a CCIR deverá estudar a questão das larguras de faixa e das formas de apresentação dos dados e dar o seu parecer sobre este assunto, coordenando os seus trabalhos com as administrações que desenvolvem e que experimentam os sistemas de transmissão digitais;

pede ao secretário-geral

que apresente a presente resolução à Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), convidando-a a definir as necessidades operacionais no que se refere à permuta de dados com navios, utilizando as técnicas de transmissão digitais, e que formule recomendações apropriadas para ajudar as administrações a preparar uma futura conferência.

RESOLUÇÃO N.º 311

Relativa à introdução de um sstema de chamada selectiva numérica para fazer face às necessidades do serviço móvel marítimo (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que há urgente necessidade de dispor de um só e único sistema de chamada selectiva numérica para fazer face às necessidades do serviço móvel marítimo em todo o Mundo;

---

(1) Substitui a Resolução Mar2-19 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

b) Que a Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) (1) comunicou à Conferência Administrativa Mundial das Radicomunicações Marítimas (Genebra, 1974), bem como à CCIR, as suas necessidades de um sistema de chamada selectiva para fins gerais que permita facilitar a transmissão e a recepção de todas as comunicações;

c) Que os artigos 25, 60, 62 e 65 do Regulamento das Radiocomunicações prevêem a utilização de um tal sistema;

d) Que os estudos relativos às características técnicas e de exploração de um tal sistema, efectuados pela CCIR no quadro da sua Questão n.º 9-3/8, estão já muito avançados;

e) Que as regras técnicas aplicáveis aos sistemas, tais como definidas do Regulamento das Radiocomunicações, se baseiam essencialmente nos pareceres da CCIR;

f) Que as assembleias plenárias da CCIR, se efectuam todos os três anos, ao passo que as conferências administrativas das radiocomunicações, que estão habilitadas a modificar o Regulamento das Radiocomunicações e procedem a essas modificações utilizando largamente os pareceres da CCIR, se realizam menos frequentemente e com muito menos regularidade;

é de opinião

a) Que as assembleias plenárias da CCIR adoptarão, provavelmente, pareceres relativos às características técnicas e de exploração aplicáveis a um só e único sistema de chamada selectiva numérica;

b) Que convém que as administrações beneficiem dos pareceres mais recentes da CCIR relativos aos sistemas de chamada selectiva destinados ao serviço móvel marítimo;

decide, por isso,

1. Convidar a CCIR a concluir os seus trabalhos para responder à Questão n.º 9-3/8 e a emitir, logo que possível, pareceres relativos às características técnicas e de exploração de um sistema selectivo numérico;

2. Que convém que cada assembleia plenária da CCIR faça o que seja necessário para levar ao conhecimento do secretário-geral da UIT os pareceres da CCIR que possam, ter influência nos criterios técnicos e de exploração relativos à introdução de um só e único sistema de chamada selectiva numérica no serviço móvel marítimo;

3. Que, depois de lhes ter comunicado os textos pertinentes da CCIR, o secretário-geral escreva às administrações pedido-lhes que indiquem, no prazo de quatro meses, quais os pareceres da CCIR ou as características técnicas e de exploração definidas nos pareceres mencionados no n.º 1 anterior que elas preferem aplicar no quadro das disposições apropriadas do Regulamento das Radiocomunicações:

4. Que, expirado esse prazo, o secretário-geral envie às administrações uma compilação das respostas recebidas.

RESOLUÇÃO N.º 312

Relativa à introdução de novos procedimentos de chamada em telegrafia morse A1A em ondas decamétricas (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário utilizar mais eficazmente o espectro das frequências radioeléctricas, assim como o tempo de trabalho do pessoal de exploração a bordo dos navios;

b) Que é desejável melhorar a eficácia da chamada nas faixas utilizadas para a telegrafia morse A1A em ondas decamétricas;

c) Que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) adoptou um novo procedimento de chamada para a telegrafia morse A1A em ondas decamétricas (artigo 63 e apêndice 34)

d) Que, para assegurar a eficácia deste novo procedimeno de chamada, é necessário que as administrações cheguem a acordo sobre os grupos indicados no apêndice 34, em conformidade com uma distribuição planificada das estações costeiras numa base regional e em função do tráfego;

e) Que as administrções que participaram na Conferência de 1974 adoptaram um plano de distribuição (anexo à presente resolução) das estações costeiras classificadas em quatro grupos, por países e por zonas, a fim de assegurar uma melhor distribuição das chamadas;

convida

as administrações que asseguram um serviço internacional de correspondência pública a indicarem, com vista à publicação da Nomenclatura das estações costeiras, os períodos de serviço durante os quais será assegurada a escuta na ou nas vias comuns e, se necessário, na ou nas vias de grupos;

---

(1) Resolução A.420(XI) da OMCI.

(2) Substitui a Resolução Mar2-5 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

convida, além disso,

as administrações que desejem integrar-se num grupo de plano de distribuição, ou as administrações já incluídas no plano e que desejem introduzir qualquer modificação nesse plano, a coordenarem, tanto quanto seja possível, as modificações pretendidas com as outras administrações interessadas e susceptíveis de ser afectadas que figuram num grupo em questão. Qualquer administração que tenha decidido integrar-se num grupo ou mudar de grupo no plano comunicará ao secretário-geral a sua decisão, que será publicado no anexo à Nomenclatura das estações costeiras;

encarrega o secretário-geral

1. De levar a presente resolução ao conhecimento de todas as administrações de que dependem estações costeiras nos países ou nas zonas que figuram no plano de distribuição, a fim de obter dessas administrações o acordo sobre esse plano ou sobre as rectificações a esse plano para satisfazerem as suas necessidades;

2. De manter actualizado, tendo em conta os resultados dessa consulta com as administrações interessadas, o plano de distribuição anexo à Nomenclatura das estações costeiras;

3. De publicar qualquer modificação do plano de distribuição no *Boletim de Exploração*, antes da publicação de qualquer revisão do plano na Nomenclatura das estações costeiras.

ANEXO À RESOLUÇÃO N.º 312

Plano de distribuição para as vias de grupos
Estações costeiras que funcionam em telegrafia morse A1A em ondas decamétricas

Países e zonas

Grupo 1

Açores.
Angola (República Popular de).
Baamas (Comunidades das).
Bahrein (Estado do).
Bangladesh (República Popular do).
Bermudas.
Brasil (República Federativa do).
Canadá (Costa Oeste e Árctico Ocidental).
Chile.
Costa do Marfim (República da).
Jibuti (República da).
Equador.
Espanha (Ilhas Canárias).
Estados Unidos da América (Costa Este).
Etiópia.
França.
India (República da) (Oeste).
Irlanda.
Israel (Estado de).
Quénia (República do).
Libéria (República da).
Madagáscar (República Democrática de).
Martinica (Departamento Francês da).
Maurícia.
Nova Caledónia e Dependências.
Novas Hébridas.
Omã (Sultanato de).
Filipinas (República das).
Polinésia Francesa).
Porto Rico.
Reunião (Departamento Francês da).
Roménia (República Socialista da).
Reino Unido da Grã-Bretanha e da Irlanda do Norte.
São Tomé e Príncipe (República Democrática de).
Singapura (República de).
Suíça (Confederação).
União das Repúblicas Socialistas Soviéticas (Ucrânia e Ásia Meridional).

Grupo 2

Argélia (República Argelina Democrática e Popular).
Antilhas Holandesas.
Arábia Saudita (Reino da) (Oeste).
Barbados.
Bélgica.
Benim (República Popular do).
Camarões (República Unidas dos).
Cabo Verde (República de).
Natal (Ilha) (Oceano Índico).
Chipre (República de).
Colômbia (República da).
Congo (República Popular do).
Cook (Ilhas).
Costa Rica.
Cuba.
Dominicana (República).
Egipto (República Árabe do).
Estados Unidos da América (Costa do Golfo).
Falkland e Dependências (Ilhas) (Malvinas).
França.
Gabonesa (República).
Gâmbia (República da).
Grécia.
Hong-Kong.
Húngara (República Popular).
Itália.
Kampuchea Democrático.
Líbano.
Martinica (Departamento Francês da).
México.
Nova Caledónia e Dependências.
Novas Hébridas.
Panamá (República do).
Paraguai (República do).
Países Baixos (Reino dos).
Peru.
Polónia (República Popular da).
Polinésia Francesa.
República da Coreia.
Reunião (Departamento Francês da).
Reino Unido da Grã-Bretanha e da Irlanda do Norte (somente 22 MHz).
Sudão (República Democrática do).
Sri Lanka (República Socialista Democrática de).
Checoslováquia (República Socialista).
Tailândia.
União das Repúblicas Socialistas (Noroeste e Extremo Oriente).
Iémene (República Árabe do).

Grupo 3

Alasca (Estado do).
Argentina (República).
Birmânia (República Socialista da União da).
Canadá (Costa Este e Árctico Oriental).
China (República Popular da).
Dinamarca.
Estados Unidos da América (Costa Oeste).
Finlândia.
Ghana.
Guam.
Guiné-Bissau (República da).
Guiné (República Popular Revolucionário da).
Guiana.
Hawai (Estado de).
Irão (República Islâmica do).
Islândia.
Jamaica.
Líbia (Jamalúriya Árabe. Líbia Popular Socialista).
Madeira.
Marianas.
Marrocos (Reino de).
Moçambique (República Popular de).
Nauru (República de).
Nigéria (República Federal da).
Noruega.
Paquistão (República Islâmica do).
República Democrática Alemã.
Suécia.
Trindade e Tabago.
Turquia.
União das Repúblicas Socialistas Soviéticas (Extremo Oriente e Região Europeia).
Venezuela (República da).
Jugoslávia (República Socialista Federativa da).

Grupo 4

Albânia (República Popular Socialista da).
Alemanha (República Federal da).
Arábia Saudita (Reino da) (Este).
Austrália.
Bulgária (República Popular da).
China (República Popular da) (Província de Taiwan).
Espanha (excepto as ilhas Canárias).
Fiji.
Guiné Equatorial (República da).
Índia (República da) (Este).
Indonésia (República da).
Iraque (República do).
Japão.
Jordânia (Reino Hachemita da).
Koweit (Estado do).
Malásia.
Malta (República de).
Mauritânia (República Islâmica da).
Nova Zelândia.
Papuásia-Nova Guiné.
Pitcairn (Ilha).
Portugal.
República Árabe Síria.
Salomão (Ilhas).
Samoa Americana.
Senegal (República do).
Seychelles (República das).
Serra Leoa.
República da África do Sul.
Suriname (República de).
Togolesa (República).
Tunísia.
União das Repúblicas Socialistas (Região Europeia e Árctico).
Uruguai (República Oriental do).
Vietname (República Socialista do).
Iémene (República Democrática Popular do).
Zaire (República do).

RESOLUÇÃO N.º 313

Relativa à introdução de um novo sistema de identificação das estações do serviço móvel marítimo e do serviço marítimo por satélite (identidades no serviço móvel marítimo)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A necessidade de atribuir, para fins da segurança e das telecomunicações, uma identidade própria a cada navio;
b) A necessidade de proceder de modo que essa identidade seja utilizável nos sistemas automáticos;
c) O facto de que, para se obter um formato comum de endereço que convenha aos sistemas automáticos, as identidades consignadas às estações terrenas de navio, às estações costeiras, às estações terrenas costeiras e as identidades utilizadas para as chamadas de grupo devem ser de natureza semelhante quando são transmitidas pelo trajecto radioeléctrico;

considerando, além disso,

a) Que é desejável que o código constituído pela identidade da estação de navio, ou uma parte desse código, possa ser utilizado pelos assinantes das redes públicas com comutação para chamar os navios em exploração automática;
b) Que, em certos países, as redes públicas comutadas têm limitações quanto ao número máximo dos algarismos que podem ser utilizados para compor (no disco ou no teclado) a identidade da estação de navio;
c) Que em parecer da CCITT (1) descreve um método de identificação de navio que tem em conta essa contingência;
d) Que, no interesse do desenvolvimento da exploração automática no sentido estação costeira-navio, as limitações, sejam quais forem, deveriam ser reduzidas ao mínimo;

(1) Parecer da CCITT E.210/F. 120.

notando

que a CCIR estuda a adopção do novo sistema de identidades para as estações do serviço marítimo e do serviço móvel marítimo e do serviço móvel marítimo por satélite:

decide

que, no caso das administrações que utilizam essa forma de identificação para as estações do serviço móvel marítimo por satélite, a atribuição das identidades se faça em conformidade com as disposições do apêndice 43 até à decisão apropriada da próxima conferência administrativa mundial das radiocomunicações competente;

convida as administrações

a continuarem a participar nos estudos da CCIR e da CCITT sobre este assunto;

pede ao secretário-geral

que prepare o quadro dos algarismos de identificação de nacionalidade (NID), em estreita colaboração com a CCIR e a CCITT, e que apresente esse quadro a exame pela próxima conferência administrativa mundial das radiocomunicações competente, para inclusão no apêndice 43.

RESOLUÇÃO N.º 314

Relativamente ao estabelecimento de um sistema mundial coordenado para a reunião de dados relativos à oceanografia (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que foi expresso o desejo de que se estabeleça um sistema mundial coordenado de reunião de dados relativos á oceanografia;

b) Que em cada uma das seis faixas de ondas decamétricas atribuídas em exclusivo ao serviço móvel marítimo a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967) reservou uma faixa de frequências destinada a ser utilizada, em conformidade com as disposições do apêndice 31 ao Regulamento das Radiocomunicações, para a reunião de dados relativos à oceanografia;

c) Que as faixas de frequências de que se trata só serão utilizadas com o máximo rendimento mediante a colaboração das administrações e a coordenação a que estas procedam;

d) Que certas administrações manifestaram desejo de que se estabeleça, na base de um plano coordenado nas faixas atribuídas pela presente Conferência, um sistema mundial coordenado de transmissão de dados relativos à oceanografia;

e) Que, entretanto, outras administrações desejam utilizar, num futuro próximo, estações de reunião de dados relativos à oceanografia, no quadro das decisões tomadas sobre esta questão pela presente Conferência;

f) Que, por consequência, convém estabelecer um programa coordenado de reunião de dados relativos à oceanografia nas faixas de frequências indicadas na alínea *b*) anterior;

g) Que a Comissão Oceanográfica Intergovernamental (COI) e a Organização Mundial (OMM) se consultam desde 1962 sobre os esforços de cooperação a desenvolver no domínio da reunião de dados relativos à oceanografia (por exemplo, o grupo de especialistas OMM/COI encarregado de estudar a coordenação das necessidades, Genebra, 19-21 de Julho de 1967);

decide

1. Convidar a COI e a OMM a estabelecerem em comum, concertadamente com a IFRB e, consoante o caso, com as administrações dos Membros, um plano coordenado concebido de modo a satisfazer as necessidades presentes e futuras de todos os Membros interessados e a permitir que as estações participantes na reunião de dados relativos à oceanografia funcionem num sistema mundial no quadro das disposições tomadas pela presente Conferência relativamente a um tal sistema. Esse plano deverá comportar a indicação da distribuição geográfica das estações oceanográficas;

2. Incitar as administrações a consignarem, para a parte do sistema mundial sob sua jurisdição, frequências conformes com o plano acima, assim como com as recomendações da COI e da OMM;

3. Convidar, além disso, a COI e a OMM a assumirem em comum, concertadamente com a IFRB, a responsabilidade de manter o plano actualizado, tendo em conta a evolução das necessidades de dados relativos à oceanografia;

---

(1) Substitui a Resolução Mar20 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967).

4. Que a próxima conferência administrativa das radiocomunicações competente para tratar de questões relativas ao serviço móvel marítimo deverá ter em consideração o plano de que tratam os §§ 1 a 3 anteriores, a fim de determinar as modificações eventualmente necessárias para melhorar a sua eficácia.

RESOLUÇÃO N.º 315

Relativa à supressão eventual das taxas de estação móvel para a correspondência pública no serviço móvel marítimo

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a VI Assembleia Plenária da CCITT (Genebra, 1976) adoptou o projecto de parecer relativo à taxação, à contabilidade e ao reembolso móvel marítimo, com excepção dos pontos relativos especialmente às taxas de estação para a correspondência pública no serviço móvel marítimo;

b) Que o projecto de parecer acima indicado foi ulteriormente modificado, à luz da decisão tomada pela VI Assembleia Plenária da CCITT (Genebra, 1976), relativamente às taxas de estação móvel, e que esse projecto de parecer foi aprovado na sequência de uma votação por correspondência,

c) Que o parecer modificado compreende as seguintes disposições (1):

> As taxas de estação móvel podem ser aplicadas aos serviços de radiotelegrafia pública, de radiotelefonia e de radiotelex assegurados em ondas hectométricas e decamétricas, mas não devem aplicar-se a nenhum dos serviços que funcionam em ondas métricas, a nenhum dos serviços móveis por satélite, nem a nenhum serviço explorado automaticamente. Todavia, as taxas de estação móvel podem também aplicar-se aos radiotelegramas transmitidos em ondas métricas.
>
> As taxas de estação móvel deverão ser abolidas para o tráfego encaminhado a partir das 23.59 TMG de 31 de Dezembro de 1987.

decide

adoptar a data recomendada para a supressão das taxas de estação móvel para a correspondência pública no serviço móvel marítimo.

RESOLUÇÃO N.º 316

Relativa à cooperação técnica com os países em desenvolvimento no domínio das telecomunicações marítimas (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo notado

que a assistência prestada pela União, concertadamente com outras organizações, especialmente a Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), no domínio das telecomunicações marítimas, aos países em desenvolvimento, permite augurar bem do futuro;

consciente

a) Do facto de que os países em desenvolvimento têm necessidade, para intensificarem as suas permutas comerciais, de aumentar a actividade da sua marinha mercante e de atrair o tráfego marítimo de outros países;

b) Do papel importante que têm as telecomunicações nas actividades marítimas de todo o Mundo, quer se trate da economia quer da segurança;

c) Das possibilidades de dar à marinha mercante meios de segurança satisfatórios e melhores perspectivas económicas, embora consagrando somas relativamente modestas à instalação e à exploração de serviços de telecomunicações marítimas;

---

(1) V. o parecer D.90/F111 da CCITT (§§ B12 e B13).

(2) Substitui a Resolução Mar2-18 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

considerando

a) Que para numerosos países em vias de desenvolvimento é necessário reforçar a eficácia dos serviços que interessam:

À segurança da navegação e à salvaguarda da vida humana no mar;
À rentabilidade das operações portuárias;
À correspondência pública destinada aos passageiros e aos membros das tripulações;

b) Que seria possível, a este respeito, alargar as actividades de cooperação técnica da União, de modo a proporcionar a esses países uma assistência das mais válidas:

decide convidar o secretário-geral

1. A oferecer a assistência da União aos países em desenvolvimento que se esforçam por melhorar as suas telecomunicações marítimas, fornecendo-lhes, nomeadamente, pareceres técnicos relativos à instalação, à exploração e à manutenção do material, bem como contribuindo para a formação profissional do pessoal;

2. A pedir, para isso, a colaboração da OMCI, da Conferência das Nações Unidas para o Comércio e o Desenvolvimento (CNUCED) e de outras instituições especializadas das Nações Unidas, consoante o caso;

3. A continuar a procurar, com especial atenção, o auxílio do Programa das Nações Unidas para o Desenvolvimento (PNUD) e outras fontes de financiamento para permitir à União prestar assistência técnica a um tempo suficiente e eficaz no que se refere às telecomunicações marítimas, em colaboração com outras instituições especializadas interessadas, se for caso disso;

convidar os países membros

a contribuírem, prioritariamente, na medida das suas possibilidades e do estado de desenvolvimento da sua técnica, para a cooperação técnica prestada pela União aos países em desenvolvimento no domínio das telecomunicações marítimas, facilitando o recrutamento de especialistas, que deverão ser enviados com a missão de trabalhar nesses países, acolhendo estagiários titulares de bolsas de estudo concedidas pela União e vindos dos ditos países, enviando conferências aos ciclos de estudos organizados pela União e, se esta lho pedir, dando-lhe pareceres sobre questões técnicas;

convidar os países em desenvolvimento

a incluírem, segundo as suas necessidades, nos seus programas nacionais de pedidos de assistência técnica exterior programas relativos às telecomunicações marítimas e a apoiarem os projectos multinacionais neste domínio.

RESOLUÇÃO N.º 400

Relativa ao tratamento das fichas de notificação referentes às consignações de frequência a estações aeronáuticas nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz (1)

A Conferência Administrativa das Radiocomunicações (Genebra, 1979),

considerando

a) Que os Actos Finais da Conferência Administrativa das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) entraram em vigor em 1 de Setembro de 1979;

b) Que o novo plano de adjudicação de frequências contido no apêndice 27 Aer2 entrará em vigor em 1 de Fevereiro de 1983, à 1 hora UTC;

c) Que certas administrações podem desejar começar a aplicar certas disposições do novo plano de adjudicação de frequências antes da data especificada para a sua entrada em vigor, nos casos em que não sejam, assim, causadas interferências prejudiciais ao serviço assegurado pelas estações que funcionam de acordo com o plano actual de consignação de frequências;

d) Que é, por consequência, necessário prever um procedimento provisório para facilitar a passagem do plano actual ao novo plano de consignação de frequências;

decide

1. Que durante o período transitório que decorrerá entre a data de entrada em vigor dos Actos Finais supramencionados e a data de entrada em vigor do novo plano de adjudicação de frequências:

1.1. Continuem a aplicar-se as disposições dos n.ºs **1334** a **1341** do Regulamento das Radiocomunicações durante o exame das fichas de notificação relativas às consignações de frequência às estações aeronáuticas do serviço móvel aeronáutico (R), em conformidade com as consignações do plano existente;

---

(1) Substitui a Resolução Aer2-4 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

1.2. Todas essas consignações sejam inscritas no ficheiro de referência internacional das frequências, de acordo com as conclusões formuladas pela IFRB;

1.3. A IFRB examine as consignações de frequência numa via de novo plano, a fim de determinar se as adjudicações do plano existente beneficiam da protecção especificada no apêndice 27 Aer2 (parte I, secção II-A, § 5). Ao proceder a esse exame, a Comissão admitirá que a frequência em questão será utilizada de acordo com os critérios de partilha entre as zonas especificadas no apêndice 27 Aer2 (parte I, secção II-B, § 4);

1.4. Qualquer consignação em conformidade com as disposições do § 1.3 acima e que tenha sido objecto de uma conclusão favorável seja incluída no ficheiro de referência;

1.5. A data a inscrever na coluna 2a ou na coluna 2b do ficheiro de referência seja determinada como segue:

a) Se a conclusão for favorável relativamente aos n.os **1336** a **1339**, inscrever-se-á a data de 29 de Abril de 1966 na coluna 2a;

b) Se a conclusão for favorável relativamente ao n.º **1341**, inscrever-se-á a data de 29 de Abril de 1966 na coluna 2b;

c) Para todas as outras consignações (incluindo as que possam estar de acordo com o novo plano de adjudicação de frequências, mas não com o plano actual), a data a inscrever na coluna 2b será a data em que a IFRB tenha recebido a ficha de notificação.

1.6. Qualquer consignação de acordo com o novo plano de adjudicação de frequências seja especificada como tal por meio de um símbolo conveniente que a IFRB inscreverá na coluna «Observações» do ficheiro de referência;

2. Que à data de entrada em vigor do novo plano de adjudicação de frequências a IFRB examine as consignações de frequência às estações aeronáuticas do serviço móvel aeronáutico (R) inscritas no ficheiro de referência internacional das frequências nas faixas atribuídas em exclusivo a este serviço entre 2850 kHz e 22 000 kHz, no que respeita à sua conformidade com o novo plano de adjudicação de frequências, seguindo para isso as partes pertinentes do procedimento descrito nos n.os **1334** a **1341** do Regulamento das Radiocomunicações, e inscreva em frente dessas consignações, na coluna 2a ou na coluna 2b do ficheiro de referência internacional das frequências, uma data determinada como segue:

2.1. Para as consignações com emissão em faixa lateral dupla (A3E) já inscritas no ficheiro de referência à data de entrada em vigor do novo plano de adjudicação de frequências, essa data continuará a ser a que estiver inscrita na coluna 2a ou na coluna 2b, consoante o caso, até 1 de Fevereiro de 1983. Uma data que figure na coluna 2a para uma consignação de frequência que utilize a faixa lateral dupla (A3E) será transferida para a coluna 2b em 2 de Fevereiro de 1983. Em 1 de Janeiro de 1987 a IFRB examinará as inscrições e, após consulta às administrações interessadas, anulará as inscrições que já não estejam em uso, conservando as outras apenas para informação, sem data, na coluna 2b;

2.2. Se a conclusão for favorável relativamente aos n.os **1335** a **1339,** inscrever-se-á a data de 5 de Março de 1978 na coluna 2b;

2.3. Se a conclusão for favorável relativamente aos n.os **1335** a **1341,** inscrever-se-á a data de 5 de Março de 1978 na coluna 2b;

2.4. Para todas as outras consignações, inscrever-se-á a data de 6 de Março de 1978 na coluna 2b;

3. Que à data de entrada em vigor do novo plano de adjudicação de frequências, as adjudicações que figuram nesse plano substituam, no ficheiro de referência internacional das frequências, as adjudicações que figuram no plano actual;

convida as administrações

a notificarem, logo que possível, à IFRB a anulação das consignações de frequência cuja utilização for abandonada por virtude da entrada em serviço das adjudicações do novo plano.

RESOLUÇÃO N.º 401

Relativa à implementação do plano de adjudicação de frequências nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz (1)

A Conferência Administrativa das Radiocomunicações (Genebra, 1979),

considerando

a) Que as faixas atribuídas em exclusivo entre 2850 kHz e 22 000 kHz ao serviço móvel aeronáutico (R) pela Conferência Administrativa das Radiocomunicações (Genebra, 1959) foram modificadas pela Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966);

b) Que a Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966) instituiu procedimentos destinados a serem aplicados pelas administrações no que respeita à entrada em serviço das modificações;

c) Que foram tomadas as disposições necessárias para que a IFRB ponha esses procedimentos em execução;

---

(1) Substitui a Resolução Aer2-5 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

reconhecendo

a) Que o serviço móvel aeronáutico (R) é antes de tudo um serviço de segurança;

b) Que a Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) introduziu novas modificações às referidas faixas, a fim de ter em conta as técnicas da faixa lateral única;

c) Que é necessário que todas as administrações adoptem as modificações efectuadas por essa Conferência, a fim de evitar interferências prejudiciais aos serviços assegurados por estações que funcionam em conformidade com as disposições do Regulamento das Radiocomunicações;

decide

1. Que, o mais tardar três meses antes da entrada em vigor do novo plano, as administrações notifiquem à IFRB as modificações destinadas a tornar conformes com esse plano as inscrições que figuram já no ficheiro de referência;

2. Que as consignações inscritas no ficheiro de referência à data de 1 de Fevereiro de 1983 e que nessa data não estejam em conformidade com as decisões da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) sejam tratadas como segue:

2.1. A IFRB fará chegar às administrações interessadas, dentro dos 30 dias que se seguem a 1 de Fevereiro de 1983, extractos pertinentes do ficheiro de referência, informando-as de que, em conformidade com os termos da presente resolução, as consignações em causa deverão ser transferidas para as frequências apropriadas num prazo de seis meses a contar da data de expedição dos referidos extractos;

2.2. Se uma administração não notificar essa transferência à IFRB no prazo prescrito, a inscrição existente será mantida no ficheiro de referência, sem indicação da data na coluna 2 e com uma observação apropriada na coluna «Observações». As administrações serão informadas dessa medida;

3. Que, se uma administração o desejar, a IFRB lhe preste toda a ajuda necessária. Em tal caso a IFRB aplicará as disposições dos n.ºs **1445** a **1449** do Regulamento das Radiocomunicações.

RESOLUÇÃO N.º 402

Relativa à implementação do novo arranjo aplicável às faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz (1)

A Conferência Administrativa das Radiocomunicações (Genebra, 1979),

considerando

a) Que a utilização de cada uma das faixas de frequências compreendidas entre 2850 kHz e 22 000 kHz e atribuídas em exclusivo ao serviço móvel aeronáutico (R) pela Conferência Administrativa das Radiocomunicações (Genebra, 1959) foi modificada pela Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966);

b) Que a Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966) decidiu que as administrações deveriam substituir progressivamente e o mais cedo possível, nas suas radiocomunicações do serviço móvel aeronáutico (R), a técnica da faixa lateral dupla pela técnica da faixa lateral única, pelo que a utilização das faixas em questão foi modificada de novo pela Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) para permitir a utilização da técnica da faixa lateral única;

c) Que um número muito grande de consignações de frequência às estações de aeronave e às estações aeronáuticas serão transferidas das frequências actuais para novas frequências e vias designadas por essa Conferência;

d) Que as transferências de consignações das frequências deveriam ser efectuadas logo que possível para que se possam materializar as vantagens que oferecem as novas vias designadas por essa Conferência;

e) Que a transferência das consignações deveriam ser realizada perturbando o menos possível o serviço prestado por cada estação;

f) Que a transferência das consignações deveria ser realizada de modo a evitar interferências prejudiciais entre as estações interessadas durante o período de implementação;

g) Que os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) entraram em vigor em 1 de Setembro de 1979;

h) Que o novo plano de adjudicação das frequências do apêndice 27 Aer2 entrará em vigor em 1 de Fevereiro de 1983;

---

(1) Substitui a Resolução Aer2-3 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

reconhecendo

a) Que o serviço móvel aeronáutico (R) é antes de tudo um serviço de segurança;

b) Que certas frequências foram adjudicadas para uso mundial;

c) Que a implementação das decisões da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) relativas ao novo arranjo das faixas atribuídas ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz deveria efectuar-se de maneira ordenada para a transferência dos serviços actuais das antigas para as novas consignações;

decide

1. Que, durante o período compreendido entre a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) (1 de Setembro de 1979) e a data de entrada em vigor do novo plano de adjudicação de frequências que figura no apêndice 27 Aer2 (1 de Fevereiro de 1983), a utilização das vias para qualquer nova exploração em faixa lateral única se efectue de acordo com as seguintes disposições:

1.1. A frequência portadora (frequência de referência) da via em faixa lateral única situada na parte superior da antiga via em faixa lateral dupla será a mesma que a frequência portadora (frequência de referência) dessa via;

1.2. A frequência portadora (frequência de referência) da via em faixa lateral única situada na parte inferior da antiga via em faixa lateral dupla será 3 kHz inferior à frequência portadora (frequência de referência) dessa via;

1.3. Antes de 1 de Fevereiro de 1983 as estações aeronáuticas e as estações de aeronave dotadas de equipamento faixa lateral única podem utilizar uma ou outra das metades da antiga via em faixa lateral dupla, sendo a frequência portadora (frequência de referência) em faixa lateral única aquela que vem indicada nos §§ 1.1 e 1.2 anteriores;

1.4. Qualquer administração pode utilizar as vias do novo plano desde que não cause interferências prejudiciais aos utentes das vias do plano actual. Para a utilização operacional das vias em questão convém que as administrações tenham em conta as disposições do n.º 27/20 do apêndice 27 Aer2 ao Regulamento das Radiocomunicações;

2. Que em 1 de Fevereiro de 1983 as frequências indicadas no apêndice 27 ao Regulamento das Radiocomunicações sejam substituídas pelas frequências indicadas na parte II, secção II, artigo 2, do apêndice 27 Aer2;

3. Que é necessário que as administrações tomem as medidas apropriadas para passar o mais cedo possível à técnica da faixa lateral única, não permitindo mais a instalação de novos equipamentos em faixa lateral dupla a partir de 1 de Abril de 1981. As estações de aeronave e as estações aeronáuticas deverão poder começar o mais cedo possível a utilizar aparelhos em faixa lateral única e deverão, além disso, deixar de efectuar emissões em faixa lateral dupla no mais curto espaço de tempo e, em qualquer caso, o mais tardar em 1 de Fevereiro de 1983;

4. Que até 1 de Fevereiro de 1983 as estações aeronáuticas e as estações de aeronave dotadas de aparelhos em faixa lateral única devem igualmente ser equipadas de modo a poderem efectuar, quando necessário, emissões da classe H3E compatíveis com o emprego de receptores em faixa lateral dupla;

5. Que, salvo disposições contrárias contidas nos Actos Finais da Conferência Administrativa Mundial do Serviço Móvel Aeronáutico (R) (Genebra, 1978), a partir de 1 de Fevereiro de 1983 só sejam autorizadas as classes de emissão H2B, J3E, J2B, J2D e J9X. Contudo, a exploração em faixa lateral dupla poderá prosseguir para uso nacional até 1 de Fevereiro de 1987, com a condição de que essa exploração se efectue em conformidade com as disposições dos n.ºs **299** e **307** do Regulamento das Radiocomunicações e não cause interferências prejudiciais às estações que asseguram comunicações internacionais no serviço móvel aeronáutico (R) em faixa lateral única. Todavia, pede-se instantemente às administrações com necessidade desse alargamento do período de aplicação integral da faixa lateral única que cessem, logo que possível, a exploração em faixa lateral dupla.

RESOLUÇÃO N.º 403

Relativa à utilização das frequências de 3023 kHz e 5680 kHz comuns aos serviços móveis aeronáuticos (R) e (OR) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo notado

que parece existirem certas anomalias nas condições de utilização das frequências de 3023,5 kHz e 5680 kHz estipuladas no apêndice 26 ao Regulamento das Radiocomunicações (Genebra, 1959), tais como estão enunciadas nas alíneas 2-*a*) e 2-*b*) que figuram na coluna 3 do artigo 2 do plano de adjudicação de frequências, e que foram tomadas medidas para fazer desaparecer essas anomalias;

---

(1) Substitui a Resolução Aer2-1 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

considerando

a) Que a coordenação das operações de busca e salvamento no local de um sinistro seria melhorada se durante essas operações a utilização das frequências de 3023 kHz (anteriormente 3023,5) e 5680 kHz fosse alargada às comunicações entre as estações móveis e as estações terrestres que nelas participarem;

b) Que seria do interesse geral do serviço móvel aeronáutico que as mesmas disposições relativas à utilização das frequências de 3023 kHz (anteriormente 3023,5) e 5680 kHz fossem aplicadas no serviço móvel aeronáutico (R) e no serviço móvel aeronáutico (OR);

decide

convidar as administrações a aplicarem no serviço móvel aeronáutico (OR), a partir da data de entrada em vigor do plano de adjudicação de frequências adoptado pela Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978), as disposições que regem a utilização das frequências 3023 kHz e 5680 kHz estipuladas no apêndice 27Aer2 (parte II, secção II, artigo 3).

RESOLUÇÃO N.º 404

Relativa à implementação da nova disposição das faixas de frequências atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 21 924 kHz e 22 000 kHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que na sua Recomendação Aer2-5 a Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) tinha recomendado às administrações que estudassem as questões relativas à utilização futura da faixa de 21 924-22 000 kHz;

b) Que a presente Conferência atribuiu esta faixa em exclusivo ao serviço móvel aeronáutico (R);

decide

que é necessário acrescentar no apêndice 27 Aer2 uma faixa de frequências suplementar para pôr em serviço frequências mundiais apropriadas para as comunicações a grande distância e reduzir a saturação das faixas utilizadas actualmente:

encarrega o secretário-geral

de publicar o novo apêndice 27 Aer2, adoptado pela Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978), com a inclusão de um plano para a faixa de 21 924-22 000 kHz segundo as indicações enunciadas em anexo à presente Resolução;

reconhecendo

que há risco de resultarem interferências prejudiciais ao serviço móvel aeronáutico (R) nesta faixa se em 1 de Fevereiro de 1983 as consignações existentes na faixa de 21 924-22 000 kHz não tiverem sido transferidas quer para as novas frequências destinadas ao serviço móvel aeronáutico (R), quer para outras faixas mais apropriadas para as consignações de frequência às estações do serviço fixo aeronáutico;

decide

1. Que a implementação das medidas tomadas pela presente Conferência relativamente à nova disposição da faixa de ondas decamétricas atribuída ao serviço móvel aeronáutico (R) deverá efectuar-se de acordo com o procedimento metódico definido a seguir para a passagem das antigas para as novas consignações;

2. Que as consignações visadas no § 1 devem ser tratadas como segue:

2.1. A IFRB enviará extractos pertinentes do ficheiro de referência às administrações interessadas, num prazo de 30 dias a contar de 1 de Fevereiro de 1982, informando-as de que, em conformidade com as disposições da presente Resolução, as consignações em causa devem ser transferidas para as faixas apropriadas num prazo de 6 meses após o envio desses extractos;

2.2. Se uma administração não notificar a transferência no prazo prescrito, manter-se-á a inscrição inicial no ficheiro de referência, sem indicação de data na coluna 2 e com uma observação apropriada na coluna «Observações», sendo a administração interessada avisada desta medida;

3. Que, se uma administração o desejar, a IFRB lhe preste a assistência necessária. Para isso a IFRB aplicará as disposições dos n.ºs **1445** e **1449** do Regulamento das Radiocomunicações.

ANEXO À RESOLUÇÃO N.º 404

Indicação de modificações a introduzir no apêndice 27 Aer2 do Regulamento das Radiocomunicações

A. APÊNDICE 27 Aer2

No índice, *parte II, no título, substituir a frequência de* 17 970 kHz *por* 22 000 kHz.
No n.º 27/10, *substituir* 17 970 kHz *por* 22 000 kHz.
No n.º 27/16, *acrescentar no quadro as novas frequências seguintes:*

KHz	
21 924-22 000	
21 925	21 964
21 928	21 967
21 931	21 970
21 934	21 973
21 937	21 976
21 940	21 979
21 943	21 982
21 946	21 985
21 949	21 988
21 952	21 991
21 955	21 994
21 958	21 997
21 961	–
	25 vias

No n.º 27/31-A, *no título que precede o* n.º 27/31-A, *substituir* 18 MHz *por* 22 MHz; *no texto do* n.º 27/31-A *substituir* 13 MHz *e* 18 MHz *por* 13 MHz, 18 MHz *e* 22 MHz.
No n.º 27/31-B, 2.ª linha, *substituir* a faixa dos 18 MHz *pelas faixas* dos 18 MHz; *e* 22 MHz 4.ª linha, *depois de* 18 MHz *acrescentar* 22 MHz.
Na parte II, *no título, substituir a frequência* de 17 970 kHz *por* 22 000 kHz.
No n.º 27/189, *acrescentar no quadro a nova coluna seguinte para a faixa dos* 22 MHz:

Zonas	Faixas (MHz) 22 kHz
W I	21 940 21 946 21 952 21 958 21 967 21 973 21 979 21 988 21 997
W II	21 964 21 985
W III	21 949 21 970
W IV	21 955 21 976 21 991
W V	21 943 21 961 21 982 21 994

Imediatamente depois do n.º 27/207, *acrescentar o novo quadro seguinte, correspondente à faixa de* 22 MHz:

27/207ADD Faixa de **21 924-22 000** **22 MHz**

1	2	3
21 940	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 943	W MONDIALE WORLDWIDE MUNDIAL	C100/V

1	2	3
21 946	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 949	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 952	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 955	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 958	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 961	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 964	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 967	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 970	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 973	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 976	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 979	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 982	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 985	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 988	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 991	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 994	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 997	W MONDIALE WORLDWIDE MUNDIAL	C100/I

RESOLUÇÃO N.º 405

Relativa à utilização das frequências do serviço móvel aeronáutico (R) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) elaborou e adoptou um novo plano de adjudicação de frequências para a utilização das ondas decamétricas pelo serviço móvel aeronáutico (R) (apêndice 27 Aer2 ao Regulamento das Radiocomunicações);

b) Que o tráfego aéreo está sujeito a modificações contínuas;

c) Que essas modificações devem ser tomadas em consideração pelas administrações interessadas; mas

d) Que ao procurar satisfazer as novas necessidades de comunicações convém não tomar qualquer decisão susceptível de impedir ou de comprometer a utilização coordenada das ondas decamétricas pelo serviço móvel aeronáutico (R) tal como prevista no plano;

e) Que as famílias de frequências adjudicadas às zonas de passagem das linhas aéreas mundiais principais (ZLAMP) às zonas das linhas aéreas regionais e nacionais (ZLARN), assim como às subdivisões dessas zonas e às zonas VOLMET, foram escolhidas tendo em conta as condições de propagação que permitem a escolha de frequências que melhor convém às distâncias consideradas;

(1) Substitui a Resolução Aer2-7 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

f) Que convém tomar medidas para que seja correcta a ordem de grandeza das frequências utilizadas;
g) Que é essencial repartir o tráfego de comunicações tão uniformemente quanto possível entre as frequências disponíveis;
h) Que foram adjudicadas frequências para uma utilização mundial:

decide

que as administrações tomem, a título individual ou em colaboração, as medidas necessárias a fim de:

1. Assegurar a maior utilização possível de frequências mais elevadas para diminuir o tráfego nas faixas de ondas decamétricas do serviço móvel aeronáutico (R);

2. Utilizar tanto quanto possível antenas com uma directividade e um rendimento apropriados, para reduzir ao mínimo os riscos de interferências mútuas no interior de uma zona ou entre diversas zonas;

3. Coordenar a utilização das famílias necessárias para um troço de linha determinado, em conformidade com os princípios técnicos expostos no apêndice 27 Aer2, e tendo em conta os dados disponíveis sobre as condições de propagação, a fim de que sejam utilizadas as frequências que melhor convenham para ligação entre o solo e uma aeronave situada a uma dada distância da estação aeronáutica que assegura o serviço no troço de linha considerado;

4. Melhorar as técnicas e os procedimentos de exploração e utilizar o material que permita obter o rendimento mais elevado possível das comunicações ar-solo em ondas decamétricas;

5. Coligir dados técnicos precisos sobre o funcionamento dos seus sistemas de comunicação em ondas decamétricas, especialmente dados que tenham influência nas normas técnicas e de exploração, para facilitar um reexame do plano;

6. Determinar, por meio de arranjos regionais, o melhor método que permita assegurar as comunicações necessárias em qualquer nova linha aérea regional ou internacional a longa distância que não seja ou não possa ser servida no quadro das ALAMP e das ZLARN, de modo que não crie interferência prejudicial na utilização das frequências previstas no plano.

RESOLUÇÃO N.º 406

Relativa à utilização de faixas de frequências superiores às faixas de ondas decamétricas, para as comunicações e a difusão de informações meteorológicas no serviço móvel aeronáutico (R) e no serviço móvel aeronáutico por satélite (R) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, sob o ponto de vista do serviço móvel aeronáutico, as faixas de frequências superiores às faixas de ondas decamétricas permitem assegurar comunicações mais seguras e melhor protegidas contra interferências do que as comunicações em ondas decamétricas;
b) Que, sob o ponto de vista técnico, assim como sob o ponto de vista da exploração, a utilização das ondas métricas pela aviação fez progressos notáveis;
c) Que se reconhece, presentemente, a possibilidade de estabelecer, no futuro, comunicações por satélite;
d) Que, devido ao constante desenvolvimento das telecomunicações aeronáuticas em todas as regiões do Mundo, existe um pedido crescente de frequências para o estabelecimento de comunicações com as aeronaves em voo e a difusão de informações meteorológicas para essas aeronaves;

decide

que convém que, na medida do possível e tendo em conta os imperativos económicos e técnicos, as administrações, para satisfazerem as suas necessidades de comunicações e de difusão de informações meteorológicas, procurem utilizar frequências escolhidas em faixas de frequências superiores às faixas de ondas decamétricas, atribuídas ao serviço móvel aeronáutico (R) e ao serviço móvel aeronáutico por satélite (R).

RESOLUÇÃO N.º 407

Relativa à utilização não autorizada de frequências das faixas atribuídas ao serviço móvel aeronáutico (R) (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, as observações de fiscalização das emissões relativas à utilização das frequências das faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz mostram que certo número de

---

(1) Substitui a Resolução Aer2-6 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

(2) Substitui a Resolução Aer2-2 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

frequências dessas faixas são ainda utilizadas por estações que pertencem a serviços diferentes do serviço móvel aeronáutico (R), especialmente por estações de radiodifusão de grande potência, algumas das quais funcionam em contravenção das disposições do n.º **2665** do Regulamento das Radiocomunicações;

b) Que essas estações causam, assim, interferências prejudiciais ao serviço móvel aeronáutico (R) e que se observou nas faixas em questão um grande número de emissões cujas origens não puderam ser identificadas com certeza absoluta;

c) Que as radiocomunicações constituem o único meio de comunicação à disposição do serviço móvel aeronáutico (R) e que este serviço é um serviço de segurança;

considerando, em especial

d) Que é essencial que as vias directamente utilizadas para o funcionamento dos serviços de transporte aéreo em boas condições de segurança e de regularidade estejam isentas de interferências prejudiciais, sendo dado que estas vias são indispensáveis à salvaguarda da vida humana e dos bens;

decide solicitar instantemente às administrações

1. Que se esforcem por que estações pertencentes a serviços diferentes do serviço móvel aeronáutico (R) se abstenham de utilizar as frequências das faixas atribuídas a este serviço, salvo nas condições estipuladas nos n.ºs **342** e **956** do Regulamento das Radiocomunicações;

a) Que não se poupem a esforços para identificar e localizar a origem de qualquer emissão não autorizada capaz de causar interferências prejudiciais ao serviço móvel aeronáutico (R) e susceptível, por isso, de pôr em perigo este serviço de segurança;

b) E que comuniquem os resultados obtidos à IFRB;

3. Que participem nos programas de fiscalização das emissões que a IFRB possa ser levada a organizar de acordo com a presente Resolução;

4. Que peçam aos respectivos governos que promulguem a legislação adequada que possa ser necessária para impedir as estações situadas a bordo de aeronaves de funcionarem em contravenção das disposições do n.º **2665** do Regulamento das Radiocomunicações;

encarregar a IFRB

1. De continuar a organizar programas de fiscalização das emissões nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R), com o objectivo de eliminar as emissões das estações de outros serviços que funcionam nestas faixas, emissões que causem interferências prejudiciais ao serviço móvel aeronáutico (R) ou sejam susceptíveis de as causar;

2. De tomar as medidas necessárias para eliminar as emissões das estações de outros serviços que funcionam nestas faixas, emissões que causem interferências prejudiciais ao serviço móvel aeronáutico (R) ou sejam susceptíveis de as causar;

3. De procurar, se for caso disso, a cooperação das administrações, de um lado, para identificar as origens dessas emissões, empregando todos os meios disponíveis, de outro, para obter a suspensão dessas emissões.

RESOLUÇÃO N.º 500

Relativa à modificação das frequências portadoras das estações de radiodifusão em ondas quilométricas na Região

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, tanto do ponto de vista técnico como económico, há interesse em reduzir as interferências que se produzem nos receptores de radiodifusão domésticos devido a frequências de combinação;

b) Que essas interferências são notavelmente reduzidas quando os valores nominais das frequências portadoras das estações de radiodifusão são múltiplos do afastamento dos canais;

c) Que os valores nominais das frequências portadoras das estações inscritas no plano de radiodifusão em ondas quilométricas para a Região 1 (Genebra, 1975) não são múltiplos do afastamento dos canais (9 kHz);

d) Que, para evitar interferências entre essas estações, é necessário que as frequências portadoras das estações de radiodifusão em ondas quilométricas da Região 1 sejam modificadas na mesma data, pelo menos no caso de todas as estações que partilham o mesmo canal, sem que daí resulte diminuição do afastamento entre as frequências portadoras adjacentes;

e) Que a modificação das frequências portadoras das estações de radiodifusão em ondas quilométricas aumentará, em certos casos, as interferências causadas às estações de radionavegação aeronáutica;

notando

que o serviço de radionavegação aeronáutica é um serviço de segurança:

decide

1. Que durante o período que vai de 1 de Fevereiro de 1986 a 1 de Fevereiro de 1990 os valores nominais das frequências portadoras de todas as estações em ondas quilométricas que funcionam em conformidade com o Acordo de Radiodifusão em Ondas Quilométricas e Hectométricas (Genebra, 1975) ou estão projectadas em conformidade com as disposições desse Acordo deverão ser reduzidos de 2 kHz, de modo que essas frequências fiquem a ser múltiplos de 9 kHz, permanecendo sem alteração as outras características das estações;

2. Que para garantir que se possam tomar as disposições para evitar qualquer interferência adicional ao serviço de radionavegação aeronáutica, a modificação das frequências das estações de radiodifusão deverá efectuar-se por grupos de cinco canais adjacentes, começando pelo grupo que tem as frequências mais baixas;

3. Que as modificações deverão efectuar-se em três fases, a saber:

Canais 1 a 5 — em 1 de Fevereiro de 1986
Canais 6 a 10 — em 1 de Fevereiro de 1988 à 1.00 UTC;
Canais 11 a 15 — em 1 de Fevereiro de 1990

4. Que à data da primeira modificação (1 de Fevereiro de 1986) o limite inferior da faixa atribuída ao serviço de radiodifusão passará a ser de 148,5 kHz e que depois de 1 de Fevereiro de 1990 a faixa atribuída a esse serviço será a faixa de 148,5-283,5 kHz;

5. Que qualquer modificação de uma consignação de frequência a uma estação de radionavegação aeronáutica que daí venha a resultar deverá ser notificada à IFRB e, se o seu exame levar a uma conclusão favorável relativamente às disposições dos n.os **1240** e **1241**, deverá ser inscrita no ficheiro de referência sem modificação de data ou de estatuto. Porém, se a conclusão da Comissão só for desfavorável relativamente às disposições do n.º **1241**, a modificação deverá ser inscrita no ficheiro de referência em conformidade com as disposições pertinentes do artigo 12, sem qualquer modificação da data inicial;

decide, além disso,

que as administrações deverão informar a IFRB, pelo menos, dois anos antes de introduzir modificações previstas nas características das suas estações de radiodifusão existentes em ondas quilométricas ou antes de pôr em serviço novas estações;

encarrega a IFRB

de publicar essas informações numa secção especial da sua circular semanal;

encarrega o secretário-geral

de comunicar a presente resolução ao secretário-geral da OACI.

RESOLUÇÃO N.º 501

Relativa ao exame pela IFRB das fichas de notificação referentes a estações do serviço de radiodifusão da Região 2 que funcionam na faixa de 535-1605 kHz durante o período que precede a entrada em vigor dos Actos Finais da Conferência Administrativa Regional de Radiodifusão em Ondas Hectométricas (Região 2).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, uma Conferência administrativa regional de radiodifusão em ondas hectométricas (Região 2) será convocada, em duas sessões, a fim de estabelecer um plano para o serviço de radiodifusão na faixa de 535-1605 kHz:

b) Que a 1.ª sessão dessa Conferência se realizará em Março de 1980 e a 2.ª sessão em Novembro de 1981;

c) Que as disposições pertinentes do artigo 12 foram modificadas pela presente Conferência;

d) Que a Conferência Administrativa Regional de Radiodifusão em Ondas Hectométricas (Região 2) adoptará as disposições que a Comissão deverá aplicar para a notificação e a inscrição no ficheiro de referência das consignações de frequência que figuram no plano;

e) Que é, por consequência, necessário estabelecer o procedimento que a Comissão deverá aplicar para o exame das fichas de notificação relativas às estações de radiodifusão da Região 2 que funcionam na faixa de 535-1605 kHz durante o período que vai desde a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) até à data de entrada em vigor dos Actos Finais da Conferência Administrativa Regional de Radiodifusão em Ondas Hectométricas (Região 2):

decide

que entre a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) e a data de entrada em vigor dos Actos Finais da Conferência Administrativa Regional de Radiodifusão em Ondas Hectométricas (Região 2) a Comissão não examinará, no que refere às disposições do n.º **1241**, as fichas de notificação das consignações de frequência às estações de radiodifusão da Região 2 que funcionam na faixa de 535-1605 kHz e inscrevê-las-á sem menção de data na coluna 2a ou na coluna 2b, sendo a data que figura na coluna 2c só dada a título de informação.

RESOLUÇÃO N.º 502

Relativa ao período compreendido entre a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) e a data em que as disposições e o plano associado adoptados por essa Conferência serão incluídos, em anexo, no Regulamento das Radiocomunicações (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que os Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) entraram em vigor em 1 de Janeiro de 1979;
b) Que a Resolução Sat-4 da referida Conferência pede à Conferência Administrativa Mundial das Radiocomunicações de 1979 que inclua, em anexo, no Regulamento das Radiocomunicações as disposições e o plano associado que essa Resolução estabeleceu;
c) Que medeia um período transitório entre a aplicação dos Actos Finais da Conferência de 1977 e a entrada em vigor do Regulamento das Radiocomunicações que comporta a inclusão das disposições e do plano associado da Conferência de 1977 (apêndice 30);

considerando, além disso,

que os Actos Finais da Conferência de 1977 são considerados como contendo um acordo mundial e um plano associado, de acordo com a Resolução Spa2-2 da Conferência Administrativa Mundial das Radiocomunicações Espaciais (Genebra, 1971);

decide

1. Que durante esse período transitório e depois da data da sua inclusão em anexo, no Regulamento das Radiocomunicações e as disposições e o plano associado conservam a sua integridade como instrumento jurídico;
2. Que durante este período a IFRB e os outros órgãos adequados daquela deverão apoiar-se nas disposições dos Actos Finais da Conferência de 1977 e do Regulamento das Radiocomunicações.

RESOLUÇÃO N.º 503

Relativa à coordenação, à notificação e à inscrição no Ficheiro de Referência Internacional das Frequências das consignações de frequência às estações do serviço de radiodifusão por satélite da Região 2 (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que será estabelecido um plano para o serviço de radiodifusão por satélite da Região 2 em conformidade com a Resolução n.º 701;
b) Que na Região 2 o serviço de radiodifusão por satélite deveria ser explorado de acordo com os princípios enunciados no artigo 12 e nos anexos 6 e 7 do apêndice 30 ao Regulamento das Radiocomunicações;
c) Que algumas das disposições adoptadas pela Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) relativas às estações do serviço de radiodifusão por satélite nas Regiões 1 e 3 podem igualmente aplicar-se à Região 2 até à entrada em vigor do plano que será estabelecido para essa Região em cumprimento da Resolução n.º 701;
d) Que durante o período transitório os procedimentos expostos na Resolução n.º 33 continuarão a aplicar-se na Região 2;

---

(1) Substitui a Resolução Sat-3 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).
(2) Substitui a Resolução Sat-5 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

decide

1. Que qualquer administração que pretenda pôr em serviço uma estação espacial de radiodifusão por satélite na Região 2 deverá, para fins da coordenação com os sistemas de radiocomunicação espacial das outras administrações, aplicar as disposições apropriadas do artigo 11 (n.os **1042** a **1056**, inclusive) do Regulamento das Radiocomunicações;

2. Que as disposições pertinentes da Resolução n.º 33 se aplicarão à coordenação, à notificação e à inscrição das consignações de frequências às estações de radiodifusão por satélite na Região 2, sempre que se trate de uma estação do serviço de radiodifusão por satélite ou do serviço fixo por satélite na Região 2;

2.1. Que qualquer administração que notifique uma consignação de frequência a uma estação espacial do serviço de radiodifusão por satélite na Região 2, nos termos do § 4.1 da Resolução n.º 33, notificará igualmente uma consignação por frequência a uma estação terrena de recepção tipo;

3. Que os procedimentos de coordenação, de notificação e de inscrição para as estações do serviço fixo por satélite descritos no artigo 7 do apêndice 30 ao Regulamento das Radiocomunicações serão aplicados igualmente às estações de radiodifusão por satélite na Região 2, em relação às estações de radiodifusão por satélite para as quais uma consignação de frequência está em conformidade com o plano, em todos os casos em que:

A largura de faixa necessária da consignação de frequência prevista para a Região 2 se sobreponha parcialmente à de uma consignação de frequência da Região 1 e ou Região 3; e

A densidade de fluxo de potência que seria produzida pela consignação de frequência pretendida para uma estação espacial de radiodifusão da Região 2 exceda o valor especificado no anexo 1 do apêndice 30;

4. Que para fornecer as informações indicadas na secção B da Resolução n.º 33 e na secção II do artigo 7 do apêndice 30 convirá utilizar o anexo 2 do apêndice 30;

5. Que cada consignação de frequência notificada em observância do § 4.1 da Resolução n.º 33 ou do § 2.1 da presente resolução ou da secção III do artigo 7 do apêndice 30 será objecto de uma ficha de notificação distinta, elaborada segundo as disposições do anexo 2 do apêndice 30.

RESOLUÇÃO N.º 504

Relativa aos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) no que respeita à Região 2

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) adoptou somente disposições para a Radiodifusão por Satélite (Genebra, 1977) adoptou somente disposições transitórias para a Região 2;

b) Que a presente Conferência decidiu introduzir no quadro de atribuição das faixas de frequências para a Região 2 modificações que influenciam as condições em que se baseiam essas disposições transitórias dos Actos Finais da Conferência de 1977;

c) Que a presente Conferência também decidiu incorporar as disposições e o plano associado adoptados pela Conferência de 1977 no Regulamento das Radiocomunicações como apêndice 30;

d) Que se reunirá, em 1983, uma conferência administrativa regional das radiocomunicações a fim de elaborar um plano para o serviço de radiodifusão por satélite na Região 2, em conformidade com a Resolução n.º 701;

decide

1. Que as disposições do artigo 12 do apêndice 30 relativas à segmentação do arco na Região 2 deixam de ser aplicáveis na faixa de 11,7-12-1 GHz e que não o serão mais no resto da faixa de 11,7-12,2 GHz depois da Conferência Administrativa Regional das Radiocomunicações de 1983;

2. Que as outras disposições transitórias do apêndice 30 relativas unicamente à Região 2 continuarão a aplicar-se até às decisões da Conferência Administrativa Regional das Radiocomunicações de 1983. Após essa data, considerar-se-ão os Actos Finais da Conferência Administrativa Regional de 1983 como anulando as disposições transitórias relativas à Região 2 e actualmente contidas no apêndice 30, sob reserva de que tenham sido oficialmente adoptados pela próxima conferência administrativa mundial das radiocomunicações competente.

RESOLUÇÃO N.º 505

Relativa ao serviço de radiodifusão por satélite (radiodifusão sonora) na gama de frequências de 0,5 GHz a 2 GHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que várias administrações apresentaram propostas relativas a atribuições de faixas de frequências ao serviço de radiodifusão por satélite (radiodifusão sonora) na gama de 0,5-2 GHz;

b) Que as faixas de frequências actualmente atribuídas ao serviço de radiodifusão por satélite não permitem a recepção individual de programas sonoros por receptores portáteis e por receptores instalados em automóveis;
c) Que a introdução do serviço de radiodifusão por satélite (radiodifusão sonora) na gamas de 0,5-2 GHz é tecnicamente realizável e permitiria a recepção individual por receptores portáteis e por receptores instalados em automóveis;
d) Que experiências de simulação confirmaram algumas das hipóteses apresentadas em estudos teóricos, mas que, no entanto, não foi ainda feita qualquer demonstração de um sistema prático;
e) Que devem fazer-se estudos complementares antes da entrada em serviço de sistemas operacionais;
f) Que a CCIR empreendeu estudos sobre este serviço, no quadro do programa de estudos 34B/10;
g) Que a gama de frequências conveniente para este serviço é limitada a 0,5 GHz para a extremidade inferior (devido á elevação do nível do ruído artificial e ao aumento das dimensões das antenas de emissão quando a frequência decresce) e a 2 GHz para a extremidade superior (devido à diminuição da superfície equivalente das antenas de recepção quando a frequência aumenta);
h) Que, devido ao nível elevado da densidade de fluxo de potência necessária, a partilha com os serviços de Terra parece extremamente difícil;

notando

a) Que certas administrações apresentaram propostas relativas à faixa de frequências de 1429-1525 MHz;
b) Que o serviço de radioastronomia dispõe de uma atribuição na faixa inferior contígua, de modo que a parte inferior da faixa de 1429-1525 MHz não pode ser encarada para uma atribuição ao serviço de radiodifusão por satélite (radiodifusão sonora);
c) Que na fase experimental bastaria uma largura de faixa de algumas centenas de kilohertz;

decide

1. Que as administrações deverão ser encorajadas a fazer experiências sobre o serviço de radiodifusão por satélite (radiodifusão sonora) no interior da gama de frequências de 0,5-2 GHz em pequenas subfaixas convenientemente situadas, sob reserva de acordo entre as administrações interessadas. Uma dessas subfaixas pode situar-se na faixa de 1429-1525 MHz;

2. Que a CCIR deverá prosseguir e acelerar os estudos relativos às características técnicas de um sistema de radiodifusão sonora por satélite para a recepção individual em receptores portáteis e em receptores para veículos automóveis, à possibilidade da partilha com os serviços de Terra e aos critérios de partilha apropriados;

3. Que a próxima conferência administrativa mundial das radiocomunicações que deva tratar dos serviços de radiocomunicação espacial em geral, ou de um desses serviços em especial, deverá estar habilitada a examinar os resultados dos diversos estudos efectuados e a tomar as decisões necessárias à atribuição de uma faixa de frequências apropriadas;

4. Que a conferência acima mencionada deverá, além disso, elaborar procedimentos apropriados com vista a proteger e, se necessário, a transferir para outras faixas as consignações às estações dos serviços de Terra susceptíveis de serem afectadas.

RESOLUÇÃO N.º 506

Relativa à utilização da órbita dos satélites geostacionários, com exclusão de qualquer outra órbita, pelas estações espaciais que funcionam nas faixas de frequências de 12 GHz atribuídas ao serviço de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) aprovou, para as Regiões 1 e 3, um plano especificando consignações de frequências nas faixas mencionadas acima e posições na órbita dos satélites geostacionários;
b) Que uma conferência administrativa regional das radiocomunicações, que se realizará em 1983, deve elaborar um plano semelhante para a Região 2;
c) Que a exploração de serviços de radiocomunicações espacial nas referidas faixas de frequências, mas numa órbita diferente da dos satélites geostacionários, seria incompatível com os planos mencionados nas alíneas *a*) e *b*):

decide

que as administrações devem proceder de modo que as suas estações espaciais nas faixas de frequências consideradas utilizem a órbita dos satélites geostacionários, com exclusão de qualquer outra órbita.

---

(1) Substitui a Resolução Sat-7 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

RESOLUÇÃO N.º 507

Relativa ao estabelecimento de acordos e de planos associados para o serviço de radiodifusão por satélite(1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é importante fazer o melhor uso possível da órbita dos satélites geostacionários e das faixas de frequências atribuídas ao serviço de radiodifusão por satélite;
b) Que o grande número de instalações de recepção utilizando antenas directivas, que poderão ser postas em funcionamento para um serviço de radiodifusão por satélite, poderá ser obstáculo à mudança das localizações das estações espaciais deste serviço na órbita dos satélites geostacionários, partir do momento em que sejam postas em serviço;
c) Que as emissões de radiodifusão por satélite poderiam provocar interferências prejudiciais em grande parte da superfície da Terra;
d) Que os outros serviços que beneficiam de atribuições na mesma faixa têm necessidade de utilizar esta antes da entrada em funcionamento ao serviço de radiodifusão por satélite;

decide

1. Que as estações do serviço de radiodifusão por satélite sejam estabelecidas e exploradas em conformidade com acordos e planos associados estabelecidos por conferências administrativas, mundiais ou regionais, consoante o caso, nas quais poderão participar todas as administrações interessadas e aquelas cujos serviços sejam susceptíveis de ser afectados;
2. Que, durante o período que precede a entrada em vigor de tais acordos e planos associados, as administrações e a IFRB apliquem o procedimento descrito na Resolução n.º 33;

convida o conselho de administração

a prosseguir o exame da questão da convocação de conferências administrativas mundiais, ou de conferências administrativas regionais, se for caso disso, com vista a fixar as datas e locais, assim como a agenda, convenientes.

RESOLUÇÃO N.º 508

Relativa à convocação de uma conferência administrativa mundial das radiocomunicações para a planificação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que não é satisfatória a situação que actualmente existe nas faixas de ondas decamétricas atribuídas em exclusivo ao serviço de radiodifusão;
b) Que importa proceder de modo a que sejam garantidos a todos os países direitos iguais de livre utilização dessas faixas;

decide

1. Que a utilização das faixas de ondas decamétricas atribuídas em exclusivo ou partilhadas com o serviço de radiodifusão (com exclusão das faixas reservadas para a radiodifusão na zona tropical) seja objecto de planificação por uma conferência administrativa mundial das radiocomunicações;
2. Que a planificação se baseie na utilização de emissões de faixa lateral dupla (FLD). A conferência deveria igualmente estudar a forma como um sistema de faixa lateral única (FLU) poderia ser introduzido progressivamente sem causar deterioração grave nas emissões em faixa lateral dupla;
3. Que a conferência visada no § 1 se realize em duas sessões;
4. Que a 1.ª sessão:
4.1. Seja encarregada de especificar os critérios técnicos para a planificação e os princípios que deverão reger a utilização das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão, em especial:
4.1.1. A potência apropriada para a radiodifusão em ondas decamétricas, tendo em conta os outros factores técnicos pertinentes;
4.1.2. As necessidades de cada país no que se refere à radiodifusão nacional e internacional;
4.1.3. O número máximo de frequências a utilizar para a difusão de um mesmo programa com destino a uma mesma zona;
4.1.4. A especificação de um sistema em faixa lateral única que possa ser utilizado no futuro pela radiodifusão em ondas decamétricas;

---

(1) Substitui a Resolução Spa2-2 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

4.2. Decida, além disso, sobre os princípios de planificação a aplicar e sobre o método de planificação a utilizar pela 2.ª sessão;

5. Que na sua 2.ª sessão, que deveria realizar-se o mais cedo 12 meses e o mais tarde 18 meses depois da 1.ª sessão, a conferência:

5.1. Proceda à planificação em conformidade com os princípios e o método fixados aquando da 1.ª sessão;

5.2. Examine e, se necessário, reveja as disposições pertinentes do Regulamento das Radiocomunicações relativas ao serviço de radiodifusão em ondas decamétricas;

pede instantemente às administrações

que até à realização da conferência não utilizem emissores de potência mais elevada que a necessária para assegurar uma recepção satisfatória e que se esforcem porque o número das frequências utilizadas corresponda ao mínimo necessário;

chama a atenção do conselho de administração

para a urgência de que se reveste essa conferência, e

convida o conselho de administração

a tomar todas as disposições necessárias para a convocação da conferência e a fixar a data da 1.ª sessão o mais cedo possível depois da próxima assembleia plenária da CCIR, tendo em conta o prazo mínimo fixado no artigo 58 (n.º 303) da Convenção;

pede à IFRB

que efectue os estudos técnicos e os trabalhos preparatórios necessários, incluindo os indicados no n.º **1771** do Regulamento das Radiocomunicações;

pede à CCIR

que acelere os estudos que são objecto das Recomendações n.os 500 e 501.

RESOLUÇÃO N.º 509

Relativa à convocação de uma conferência regional de radiodifusão encarregada de reexaminar e de rever as disposições dos Actos Finais da Conferência Africana de Radiodifusão em Ondas Métricas e Decimétricas (Genebra, 1963)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o último plano africano de radiodifusão em ondas métricas e decimétricas foi estabelecido em Genebra, em 1963, para a radiodifusão sonora na faixa II (87,5-100 MHz) e para a radiodifusão televisiva nas faixas I (47-68 MHz), III (174-233 MHz), IV (470-582 MHz) e V (582-960 MHz);

b) Que alguns países africanos não participaram na Conferência Africana de Radiodifusão em Ondas Métricas e Decimétricas (Genebra, 1963);

c) Que muitos outros países africanos se tornaram então independentes e que esses países deverão ser incluídos num novo plano;

notando

a) Que está previsto organizar uma conferência de planificação de radiodifusão sonora em modulação de frequência para a faixa de 87,5-108 MHz (v. Resolução n.º 510);

b) A extensão, de 174-223 MHz a 174-230 MHz, da atribuição que foi feita, a título primário, ao serviço de radiodifusão (televisão) na Região 1;

constando

que é necessário actualizar o plano existente;

decide

que seja convocada uma conferência regional logo que possível, e de preferência antes de 1984, a fim de reexaminar e de rever as disposições do plano actual de radiodifusão televisiva em ondas métricas e decimétricas (Genebra, 1963) para a zona africana de radiodifusão, tendo em conta as consignações contidas no Plano de Estocolmo de 1961;

convida o conselho de administração

a tomar todas as disposições necessárias para convocar essa conferência e para lhe fixar a data e a agenda;

pede à CCIR

que efectue os estudos técnicos necessários;

pede à IFRB

que efectue os trabalhos preparatórios necessários à dita conferência.

RESOLUÇÃO N.º 510

Relativa à convocação de uma conferência de planificação da radiodifusão sonora na faixa de 87,5-108 MHz para a Região 1 e certos países interessados da Região 3

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a faixa atribuída, a título primário, ao serviço de radiodifusão na Região 1 foi alargada de 87,5-100 MHz para 87,5-108 MHz;
b) Que na Região 1 a faixa de 100-108 MHz está actualmente atribuída ao serviço móvel, excepto móvel aeronáutico (R), e também ao serviço fixo em alguns países;
c) Que vários países da Região 3 com fronteiras terrestres com a Região 1 utilizam também esta faixa para o serviço de radiodifusão;
d) Que é necessário estabelecer um novo plano de radiodifusão sonora para toda a faixa de 87,5-100 MHz para todos os países da Região 1 que utilizam ou que prevêem utilizar a faixa de 87,5-100 MHz para a radiodifusão sonora em modulação de frequência;
e) Que para outros países da Região 1 é necessário estabelecer um plano de radiodifusão sonora na faixa de 100-108 MHz;
f) Que esse novo plano não deveria em nenhum caso influenciar desfavoravelmente as consignações existentes, ou em projecto, às estações de televisão na faixa de 87,5-100 MHz, que estão em conformidade com o Acordo Regional de Estocolmo, 1961;
g) Que esse novo plano, na faixa de 87,5-100 MHz, não deveria ter como consequência a deterioração das zonas de serviço das estações existentes de radiodifusão sonora que funcionam em conformidade com o Acordo Regional de Estocolmo, 1961, situadas na zona de coordenação com os países que utilizam esta faixa para a televisão em conformidade com o Acordo Regional de Estocolmo, 1961;
h) Que é necessário introduzir, logo que possível, estações de radiodifusão sonora na faixa de 100-108 MHz em conformidade com esse plano;
i) Que existe a possibilidade de as instalações de radionavegação utilizadas para a aterragem automática de aeronaves e que funcionam na faixa adjacente de 108-112 MHz serem submetidas a interferências prejudiciais por estações de radiodifusão situadas na proximidade e funcionamento na faixas de 87,5-108 MHz, se as frequências das respectivas estações não forem judiciosamente escolhidas, e de tais interferências porem em perigo a vida humana:

decide

1. Que se realize uma conferência regional antes de 31 de Dezembro de 1983, com vista a estabelecer um acordo para a Região 1 e para os países interessados da Região 3 e um plano associado relativo à radiodifusão sonora na faixa de 87,5-108 MHz para a Região 1 e para as partes do Afeganistão e do Irão contíguas da Região 1;
2. Que essa Conferência se efectue em duas sessões:

A 1.ª sessão permitirá estabelecer as bases técnicas para a preparação do plano, os critérios mútuos de partilha entre o serviço de radiodifusão sonora e os outros serviços, incluindo o serviço de radiodifusão (televisão) que funciona na faixa de 87,5-108 MHz;
A 2.ª sessão, que se realizará de preferência 6 a 12 meses depois da 1.ª, deverá elaborar o acordo e o plano associado;

3. Que se deve dar aos países interessados da Região 3 a possibilidade de participarem nessa conferência;

pede à CCIR

que estude urgentemente as bases necessárias à planificação e à determinação dos critérios de protecção entre as estações de radiodifusão sonora e as estações de radiodifusão televisiva entre as estações de radiodifusão sonora e as estações dos serviços fixo e móvel, excepto aeronáutico (R);

convida o conselho de administração

a fixar as datas e a agenda dessa conferência;

pede às administrações

que, quando da planificação da faixa de 87,5-108 MHz, tenham em conta os problemas de compatibilidade com as instalações de radionavegação que funcionam na faixa adjacente.

RESOLUÇÃO N.º 600

Relativa à utilização, para o serviço de radionavegação, das faixas de frequências de 2900-3100 MHz, 5470-5650 MHz, 9200-9300 MHz, 9300-9500 MHz e 9500-9800 MHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a presente Conferência adoptou disposições relativas ao desenvolvimento de equipamentos de resposta que devem ser instalados a bordo de navios e utilizados no serviço de radionavegação marítima, nas faixas de frequências de 2930-2950 MHz, 5470-5480 MHz e 9280-9300 MHz;

b) Que atribuições de frequência para o serviço de radionavegação, nas faixas utilizadas para a radionavegação aeronáutica e marítima, são objecto de pedidos crescentes, em razão:

i) Do aumento do número de radiodetectores marítimos de bordo, aumento esse que tende a intensificar-se devido á exigência que visa tornar obrigatória a instalação desses equipamentos a bordo dos navios em todo o Mundo;

ii) Das crescentes necessidades no que se refere a auxiliares da navegação e a equipamentos de resposta destinados a funcionar em associação com radiodetectores primários;

iii) Da necessidade de aumentar a utilização dessas faixas pelas estações do serviço de radionavegação aeronáutica, tendo em conta o facto de que se exige também a instalação desses equipamentos a bordo de aeronaves a título obrigatório em todo o Mundo;

c) Que se produzem cada vez mais interferências prejudiciais na faixa de 9300-9500 MHz devido a essas circunstâncias;

d) Que tais aplicações de radiodetectores levantam importantes problemas de segurança;

notando

a) As disposições da Recomendação n.º 605;

b) As conclusões da reunião especial preparatória da CCIR;

c) A necessidade de dispor de informações complementares, relativas à exploração e aos aspectos técnicos, para decidir sobre a utilização mais eficaz das frequências;

decide

1. Que a próxima conferência administrativa mundial das radiocomunicações competente deverá:

1.1. Reexaminar as notas relativas a estas faixas atribuídas ao serviço de radionavegação e introduzir-lhes as modificações que considere apropriadas, à luz de estudos complementares;

1.2. Elaborar recomendações apropriadas com carácter regulamentar;

2. Que a CCIR deverá prosseguir o exame dos aspectos técnicos e formular pareceres;

convida

1. O conselho de administração a tomar as disposições necessárias para que as questões de radionavegação que interessam aos serviços móveis figurem na agenda da próxima conferência de radiocomunicações competente no que se refere a serviços móveis;

2. As administrações a estudarem a utilização dessas faixas pelos serviços de radionavegação e a apresentarem propostas com vista à utilização eficaz das referidas faixas;

pede ao secretário-geral

que apresente esta resolução à OMCI e à OACI e que peça a essas organizações que examinem com urgência as exigências operacionais dos serviços de radionavegação marítima e aeronáutica que utilizam estas faixas de frequências e formulem recomendações apropriadas a fim de auxiliar as administrações a prepararem essa conferência.

RESOLUÇÃO N.º 601

Relativa às normas e aos pareceres referentes às radiobalizas de localização de sinistros que funcionam nas frequências de 121,5 MHz e 243 MHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as radiobalizas de localização de sinistros que funcionam nas frequências de 121,5 MHz e 243 MHz se destinam a facilitar as operações de busca e salvamento;
b) Que as frequências de 121,5 MHz e 243 MHz são correntemente utilizadas pelas aeronaves que participam em operações de busca e salvamento;
c) Que a Organizçaão da Aviação Civil Internacional recomendou características do sinal especificações técnicas aplicáveis aos aparelhos de aeronave que funcionam na frequência de 121,5 MHz ou na frequência de 243 MHz, ou nessas duas frequências;

decide

que convém que as administrações que autorizem a utilização de radiobalizas de localização de sinistros funcionando na frequência de 121,5 MHz ou na frequência de 243 MHz, ou nessas duas frequências, tomem as disposições necessárias para que essas radiobalizas estejam em conformidade com as normas e com os pareceres pertinentes da Organização da Aviação Civil Internacional e da Comissão Consultiva Internacional das Radiocomunicações.

RESOLUÇÃO N.º 640

Relativa à utilização internacional, em caso de catástrofe natural, das radiocomunicações nas faixas de frequências atribuídas ao serviço de amador

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, em caso de catástrofe natural, os sistemas de comunicação normais ficam frequentemente sobrecarregados, danificados ou totalmente inutilizáveis;
b) Que é indispensável restabelecer rapidamente as comunicações para facilitar as operações de socorro organizadas à escala mundial;
c) Que as faixas atribuídas ao serviço de amador não estão sujeitas a planos internacionais ou a procedimentos de notificação e que, portanto, se prestam bem a uma utilização a curto prazo nos casos de urgência;
d) Que as comunicações internacionais, em caso de catástrofe, seriam facilitadas pelo recurso provisório a certas faixas de frequências atribuídas ao serviço de amador;
e) Que, em tais circunstâncias, as estações do serviço de amador, devido à sua larga dispersão e à sua capacidade demonstrada em casos semelhantes, podem ajudar a responder às necessidades essenciais de comunicações;
f) Que existem redes nacionais e regionais de amadores que, para os casos de urgência, utilizam certas frequências nas faixas atribuídas ao serviço de amador;
g) Que, em caso de catástrofe natural, a comunicação directa entre as estações do serviço de amador e de outras estações poderia revelar-se útil, especialmente para efectuar comunicações indispensáveis até ao restabelecimento das comunicações normais;

reconhecendo

que, no que se refere às comunicações em caso de catástrofe natural, os direitos e as responsabilidades pertencem às administrações interessadas;

decide

1. Que as faixas atribuídas ao serviço de amador indicadas no n.º **510** podem ser utilizadas pelas administrações para dar resposta às necessidades de comunicações internacionais em caso de catástrofe;
2. Que essas faixas assim utilizadas só devem servir para comunicações relacionadas com operações de socorro em caso de catástrofe natural;
3. Que, para as comunicações em caso de catástrofe, a utilização das faixas atribuídas ao serviço de amador por estações não pertencentes a este serviço deve ser limitada ao período de urgência e às zonas geográficas particulares, definidas pela autoridade responsável do país afectado;
4. Que as comunicações estabelecidas em caso de catástrofe devem efectuar-se no interior da zona sinistrada e entre a zona sinistrada e a sede permanente da organização que assegura as operações de socorro;

---

(1)Substitui a Resolução Mar7 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967).

5. Que tais comunicações só devem efectuar-se com o consentimento da administração do país atingido pela catástrofe;

6. Que as comunicações de socorro de origem exterior ao país sinistrado não devem substituir as redes de amador nacionais ou internacionais já previstas para as situações de urgência;

7. Que é desejável uma estreita colaboração entre as estações do serviço de amador e as estações de outros serviços de radiocomunicações que possam considerar necessário utilizar as frequências atribuídas ao serviço de amador para as comunicações em caso de catástrofe;

8. Que tais comunicações internacionais de socorro devem, na medida do possível, evitar causar interferências às redes do serviço de amador;

convida as administrações

1. A satisfazerem as necessidades para as comunicações internacionais em caso de catástrofe;

2. A preverem, na sua regulamentação nacional, os meios de satisfazer as necessidades para as comunicações de urgência.

RESOLUÇÃO N.º 641

Relativa à utilização da faixa de frequências de 7000-7100 KHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a partilha das faixas de frequências entre o serviço de amador e o serviço de radiodifusão não é desejável e que convém evitá-la;

b) Que é desejável que esses serviços recebam, na faixa 7, atribuições mundiais exclusivas;

c) Que a faixa de 7000-7100 kHz é atribuída em exclusivo ao serviço de amador em todo o Mundo;

decide

que a faixa de 7000-7100 kHz deve ser interdita ao serviço de radiodifusão e que as estações de radiodifusão devem deixar de emitir em frequências desta faixa.

RESOLUÇÃO N.º 642

Relativa à entrada em serviço das estações terrenas do serviço de amador por satélite

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

que os procedimentos dos artigos 11 e 13 são aplicáveis ao serviço de amador por satélite;

reconhecendo, além disso,

a) Que as características das estações terrenas do serviço de amador por satélite são muito diversas;

b) Que as estações espaciais do serviço de amador por satélite estão concebidas de maneira que as estações terrenas de amador de todos os países a elas tenham acesso;

c) Que a coordenação entre as estações dos serviços de amador e de amador por satélite se efectua sem que haja necessidade de recorrer a procedimentos oficiais;

d) Que, em aplicação das disposições do n.º **2741** do Regulamento das Radiocomunicações, incumbe à administração que autoriza uma estação espacial do serviço de amador por satélite eliminar qualquer interferência prejudicial;

nota

que certas informações especificadas nos apêndices 3 e 4 não podem razoavelmente ser fornecidas no caso de estações do serviço de amador por satélite;

decide

1. Que, quando uma administração (ou uma administração agindo em nome de um grupo de administrações expressamente nomeadas) se propuser estabelecer um sistema de satélites do serviço de amador por satélite e desejar publicar informações relativas às estações terrenas desse sistema, poderá:

1.1. Comunicar à IFRB a totalidade, ou parte, das informações pedidas no apêndice 3; a IFRB publicará essas informações numa secção especial da sua circular semanal, pedindo que os comentários lhe sejam comunicados no prazo de quatro meses a contar da data de publicação;

---

(1) Substitui a Resolução n.º 10 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

1.2. Notificar, nos termos dos n.os **1488** a **1491**, a totalidade ou parte das informações indicadas no apêndice 3; a IFRB inscrevê-las-á numa lista especial;

2. Que essas informações incluirão, no mínimo, as características de uma estação terrena tipo do serviço de amador por satélite, que possa transmitir sinais à estação espacial para accionar ou modificar as funções da estação espacial ou para as terminar.

RESOLUÇÃO N.º 700

Relativa à partilha entre o serviço fixo por satélite nas Regiões 1 e 3 e o serviço de radiodifusão por satélite na Região 2, na faixa de 12,2-12,7 GHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

a) Que fez uma atribuição ao serviço de radiodifusão por satélite na faixa de 12,1-12,7 GHz na Região 2;
b) Que a atribuição ao serviço fixo por satélite foi mantida na faixa de 12,5-12,75 GHz nas Regiões 1 e 3, e que foi feita uma atribuição adicional na faixa de 12,2-12,5 GHz para a Região 3;
c) Que quando do estabelecimento do plano de radiodifusão por satélite (Genebra, 1977) para as Regiões 1 e 3 foram tidas devidamente em conta as necessidades de exploração futuras do serviço fixo por satélite na Região 2 e que, para o efeito, houve a necessidade de impor restrições para a preparação do plano e para o procedimento de modificação associado;

decide

1. Que antes da entrada em vigor das disposições apropriadas e do plano associado que deverão ser estabelecidos pela conferência regional para a planificação do serviço de radiodifusão por satélite na Região 2, as disposições da Resolução n.º 33, assim como as disposições do artigo 11, se aplicarão à coordenação entre as estações espaciais do serviço de radiodifusão por satélite da Região 2 e as estações espaciais do serviço fixo por satélite das Regiões 1 e 3;

2. Que ao estabelecer um plano (assim como qualquer procedimento de modificação associado) para o serviço de radiodifusão por satélite na Região 2 deverá ter-se em conta a necessidade de um funcionamento satisfatório, no futuro, do serviço fixo por satélite nas Regiões 1 e 3, e que, no caso de se julgar necessário impor condicionamentos a esse serviço, de modo que não seja causada qualquer interferência prejudicial aos serviços fixos por satélite ou de radiodifusão por satélite em questão, convirá que esses condicionamentos não sejam em nenhum caso mais estritos que os impostos ao serviço fixo por satélite na Região 2 pelo apêndice 30;

3. Que, para indicar à conferência regional os princípios orientadores a seguir para alcançar o objectivo expresso no n.º 2 anterior, a CCIR deverá estudar urgentemente as disposições técnicas necessárias, tendo em conta os sistemas ou projectados do serviço fixo por satélite para a exploração nas faixas de 12,5-12,7 GHz na Região 1 e de 12,2-12,7 GHz na Região 3.

RESOLUÇÃO N.º 701

Relativa à convocação de uma conferência administrativa regional das radiocomunicações encarregadas de estabelecer um plano pormenorizado para o serviço de radiodifusão por satélite na faixa de 12 GHz e as ligações de conexão associadas na Região 2 (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que a Conferência Administrativa Mundial da Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) adoptou um plano de consignações de frequência e de posições orbitais para o serviço de radiodifusão por satélite nas faixas de 12 GHz para as Regiões 1 e 3;
b) Que a referida Conferência adoptou disposições provisórias, na previsão do estabelecimento de um plano análogo para a Região 2;
c) Que, após consulta aos Membros da Região 2 pelo conselho de administração, se prevê a convocação, em 1983, de uma conferência administrativa regional das radiocomunicações para a radiodifusão por satélite para a Região 2;
d) Que a presente Conferência adoptou modificações do quadro de atribuição das faixas de frequências, que terão repercussões sérias nas condições em que a conferência da Região 2 se baseará para estabelecer o seu plano para o serviço de radiodifusão por satélite na faixa de 12 GHz;
e) Que a presente Conferência também decidiu incorporar as disposições e o plano associado adoptados pela Conferência de 1977 no Regulamento das Radiocomunicações como apêndice 30:

---

(1) Substitui as Resoluções Sat-8 e Sat-9 e a Recomendação Sat-8 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

considerando

a) Que os anexos 8 e 9 do apêndice 30 contêm os dados técnicos e os critérios de partilha utilizados para o estabelecimento das disposições e do plano associado;
b) Que convém tirar partido dos progressos técnicos resultantes das experiências efectuadas com satélites de radiodifusão desde 1977;
c) Que convém também tirar partido dos estudos recentes da CCIR;
d) Que, relativamente aos serviços de radiocomunicação espacial, a presente Conferência atribuiu, na Região 1, a faixa de 12,3-12,7 GHz ao serviço de radiodifusão por satélite, e a faixa de 12,1-12,3 GHz ao serviço fixo por satélite e ao serviço de radiodifusão por satélite, em conformidade com as disposições da nota 841 do quadro de atribuição das faixas de frequências;
e) Que a presente Conferência reservou as faixas de 14,5-14,8 GHz e de 17,3-18,1 GHz para serem utilizadas nas ligações de conexão para os satélites de radiodifusão;
f) Que há vantagens importantes em planificar as ligações ascendentes ao mesmo tempo que se efectua a planificação dos sistemas de radiodifusão por satélite que funcionam na faixa de 12 GHz;

reconhecendo

a) Que já não é necessária a segmentação do arco na faixa de 11,7-12,1 GHz e que deixará de ser necessária na faixa de 12,1-12,3 GHz após a conferência administrativa regional das radiocomunicações de 1983;
b) Que os sistemas do serviço fixo por satélite que funcionam na faixa de 11,7-12,2 GHz não devem impor restrições ao estabelecimento de um plano de radiodifusão por satélite na Região 2, mas que, nas decisões da conferência administrativa regional das radiocomunicações de 1983, convirá ter em consideração aqueles sistemas que sejam desenvolvidos até à data da conferência administrativa regional das radiocomunicações de 1983, e que estejam em conformidade com as disposições dos Actos Finais da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971) e da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977):

decide

1. Que, o mais tardar em 1983, se realizará uma conferência administrativa regional das radiocomunicações (CARR), à qual se refere a alínea *c*) da parte *notando*, a fim de:

1.1. Dividir a faixa de 12,1-12,3 GHz em duas subfaixas e atribuir, a título primário, a subfaixa inferior ao serviço fixo por satélite e a subfaixa superior ao serviço de radiodifusão por satélite, ao serviço de radiodifusão, ao serviço móvel, excepto móvel aeronáutico, e ao serviço fixo (v. o n.º **841**);

1.2. Estabelecer um plano pormenorizado de consignações de frequência e de posições orbitais para o serviço de radiodifusão por satélite na Região 2, na faixa de 12,3-12,7 GHz e na parte da faixa de 12,1-12,3 GHz, que essa conferência atribuirá ao serviço de radiodifusão por satélite;

1.3. Planificar as ligações de conexão numa parte da faixa de 17,3-18,1 GHz, da mesma largura que a faixa total atribuída ao serviço de radiodifusão por satélite na faixa de 12 GHz. Todavia, as administrações poderão, nas ligações de conexão para os satélites de radiodifusão, utilizar faixas de frequências diferentes das faixas previstas no plano, com a condição de que essa utilização não exija qualquer modificação do plano;

1.4. Estabelecer procedimentos que regulamentarão a utilização, pelo serviço de radiodifusão por satélite, das faixas especificadas no § 1.2 da presente Resolução e, se necessário, procedimentos aplicáveis às ligações de conexão correspondentes;

2. Que a planificação deverá ter em conta as secções pertinentes do apêndice 30, e especialmente os anexos 4 e 5, assim como outras decisões tomadas pela presente Conferência. Ao tomar em consideração os anexos 6, 7 e 8, convirá igualmente ter em conta os pareceres mais recentes da CCIR e os últimos progressos da técnica;

3. Que o plano indicará a consignação pormenorizada das posições orbitais e dos canais disponíveis, garantindo assim que as necessidades no que se refere à radiodifusão por satélite apresentadas por cada administração serão satisfeitas equitativamente em relação a todos os países interessados. Por princípio, convirá garantir a cada administração da Região um número mínimo (4) de canais para a exploração do serviço de radiodifusão por satélite. Para além deste mínimo, ter-se-ão em conta as características especiais dos países (superfície, zonas horárias, diversidade linguística, etc.);

4. Que todas as administrações da Região 2 deverão apresentar à IFRB as suas necessidades no que se refere ao serviço de radiodifusão por satélite o mais tardar um ano antes do início da conferência administrativa regional das radiocomunicações encarregada de estabelecer um plano para esse serviço na Região 2. Essas necessidades poderão ser actualizadas à vontade das administrações. Considera-se que a palavra «necessidade» inclui o número e os limites de cada zona de serviço, assim como o número de canais necessários para cada zona. Seis meses antes da data limite fixada para o envio dos pedidos, a IFBR lembrará às administrações, por carta-circular ou telegrama, que devem comunicar as suas necessidades;

5. Que a planificação se fará na base da recepção individual, mas que cada administração poderá utilizar o sistema de recepção que melhor corresponda às suas necessidades (recepção individual ou recepção comunitária, ou ambas);

6. Que, quando da planificação, não se deverá perder de vista os sistemas devem ser concebidos de modo a reduzir ao mínimo as diferenças e incompatibilidades técnicas com os sistemas utilizados noutras Regiões;

7. Que a planificação deverá ter em conta as disposições das Resoluções n.ºs 31 e 700 relativas à questão da partilha inter-regional;

convida o conselho de administração

a tomar as medidas necessárias para a convocação da referida conferência administrativa regional das radiocomunicações, baseando-se nas disposições da presente Resolução para estabelecer a agenda dessa conferência;

convida a CCIR

a efectuar os estudos necessários para apresentar com a antecedência necessária informações técnicas de que a conferência terá provavelmente necessidade como base dos seus trabalhos (v., também, a Recomendação n.º 101);

convida a IFBR

1. A pedir a todas as administrações dos países da Região 2 que apresentem as suas necessidades no que se refere ao serviço de radiodifusão por satélite em conformidade com as disposições do § 4 anterior;
2. A reunir as informações apresentadas pelas administrações sob uma forma que permita o estudo comparativo delas, a comunicar essas informações ao secretário-geral para publicação e a enviá-las às administrações o mais tardar nove meses antes da abertura da Conferência Administrativa Regional das Radiocomunicações.

RESOLUÇÃO N.º 702

Relativa à convocação de uma conferência administrativas regional das radiocomunicações encarregada de definir critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas aos serviços fixo, de radiodifusão e móvel da Região 3.

A conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que atribuições de frequências nas faixas das ondas métricas e decimétricas foram sujeitas, durante esta Conferência, a importantes revisões, que ocasionaram partilhas essencialmente entre os serviços fixo, de radiodifusão e móvel;
b) Que o desenvolvimento anárquico dos serviços que partilham esta parte do espectro em toda a Região ameaça dar origem à utilização desordenada e ineficaz deste último;
c) Que não existe qualquer critério bem estabelecido para definir a partilha do espectro entre os serviços a que essas faixas estão atribuídas;
d) Que na Região 3 não existe qualquer acordo regional quer regule a instalação de radiodifusão nessas faixas;
e) Que não é certo, nesta fase, que seja necessário um plano de consignação para a Região 3;

notando

a prioridade que ela deu à convocação de futuras conferências administrativas de radiocomunicações;

decide

1. Que em devido tempo seja convocada uma conferência administrativa regional das radiocomunicações;
2. Que essa conferência regional defina os critérios técnicos de partilha entre os serviços fixo, de radiodifusão e móvel aos quais estão atribuídas as faixas em causa;
3. Que após a definição desses critérios técnicos a conferência decida igualmente as medidas a tomar em seguida;

convida o conselho de administração

a preparar a convocação da referida conferência administrativa regional das radiocomunicações, apoiando-se nas indicações dadas na presente Resolução para estabelecer a agenda da conferência;

convida a CCIR

a proceder aos estudos necessários para apresentar, em devido tempo, as informações técnicas provavelmente necessárias para servir de base aos trabalhos da conferência regional;

convida as administrações

a contribuírem de modo apropriado para os estudos da CCIR.

RESOLUÇÃO N.º 703

Relativa aos métodos de cálculo e aos critérios de interferência recomendados pela CCIR no que respeita à partilha das faixas de frequências entre serviços de radiocomunicações espacial e serviços de radiocomunicação de Terra ou entre serviços de radiocomunicação espacial (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 199),

considerando

a) Que nas faixas de frequências partilhadas, com igualdade de direitos, pelos serviços de radiocomunicação espacial e pelos serviços de radiocomunicação de Terra é preciso impor a cada um desses serviços certas restrições de ordem técnica e certos procedimentos de coordenação a fim de evitar interferências mútuas;

---

(1) Substitui a Resolução Spa2-6 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

b) Que nas faixas de frequências partilhadas por estações espaciais situadas a bordo de satélites geostacionários é necessário impor procedimentos de coordenação a fim de limitar as interferências mútuas;

c) Que os métodos de cálculo e os critérios de interferência relativos aos procedimentos de coordenação mencionados nas alíneas *a*) e *b*) acima se baseiam em pareceres da CCIR;

d) Que, graças não só aos bons resultados da utilização partilhada das faixas de frequências pelos serviços de radiocomunicação espacial e pelos serviços de radiocomunicação de Terra, como também aos progressos constantes da técnica espacial, cada assembleia plenária da CCIR que se realizou desde a X Assembleia Plenária (Genebra, 1963) melhorou alguns dos critérios técnicos que a assembleia plenária precedente tinha preconizado;

e) Que a assembleia plenária da CCIR se reúne de três em três anos, ao passo que as conferências administrativas das radiocomunicações, que estão habilitadas a modificar o Regulamento das Radiocomunicações utilizando em larga medida os pareceres da CCIR, se reúnem, na prática, com menos frequência e muito menos regularmente;

f) Que a Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 193) reconhece aos Membros da União a faculdade de concluírem acordos especiais sobre questões de telecomunicações, não podendo, no entanto, tais acordos contrariar as disposições da Convenção ou dos regulamentos a ela anexos relativamente a interferências prejudiciais causadas aos serviços de radiocomunicação dos outros países;

convencida

a) De que as futuras assembleias plenárias da CCIR introduzirão provavelmente novas modificações nos métodos de cálculo e nos critérios de interferência recomendados;

b) De que as administrações deveriam ser informadas antecipadamente dos projectos de pareceres pertinentes da CCIR;

c) Que convém que as administrações apliquem, na medida do possível, os pareceres em vigor da CCIR relativos aos critérios de partilha, quando estabelecerem planos de sistemas destinados a funcionar nas faixas de frequências partilhadas, com igualdade de direitos, entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra ou entre serviços de radiocomunicação espacial;

convida a CCIR

a) A pedir às comissões de estudos que, nas suas reuniões finais que precedem a assembleia plenária, preparem uma lista provisória em que assinalem as passagens pertinentes dos projectos de pareceres revistos e projectos de novos pareceres da CCIR que tenham incidência sobre os métodos de cálculo e sobre os critérios de interferência, assim como as secções específicas do Regulamento das Radiocomunicações a que se aplicam, relativamente à partilha entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra, ou entre serviços de radiocomunicação espacial;

b) A pedir ao director da CCIR que, no prazo de 30 dias a seguir às reuniões finais das comissões de estudos, faça chegar essa lista às administrações e à IFRB acompanhada dos textos desses projectos de pareceres revistos e dos novos pareceres;

decide

1. Que a IFRB difunda imediatamente por todas as administrações as informações mencionadas na alínea *b*) da parte *convida a CCIR*, de modo que essas informações lhes cheguem, sempre que possível, antes da convocação da assembleia plenária seguinte.

Esse envio deverá ser acompanhado de uma nota a indicar que os textos em anexo vão ser submetidos à aprovação da assembleia plenária seguinte da CCIR;

2:

a) Que cada assembleia plenária da CCIR, depois de ter adoptado, na totalidade ou em parte, os pareceres pertinentes, examinado e aprovado as partes apropriadas da lista mencionada na alínea *a*) da parte *convida a CCIR*, tome as disposições necessárias para que o secretário-geral seja informado dessa lista, assim como dos pareceres que tenham incidência sobre os métodos de cálculo apropriados e os critérios de interferência a utilizar;

b) Que, no prazo de 30 dias, o secretário-geral difunda esta lista, assim como os textos pertinentes, por todas as administrações, para lhes pedir que indiquem, num prazo de quatro meses, quais são os pareceres da CCIR ou os critérios técnicos definidos nos pareceres mencionados no § 2, alínea *a*) acima, que aceitam utilizar na aplicação das disposições pertinentes do Regulamento das Radiocomunicações;

3. Que as administrações que não respondam, no prazo de 4 meses, ao pedido do secretário-geral recebam um telegrama a pedir-lhes que comuniquem a sua decisão respeitante à aplicação desses pareceres no quadro das disposições pertinentes do Regulamento das Radiocomunicações. Se, no prazo de 30 dias a contar da data do envio do telegrama, não for recebida resposta de uma administração, considerar-se-á que essa administração não deseja, de momento, expressar qualquer opinião;

4. Que, no caso de uma administração, em resposta ao pedido do secretário-geral, indicar que não pode aceitar determinado parecer da CCIR ou determinado critério técnico definido nesses pareceres, ou no caso de uma administração não responder ao pedido do secretário-geral como está indicado no § 3 acima, os métodos de cálculo e os critérios de interferência pertinentes definidos no Regulamento das Radiocomunicações continuem a aplicar-se nos casos que digam respeito a essa Administração;

5. Que o secretário-geral publique, para informação de todas as administrações, uma lista elaborada pela IFRB na base das respostas ao pedido supracitado dos pareceres da CCIR ou dos métodos de cálculo e dos critérios de interferência pertinentes definidos nesses pareceres, com a indicação das administrações para as quais cada um desses pareceres ou cada um desses critérios técnicos é aceitável ou inaceitável. Essa lista recapitulativa incluirá também os nomes das administrações mencionadas no § 3 acima;

6. Que a IFRB deve ter em conta:

a) As condições de aplicação dos métodos de cálculo e os critérios de interferência da CCIR, quando proceder a exames técnicos em casos que interessam unicamente a administrações para as quais esses métodos e esses critérios são aceitáveis;

a) As condições de aplicação dos métodos de cálculo e dos critérios de interferência definidos no Regulamento das Radiocomunicações, em conformidade com a lista recapitulativa mencionada no § 5 acima, quando proceder a exames técnicos, em casos que interessam as outras administrações;

7. Que o secretário-geral solicite anualmente às administrações que ainda não tenham respondido que lhe comuniquem a sua decisão em aplicação do § 3 acima;

8. Que se posteriormente surgirem questões relativamente á aplicação de qualquer dos métodos de cálculo e de qualquer dos critérios de interferência pertinentes, num caso que implique as administrações referidas no § 3 acima, a IFRB proceda a um inquérito junto das administrações interessadas para saber se elas estariam de acordo em que sejam aplicados os métodos e critérios técnicos definidos nos pareceres pertinentes da CCIR e de que trata o § 2 acima;

9. Que a lista recapitulativa publicada em aplicação do § 5 acima seja actualizada com base nas respostas recebidas em aplicação dos §§ 7 e 8 acima.

RECOMENDAÇÕES

Nota do secretário-geral

Em aplicação das decisões tomadas pela Conferência, as Recomendações foram classificadas e enumeradas pelas categorias e segundo o sistema de numeração indicado a seguir. Além disso, na aplicação deste processo de classificação verificou-se que certas Recomendações, pertencentes a um dado grupo, estavam directamente relacionadas com Recomendações que figuram noutros grupos. Este facto foi tido em conta para facilitar a consulta dos textos.

	Números
Recomendações de aplicação geral	1-99
Princípios, procedimentos gerais e cooperação	1-20
Procedimentos específicos	30-39
Questões técnicas	60-69
Referem-se igualmente: n.^{os} **8, 31, 100, 505 e 711.**	
Equipamento/terminologia	70-79
Referem-se igualmente: n.^{os} **67 e 69.**	
Serviço fixo/serviço por satélite	100-199
Referem-se igualmente: n.^{os} **12, 703 e 706.**	
Serviço móvel/serviço móvel por satélite	200-299
Referem-se igualmente: n.^{os} **12, 703 e 706.**	
Serviço móvel marítimo/serviço móvel marítimo por satélite	300-399
Referem-se igualmente: n.^{os} **7, 9, 200, 201, 202, 203, 204 e 604.**	
Serviço móvel aeronáutico/serviço móvel aeronáutico por satélite	400-499
Referem-se igualmente: n.^{os} **7, 9, 202, 204, 604 e 709.**	
Serviço de radiodifusão/serviço de radiodifusão por satélite	500-599
Referem-se igualmente: n.^{os} **9, 12, 101, 704, 705 e 712.**	
Outros serviços	600-699
Referem-se igualmente: n.^{os} **12, 701, 703, 704, 707 e 710.**	
Relativas a mais de um serviço	700-799
Referem-se igualmente: n.^{os} **2, 3, 12, 61 e 65.**	

V., igualmente, a este respeito o «Índice analítico» (parte B) elaborado pelo secretário-geral.

RECOMENDAÇÃO N.º 1

Relativa à utilização de sistemas de radiocomunicações espaciais no caso de catástrofes naturais, de epidemias, de fomes e de outras situações críticas análogas (1)

A Conferência Administrativa das Radiocomunicações (Genebra, 1979),

considerando

a) Que, em caso de catástrofes naturais, epidemias, de fomes e de outras situações críticas análogas, podem ser salvas vias por socorros rápidos e eficazes;
b) Que são essenciais telecomunicações rápidas e fiáveis para essa operações de socorro;
c) Que, em consequência dos danos que sofreram ou por outras razões, os meios de telecomunicação normais das zonas sinistradas são frequentemente insuficientes para as operações de socorro e que os recursos locais não permitem restabelecê-los ou completá-los rapidamente;
d) Que o emprego de sistemas de radiocomunicações espaciais constitui um dos meios que permitiria assegurar telecomunicações rápidas e fiáveis para as operações de socorro;

notando

a) Que, segundo o que se sabe da planificação no que se refere a sistemas de radiocomunicações espaciais, não estão previstas frequências nem vias designadas para as radiocomunicações em caso de sinistro;
b) Que, na ausência de tais disposições, não é possível estabelecer especificações para estações terrenas de funcionamento universal que possam ser transportadas rapidamente;
c) Que o Relatório n.º 554-1 da CCIR apresenta os resultados mais recentes dos estudos relativos às estações terrenas transportáveis afectas às operações de socorro;

recomenda

1. Que as administrações, individualmente ou em colaboração, quando estabelecerem os planos dos seus sistemas de radiocomunicações espaciais tomem medidas com vista a satisfazer as necessidades de eventuais operações de socorro e determinem para o efeito vias radioeléctricas e facilidades que possam ser imediatamente utilizadas para operações de socorro;
2. Que as administrações interessadas prescindam de aplicar os procedimentos de coordenação previstos no Regulamento das Radiocomunicações no caso de estações terrenas transportáveis afectas às operações de socorro;

convida a CCIR

a continuar os estudos sobre especificações tipo e as frequências preferíveis para estações terrenas transportáveis e para equipamento compatível transportável para as radiocomunicações fixas e móveis destinadas às operações de socorro.

RECOMENDAÇÃO N.º 2

Relativa ao exame, pelas conferências administrativas mundiais das radiocomunicações, do estado de ocupação do espectro das frequências no domínio das radiocomunicações espaciais (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as faixas de frequências utilizáveis para as aplicações espaciais são limitadas em número e em largura;
b) Que são em número limitado as posições possíveis para satélites cujo principal objectivo é o estabelecimento de ligações de telecomunicações e que algumas posições são mais favoráveis que outras para certas ligações;
c) Que convém dar a todas as administrações a possibilidade de estabelecerem as ligações espaciais que julgem necessárias;
d) Que a importância e o custo das redes ou dos sistemas espaciais são tais que é necessário evitar o mais possível pôr entraves à sua exploração e ao seu desenvolvimento;
e) Que a técnica está em constante e rápida evolução e que convém assegurar a melhor utilização possível dos recurso no domínio das radiocomunicações espaciais;
f) Que as administrações devem proceder de modo que as consignações de frequência para aplicações espaciais sejam utilizadas da maneira mais eficaz possível tendo em conta o desenvolvimento da técnica e seja abandonadas logo que deixem de estar em serviço;
g) Que, apesar das disposições do artigo 11 do Regulamento das Radiocomunicações e dos princípios adoptados pela Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971) que prevêem procedimentos de consulta e de coordenação muito vastos entre administrações com vista à melhor inclusão possível de todos os sistemas espaciais, pode acontecer que, com o aumento da utilização das frequências e das posições orbitais, as administrações encontrem dificuldades inaceitáveis numa ou várias faixas de frequências para prover às suas necessidades no que se refere às radiocomunicações espaciais;

recomenda

que a próxima conferência administrativa mundial das radiocomunicações apropriada seja habilitada a tratar da situação descrita no *considerando* g), se tal situação se apresentar;

---

(1) Substitui a Resolução Spa2-13 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).
(2) Substitui a Resolução Spa2-1 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

convida, por isso, o conselho de administração

se tal situação se apresentar, a fixar a agenda da próxima conferência administrativa mundial das radiocomunicações apropriada de modo a permitir-lhe examinar sob todos os aspectos a utilização de ou das faixas de frequências consideradas, incluindo especialmente as consignações em causa registadas no Ficheiro Internacional de Referência das Frequências, e encontrar uma solução para o problema.

RECOMENDAÇÃO N.º 3

Relativa à transmissão de energia eléctrica por meio de frequências radioeléctricas a partir de um engenho espacial

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, sob o ponto de vista técnico, pode ser possível no futuro transformar certas partes de radiação solar em energia eléctrica a bordo de um engenho espacial e transmitir essa energia para a Terra utilizando técnicas de transmissão radioeléctrica e que essa energia poderia completar os recursos mundiais de energia;

b) Que a transmissão eventual de radiações de tal potência poderia ter efeitos desfavoráveis sobre a propagação na ionosfera das ondas radioeléctricas destinadas a outros serviços;

reconhecendo

a) Que é necessário garantir que a transmissão, por meio de frequências radioeléctricas, da energia eléctrica recolhida no espaço não venha a causar interferências prejudiciais aos serviços de radiocomunicação;

b) Que é necessário avaliar as consequências ecológicas e biológicas eventuais da transmissão radioeléctrica dessa energia, especialmente para aeronaves que atravessem o feixe das antenas que servirão a essa transmissão;

notando

que o Relatório da Reunião Especial Preparatória da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) se refere à possibilidade técnica de construir um satélite para recolher a energia solar;

notando igualmente

as disposições do artigo 6 do Regulamento das Radiocomunicações relativas à obrigação que as administrações têm de não causar interferência prejudicial aos serviços de radiocomunicação que funcionem em conformidade com as disposições do Regulamento;

recomenda à CCIR

que estude de modo apropriado, sob todos os aspectos, os efeitos dessa transmissão radioeléctrica de energia a partir do espaço sobre um serviço de radiocomunicação e formule recomendações, apropriadas, tendo em conta as incidências ecológicas e biológicas;

convida o secretário-geral

a transmitir esta Recomendação ao Secretário-Geral das Nações Unidas.

RECOMENDAÇÃO N.º 4

Relativa à forma de melhorar o agrupamento das ligações das redes nacionais e internacionais de radiocomunicação que funcionam nas faixas compreendidas entre 4000 kHz e 27 500 kHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) As necessidades sempre crescentes de frequências, especialmente nas faixas compreendidas entre 400 kHz e 27 500 kHz;

b) A estrutura actual das redes nacionais e internacionais de radiocomunicação nessas faixas;

---

(1) Substitui a Recomendação n.º 11 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

c) O tráfego relativamente reduzido em certas ligações dessas redes;
d) As disposições da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973), relativas à utilização racional de frequências e do espectro (artigo 33);

tendo em conta esse facto

a) De que rendimento de um grupo de ligações é superior à soma dos rendimentos das ligações individuais;
b) Que, por consequência, é possível diminuir o número total das frequências necessárias;
c) Que, em certas partes do Mundo, existem zonas e países interconectados por diversas ligações tanto radioeléctricas como por cabos;

recomenda

1. Que, em todos os casos em que isso seja possível, as administrações se esforcem, agrupando mais eficazmente as ligações radioeléctricas de tráfego reduzido, por diminuir a saturação das faixas compreendidas entre 4000 kHz e 27 500 kHz;

2. Que os países interconectados por ligações radioeléctricas ou por cabos concluam, sempre que possível na prática, acordos especiais relativos à utilização em comum das ligações internacionais existentes e funcionando nas faixas compreendidas entre 4000 kHz e 27 500 kHz;

3. Que, por regra geral, esses acordos garantam a cada um dos países participantes vantagens equivalentes no que respeita às condições financeiras e aos meios de exploração;

4. Que, ao projectarem novas ligações radioeléctricas ou a extensão daquelas que existem já, as administrações tenham em conta, tanto quanto possível, os princípios enunciados nos §§ 1 a 3 acima.

RECOMENDAÇÃO N.º 5

Relativa aos meios a adoptar para reduzir a saturação da faixa 7 (3-30 MHz) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

a) Que é necessário reduzir com urgência o volume de pedidos referentes à faixa 7 do espectro das frequências radioeléctricas;
b) Quem, tirando partido dos últimos progressos da técnica das telecomunicações, e especialmente dos conseguidos na utilização das faixas 8 e superiores, no emprego de cabos coaxiais, etc., é possível contribuir para essa redução;
c) Que a utilização de meios técnicos aperfeiçoados de substituição conduziria a gastos consideráveis, ao passo que seria menos oneroso continuar a empregar as frequências da faixa 7, e que, em tais condições, certas administrações experimentariam mais dificuldades que outras, mais favorecidas, em adoptar esses novos meios;

recomenda

1. Que todas as administrações tomem medidas necessárias para reduzir o volume dos pedidos referentes à faixa 7, utilizando o mais possível as técnicas modernas;

2. Que seja pedido às organizações internacionais que prestam a sua assistência que dêem importância especial ao fornecimento de equipamento às administrações que, por razões de ordem económica, não estejam em condições de, elas próprias, o adquirirem, de modo a permitir a adopção por essas administrações de meios de telecomunicação de substituição, contribuindo assim para uma maior economia na utilização da faixa 7.

RECOMENDAÇÃO N.º 6

Relativa às necessidades práticas dos países que têm necessidade de assistência especial (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

recomenda

a todas as administrações que se esforcem particularmente por colaborar com as administrações dos países com necessidade de assistência especial, fornecendo-lhe informações de fiscalização das emissões e assistência técnica que possa ajudá-las a obter consignações de frequência que convenham às suas ligações;

---

(1) Substitui a Recomendação n.º 10 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).
(2) Substitui a Recomendação n.º 35 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

convida a IFRB

a fornecer às administrações dos países com necessidade de assistência especial informações e dados técnicos que lhes sejam necessários, incluindo explicações pormenorizadas sobre o Regulamento das Radiocomunicações de modo a permitir-lhes escolher e obter consignações de frequência que convenham ao funcionamento das suas ligações.

RECOMENDAÇÃO N.º 7

Relativa à adopção de modelos normalizados de licenças concedidas às estações de navio e às estações de aeronave (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a normalização dos modelos de licenças concedidas às estações de navio e de aeronaves que efectuam percursos internacionais facilitaria consideravelmente a inspecção dessas estações;
b) Que modelos normalizados de licenças a conceder às estações de navio e de aeronave serviriam de guia útil às administrações que desejam melhorar os seus modelos actuais de licenças nacionais;
c) Que esses modelos normalizados de licença poderiam ser utilizados com vantagem por essas administrações para constituírem o certificado de que trata o n.º **2027** do Regulamento das Radiocomunicações;

considerando, além disso,

que a Conferência Administrativa das Radiocomunicações (Genebra, 1959) elaborou:

a) Uma série de princípios para a execução dos modelos normalizados de licenças (v. o anexo 1);
b) Modelos de licenças a conceder às estações de aeronave (v. os anexos 2 e 3):

recomenda

1. Que as administrações, se acharem esses modelos práticos e aceitáveis, os adoptem para uso internacional;
2. Que as administrações se esforcem, tanto quanto possível, por tornarem os seus modelos de licenças nacionais conforme com esses modelos normalizados.

ANEXO À RECOMENDAÇÃO N.º 7

Princípios a seguir para a elaboração de modelos normalizados de licenças a conceder às estações de navio e às estações de aeronave

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) considerou que, quando da elaboração dos modelos normalizados de licenças de estações de navio e de aeronaves, convém:

1. Apresentar, tanto quando possível, os modelos de licenças sob a forma de quadros. As linhas e as colunas desse quadro devem ser marcadas por letras ou algarismos;
2. Dar uma forma o mais possível semelhante às licenças das estações de navio das estações de aeronave;
3. Dar às licenças o formato internacional A4;
4. Apresentar as licenças sob forma que facilite ao máximo a verificação desses documentos a bordo dos navios ou das aeronaves;
5. Imprimir as licenças em caracteres latinos, na língua nacional do país que as concede. As administrações dos países cuja língua nacional não pode ser escrita em caracteres latinos utilizarão essa língua nacional e, além disso, uma língua de trabalho da União;
6. Colocar no cimo da licença o título «Licença de estação de navio» ou «Licença de estação de aeronave». Esse título será na língua do país de origem, assim como nas três línguas de trabalho da União. Estes princípios foram aplicados quando da elaboração dos modelos de licença de que tratam os anexos 2 e 3.

---

(1) Substitui a Recomendação n.º 17 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

ANEXO 2 À RECOMENDAÇÃO N.º 7

(Nome completo da autoridade que concede a licença, escrito na língua nacional)

... (*a*)

SHIP STATION LICENCE

LICENCE DE STATION DE NAVIRE

LICENCIA DE ESTACIÓN DE BARCO

N.º ...

Duração de validade

Em conformidade com... (regulamentação nacional) e com o Regulamento das Radiocomunicações anexo à Convenção Internacional das Telecomunicações actualmente em vigor, é concedida a presente autorização para a utilização do equipamento radioeléctrico abaixo descrito:

1	2	3	4
Nome do navio	Indicativo de chamada ou outro modo de identificação	Armador do navio	Categoria de correspondência pública

	Aparelho	a	b	c	d
		Tipo	Potência (watts)	Classe de emissão	Faixas de frequência ou frequências consignadas
5	Emissores				(*b*)
6	Emissores de socorro de navio				(*b*)
7	Emissores de engenho de salvamento				(*b*)
8	Outro aparelho	(*Facultativo*)			

(*a*) As palavras «licença de estação de navio» devem ser escritas na língua nacional, no caso de essa língua ser uma língua de trabalho da União.
(*b*) Valor numérico ou símbolo.

Pela autoridade que concede a licença:

... ...
(Localidade) (Data) (Marca de autenticação)
(Selo branco)

ANEXO 3 À RECOMENDAÇÃO N.º 7

(Nome completo da autoridade que concede a licença, escrito na língua nacional)

... (*a*)

AIRCRAFT STATION LICENCE

LICENCE DE STATION D'AÉRONEF

LICENCIA DE ESTACIÓN DE AERONAVE

N.º ...

Duração da validade

Em conformidade com... (regulamentação nacional) e com o Regulamento das Radiocomunicações anexo à Convenção Internacional das Telecomunicações actualmente em vigor, é concedida a presente autorização para utilização do equipamento radioeléctrico abaixo descrito:

1	2	3	4
Nacionalidade e sinais de matrícula da aeronave	Indicativo de chamada ou outro modo de identificação	Tipo de aeronave	Proprietário da aeronave

(*a*) As palavras «licença de estação de navio» devem ser escritas na língua nacional, no caso de essa língua ser uma língua de trabalho da União.
(*b*) Valor numérico ou símbolo.

	Aparelho	a Tipo	b Potência (watts)	c Classe de emissão	d Faixas de frequência ou frequências consignadas
5	Emissores				(*b*)
6	Emissores de engenho de salvamento (se for caso disso).				(*b*)
7	Outro aparelho	(*Facultativo*)			

(*a*) As palavras «licença de estação de aeronave» devem ser escritas na língua nacional, no caso de essa língua ser uma língua de trabalho da União.
(*b*) Valor numérico ou símbolo.

Pela autoridade que concede a licença:

... ...
(Localidade) (Data) (Marca de autenticação)
(Selo branco)

RECOMENDAÇÃO N.º 8

Relativa à identificação automática das estações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

a) Que o artigo 25 do Regulamento das Radiocomunicações autoriza, sempre que isso seja possível, a identificação automática das estações nos serviços apropriados e em certas circunstâncias;
b) Que nem sempre é realizável nem oportuno dar uma identificação manual;
c) Que as fontes de interferência prejudicial não são muitas vezes identificadas durante longos períodos e que as medidas que poderiam ser tomadas com vista a atenuar a interferência se encontram por causa disso atrasadas;
d) Que os procedimentos relativos à identificação automática podem ajudar, quando necessário, a remover certos inconvenientes da identificação manual;
e) Que a emissão automática de um indicativo de chamada ou de outros sinais pode permitir identificar certas estações que nem sempre é possível identificar, por exemplo, os feixes hertzianos e os sistemas espaciais;
f) Que é desejável promover um método de identificação automática comum a fim de facilitar a aplicação efectiva das disposições do artigo 25, o que impediria a proliferação de numerosos sistemas e técnicas de modulação variados que poderiam ser utilizados para esse fim;

recomenda

à CCIR que estude a questão da identificação automática das estações, com vista a recomendar características, técnicas e métodos de aplicação de um sistema universal comum, incluindo técnicas de modulação normalizadas, que serão aplicadas de acordo com as disposições do artigo 25, tendo em devida conta as necessidades dos diferentes serviços e tipos de estações.

RECOMENDAÇÃO N.º 9

Relativa às medidas a tomar para impedir o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves fora dos limites dos territórios nacionais (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves situados fora dos limites do território nacional de um país é contrário às disposições dos n.os **2665** e **3603** do Regulamento das Radiocomunicações;
b) Que tal funcionamento é contrário à utilização racional das frequências e pode acabar por criar uma situação extremamente confusa;

(1) Substitui a Recomendação n.º 16 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

c) Que o funcionamento de tais estações de radiodifusão pode efectuar-se fora de qualquer jurisdição dos países Membros e tornar assim difícil a aplicação das leis nacionais;

d) Que se pode ficar em presença de uma situação particularmente difícil sob o ponto de vista jurídico quando essas estações de radiodifusão funcionarem a bordo de navios ou de aeronaves que não forem regularmente matriculados em qualquer país;

recomenda

1. Que as administrações peçam aos seus governos respectivos que examinem por que meios, directos ou indirectos, é possível evitar ou fazer cessar o funcionamento das estações acima mencionadas e que, além disso, tomem, se necessário, as medidas que se imponham;

2. Que as administrações comuniquem ao secretário-geral o resultado desses estudos e lhe transmitam qualquer outra indicação de interesse geral para que ele possa, por sua vez, transmitir essas informações aos Membros.

RECOMENDAÇÃO N.º 10

Relativa à apresentação de propostas de modificação dos textos do Regulamento das Radiocomunicações (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo tomado nota

a) Do facto de que nas propostas apresentadas por certas administrações foi utilizado um método uniforme para apresentar os textos modificados (textos novos sublinhados, textos suprimidos riscados);

b) De que esse método se revelou muito eficaz quando do exame dos textos propostos;

c) De que, se esse método uniforme fosse aplicado nas diferentes fases de elaboração dos textos de uma conferência (subgrupos de trabalho, grupos de trabalho), isso facilitaria a tarefa das delegações e poderia facilitar a da conferência;

d) De que o secretário-geral tomou as medidas para dar directivas às administrações, a fim de as ajudar na apresentação das suas propostas às conferências administrativas, em conformidade com as disposições da Convenção Internacional das Telecomunicações, e na coordenação da sua apresentação às conferências;

recomenda

1. Que as administrações sejam convidadas a apresentar as suas propostas de maneira uniforme;

2. Que, a fim de facilitar essa apresentação, o secretário-geral publique directivas que deverão ser também aplicadas quando de futuras conferências;

3. Que, quando de próximas conferências administrativas das radiocomunicações, se utilize uma apresentação uniforme nas diversas fases de elaboração dos textos, pelo menos até ao nível dos grupos de trabalho.

RECOMENDAÇÃO N.º 11

Relativa à numeração que figura na margem do Regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a cada artigo do Regulamento das Radiocomunicações está associado um sistema lógico de numeração dos parágrafos e dos subparágrafos e que, principalmente para facilitar as referências, são acrescentados números consecutivos na margem em frente de cada disposição;

b) Que nessa numeração na margem é largamente utilizada pelas administrações e os organismos permanentes da União;

c) Que foram previstas séries de números de reserva no fim de cada artigo do Regulamento das Radiocomunicações revisto (Genebra, 1979) para facilitar o aditamento pelas futuras conferências administrativas mundiais das radiocomunicações de novas disposições, e em especial de novos artigos;

reconhecendo

a) Que a familiarização com novos números na margem exige grandes esforços de modo que poderia provocar dificuldades a sua eventual modificação por uma conferência administrativa mundial das radiocomunicações que empreenda uma revisão parcial do Regulamento das Radiocomunicações;

---

(1) Substitui a Recomendação Mar2-20 da Conferência Administrativa das Radiocomunicações Marítimas (Genebra, 1974).

b) Que a revisão de numeração na margem só será indispensável se for convocada uma futura conferência administrativa mundial das radiocomunicações para empreender uma revisão geral do Regulamento das Radiocomunicações;

recomenda

1. Que uma futura conferência administrativa mundial das radiocomunicações que empreenda uma revisão parcial do Regulamento das Radiocomunicações só utilize os números de reserva se for necessário incluir disposições suplementares no fim dos artigos;

2. Que, se for necessário incluir uma ou várias disposições suplementares num artigo, sejam utilizadas referências alfabéticas suplementares como sufixo a seguir aos números atribuídos;

3. Que, no caso de ser suprimida uma disposição existente, não volte a ser utilizado o número que figura na margem.

RECOMENDAÇÃO N.º 12

Relativa à convocação de futuras conferências administrativas das radiocomunicações para tratar de serviços específicos

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que o ponto 2.10 do seu mandato a convida a propor ao conselho de administração e à próxima Conferência de Plenipotenciários um programa para a convocação das futuras conferências administrativas das radiocomunicações para tratar de serviços específicos;

b) Que várias das suas Resoluções e Recomendações pedem ou mencionam a convocação dessas futuras conferências;

considerando

a) Que, ao estabelecer o calendário das futuras conferências administrativas mundiais das radiocomunicações, convém tomar em consideração outras conferências em que participam Membros da União e especialmente as conferências regionais e sub-regionais, a Conferência de Plenipotenciários e as reuniões da CCIR;

b) Que as conferências devem ser suficientemente espaçadas para que as administrações e os organismos permanentes da União disponham de prazos suficientes para a preparação de cada conferência;

c) Que um certo número de assuntos específicos evocados nas Resoluções e nas Recomendações mencionadas na alínea *b*) da parte *notando*, devem ser tratados por uma conferência competente e que compete ao conselho de administração tomar, em tempo útil, as medidas necessárias à inclusão de cada questão na agenda da conferência apropriada;

recomenda ao conselho de administração e, se for caso disso, à Conferência de Plenipotenciários

1. Que inclua as seguintes conferências administrativas mundiais das radiocomunicações no calendário das futuras conferências:

Conferência administrativa mundial das radiocomunicações para os serviços móveis (v. a Resolução n.º 202);
Conferência administrativa mundial das radiocomunicações para a planificação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão (v. a Resolução n.º 508 e as Recomendações n.os 500 e 501);
Conferência administrativa mundial das radiocomunicações sobre a utilização de órbita dos satélites geoestacionários e a planificação dos serviços espaciais que utilizam essa órbita (v. a Resolução n.º 3);

2. Que inclua as seguintes conferências administrativas regionais das radiocomunicações no calendário das futuras conferências:

Secção final da Conferência para a Radiodifusão em Ondas Hectométricas na Região 2 (já prevista para Novembro de 1981);
Conferência para a planificação do serviço de radiodifusão por satélite na Região 2 (já prevista para o 2.º trimestre de 1983) (v. a Resolução n.º 701);
Conferência para a planificação da radiodifusão sonora na faixa de 87,5-108 MHz para a Região 1 e certos países interessados da Região 3 (v. a Resolução n.º 510);
Conferência para a conclusão de acordos e o estabelecimento dos planos associados para as ligações ascendentes na direcção dos satélites de radiodifusão que funcionam na faixa de 12 GHz nas Regiões 1 e 3 (v. a Resolução n.º 101);

Conferência administrativa regional das radiocomunicações encarregada de definir critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas aos serviços fixos, de radiodifusão e móvel na Região 3 (v. a Resolução n.º 702);
Conferência encarregada de rever a Convenção e o Plano de Copenhaga de 1948 para a zona marítima europeia — Região 1 (v. igualmente a este respeito a Recomendação n.º 300);
Conferência encarregada de reexaminar e de rever as disposições dos Actos Finais da Conferência Africana de Radiodifusão em Ondas Métricas e Decimétricas (Genebra, 1963) (v. a Resolução n.º 509);
Conferência encarregada da preparação de um plano de radiodifusão na faixa de 1605-1705 kHz na Região 2 (v. a Recomendação n.º 504);

3. Que tome as medidas necessárias para convocar cada uma dessas conferências logo que possível após o termo dos trabalhos preparatórios que se lhe referem, tendo em conta:

a) As opiniões relativas ao calendário das conferências, como previsto nas Recomendações e nas Resoluções mencionadas nos §§ 1 e 2 da parte *recomenda*;
b) A necessidade de espaçar essas conferências de modo adequado para que as administrações e os organismos permanentes da União disponham de prazos suficientes para a sua preparação;
c) O programa das conferências projectadas ou previstas, diferentes das conferências administrativas das radiocomunicações, em que devem participar os Membros da União;
d) Os recursos que as diversas administrações e a União no seu conjunto deverão consagrar à realização deste programa de conferências.

RECOMENDAÇÃO N.º 13

Relativa a uma conferência administrativa mundial das radiocomunicações para uma revisão geral ou parcial do Regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que a presente Conferência estabeleceu um programa de conferências administrativas mundiais especializadas das radiocomunicações para o próximo decénio;

considerando

a evolução muito rápida da tecnologia das telecomunicações e as consequências da sua aplicação especialmente na utilização racional do espectro radioeléctrico;

considerando

a necessidade de uma revisão geral ou parcial do Regulamento das Radiocomunicações para permitir o desenvolvimento harmonioso de diversos serviços que não serão tratados pelas conferências especializadas previstas pela presente Conferência;

recomenda o conselho de administração

que examine, a partir de 1990, se é necessário convocar uma conferência administrativa mundial das radiocomunicações com o fim de proceder a uma revisão geral ou parcial do Regulamento das Recomendações.

RECOMENDAÇÃO N.º 30

Relativa à fiscalização internacional das emissões (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é desejável obter uma utilização mais eficaz do espectro das frequências radioeléctricas a fim de ajudar as administrações a satisfazerem mais facilmente as suas necessidades de frequências, e que para esse fim é desejável tomar medidas para que a Lista Internacional das Frequências reflita mais fielmente a utilização real do espectro das frequências;

(1) Substitui a Recomendação n.º 5 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

b) As disposições do Regulamento das Radiocomunicações (Genebra, 1979), segundo as quais a Comissão Internacional do Registo de Frequências deve rever as inscrições no Ficheiro de Referência Internacional das Frequências com vista a torná-las tão conformes quanto possível com a utilização do espectro das frequências;
c) Que os dados provenientes da fiscalização internacional das emissões deveriam ajudar essa Comissão a desempenhar tal função;

reconhecendo

a) Que um sistema internacional de fiscalização das emissões só pode ser plenamente eficaz se cobrir todas as zonas do Mundo;
b) Que, em certas zonas do Mundo, os meios para esse fim são actualmente inexistentes ou insuficientes para permitir uma fiscalização eficaz;

convida a CCIR

a estudar e a elaborar, em colaboração com a Comissão, pareceres técnicos relativos aos meios suplementares necessários para assegurar uma cobertura mundial apropriada com vista à aplicação do Regulamento das Radiocomunicações, mais especialmente os artigos 10, 11, 12, 13, 14 e 20; e

convida as administrações

1. A fazerem todos os esforços para desenvolver os meios de fiscalização, como previsto no artigo 20 do Regulamento das Radiocomunicações, tendo em conta as possibilidades oferecidas pelos organismos das Nações Unidas encarregadas da assistência técnica;
2. A informarem a Comissão da medida em que estão dispostas a cooperar em fiscalizações de natureza determinada que por ela possam ser pedidas.

RECOMENDAÇÃO N.º 31

Relativa a um manual sobre a aplicação das técnicas informáticas na gestão do espectro radioeléctrico

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o devido ao pedido crescente de frequências radioeléctricas, convém melhorar a utilização do espectro radioeléctrico;
b) Que, para resolver os problemas apresentados pela utilização do espectro radioeléctrico, é preciso dispor de meios de armazenamento, de extracção e de análise dos dados que podem proporcionar os métodos informáticos;
c) Que a gestão do espectro radioeléctrico representa, para as administrações, uma série de tarefas cuja amplitude e complexidade vão crescendo;
d) Que, graças aos progressos técnicos, podem ser obtidos computadores poderosos e microcomputadores de preço razoável;
e) Que muitas administrações têm necessidade de directivas sobre as técnicas informáticas aplicáveis à gestão do espectro radioeléctrico;
f) Que é desejável uma certa compatibilidade para facilitar a coordenação entre administrações e a permuta de dados com a IFRB;
g) Que são numerosas as administrações que se interessam pelos sistemas informáticos de gestão do espectro radioeléctrico e que algumas delas estão activamente a desenvolver esses sistemas;
h) Que o secretariado-geral põe meios informáticos à disposição de todos os organismos da União e fornece-lhes conselhos neste domínio e, se necessário, também os fornece igualmente às administrações;

recomenda à CCIR

1. Que, o mais tardar até 1982, prepare um manual que descreva os diferentes aspectos da aplicação das técnicas informáticas na gestão do espectro radioeléctrico, examine as diferentes formas como a questão foi abordada, dê as directivas apropriadas nos diversos níveis das aplicações práticas e contenha pareceres para os casos em que entre em jogo a cooperação internacional;
2. Que reexamine e reveja periodicamente esse manual;

convida o secretariado-geral e a IFRB

a participarem na elaboração desse manual.

RECOMENDAÇÃO N.º 60

Relativa às normas técnicas da IFRB (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

que as normas técnicas da Comissão Internacional do Registo das Frequências (IFRB) são de uso diário para o exame técnico dos pareces de notificação de frequências;

pede instantemente à CCIR

que apresse a execução de todas as fases dos programas de estudos que sejam de natureza a ajudar a IFRB a aperfeiçoar ainda mais as suas normas técnicas; e

convida as administrações

a dispensarem, na sua participação nos trabalhos da CCIR e das suas Comissões de estudo, prioridade especial aos estudos de que se trata aqui.

RECOMENDAÇÃO N.º 61

Relativas às normas técnicas necessárias para avaliação das interferências prejudiciais nas faixas de frequências superiores a 28 MHz (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a definição de interferência prejudicial (n.º 163 do Regulamento das Radiocomunicações), de carácter qualitativo, dá lugar a uma estimativa puramente subjectiva do incómodo de tal interferência;
b) Que para o desempenho das suas tarefas regulamentares, a IFRB adoptou, nas suas normas técnicas, para as faixas de frequências inferiores a 28 MHz, valores da relação sinal útil/sinal interferente abaixo dos quais se podem esperar interferências prejudiciais;
c) Que a «interferência prejudicial» implica um grau de interferência ou uma probabilidade de interferência considerável;
d) Que, por isso, é desejável determinar o nível da interferência pela qual as emissões, radiações ou induções influenciam desfavoravelmente um serviço de radiocomunicação além dos limites específicos estabelecidos para o seu funcionamento, sob o ponto de vista da qualidade e da eficácia exigidas pela natureza desse serviço;
e) Que a avaliação do nível de interferência está ligada a factores tais como a natureza dos serviços em causa, o número de fontes de interferência, as percentagens de tempo durante os quais o sinal interferente influencia desfavoravelmente o sinal útil;

notando

a) Que até aqui a IFRB considerou os valores máximos admissíveis de interferência, tais como estão especificados nos pareceres pertinentes da CCIR, como sendo valores que permitem assegurar um serviço satisfatório;
b) Que todavia, a IFRB não possui informações sobre a medida em que esse valores recomendados e as percentagens de tempo associadas podem ser excedidos sem que por isso um serviço seja desfavoravelmente influenciado além dos limites especificados estabelecidos para o seu funcionamento, sob o ponto de vista da qualidade e da eficácia pela natureza do serviço;

convida a CCIR

a prosseguir o estudo desta questão e a recomendar critérios técnicos para as faixas de frequências superiores a 28 MHz atribuídas aos serviços de radiocomunicação espacial, à radioastronomia e aos serviços de radiocomunicação de Terra interessados, a fim de permitir que a IFRB e as administrações apliquem os critérios assim definidos para essas faixas.

---

(1) Substitui a Recomendação n.º 2 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).
(2) Substitui a Recomendação Spa2-12 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

RECOMENDAÇÃO N.º 62

Visando completar as características adicionais de classificação das emissões e fornecer novos exemplos de designações de emissões tais como figuram no apêndice 6 (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que esta Conferência adoptou no artigo 4 um novo método de designação das emissões baseado no parecer n.º 507 da CCIR;
b) Que uma parte essencial desse novo método é a classificação das emissões;
c) Que o novo método de classificação estabelece uma distinção entre as características fundamentais (primeiro, segundo e terceiro símbolos) cuja utilização é obrigatória e as características adicionais (quarto e quinto símbolos) cuja utilização é facultativa;
d) Que a classificação completa das emissões abrange o conjunto desses cinco símbolos;
e) Que a lista das características adicionais dada na parte A do apêndice 6 não é talvez suficientemente completa para ter em conta no futuro as novas técnicas e que, por isso, ela pode ser objecto de aditamentos a intervalos relativamente frequentes;
f) Que um parecer da CCIR proporcionaria um quadro apropriado para esse aditamento;

considerando, além disso,

a) Que na parte B do apêndice 6 é dada uma lista de exemplos de designações completas de emissões;
b) Que, todavia, essa lista não é exaustiva e que o n.º **265** do Regulamento das Radiocomunicações estipula, por isso, que poderiam ser dados outros exemplos nos pareceres mais recentes da CCIR e que esses exemplos poderiam igualmente ser publicados no prefácio à Lista Internacional das Frequências;

convida a CCIR

1. A prosseguir os estudos sobre a classificação das emissões, com vista a completar a lista das características adicionais para, no futuro, ter em conta as novas técnicas, sem, no entanto, modificar as características adicionais que tenham sido objecto de um acordo e que figurem na parte A do apêndice 6;

2. A fornecer exemplos de designação completas de emissões que não são dados na parte B do apêndice 6 tendo igualmente em conta os aditamentos mencionados no § 1 acima;

convida a Comissão Internacional de Registo de Frequências

a publicar, no prefácio à Lista Internacional de Frequências, as novas características adicionais, assim como os novos exemplos mencionados nos §§ 1 e 2 acima, logo que sejam consignados nos pareceres pertinentes da CCIR;

e recomenda

que as administrações utilizem as características adicionais completadas referidas no § 1 acima.

RECOMENDAÇÃO N.º 63

Relativa à apresentação de fórmulas e de exemplos para o cálculo das larguras de faixa necessárias

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, segundo o artigo 4 do Regulamento das Radiocomunicações, a largura de faixa necessária deve fazer parte da designação completa das emissões;
b) Que a parte B do apêndice 6 dá uma lista parcial de exemplos e de fórmulas para o cálculo da largura de faixa necessária de certas emissões típicas;
c) Que não se dispõe de dados suficientes para determinar os factores K utilizados em todo o quadro de exemplos de larguras de faixa necessárias que figuram no apêndice 6;
d) Que, sob o ponto de vista mais particular da utilização do espectro radioeléctrico, assim como da fiscalização e da notificação das emissões, é necessário conhecer as larguras de faixa necessárias para as diferentes classes de emissão;

---

(1) Substitui a Recomendação n.º 8 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

e) Que é desejável, por razões de simplicidade e de uniformidade internacional, que as medidas destinadas a determinar a largura de faixa necessária sejam feitas tão raramente quanto possível;

recomenda que a CCIR

1. Forneça a intervalos de tempo convenientes fórmulas adicionais que permitam determinar a largura de faixa necessária para as classes de emissão correntes, bem como exemplos destinados a completar as da parte B do apêndice 6;

2. Estude e indique valores para os factores K suplementares de que há necessidade para calcular a largura de faixa necessária para as classes de emissão correntes;

convida a IFRB

a publicar exemplos de tais cálculos no prefácio à Lista Internacional das Frequências.

RECOMENDAÇÃO N.º 64

Relativa às relações de protecção e aos campos mínimos necessários (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

que as informações de que se dispõe sobre a relação de protecção e o campo mínimo necessário para cada serviço devem ser ainda mais precisas que possam estabelecer planos mais eficazes para a utilização do espectro das frequências radioeléctricas;

convida a CCIR

1. A continuar o estudo das relações de protecção que definem o limiar de interferência prejudicial para os diferentes serviços;

2. A continuar o estudo das relações sinal/ruído e dos campos mínimos necessários para receber de forma satisfatória as diferentes classes de emissão nos diferentes serviços;

3. A continuar o estudo das tolerâncias de desvanecimento nos diferentes serviços;

4. A dispensar especial atenção a esses estudos para ajudar a IFRB a melhorar as normas técnicas que utiliza.

RECOMENDAÇÃO N.º 65

Relativa às técnicas que permitam elaborar novos esquemas de partilha e de utilização das faixas de frequências

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

a) Que os progressos técnicos, especialmente no que respeita às técnicas radioeléctricas digitais, assim como aos novos processos de codificação, de modulação e de acesso, tornam possível o estabelecimento de novos esquemas de partilha que oferecem vantagens económicas e técnicas e que permitem aumentar a eficácia da partilha do espectro e da utilização das faixas de frequências;

b) Que se constatam progressos rápidos no que respeita às técnicas correspondentes;

convida a CCIR

1. A proceder ao estudo das técnicas radioeléctricas digitais e de novos processos de codificação, de modulação e de acesso, por exemplo nas técnicas de radiocomunicação por blocos e de expansão do espectro, e dos sistemas de funções múltiplas;

2. A ultimar novos métodos para a utilização de uma portadora em partilha no tempo por diferentes serviços de radiocomunicação, ou seja, a utilização de uma mesma parte do espectro por vários serviços;

3. A apresentar pareceres sobre os seguintes assuntos para as futuras conferências administrativas mundiais das radiocomunicações pertinentes:

Critérios técnicos e especificações dos esquemas de partilha do espectro mais eficazes para os diversos serviços;

Critérios técnicos e critérios de qualidade que permitam assegurar a compatibilidade e o interfuncionamento dos sistemas;

Critérios em que basear a gestão do espectro para os sistemas conformes com essas novas técnicas.

---

(1) Substitui a Recomendação n.º 3 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

RECOMENDAÇÃO N.º 66

Acerca de estudos sobre os níveis máximos tolerados de radiações não essenciais

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o apêndice 8 ao Regulamento das Radiocomunicações especifica os níveis tolerados das radiações não essenciais expressos em nível de potência média de qualquer componente não essencial fornecida por um emissor à linha de alimentação da antena, para as faixas inferiores a 17,7 GHz;
b) Que o objectivo principal do apêndice 8 é o de especificar os níveis máximos tolerados das radiações não essenciais que, sendo realizáveis, assegurem uma protecção suficiente contra as interferências prejudiciais;
c) Que os níveis excessivos de radiações não essenciais pode causar interferências prejudiciais;
d) Que, enquanto o apêndice 8 só trata da potência média do emissor e das radiações não essenciais, existe grande variedade de radiações em que a interpretação da expressão «potência média» é difícil, assim como, consequentemente, a medida dessa potência;
e) Que a CCIR, embora esteja a estudar esta questão, ainda não emitiu parecer apropriado respeitante ao apêndice 8 no caso das faixas de frequências superiores a 960 MHz;
f) Que as radiações não essenciais de emissores que funcionam em estações espaciais podem causar interferências prejudiciais, especialmente pelas componentes de amplificadores de faixa larga que não podem ser ajustados após o lançamento;
g) Que as radiações não essenciais de estações terrenas necessitam também de estudos especiais;
h) Que a CCIR não publicou informações relativas às radiações não essenciais de estações que utilizam técnicas de modulação digital e que funcionam em faixas de frequências superiores a 960 MHz;

notando

a muito intensa utilização do espectro radioeléctrico acima de 960 MHz nas grandes zonas urbanas e do desenvolvimento rápido dessa utilização que se efectua actualmente sobretudo acima de 10 GHz;

recomenda que a CCIR

1. Estude urgentemente a questão das radiações não essenciais resultantes das emissões de serviços espaciais e elabore na base desses estudos, pareceres relativos aos níveis máximos tolerados das radiações não essenciais, expressos em potência média das componentes não essenciais fornecidas pelo emissor à linha de alimentação da antena;
2. Prossiga o estudo dos níveis das radiações não essenciais em todas as faixas de frequências, insistindo nas faixas de frequências, nos serviços e nas técnicas de modulação que não estejam actualmente tratados no apêndice 8;
3. Estabeleça técnicas de medida apropriadas para as radiações não essenciais, incluindo a determinação de níveis de referência para as transmissões de faixa larga, assim como a possibilidade de aplicação de larguras de faixa de referência nas medidas;
4. Estude a categorização das emissões e das radiações não essenciais segundo a sua «potência média» e elabore pareceres apropriados para facilitar a interpretação desse termo e a medida da potência média para diferentes categorias de emissão.

RECOMENDAÇÃO N.º 67

Relativa à definição dos termos «zona de serviço» e «zona de cobertura»

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que nos textos oficiais da UIT se encontram frequentemente os termos «zona de serviço» e «zona de cobertura»;
b) Que estes dois termos são utilizados com o mesmo sentido ou com sentidos diferentes, segundo os diversos serviços de radiocomunicações;
c) Que não existe definição dos termos «zona de serviço» e «zona de cobertura» no artigo 1 do Regulamento das Radiocomunicações;

notando

a) Que o termo «zona de serviço» é já utilizado nos textos dos apêndices 1, 3, 4, 5 e 25 Mar2 do Regulamento das Radiocomunicações;

b) Que existe uma definição de «zona de serviço» para a radiodifusão de Terra no parecer n.º 499-1 da CCIR, baseado no campo utilizável;

c) Que uma definição muito semelhante à do parecer n.º 499-1 figura no anexo 2 dos Actos Finais da Conferência Administrativa Regional de Radiodifusão em Ondas Quilométricas e Hectométricas (Regiões 1 e 3) (Genebra, 1975);

d) Que uma definição de «zona de serviço» para radiodifusão por satélite figura no anexo 8 dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977). Essa definição é de natureza administrativa e é acompanhada de uma nota técnica na qual há uma referência a uma densidade de fluxo de potência apropriada e a uma protecção contra interferências baseada numa relação de protecção combinada;

e) Que aspectos técnicos e administrativos estão algumas vezes compreendidos na definição da «zona de serviço» e que não podem ser separados facilmente;

f) Que figura no anexo 8 acima mencionado uma definição de «zona de cobertura» para a radiodifusão por satélite, baseada no nível de densidade de fluxo de potência que assegura, na ausência de interferência, uma qualidade de recepção especificada;

reconhecendo

que as definições existentes de «zona de serviço» e «zona de cobertura» estão ligadas às definições do campo utilizável ou da densidade de fluxo utilizável, quer na presença, quer na ausência de sinais interferentes;

convida a CCIR

1. A estabelecer uma definição de «zona de cobertura»;

2. A estabelecer as bases técnicas de uma definição geral de «zona de serviço» que tenham em conta a presente utilização deste termo em todos os textos oficiais da UIT com vista a permitir que futuras conferências administrativas determinem os aspectos administrativos desse definição.

RECOMENDAÇÃO N.º 68

Relativa aos estudos e à previsão da propagação e dos ruídos radioeléctricos (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a utilização eficaz das frequências radioeléctricas depende do emprego dos dados e normas técnicas, de maior confiança, sobretudo nas partes do espectro que estão mais saturadas;

b) Que se pode facilitar a satisfação de novas necessidades de frequências e o desenvolvimento dos serviços de radiocomunicação melhorando onde seja necessário as normas técnicas actualmente utilizadas pela IFRB;

c) Que o antigo apêndice A do Regulamento das Radiocomunicações (edição de 1968), intitulado «Estudo e previsão da propagação e dos ruídos radioeléctricos», reconhecia que a importância dos dados sobre a propagação e os ruídos radioeléctricos é determinante para a utilização óptima das frequências e o estabelecimento de planos eficazes para os serviços de radiocomunicação;

d) Que esse apêndice tinha por objectivo principal o estabelecimento e o funcionamento de sistemas mundiais de estações de observação, a fim de obter dados sobre os ruídos radioeléctricos e sobre os fenómenos ionosféricos, troposféricos e outros que influenciam a propagação das ondas;

e) Que as administrações tomam as disposições mais apropriadas para estudar, coordenar e difundir rapidamente esses dados e as previsões relativas a esses dados e que elas se esforçam igualmente por promover os estudos sobre a propagação e sobre os ruídos radioeléctricos por intermédio da CCIR;

f) Que a CCIR adoptou programas de estudos que tratam de grande número desses problemas;

g) Que em certas partes do Mundo não foi efectuada qualquer medida da propagação e dos ruídos radioeléctricos;

pede à CCIR

1. Que encoraje e ajude a empreender o estudo da propagação e dos ruídos radioeléctricos nas regiões que não estejam ainda dotadas de um sistema apropriado de estação de observação;

2. Que continue o estudo da propagação e dos ruídos radioeléctricos e que tome as medidas necessárias com vista a coordenar os resultados obtidos em diferentes países;

---

(1) Substitui a Recomendação n.º 4 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

3. Que preste atenção especial àqueles estudos que ajudem a melhorar as normas técnicas utilizadas por esse Comissão;

4. Que forneça regularmente relatórios sobre essas questões, mesmo que os estudos não estejam concluídos;

5. Que continue a consultar regularmente as outras organizações que efectuam estudos sobre a propagação e os ruídos radioeléctricos, por exemplo a União Radiocientífica Internacional, a fim de realizar uma coordenação tão larga quanto possível;

recomenda às administrações

1. Que empreendam o estudo da propagação e dos ruídos radioeléctricos nas regiões que não estejam ainda dotadas de um sistema apropriado de estações de observação e que comuniquem os resultados desse estudo à CCIR;

2. Que continuem a favorecer o estabelecimento e o funcionamento de um sistema mundial de estações de observação, a fim de obterem dados sobre os ruídos radioeléctricos e sobre os fenómenos ionosféricos, troposféricos e outros que influenciam a propagação das ondas;

3. Que continuem a tomar as disposições mais apropriadas para estudar, coordenar e difundir rapidamente esses dados e as previsões relativas aos mesmos;

4. Que, no estabelecimento e na adopção dos seus programas de trabalhos sobre a propagação e os ruídos radioeléctricos, tenham em conta os pareceres, relatórios, questões e programas de estudos da CCIR que se aplicam a esses problemas, especialmente os resultados já obtidos, os planos estabelecidos para os estudos futuros e os modos de apresentação recomendados nesses documentos.

RECOMENDAÇÃO N.º 69

Relativa às tolerâncias de frequência dos emissores (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o apêndice 7 ao Regulamento das Radiocomunicações especifica as tolerâncias de frequência a respeitar pelos emissores;

b) Que o principal objectivo desse apêndice foi diminuir a fracção do espectro das frequências necessárias para cada via por meio de uma redução das tolerâncias de frequência, e que muitos casos é ainda possível obter uma melhoria considerável na utilização do espectro, graças a uma nova redução das tolerâncias de frequência;

c) Que, melhorando, em diversos serviços, a tolerância de frequência para a levar ao valor mais estrito que seja possível atingir no estado da técnica, se poderia aumentar a relação sinal/ruído, melhorar a inteligibilidade e reduzir erros;

d) Que, em certos casos, uma tolerância de frequência mais estrita não aumentaria, na prática, o número das vias disponíveis;

e) Que em certas faixas de frequências as tolerâncias *especificadas no apêndice 7* se aproximam talvez já do valor mínimo utilizável para certas categorias de estações, quando elas aplicam as técnicas e os métodos de exploração actuais;

f) Que será de grande utilidade para as administrações, quando tenham de planificar os seus serviços e de se equiparem com material, conhecer as tolerâncias que podem ser consideradas como o valor limite mínimo utilizável para as estações, quando essas apliquem as técnicas e os métodos de exploração actuais;

g) Que, em certos casos, a obtenção de uma tolerância de frequência mais estrita está sujeita a restrições de ordem económica que convém conhecer e que convém ter em conta:

convida a CCIR

1. A prosseguir o estudo das tolerâncias de frequência com vista a reduzir a fracção do espectro das frequências necessárias para uma dada via;

2. A considerar se, em certos casos, é ou não possível prever valores de tolerância limites que não seria necessário tornar mais estritos nas condições de exploração actualmente conhecidas e precisar quais poderiam ser esses valores;

3. A fazer um relatório sobre a possibilidade de atingir esses valores limites tendo em conta os imperativos económicos e de concepção e outras considerações práticas;

4. A indicar, se necessário, quais as tolerâncias especificadas no apêndice 7 que atingiram já esses valores limites.

---

(1) Substitui a Recomendação n.º 1 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

RECOMENDAÇÃO N.º 70

Relativa ao estudo das características técnicas do material (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

reconhecendo

que as informações técnicas de que se dispõe sobre os diversos tipos de aparelhos utilizados para a recepção das diferentes classes de emissão nos diferentes serviços devem ser ainda mais completas e mais precisas para que se possam estabelecer os planos mais eficazes para a utilização do espectro das frequências radioeléctricas;

convida a CCIR

1. A prosseguir os seus estudos sobre as características que deveriam apresentar os diversos tipos de aparelhos utilizados para a recepção das diferentes classes de emissão nos diferentes serviços, no que respeita à largura de faixa, à selectividade, à sensibilidade e à estabilidade, e a formular pareceres sobre tal assunto;
2. A prosseguir o estudo dos métodos práticos que permitam obter as características recomendadas;
3. A estudar o afastamento mínimo praticamente realizável entre vias adjacentes, considerando as diferentes classes de emissão, os diferentes serviços e as diferentes faixas de frequências;
4. A estudar as outras condições a que é desejável que satisfaçam, no seu conjunto, os sistemas empregados pelos diferentes serviços, com vista a determinar as condições técnicas a que deve satisfazer o material, incluindo a aparelhagem terminal das estações e as antenas;
5. A estudar os métodos que permitam determinar se o material satisfaz as condições recomendadas;
6. A dispensar atenção especial aos estudos que ajudarão a Comissão Internacional do Registo de Frequências a melhorar as normas técnicas que emprega.

RECOMENDAÇÃO N.º 71

Relativa à normalização das características técnicas e de exploração dos materiais radioeléctricos

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as administrações se encontram confrontadas com a necessidade de consagrar cada vez mais recursos à regulamentação da qualidade de funcionamento dos materiais radioeléctricos;
b) Que as administrações, especialmente as dos países em desenvolvimento, têm muitas vezes dificuldades em obter esses recursos;
c) Que haveria vantagem em aplicar, tanto quanto praticamente possível, normas mutuamente reconhecidas, assim como os procedimentos de homologação associados;
d) Que certo número de organismos internacionais, entre os quais a CCIR, a OACI, a OMCI, a CISPR e a CEI, estabelecem recomendações e normas relativas às características técnicas e de exploração aplicáveis à qualidade de funcionamento dos materiais e à medida dessa qualidade;
e) Que, nesse domínio, as necessidades específicas dos países em desenvolvimento nem sempre têm sido tomadas plenamente em consideração;

recomenda

1. Que as administrações se esforcem por cooperar com vista a estabelecer especificações internacionais de qualidade de funcionamento e métodos de medida associados que possam ser utilizados como modelos para as normas nacionais aplicáveis aos materiais radioeléctricos;
2. Que essas especificações internacionais de qualidade de funcionamento e os métodos de medida associados correspondam a condições largamente representativas, assim como às necessidades específicas dos países em desenvolvimento;
3. Que, logo que existam tais especificações internacionais de qualidade de funcionamento para os materiais radioeléctricos, as administrações adoptem, tanto quanto praticamente possível, essas especificações como base para as suas normas nacionais;
4. Que as administrações considerem, tanto quanto praticamente possível, a aceitação mútua dos procedimentos de homologação para os materiais de acordo com essas especificações de qualidade de funcionamento.

---

(1) Substitui a Recomendação n.º 6 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

RECOMENDAÇÃO N.º 72

Relativa à terminologia

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as discussões relativas a certos termos e definições técnicas que figuram no artigo 1 fizeram surgir diversos problemas que não foram resolvidos de forma completamente satisfatória durante a dita Conferência;
b) Que a evolução da técnica e dos modos de expressão pode conduzir à junção, à modificação ou, eventualmente, à supressão de certas definições:

convida a CCIR e a CCITT,

cada uma no seu domínio próprio, a examinarem as definições dos termos técnicos que figuram no artigo 1 e a proporem qualquer modificação que considerem útil;

encarrega o secretário-geral

de transmitir as propostas elaboradas por esses dois organismos às conferências administrativas interessadas, para que estas últimas as tomem em consideração no quadro do seu mandato.

RECOMENDAÇÃO N.º 73

Relativa ao emprego do termo «canal» no Regulamento das Radiocomunicações

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o termo «canal» (em francês *voie*, em inglês *channel*, em espanhol *canal*) é utilizado muito largamente no Regulamento das Radiocomunicações para os planos de adjudicação das frequências nos apêndices 16, 18, 25 Mar2, 26, 27, 27 Aer2, 32, 33 e 34 (1);
b) Que o termo «canal» (em francês *voie*, em inglês *channel*, em espanhol *canal*) tem sentidos diferentes noutras disposições do Regulamento das Radiocomunicações e para os diferentes serviços de radiocomunicação;
c) Que não deve haver nenhuma ambiguidade quanto ao sentido do termo «canal» quando do seu emprego nos textos do Regulamento das Radiocomunicações;

convida a CCIR

a definir o termo «canal» de forma que possa ser utilizado de modo coerente e sem confusão nos textos do Regulamento das Radiocomunicações, em todas as línguas de trabalho da UIT.

RECOMENDAÇÃO N.º 74

Relativa ao emprego do sistema internacional de unidades (SI) (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o sistema SI permite resolver numerosos problemas que apresentam os sistemas de unidades mais antigos;
b) Que a Organização Internacional de Normalização aprovou o sistema SI e recomenda a sua adopção geral;

reconhecendo

a) Que o sistema SI, já adoptado por numerosas organizações internacionais, é recomendado pela CCIR e pela CCITT e utilizado pela CCIR e pelos organismos permanentes da União;

---

(1) O termo *voie* é actualmente utilizado em francês nestes apêndices, mas poder-se-ia eventualmente encarar a sua substituição ulterior pelo termo «canal», tendo em conta a definição deste termo que a CCIR venha a estabelecer.
(2) Substitui a Recomendação n.º 9 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

b) Que o sistema SI tem estatuto de norma nacional em numerosos países;
c) Que nos países que ainda não adoptaram o sistema SI como norma nacional os engenheiros das radiocomunicações, os cientistas e os autores de publicações relativas à radioelectricidade recorrem muito frequentemente a este sistema;
d) Que o emprego do sistema SI se estende constantemente a todas as partes do Mundo;

recomenda

que as administrações utilizem o sistema SI nas suas relações com a União e os organismos que a constituem.

RECOMENDAÇÃO N.º 100

Relativa à faixas de frequências preferenciais para os sistemas que utilizam a propagação por difusão troposférica

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

Considerando

a) Que a Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971) pediu à CCIR que estudasse as faixas de frequências preferenciais para os sistemas de difusão troposférica e que a mesma Conferência convidou uma futura conferência administrativa mundial das radiocomunicações a examinar esta questão;
b) As dificuldades técnicas e de exploração mencionadas pela CCIR (Relatório da Reunião Especial Preparatória, Genebra, 1978) nas faixas de frequências partilhadas pelos sistemas de difusão troposférica, pelos sistemas espaciais e pelos outros sistemas de Terra;
c) As atribuições adicionais de faixas de frequências que foram feitas pela presente Conferência aos serviços espaciais, para ter em conta o seu desenvolvimento crescente;
d) Que a IFRB tem necessidade de que as administrações lhe forneçam informações específicas sobre os sistemas que utilizam a difusão troposférica para poder assegurar-se que foram aplicadas as disposições pertinentes do Regulamento das Radiocomunicações (por exemplo, a nota 763 e os n.ºs **2560** e **2564**);

reconhecendo, todavia,

que as administrações podem querer continuar a utilizar sistemas de difusão troposférica para responder a certas necessidades de telecomunicações;

notando

que a proliferação desses sistemas em todas as faixas de frequências, em especial nas que são partilhadas com os sistemas espaciais, só fará agravar uma situação já difícil:

recomenda à CCIR

1. Que prossiga com urgência o estudo das faixas de frequências que possuam as características melhor adaptadas, sob o ponto de vista da propagação, aos sistemas que utilizam a difusão troposférica;
2. Que prossiga o estudo das possibilidades e dos critérios de partilha entre os sistemas que utilizam a difusão troposférica e os outros sistemas, em especial os sistemas espaciais;
3. Que elabore, na sequência dos estudos acima mencionados, um parecer relativo às faixas de frequências específicas que foram consideradas mais satisfatórias para tais sistemas e isso, se possível, antes da sua próxima assembleia plenária. Essas faixas de frequências deverão ser definidas tendo em conta as atribuições a outros serviços, em especial as atribuições aos serviços espaciais;

recomenda às administrações

1. Que colaborem com urgência e na medida das suas possibilidades com a CCIR, enviando-lhe contribuições referentes aos estudos mencionados acima;
2. Que, para consignarem frequências às novas estações dos sistemas que utilizam a difusão troposférica, tenham em conta as informações publicadas até agora pela CCIR, a fim de que os sistemas que sejam estabelecidos no futuro empreguem um número limitado de faixas de frequências determinadas;
3. Que indiquem explicitamente nas fichas de notificação das consignações de frequência que enviam à IFRB se essas consignações correspondem a estações de sistemas de difusão troposférica;

convida o conselho de administração

a adoptar as disposições necessárias para que uma futura conferência administrativa das radiocomunicações examine as faixas de frequências do serviço fixo a atribuir de preferência aos novos sistemas que utilizam a propagação por difusão troposférica, tendo em conta as atribuições de frequência ao serviço de radiocomunicação espacial e os pareceres elaborados para o efeito pela CCIR.

RECOMENDAÇÃO N.º 101

Relativa às ligações de conexão no serviço de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário dispor de documentação abundante sobre as características das ligações de conexão para a planificação do serviço de radiodifusão por satélite;
b) Que a CCIR prossegue o estudo deste problema segundo o programa de estudos pertinente;
c) Que as relações portadora/ruído nas ligações de conexão no sentido dos satélites de radiodifusão deveriam ter valores da ordem de dez vezes superiores aos das ligações descendentes;
d) Que, no que respeita à interferência nas ligações de conexão entre satélites de radiodifusão ocupando localizações diferentes na órbita, relações de protecção nas ligações ascendentes (superiores cerca de 10 dB às relações de protecção nas ligações descendentes) parecem poder ser facilmente obtidas pela discriminação do diagrama das antenas de emissão das estações terrenas, cujo diâmetro deverá, bem entendido, ser superior ao das antenas de recepção utilizadas para a ligação descendente;
e) Que, quando a planificação se basear em parâmetros de separação tais como diagramas de radiação para as antenas de emissão das estações espaciais, entrelaçamento das portadoras ou discriminação de polarização ou os dois parâmetros, com o fim de obter, na ligação descendente, a relação portadora/interferência exigida entre as zonas de serviço servidas a partir de uma mesma localização na órbita, a relação portadora/interferência mais elevada a prever nas ligações ascendentes que conduzem à ou às estações espaciais que ocupam essa localização deve ser obtida mediante os mesmos parâmetros de separação, com a condição de que essa relação permita melhorar a separação efectiva de cerca de 10 dB. As características da estação terrena de emissão não têm, naturalmente, influência sobre essa separação, salvo no que respeita à pureza da polarização no eixo do feixe;
f) Que para a colocação efectiva em serviço dos sistemas de radiodifusão por satélite é necessário ter em conta todas as funções conexas dos satélites de exploração espacial (perseguição, telemedida, telecomando e medida das distâncias) ligadas ao funcionamento das estações espaciais de radiodifusão;

convida a CCIR

1. A prosseguir, para as antenas de recepção das estações espaciais do serviço de radiodifusão por satélite, o estudo das características de radiação que permitam obter por si mesmas, ou combinadas com outros meios de discriminação, as relações de protecção necessárias nas ligações de conexão dos sistemas do serviço de radiodifusão por satélite, no caso das emissões da ou das estações espaciais que ocupam uma dada posição na órbita dos satélites geostacionários;

2. A prosseguir, para as antenas de recepção das estações espaciais do serviço de radiodifusão por satélite, o estudo das características de polarização que permitam obter por si mesmas, ou combinadas com outros meios de discriminação, as relações de protecção necessárias nas ligações de conexão dos sistemas do serviço de radiodifusão por satélite, no caso das emissões da ou das estações espaciais que ocupam uma dada posição na órbita dos satélites geostacionários;

3. A prosseguir o estudo das características técnicas das ligações de conexão que devem ser tomadas em consideração quando da aplicação do Plano para esse serviço;

4. A estudar as características e as condições técnicas e de concepção que afectam a aplicação das «funções dos serviços de exploração espacial» das estações espaciais do serviço de radiodifusão por satélite;

5. A estudar as condições necessárias para a separação dos canais adjacentes nas ligações de conexão com destino à ou às estações espaciais do serviço de radiodifusão por satélite ocupando uma dada posição na órbita dos satélites geostacionários.

RECOMENDAÇÃO N.º 102

Relativa ao estudo dos métodos de modulação para os feixes hertzianos sob o ponto de vista da partilha das faixas de frequências com os sistemas do serviço fixo por satélite (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, segundo o artigo 8 do Regulamento das Radiocomunicações, certas faixas de frequências podem ser partilhadas pelo serviço fixo por satélite e pelo serviço fixo;

---

(1) Substitui a Recomendação Sat-5 da Conferência Administrativa Mundial das Radiocomunicações para a Radioxlifusão por Satélite (Genebra, 1977).

(2) Substitui a Recomendação Spa-4 da Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1963).

b) Que os artigos 27 e 28 do Regulamento das Radiocomunicações fixam os critérios de partilha que é preciso respeitar a fim de evitar as interferências mútuas entre as estações desses dois serviços;
c) Que a redução das interferências entre os dois serviços parece ser o mais importante dos numerosos factores de que depende a eficácia da utilização das faixas de frequências;

notanto

a) Que a eficácia da utilização das faixas de frequências partilhadas por esses dois serviços depende dos métodos de modulação utilizados nos sistemas em causa;
b) Que o estudo das características de modulação preferidas para os sistemas do serviço fixo por satélite está previsto no programa de estudos 2D-1/4 da CCIR:

recomenda que a CCIR

estude especialmente, no quadro da Questão n.º 2-3/4, os métodos de modulação (como a modulação por impulsos codificados utilizada com a modulação de fase ou de frequência), em particular para os feixes hertzianos em visibilidade directa, sob o ponto de vista da partilha das faixas de frequências com os sistemas do serviço fixo por satélite.

RECOMENDAÇÃO N.º 103

Relativa à dispersão da energia da portadora nos sistemas do serviço fixo por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a utilização de técnicas de dispersão da energia da portadora nos sistemas do serviço fixo por satélite pode conduzir a uma redução sensível das interferências causadas às estações de um serviço de radiocomunicação de Terra que funcionam nas mesmas faixas de frequências;
b) Que a utilização dessas técnicas pode conduzir a uma redução sensível das interferências entre sistemas do serviço fixo por satélite que funcionam nas mesmas faixas de frequências e a um aumento correspondente da eficácia de utilização da órbita dos satélites geostacionários;
c) Que essas técnicas são correntemente utilizadas com êxito nos sistemas do serviço fixo por satélite sem degradação da qualidade de funcionamento;

recomenda

1. Que os sistemas do serviço fixo por satélite que empregam uma modulação angular por sinais analógicos utilizem, na medida em que isso seja praticamente possível, técnicas de dispersão da energia da portadora a fim de espalhar em qualquer momento a energia de modo compatível com um funcionamento satisfatório desses sistemas;
2. Que os sistemas do serviço fixo por satélite que empregam uma modulação digital utilizem técnicas de dispersão de energia da portadora quando isso for possível sob os pontos de vista técnico e prático.

RECOMENDAÇÃO N.º 200

Relativa à data de entrada em vigor da faixa de guarda de 10 kHz para a frequência de 500 kHz no serviço móvel (perigo e chamada)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário utilizar o espectro das frequências o mais eficazmente possível;
b) Que a presente Conferência adoptou uma faixa de guarda de 495 kHz a 505 kHz para a frequência de 500 kHz, que é a frequência internacional de chamada e de perigo em radiotelegrafia no serviço móvel;

reconhecendo

a) Que é necessário prever um prazo suficiente para que os equipamentos radioeléctricos actualmente usados sejam retirados do serviço;
b) Que os progressos da técnica permitiram o fabrico de equipamentos mais estáveis e mais fiáveis;

---

(1) Substitui a Recomendação Spa2-11 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

recomenda

à próxima conferência administrativa mundial das radiocomunicações competente que tome uma decisão sobre a data de entrada em vigor desta nova disposição;

pede ao secretário-geral

que comunique a presente recomendação à Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), pedindo-lhe que inclua o exame deste assunto no quadro do estudo do sistema de perigo e de segurança marítima e que apresente à conferência acima mencionada uma recomendação relativa à data de entrada em vigor da nova faixa de guarda.

RECOMENDAÇÃO N.º 201

Relativa ao tráfego de perigo, de urgência e de segurança (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

tendo notado

que a Organização Intergovernamental Consultiva da Navegação Marítima (OMCI):

a) Adoptou uma resolução (2) acerca do sistema de perigo no mar;
b) Está a preparar um futuro sistema mundial de perigo e de segurança no mar que inclui melhorias propostas para curto prazo e a definição das necessidades e das medidas transitórias propostas com vista a uma melhoria a longo termo;

tomando nota, além disso,

que os estudos relativos às medidas a tomar para o perigo e a segurança no quadro de um sistema de radiocomunicações marítimas por satélite são objecto de questões e de programas de estudos da CCIR;

considerando

a) A importância especial da necessidade, sublinhada pela OMCI, de um sistema que transmitisse automaticamente, em caso de perigo, sinais de alarme, seguidos de transmissão, igualmente automática, de informações suplementares relativas ao caso de perigo;
b) Que convém que o alarme automático em caso de perigo, seguido da transmissão automática de informações suplementares relativas ao caso de perigo, seja feito numa ou em várias frequências reservadas para fins de perigo;
c) Que é necessário prever frequências apropriadas para as necessidades conexas em matéria de chamada e de comunicações de segurança;
d) Que a emissão das mensagens de perigo, de urgência e de segurança e o seu registo na recepção devem poder efectuar-se sem interrupção, quer as estações interessadas funcionem ou não sob a vigilância de pessoal;

recomenda

1. Que a OMCI seja convidada a prosseguir os seus estudos a fim de chegar à implementação próxima do futuro sistema de perigo;

2. Que a CCIR prossiga os seus trabalhos com vista a determinar o papel das radiocomunicações marítimas por satélite tanto no quadro de um sistema de perigo coordenado como para a segurança;

3. Que as administrações, tendo em conta os progressos contínuos da tecnologia, encarem a necessidade de reservar uma ou, eventualmente, várias frequências para fins de perigo;

4. Que as administrações, inspirando-se nos progressos técnicos, encarem uma automatização mais aperfeiçoada dos sistemas de telecomunicação que permita difundir sem interrupção as mensagens de perigo, de urgência e de segurança, com vista a substituir a radiotelegrafia em código morse e, eventualmente, a radiotelefonia;

5. Que as administrações fixem como seu objectivo tomar uma decisão sobre o assunto quando da próxima conferência administrativa mundial das radiocomunicações competente.

---

(1) Substitui a Recomendação Mar2-16 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Resolução A-420 (XI) da OMCI.

RECOMENDAÇÃO N.º 202

Relativa à melhoria da protecção contra interferências prejudiciais das frequências de perigo e de segurança e das que têm relação com o perigo e a segurança

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que importa reduzir ao mínimo os riscos de interferências prejudiciais nas frequências utilizadas para a salvaguarda da vida humana;
b) Que esta Conferência, ao examinar o artigo 18 relativo às interferências, reconhecem por unanimidade que convém melhorar a protecção contra interferências prejudiciais das frequências de perigo e de segurança e das que têm relação com o perigo e a segurança;
c) Que se poderia, designadamente, contribuir para a melhoria dessa protecção inserindo no Regulamento das Radiocomunicações disposições estipulando que os ensaios nessas frequências devessem ser efectuados, sempre que isso seja possível na prática, utilizando uma antena fictícia ou com uma potência reduzida;
d) Que essas disposições estão contidas no artigo 38 relativo às frequências de perigo e de segurança;

notando, todavia,

que a presente Conferência não está habilitada a rever o artigo 38;

convida as administrações

a estudarem esta questão e a apresentarem propostas à próxima conferência administreativa mundial das radiocomunicações competente.

RECOMENDAÇÃO N.º 203

Relativa à utilização futura da faixa de 2170-2194 kHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a frequência de 2182 kHz é a frequência internacional de perigo em radiotelefonia;
b) Que, com excepção das emissões autorizadas na frequência portadora de 2182 kHz, é proibida qualquer emissão nas frequências compreendidas entre 2173,5 e 2190,5 kHz;
c) Que, na Região 1, as faixas de frequências adjacentes de 2170-2173,5 kHz e de 2190,5-2194 kHz são utilizadas, respectivamente, pelas estações costeiras chamando de navio (incluindo as chamadas solectivas) e pelas estações de navio chamando as estações costeiras;

notando

a) Que a presente Conferência modificou o quadro de atribuição das faixas de frequência para reduzir a faixa de guarda de um lado e do outro da frequência de 2182 kHz a ± 8,5 kHz e que atribuiu a faixas de 2170-2173,5 kHz e de 2190-2194 kHz, em exclusivo, ao serviço móvel marítimo em todo o Mundo;
b) Que é actualmente necessário reorganizar o conjunto da faixa de 2170-2194 kHz a reexaminar as disposições regulamentares, sobretudo no que respeita aos artigos 38 e 60;

recomenda

que a próxima conferência administrativa mundial das radiocomunicações competente seja convidada:

1. A examinar as atribuições no interior da faixa de 2170-2194 kHz;
2. A rever os parâmetros técnicos e de exploração apropriados com vista a reduzir ainda mais a faixa de guarda de um lado e do outro da frequência de 2182 kHz;
3. A ultimar todas as disposições regulamentares eventualmente necessárias;
4. A elaborar nestas bases planos para a aplicação de qualquer nova disposição;
5. A fixar a data de entrada em vigor desses planos e dessas disposições;

pede ao secretário-geral

que comunique a presente recomendação ao secretário-geral da Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) para que seja estudasa pelos órgãos competentes e que estes formulem recomendações sobre este assunto;

convida

as administrações a estudar esta questão e a apresentar propostas para exame pela própria conferência administrativa mundial das radiocomunicações competentes.

RECOMENDAÇÃO N.º 204

Relativa à aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o Regulamento das Radiocomunicações constitui o quadro regulamentar fundamental para todos os serviços móveis e que as suas disposições devem responder, tanto quanto possível, às necessidades e às condições de exploração práticas desses serviços;
b) Que a presente Conferência adoptou a reestruturação do Regulamento das Radiocomunicações proposto pelo grupo de especialistas, tendo em conta as propostas formuladas por um certo número de administrações com vista a uma melhoria dessa reestruturação;
c) Que a subdivisão das precedentes disposições relativas ao serviço móvel em vários capítulos, correspondendo aos diversos serviços móveis, fez surgir certas anomalias, no que respeita a esses serviços, relativas em especial à sua aplicabilidade ao serviço móvel aeronáutico e ao serviço móvel terrestre;
d) Que algumas dessas anomalias suscitam problemas fundamentais de exploração que não são da competência da presente Conferência;
e) Que o serviço móvel aeronáutico tem por objecto as comunicações que devem assegurar uma exploração segura e regular das aeronaves;
f) Que para isso a Organização da Aviação Civil Internacional aprovou normas e práticas recomendadas adaptadas às necessidades da exploração das aeronaves, as quais deram as suas provas na prática e são hoje de uso corrente;

recomenda

que a próxima conferência administrativa mundial das radiocomunicações competentes faça a revisão dos capítulos NX, NXI e NXII (1), a fim de as adaptar às necessidades e às práticas actuais dos serviços interessados;

pede ao secretário-geral

que comunique o texto da presente recomendação à OACI e à OMCI e que chame a atenção dessas organizações para o estudo do conteúdo dos capítulos NX e NXI (2), respectivamente, com vista a prestar assistência às administrações para a preparação dessa conferência.

RECOMENDAÇÃO N.º 300

Relativa à planificação da utilização das frequências pelo serviço móvel marítimo na faixa de 435-526,5 kHz, na Região 1

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a presente Conferência modificou as atribuições ao serviço móvel marítimo na faixa de 415-526,5 kHz;
b) Que a presente Conferência adoptou as Recomendações n.ºs 200 e 309 relativas a essa faixa;
c) Que a presente Conferência reviu certas normas técnicas utilizadas no serviço móvel marítimo;
d) Que algumas das normas técnicas que serviam de base ao Plano de consignação para os países europeus contido nos Actos Finais da Conferência Marítima Europeia (Copenhaga, 1948) estão já ultrapassadas;
e) Que os navios que utilizam as frequências desta faixa navegam em todo o Mundo;

---

(1) Capítulos X, XI e XII do Regulamento das Radiocomunicações de 1979.
(2) Capítulos X e XI do Regulamento das Radiocomunicações de 1979.

f) Que certos países atribuíram já frequências a outros serviços que funcionam nesta faixa, o que pode impor condicionamentos na planificação do serviço móvel marítimo;
g) Que é por consequência necessário examinar em pormenor a utilização e a planificação desta faixa, tendo em conta as normas e os progressos técnicos mais recentes;

notando

que a presente Conferência recomendou que seja convocada uma conferência administrativa das radiocomunicações para os serviços móveis;

recomenda ao conselho de administração

que providencie para que a conferência para os serviços móveis seja competente para tomar decisões relativamente à planificação e à utilização das frequências desta faixa na Região 1;

pede à CCIR

que empreenda com urgência o estudo dos aspectos técnicos e de exploração desses problemas, incluindo os critérios de partilha com outros serviços;

convida

1. O secretário-geral a comunicar a presente recomendação à Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), solicitando-lhe que examine com urgência as necessidades de exploração do serviço móvel marítimo que utiliza esta faixa de frequências e que formule as recomendações que considere apropriadas;
2. As administrações da Região 1 a estudar esta questão e a submeter, para exame, propostas à conferência para os serviços móveis.

RECOMENDAÇÃO N.º 301

Relativa à planificação da utilização das frequências nas faixas atribuídas ao serviço móvel marítimo entre 1606,5 kHz e 3400 kHz, na Região 1

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que esta Conferência modificou as atribuições ao serviço móvel marítimo nas faixas compreendidas entre 1606,5 e 3400 kHz;
b) Que esta Conferência adoptou a Recomendação n.º 203 e a Resolução n.º 38 relativas a essas faixas;
c) Que é desejável utilizar essas faixas da forma mais eficaz quando da aplicação do quadro revisto de atribuição das faixas de frequências;
d) Que os navios que utilizam as frequências dessas faixas navegam em todo o Mundo;
e) Que os planos existentes são limitados à utilização regional;
f) Que, por isso, é necessário examinar pormenorizadamente a utilização e a planificação dessas faixas;

notando

que esta Conferência recomendou que seja convocada uma conferência administrativa das radiocomunicações para os serviços móveis;

recomenda ao conselho de administração

que providencie para que a conferência para os serviços móveis tenha competência para tomar decisões relativas à planificação e à utilização das frequências dessas faixas na Região 1;

pede à CCIR

que empreenda com urgência o estudo dos aspectos técnicos e de exploração desses problemas, incluindo os critérios de partilha com outros serviços;

convida

1. O secretário-geral a comunicar a presente recomendação à Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), pedindo-lhe que examine com urgência as necessidades de exploração do serviço móvel marítimo que utiliza essas faixas de frequências e que formule as recomendações que julgue apropriadas;
2. As administrações da Região 1 a estudarem esta questão e a submeterem, para exame, propostas à conferência para os serviços móveis.

RECOMENDAÇÃO N.º 302

Relativa a uma melhor utilização das vias radiotelefónicas em ondas decamétricas pelas estações costeiras nas faixas de frequências atribuídas em exclusivo ao serviço móvel marítimo (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que um grande número de pedidos de adjudicação respeitantes a vias radiotelefónicas em ondas decamétricas tinham sido apresentados à Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974);
b) Que o número de vias resultante da revisão do apêndice 16 não basta para responder a esses pedidos nas melhores condições;
c) Que as modalidades de partilha que daí resultam foram estabelecidas essencialmente em função de critérios de exploração;
d) Que depois da presente Conferência será ainda mais importante garantir a melhor utilização possível das vias radiotelefónicas em ondas decamétricas nas faixas atribuídas em exclusivo ao serviço móvel marítimo;
e) Que convém que as administrações assegurem umas às outras, em cada via, uma qualidade de serviço equivalente;
f) Que prossegue actualmente a preparação de meios técnicos para facilitar a utilização em comum das frequências por estações costeiras vizinhas dependentes de administrações diferentes ou por uma estação costeira explorada por conta de várias administrações;

recomenda às administrações

1. Que desenvolvam todos os seus esforços com vista a concluir arranjos de exploração mutuamente satisfatórios, relativos especialmente:

— Aos diferentes esquemas de partilha no tempo;
— À separação das horas de abertura do serviço;
— Voluntariamente e no quadro regional, à utilização das vias radiotelefónicas em ondas decamétricas com uma prioridade ligada ao volume do tráfego;

2. Que utilizem todos os meios à sua disposição, incluindo os indicados acima, para permitir a melhor utilização possível das vias radiotelefónicas em ondas decamétricas pelas estações costeiras nas faixas atribuídas ao serviço móvel marítimo;

convida as administrações

1. A terem em conta, quando consignem a estações costeiras frequências das faixas de ondas decamétricas, as disposições dos n.os **954** e **1804** do Regulamento das Radiocomunicações;
2. A procederem de modo que as estações costeiras:

— Utilizem a faixa de frequências e a potência mínima adaptadas às condições de propagação e à natureza do serviço;
— Utilizem, sempre que possível, antenas direccionais;
— Dêem às estações de navio instruções apropriadas, como vem indicado no n.º **5056** do Regulamento das Radiocomunicações;

convida a CCIR

a prosseguir os seus estudos, a fim de melhorar todos os critérios de partilha, técnicos e de exploração, que tenham incidência sobre a utilização pelas estações costeiras das vias radiotelefónicas em ondas decamétricas nas faixas atribuídas em exclusivo ao serviço móvel marítimo, assim como os métodos de escolha das vias disponíveis, por meios electrónicos ou outros, com vista a facilitar o acesso múltiplo a essas vias.

RECOMENDAÇÃO N.º 303

Relativa à utilização das frequências portadoras de 4125 kHz e 6215,5 kHz, além da frequência portadora de 2182 kHz, para fins de perigo e de segurança, bem como para a chamada e a resposta na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N. (2).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) Substitui a Recomendação Mar2-7 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Substitui a Recomendação Mar2-4 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

considerando

a) Que em certas zonas do Mundo não é praticamente possível assegurar uma cobertura eficaz para fins de perigo e de segurança na frequência internacional de perigo em radiotelefonia (2182 kHz) porque as estações costeiras que asseguram a escuta nesta frequência estão muito afastadas umas das outras;

b) Que grande número de navios equipados apenas para a radiotelefonia navegam nessas zonas e ficam então fora do alcance das estações costeiras que asseguram a escuta na frequência portadora de 2182 kHz;

c) Que para ultrapassar esta dificuldade numerosas administrações das zonas acima mencionadas estabeleceram nas suas estações costeiras escutas nas frequências portadoras de 4125 kHz e 6215,5 kHz, para fins de perigo e de segurança, bem como para a chamada e a resposta, tendo-se verificado que essas escutas completam eficazmente a que é efectuada na frequência de 2182 kHz;

d) Que o Regulamento das Radiocomunicações prevê a possibilidade de utilizar, para fins de perigo e de segurança, assim como para a chamada e a resposta, além da frequência portadora de 2182 kHz, por um lado, a frequência portadora de 4125 kHz na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., e, por outro lado, a frequência portadora de 6215,5 kHz na zona da Região 3 situada ao sul do paralelo 25°N.;

e) Que poderia haver interesse em que os navios equipados apenas para a radiotelefonia e que navegam nessas zonas tenham meios para emitir e receber nas frequências portadoras de 4125 kHz e 6215,5 kHz, quando as chamadas na frequência de 2182 kHz correm o risco de ser ineficazes;

recomenda

1. Que as administrações informem os exploradores dos navios equipados apenas com radiotelefonia e que estejam sob a sua dependência de que certas estações terrestres que figuram na Nomenclatura das estações costeiras têm meios para completar o serviço assegurado na frequência portadora de 2182 kHz, para fins de perigo e de segurança, assim como para a chamada e a resposta, por um serviço que funciona na frequência portadora de 4125 kHz na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N., e na frequência portadora de 6215,5 kHz na zona da Região 3 situada ao sul do paralelo 25° N.;

2. Que as administrações que possuem certos navios equipados somente com radiotelefonia não percam de vista que, se não é obrigatório que as estações de navio e as estações costeiras estejam dotadas de instalaçoes que permitam emitir e receber nas frequências de 4125 e 6215,5 kHz, não deixa de ser um facto que tais instalações podem ser essenciais à segurança desses navios quando navegam nas zonas acima mencionadas.

RECOMENDAÇÃO N.º 304

Relativa às frequências do apêndice 16 (secção B) ao Regulamento das Radiocomunicações, destinadas a ser utilizadas em todo o Mundo pelos navios de todas as categorias, assim como pelas estações costeiras (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as frequências indicadas no quadro das frequências de emissão de faixa lateral única para a exploração *simplex* (via a uma frequência) e para a exploração de faixas cruzadas entre navios (duas frequências) ainda não são utilizadas à escala mundial para as comunicações entre navios e as estações costeiras;

b) Que os navios de longo curso, em todo o Mundo, têm necessidade de poder comunicar com as estações costeiras de qualquer administração:

recomenda

que as administrações asseguram, tanto quanto possível, um serviço nessas frequências nas suas principais estações costeiras radiotelefónicas e notifiquem ao secretário-geral informações pormenorizadas relativas a esses serviços, com vista à sua publicação na Nomenclatura das estações costeiras.

---

(1) Substitui a Recomendação Mar2-6 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

RECOMENDAÇÃO N.º 305

Relativa à utilização das vias 15 e 17 do apêndice 18 pelas estações de comunicações de bordo (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967) previu a utilização das vias 15 e 17 do apêndice 18 para as comunicações internas de exploração a bordo dos navios nas águas territoriais com uma potência aparente radiada que não excedesse 0,1 W e que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) elevou esse limite de potência para 1 W;
b) Que um certo número de administrações fazem grande uso dessas vias;
c) Que certas administrações não têm utilizado para as comunicações internas a bordo dos navios devido à falta de vias em ondas métricas para as outras necessidades do serviço móvel marítimo;
d) Que, por essa mesma razão, essas administrações desejam que essas vias deixem de ser utilizadas nas comunicações de bordo;
e) Que, sobre o assunto, a presente Conferência manteve as disposições do quadro de atribuição das faixas de frequências;

notando

que a CCIR adoptou o parecer n.º 542 e o Relatório n.º 589-1;

reconhecendo

a) Que é necessário dispor, no plano internacional, de diversas vias comuns para as estações de comunicação de bordo, a fim de poder daer resposta às necessidades mundiais no futuro;
b) Que pode ser necessário dispor de frequências que permitam utilizar *relais* nos grandes navios, tais como os porta-contentores, os navios-cisternas, etc.;
c) Que talvez haja necessidade de adquirir mais experiência no que respeita à eficácia de emprego das vias em ondas decimétricas mantidas disponíveis para o efeito pela presente Conferência;

recomenda

1. Que a próxima conferência administrativa mundial das radiocomunicações competente determine se a utilização das vias 15 e 17 do apêndice 18 é ainda necessária para as comunicações de bordo e, se não for esse o caso, que ela fixe a data em que convém que essa utilização cesse;

2. Que na mesma conferência examine o caso das vias em ondas decimétricas utilizadas pelas estações de comunicações de bordo, com vista a determinar se o seu número e a sua localização no espectro das frequências correspondem de facto às necessidades dessas estações;

3. Que essa mesma conferência determine se é necessário proceder a atribuições suplementares de frequências que as estações de comunicações de bordo poderiam utilizar em todo o Mundo, incluindo nas águas territoriais de todos os países;

4. Que as administrações dispensem toda a atenção necessária às normas técnicas dessas estações e ao seu funcionamento, a fim de assegurar a sua compatibilidade mútua no seio de um sistema internacional eficaz.

RECOMENDAÇÃO N.º 306

Relativa ao estabelecimento de uma escuta na frequência de 156,8 MHz pelas estações costeiras para fins de perigo (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a frequência de 156,8 MHz foi designada como frequência internacional de perigo para as estações do serviço móvel marítimo que funcionam nas faixas autorizadas entre 156 MHz e 174 MHz;
b) Que esta frequência é muito útil para as comunicações a curta distância e que a sua utilização, em situações de perigo, contribuirá para melhorar notavelmente a segurança da vida humana no mar, especialmente nas zonas de tráfego elevado, onde se pode manter uma escuta eficaz;
c) Que muitas administrações já asseguram a cobertura das suas costas na faixa de 156-174 MHz;

---

(1) Substitui a Recomendação Mar2-11 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Substitui a Recomendação Mar2-10 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

d) Que seria entretanto pouco prático ou inútil para certas administrações, nas condições que lhes são próprias, assegurar uma cobertura suficiente das suas costas na faixa de 156-174 MHz que garantissem uma escuta eficaz para fins de perigo na frequência de 156,8 MHz:

recomendo

que as administrações, quando julgarem necessário e possível na prática, tomem as medidas necessárias ao estabelecimento de uma escuta na frequência de 156,8 MHz para fins de perigo nas costas dos seus países.

RECOMENDAÇÃO N.º 307

Relativa à escolha, nas faixas do serviço móvel marítimo compreendidas entre 1605 kHz e 3800 kHz, de uma frequência reservada às necessidades da segurança (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a radiotelefonia em ondas hectométricas apresenta uma utilidade crescente para a segurança dos navios, pois que:

i) Em conformidade com as disposições da Convenção Internacional para a Salvaguarda da Vida Humana no Mar (Londres, 1960) os navios de carga de tonelagem bruta compreendida entre 300 t e 1600 t, a menos que estejam providos de uma estação radiotelegráfica, devem estar providos de uma estação radiotelefónica;

ii) A Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) recomenda (2) que os navios obrigatoriamente equipados quer com uma instalação radiotelegráfica (navios de mais de 1600 t brutas) quer com uma instalação radiotelefónica estejam também dotados de instalações que lhes permitam a escuta permanente, quando estejam no mar, na frequência radiotelefónica de perigo.

Que se encoraje, nos navios equipados para a radiotelegrafia, a instalação de um emissor radiofónico que possa funcionar na faixa dos 2 MHz e que as administrações encarem a adopção de um regulamento nacional que imponha a instalação de um receptor de escuta na frequência de perigo radiotelefónico a bordo dos navios a que não se aplique a Convenção de Londres (1960);

b) Que, todavia, em muitas regiões, a escuta na frequência radiotelefónica de perigo em ondas hectométricas é muito difícil por causa de numerosas chamadas transmitidas nessa frequência no tráfego corrente;

c) Que se apresentariam dificuldades análogas se fossem adoptados sistemas de escuta e de alarme mais evoluídos que os sistemas actuais;

d) Que, em certas regiões, o tráfego radiotelefónico em ondas hectométricas aumenta constantemente;

convida a CCIR

a empreender com urgência um estudo dos aspectos técnicos e de exploração dos problemas suscitados pela situação acima exposta.

recomenda

que a próxima conferência administrativa mundial das radiocomunicações competente determine, em função dos resultados dos trabalhos da CCIR:

1. Uma frequência reservada à transmissão de chamadas e mensagens de perigo e, eventualmente, de sinais e mensagens de urgência, bem como de sinais e certas mensagens de segurança, com exclusão de qualquer chamada destinada ao tráfego corrente;
2. Uma frequência, diferente da precedente, destinada à chamada por voz e à chamada selectiva para o tráfego corrente;
3. Para cada uma destas duas frequências uma faixa de guarda de largura conveniente.

---

(1) Substitui a Recomendação Mar2-2 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Resolução A-217 (VII) da OMCI.

RECOMENDAÇÃO N.º 308

Relativa à designação de frequências das faixas de ondas hectométricas a utilizar em comum pelas estações costeiras radiotelefónicas para as comunicações com as estações de navio de nacionalidades diferentes das suas (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que nos navios de pequena tonelagem dotados de aparelhos em faixa lateral única é essencial dispor de um receptor de frequências fixas controladas por cristal, para que seja facilitado o ajuste correcto;

b) Que os navios deste tipo que efectuam viagens internacionais e comunicam com estações costeiras de nacionalidades diferentes das suas têm necessidade de dispor de número considerável de cristais suplementares;

c) Que reduzir o número de cristais necessários permite manter num nível satisfatório o custo dos receptores em faixa lateral única;

considerando

a) Que convém consignar a todas as estações costeiras frequências de trabalho internacionais para as suas comunicações com navios de nacionalidades diferentes das suas, não excluindo tal utilização dessas frequências o seu emprego para as necessidades nacionais;

b) Que, examinando o Ficheiro de Referência Internacional das Frequências, se verificou que, tanto à escala regional como à escala mundial, não parecia existir qualquer frequência disponível susceptível de ser utilizada pelas estações costeiras para as suas comunicações com navios de nacionalidades diferentes das suas;

recomenda

1. Que as administrações estudem esta questão com a maior urgência possível, a fim de formularem propostas destinadas a serem apresentadas à próxima conferência administrativa das radiocomunicações habilitada para tratar desta questão;

2. Que, entretanto, os países procurem a possibilidade de concluírem arranjos regionais, bilaterais ou multilaterais, a fim de colocarem à disposição das estações costeiras frequências de trabalho comuns para comunicarem com estações de navio de nacionalidades diferentes das suas.

RECOMENDAÇÃO N.º 309

Relativa à designação de uma frequências nas faixas de 435-495 kHz ou 505-526,5 kHz (525 kHz na Região 2), numa base mundial para a emissão pelas estações costeiras de boletins meteorológicos e de avisos à navegação, com destino aos navios, utilizando a telegrafia de faixa estreita com impressão directa.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que para melhorar as disposições existentes do sistema actual de urgência e de segurança marítimas, a Organização Intergovernamental Consultiva da Navegação Marítima (CI) recomendou (2) às administrações que introduzissem emissões de telegrafia de faixa estreita com impressão directa para difundir os boletins meteorológicos e os avisos à navegação;

b) Que essas emissões teriam por efeito reforçar a segurança da vida humana no mar;

c) Que a CCIR recomendou (3) um sistema automático de telegrafia de faixa estreita com impressão directa para a transmissão aos navios de informações relativas à navegação e à meteorologia;

d) Que em certos países da Europa há administrações que assegurqm já tais emissões a título experimental utilizando a frequência de 518 kHz;

e) Que algumas administrações propuseram à presente Conferência que designasse a frequência de 518 kHz para ser utilizada para o efeito numa base mundial;

f) Que a presente Conferência pensa que esta questão depende da próxima conferência administrativa mundial das radiocomunicações competente;

---

(1) Substitui a Recomendação Mar5 da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1967).

(2) V. Resolução A-420 (XI) da Assembleia da OMCI.

(3) V. o parecer n.º 540 da CCIR.

g) Que é ainda necessário assegurar a transmissão de avisos aos navegantes e boletins meteorológicos aos navios utilizando a telegrafia morse normal;

recomenda

que a próxima conferência administrativa mundial das radiocomunicações competente estude esta questão e tome as medidas necessárias com vista a designar uma frequência internacional apropriada para transmitir os avisos à navegação e os boletins meteorológicos, utilizando a telegrafia de faixa estreita com impressão directa, conservando ao mesmo tempo as disposições relativas à telegrafia morse normal, actualmente utilizada para transmitir esses avisos;

convida as administrações

a estudarem esta questão com vista a apresentarem propostas pertinentes à próxima conferência administrativa mundial das radiocomunicações competente;

pede ao secretário-geral

que comunique a presente Recomendação à Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), solicitando-lhe que prossiga o estudo desta questão e formule as recomendações que se impõem.

RECOMENDAÇÃO N.º 310

Relativa a um sistema automático de radiocomunicações em ondas decimétricas para o serviço móvel marítimo

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

consciente

a) Do aumento contínuo da população do Globo e das necessidades que daí advêm no que respeita ao transporte seguro e eficaz de géneros alimentícios e de outras mercadorias essenciais;
b) Da necessidade de um crescimento económico rápido e eficaz em todo o Mundo;
c) De que as frotas marítimas participam activamente no comércio e estão em plena expansão;

considerando

a) Que a faixa de ondas métricas atribuída ao serviço móvel marítimo (apêndice 18) está já saturada em muitas regiões do Mundo;
b) Que as necessidades em matéria de vias radiotelefónicas suplementares em ondas decimétricas para as operações portuárias para o movimento de navios, assim como para a correspondência pública no serviço móvel marítimo, são, no futuro, da ordem das 200 a 240 vias dúplex em certas regiões saturadas;
c) Que é altamente desejável que o sistema marítimo que funciona em ondas decimétricas e outros sistemas internacionais de correspondência pública do serviço móvel sejam integralmente automatizados, a fim de assegurar a utilização eficaz das vias e a exploração económica dos serviços, no interesse dos seus utentes;
d) Que a normalização é de grande importância nos serviços móveis internacionais;
e) Que as administrações podem desejar utilizar todas as vias ou uma parte das vias, designadas para a utilização marítima, para outros serviços móveis automatizados. Pode ser o caso quando é preciso assegurar radiocomunicações comuns ou combinadas nos portos, nas vias navegáveis ou nos molhes adjacentes. Nas zonas onde são nulas as necessidades dos serviços móveis, essas vias poderiam ser utilizadas para outros serviços de radiocomunicação;

tendo tomado nota

a) Do relatório n.º 587-1 que a CCIR emitiu a este respeito em resposta à Questão n.º 23-2/8;
b) Da Decisão n.º 30, pela qual a CCIR encarregou o grupo de trabalho provisório 8/5 de prosseguir o estudo deste assunto na base da Questão n.º 23-2/8 e tendo em conta os resultados dos estudos descritos no Relatório n.º 587-1;
c) Da circular COM 73 da Organização Intergovernamental Consultiva da Navegação Marítima (OMCI), segundo a qual, em matéria de telecomunicações a curta distância, os serviços marítimos internacionais automáticos têm necessidade de uma faixa de 10 MHz de largura;

recomenda

à próxima conferência administrativa mundial das radiocomunicações competente:

1. Que designe faixas apropriadas de largura suficiente para um sistema de comunicação do serviço móvel marítimo, incluindo a correspondência pública, indo-as buscar às faixas actualmente atribuídas ao serviço móvel no plano mundial;

2. Que defina os meios que permitam estabelecer, conforme as necessidades, planos de consignação regionais que tenham em conta as necessidades mundiais do serviço móvel marítimo e sejam compatíveis com a exploração de outros serviços;

convida a CCIR

1. A estudar com urgência as faixas a que haja de dar preferência por razões de exploração e de partilha e a publicar um parecer ou um relatório antes da próxima conferência administrativa mundial das radiocomunicações competente;

2. A estudar, concertadamente com a CCITT, os aspectos técnicos e de exploração de um sistema marítimo e móvel terrestre integrado e automatizado;

pede ao secretário-geral

que leve a presente Recomendação ao conhecimento da Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) para exame e comentários.

RECOMENDAÇÃO N.º 311

Relativa á utilização de um sinal de frequência acústica consecutivo ao sinal de alarme radiotelefónico emitido pelas estações costeiras (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as estações costeiras recebem numerosos sinais de alarme radiotelefónicos que não podem identificar, quer porque não são seguidos de uma mensagem falada, quer porque essa mensagem é ininteligível por causa de interferências ou do nível demasiadamente fraco da modulação;

b) Que as estações costeiras devem tomar medidas a fim de identificar todos os sinais de alarme que recebem e de alertar os serviços de busca e salvamento para acção subsequente;

c) Que muitos dos sinais de alarme radiotelefónicos que precedem a mensagem MAYDAY RELAY provêm de estações costeiras situadas a distâncias consideráveis da estação costeira que as recebe;

d) Que poderia ser extremamente útil que se pudesse distinguir os sinais de alarme radiotelefónicos emitidos pelas estações costeiras dos que são emitidos pelas estações de navio;

reconhecendo

a) Que a recepção normal do sinal de alarme radiotelefónico não deveria ser afectada por qualquer característica necessária para estabelecer a distinção entre os sinais de alarme radiotelefónicos emitidos pelas estações costeiras e os que são emitidos pelas estações de navio;

b) Que a Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974) se ocupou de propostas tendentes a seguir por uma frequência acústica única o sinal de alarme radiotelefónico emitido pelas estações costeiras e que ensaios práticos efectuados na região do mar do Norte durante a referida Conferência mostraram que um sinal acústico de 1300 Hz com dez segundos de duração convém para o efeito;

c) Que os gastos necessários para transformar os aparelhos em serviço nas estações costeiras seriam provavelmente pouco elevados;

recomenda

que se faça seguir o sinal de alarme radiotelefónico, quando emitido por uma estação costeira, de um sinal acústico de 1300 Hz com dez segundos de duração (v. o n.º **3272**).

RECOMENDAÇÃO N.º 312

Relativa aos estudos de interligação dos sistemas de radiocomunicações móveis marítimas com as redes telefónica e telegráfica internacionais (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que adoptou e incluiu no artigo 62 disposições relativas à utilização de um sistema digital de chamada selectiva;

---

(1) Substitui a Recomendação Mar2-5 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

(2) Substitui a Recomendação Mar2-19 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

b) Que a CCIR adoptou a Questão n.º 9-3/8, relativa a um sistema de chamada selectiva apropriado às futuras condições de exploração do serviço móvel marítimo;
c) Que os estudos característicos técnicos e de exploração de um sistema digital de chamada selectiva efectuados pela CCIR estão já avançados;
d) Que a CCIR adoptou a Questão n.º 23-3/8, relativa aos sistemas radiofónicos automáticos em ondas métricas para o serviço móvel marítimo;
e) Que a CCITT está a estudar a interligação dos diferentes serviços telefónicos móveis internacionais — especialmente do serviço móvel marítimo e do serviço móvel marítimo por satélite — com a rede telefónica internacional;
f) Que foi proposto à CCITT o estudo de novas questões (7/1, 4/X) relativas à interligação dos serviços de telecomunicações marítimas por satélite e do serviço de telex internacional;

considerando

a) Que é desejável poder utilizar uma interligação dos sistemas de radiocomunicação do serviço móvel marítimo com as redes telefónica e telegráfica públicas internacionais que permita o encaminhamento automático do tráfego permutado entre as estações de navio e as redes nacionais;
b) Que essa interligação melhoraria muito sensivelmente as radiocomunicações marítimas;

convida instantemente a CCIR e a CCITT

a empreenderem todos os estudos necessários relativos à compatibilidade dos sistemas de radiocomunicações móveis marítimas com os sistemas telefónicos e telegráficos internacionais, designadamente os diversos critérios de qualidade de serviço que permitam uma interligação total dos serviços móveis marítimos com as redes telefónica e telegráfica internacionais;

e convida as administrações

a dar prioridade a esses estudos na sua participação nos trabalhos da CCIR e da CCITT.

RECOMENDAÇÃO N.º 313

Relativa a disposições temporárias relativas aos aspectos técnicos e de exploração do serviço móvel marítimo por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que adoptou um mínimo de disposições destinadas a preparar de forma metódica a introdução do serviço móvel marítimo por satélite;
b) Que as indemnizações têm por enquanto uma experiência reduzida ou nula em matéria de exploração do serviço móvel marítimo por satélite;
c) Que por consequência, não se poderiam fixar desde já disposições regulamentares abrangendo pormenorizada e completamente os aspectos técnicos e de exploração desse serviço;
d) Que, entretanto, se poderiam revelar necessárias, antes da próxima conferência administrativa das radiocomunicações competente, disposições provisórias, de ordem administrativa, técnica e relativas à exploração;

recomenda

que, enquanto vão adquirindo a experiência necessária para servir de base à adopção de disposições regulamentares pormenorizadas pela próxima conferência administrativa das radiocomunicações competente, as administrações participantes no serviço móvel marítimo por satélite cheguem a acordo sobre disposições temporárias, de ordem administrativa, técnica e relativas à exploração, as notifiquem ao secretário-geral e convidem as outras administrações a observá-las, sem compromisso para o futuro.

RECOMENDAÇÃO N.º 400

Relativa à passagem do plano actual ao novo plano de adjudicação de frequências nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) Substitui a Recomendação Mar2-15 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).
(2) Substitui a Recomendação Aer2-4 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

considerando

a) Que as Actas Finais da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) entraram em vigor em 1 de Setembro de 1979;
b) Que o novo plano de adjudicação de frequências contido no apêndice 27 Aer2 entrará em vigor em 1 de Fevereiro de 1983, às 00.01 horas UTC;
c) Que algumas administrações desejarão talvez pôr em vigor certas disposições do novo plano de adjudicação de frequências antes desta última data, quando isso for possível, sem causar interferências prejudiciais às estações que funcionam em conformidade com as disposições do actual plano de adjudicação de frequências;
d) Que na sequência da Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966), a Organização da Aviação Civil Internacional (OACI), em virtude das disposições do n.º 27/20 do apêndice 27 e agindo no espírito e no quadro da Resolução Aer6 dessa Conferência, elaborou um programa de transição para o serviço móvel aeronáutico (R), a fim de passar do plano de adjudicação de frequências do apêndice 26 ao do apêndice 27;
e) Que o programa de transição da OACI foi seguidamente transmitido à Comissão Internacional de Registo de Frequências, para difusão pelas administrações dos Membros da UIT;
f) Que será útil, de novo, adoptar um programa de natureza a facilitar a passagem do plano actual ao novo plano de adjudicação de frequências;

recomenda

1. Que a OACI seja convidada a elaborar um programa de transição, no quadro do apêndice 27 Aer2, para a utilização operacional, pelas estações aeronáuticas, das frequências que figuram no plano de adjudicação de frequências, excepto para as linhas aéreas regionais e nacionais (ZLARN) que não intervêm na exploração internacional;
2. Que a OACI seja convidada a transmitir à Comissão Internacional de Região de Frequências, para difusão pelas administrações, o programa de transição para o novo plano de adjudicação de frequências;
3. Que as administrações apliquem as disposições do programa de transição em coordenação com a OACI e em conformidade com os princípios enunciados no n.º 27/20 do apêndice 27 Aer2;

solicita ao secretário-geral

que leve a presente Recomendação à atenção da Organização da Aviação Civil Internacional.

RECOMENDAÇÃO N.º 401

Relativa ao emprego eficaz das frequências do serviço móvel aeronáutico (R) designadas para utilização mundial (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que a Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) adjudicou um número limitado de frequências para utilização mundial para fins de fiscalização da regularidade dos voos e da segurança das aeronaves;

recomenda às administrações

1. Que o número total de estações aeronáuticas em ondas decamétricas funcionando nas vias designadas para utilização mundial seja mantido a um mínimo compatível com uma utilização económica e eficaz das frequências;
2. Que, quando isso for possível e prático, uma única estação deste tipo sirva os exploradores de aeronaves de países limítrofes e que, normalmente, não haja mais de uma estação por país.

RECOMENDAÇÃO N.º 402

Relativa à cooperação com vista ao emprego eficaz das frequências do serviço móvel aeronáutico (R) designadas para utilização mundial (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) Substitui a Recomendação Aer2-2 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).
(2) Substitui a Recomendação Aer2-3 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

considerando

a) Que é necessário utilizar o mais eficazmente possível as frequências do serviço móvel aeronáutico (R) designadas para utilização mundial;

b) Que foi adoptado um plano com vista à adjudicação por zonas das frequências do serviço móvel aeronáutico (R) designadas para utilização mundial;

c) Que é desejável uma coordenação entre as administrações dos países situados nas zonas definidas pelo plano de adjudicação.

d) Que a administração de um país tem o direito de escolher e de notificar à IFRB, com vista à sua inscrição no Ficheiro de Referência Internacional das Frequências, qualquer consignação de frequência numa via adjudicada à zona onde esse país está situado;

e) O papel que a IFRB desempenha nos procedimentos de regulamentação, em conformidade com o artigo 12 do Regulamento das Radiocomunicações;

f) O papel que a Organização da Aviação Civil Internacional (OACI) desempenha no domínio da exploração aeronáutica internacional;

convida

1. As administrações dos países situados numa zona mundial de adjudicação, quando julgarem isso oportuno, e a OACI a pedirem o parecer da IFRB com vista a proceder, sob o ponto de vista técnico, à melhor escolha de frequências, a fim de utilizar com o máximo de eficácia as frequências do serviço móvel aeronáutico (R) designadas para utilização mundial;

2. As administrações dos países situados numa zona mundial de adjudicação, quando julgarem isso oportuno, a coordenarem mutuamente a utilização dessas frequências sob o ponto de vista da exploração aeronáutica e, a este respeito, a não perderem de vista a vantagem que poderiam ter em obterem o parecer da OACI neste processo;

3. A IFRB a ajudar qualquer administração ou grupo de administrações dos países situados numa zona mundial de adjudicação e que desejem coordenar as suas necessidades de frequências designadas para utilização mundial, e a prosseguirem a sua cooperação com a OACI para esse fim;

solicita ao secretário-geral

que leve a presente Recomendação à atenção da Organização de Aviação Civil Internacional.

RECOMENDAÇÃO N.º 403

Relativa ao desenvolvimento de técnicas que contribuirão para reduzir a saturação das faixas de ondas decamétricas atribuídas ao serviço móvel aeronáutico (R) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que várias administrações trabalham activamente para desenvolver técnicas de telecomunicação cuja utilização, se fosse mais alargada no serviço móvel aeronáutico (R), contribuiria para reduzir a saturação das faixas de ondas decamétricas atribuídas a este serviço; entre esses técnicas é de assinalar a utilização de frequências superiores às que correspondem às faixas de ondas decamétricas com estações telecomandadas e a utilização de antenas direccionais, de técnicas de radiocomunicação espacial e de transmissão automática de dados;

b) Que seria útil às outras administrações tomarem conhecimento dessas técnicas, a fim de estudarem a sua aplicação nas suas ligações do serviço móvel aeronáutico (R);

c) Que a Organização de Aviação Civil Internacional (OACI) trabalha activamente para coordenar a utilização prática dessas técnicas;

recomenda

às administrações que trabalham no desenvolvimento de técnicas que contribuam para reduzir a saturação das faixas de ondas decamétricas que informem periodicamente a IFRB dos progressos alcançados;

encarrega a IFRB

de difundir periodicamente as informações assim obtidas pelas administrações, bem como pela OACI.

---

(1) Substitui a Recomendação Aer2-1 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

RECOMENDAÇÃO N.º 404

Relativa à utilização da faixa de 136-137 MhZ pelo serviço móvel aeronáutico (R) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o quadro de atribuição das faixas de frequências modificado pela presente Conferência comporta atribuições ao serviço móvel aeronáutico (R), a título primário, e aos serviços fixo e móvel, excepto móvel aeronáutico (R), a título secundário, na faixa de 136-137 MHz;

b) Que se prevêem igualmente atribuições ao serviço de exploração espacial (espaço para Terra), ao serviço de meteorologia por satélite (espaço para Terra) e ao serviço de pesquisa espacial (espaço para Terra), a título primário, até 1 de Janeiro de 1990, e depois a título secundário e que o serviço móvel aeronáutico (R) só pode ser introduzido a título primário depois de 1 de Janeiro de 1990, em conformidade com os planos aprovados à escala internacional para esse serviço;

b) Que o serviço móvel aeronáutico (R) corre o risco de, a partir dessa data, ficar sujeito a interferências perigosas para a segurança da navegação aérea, e que importa proteger, no mais alto grau, este serviço contra interferências causadas por estações dos seguintes serviços: fixo, móvel, excepto móvel aeronáutico (R), de pesquisa espacial (espaço para Terra), de exploração espacial (espaço para Terra) e de meteorologia por satélite (espaço para Terra);

recomenda

1. Que em todas as Regiões as administrações que utilizem, ou tenham intenção de utilizar, depois de 1 de Janeiro de 1990, estações dos serviços fixo, móvel, excepto móvel aeronáutico (R), de exploração espacial (espaço para Terra), de meteorologia por satélite (espaço para Terra) e de pesquisa espacial (espaço para Terra) na faixa de 136-137 MHz tomem todas as disposições possíveis para assegurar a protecção necessária ao serviço móvel aeronáutico (R) e para fazer o funcionamento das estações dos outros serviços a que a faixa está atribuída a título secundário à medida que vão sendo postas em serviço estações do serviço móvel aeronáutico (R);

2. Que as administrações notifiquem à Comissão Internacional de Registo das Frequências (IFRB) os seus planos de colocação em serviço de estações aeronáuticas do serviço móvel aeronáutico (R);

3. Que as administrações notifiquem à IFRB, de preferência antecipadamente, a data em que as estações autorizadas a funcionar a título secundário cessarão de funcionar, referindo-se à presente Recomendação;

e solicita à IFRB

que aplique essas informações todos os 6 meses a partir de 1 de Janeiro de 1985.

RECOMENDAÇÃO N.º 405

Relativa a um estudo da utilização do serviço móvel aeronáutico (R) por satélite (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Os esforços persistentes desenvolvidos no serviço móvel aeronáutico (R) com vista a melhorar as comunicações proporcionalmente ao aumento do número, das dimensões e da velocidade das aeronaves;

b) Os esforços desenvolvidos pela União Internacional das Telecomunicações para reduzir a saturação das faixas de frequências compreendidas entre 4 e 27,5 MHz;

c) A necessidade de utilizar com economia as ondas decamétricas;

notando

a) Que a aplicação das técnicas de radiocomunicações espaciais às necessidades da aviação civil internacional oferece a possibilidade de melhorar substancialmente as comunicações do serviço móvel aeronáutico (R), evitando ao mesmo tempo a saturação das faixas compreendidas entre 4 e 27,5 MHz;

b) Que ensaios demonstraram que é possível estabelecer comunicações entre as aeronaves e estações aeronáuticas utilizando como retransmissor um satélite geostacionário;

c) Que a tecnologia das radiocomunicações espaciais progride rapidamente;

---

(1) Substitui a Recomendação Spa7 da Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1963).

(2) Substitui a Recomendação Aer2 da Conferência Administrativa Extraordinária das Radiocomunicações Aeronáuticas (Genebra, 1966).

d) Que as possibilidades técnicas deixam supor que, num futuro próximo, se poderá dispor de meios de radiocomunicações espaciais que deverão permitir satisfazer bom número das necessidades do serviço móvel aeronáutico (R) nas linhas aéreas mundiais principais, com excepção das linhas polares;
e) Que antes de as administrações estarem dispostas a pôr em execução um programa visando a aplicação das técnicas das radiocomunicações espaciais convém proceder a um estudo aprofundado dessas técnicas e definir as medidas a tomar;
f) Que a medida em que as administrações podem pôr em execução um tal programa está estreitamente ligada às consequências económicas da sua aplicação;
g) Que a Organização da Aviação Civil Internacional (OACI) é a instituição internacional interessada em primeiro lugar pelo estabelecimento de normas e práticas recomendadas que regem os sistemas e técnicas de radiocomunicação utilizadas em proveito da aviação civil internacional;
h) Que a CCIR estudou a aplicação das técnicas de radiocomunicação espacial no serviço móvel aeronáutico (R), mas que esses estudos poderiam necessitar de uma revisão;

convida a CCIR

a prosseguir os seus estudos sobre a aplicação das técnicas de radiocomunicação espacial no serviço móvel aeronáutico (R) em cooperação com a OACI;

recomenda

1. Que as administrações, tendo em conta os factores económicos e de exploração em jogo, tomem em consideração as possibilidades de dar satisfação às necessidades do serviço móvel aeronáutico (R) nas linhas aéreas mundiais principais recorrendo às técnicas de radiocomunicações espaciais;

2. Que as administrações prossigam o estudo destas questões baseando-se nos factores expostos no anexo à presente Recomendação.

ANEXO À RECOMENDAÇÃO N.º 405(1)

1. Características técnicas do sistema de recepção e de emissão dos satélites e das aeronaves:

a) Potência (portadora) necessária à recepção no sentido aeronave-satélite;
b) Potência (portadora) necessária à recepção no sentido satélite-aeronave;
c) Potência aparente radiada pela estação de satélite (por via);
d) Potência aparente radiada pela estação terrena de aeronave (por via);
e) Tipo de transmissão a utilizar;
f) Largura de faixa de cada via;
g) Disposição das vias;
h) Condições de polarização;
i) Necessidade de utilizar a bordo da aeronave uma antena não direccional; reflexos no mar (ou no solo);
j) Afastamento necessário entre as frequências de emissão e de recepção do satélite;
k) Características do satélite que permitam às aeronaves utilizar independentemente cada via (acesso múltiplo ou aleatório);
l) Condições relativas à fiabilidade do sistema;
m) Diversos.

2. Número e localização dos satélites:

a) Serviço a assegurar; repartição geográfica das linhas aéreas e número de voos em cada uma delas;
b) Grupo de linhas aéreas susceptíveis de ser servidas utilizando um satélite comum;
c) Número de satélites necessários para servir cada grupo de linhas aéreas;
d) Localização de cada um dos satélites;
e) Número de vias de que deve dispor cada satélite;
f) Diversos.

3. Características técnicas necessárias para as estações terrenas aeronáuticas:

a) Características convenientes das antenas de emissão e de recepção: ganho, largura do feixe, localização, etc;
b) Potência aparente radiada mínima;
c) Preparação e utilização de estações terrenas terminais a preço módico;
d) Necessidade de um sistema de chamada selectiva (SELCAL);
e) Diversos.

---

(1) A listas de factores que se segue não tem a pretensão de ser exaustiva. Não tem também por finalidade restringir o exame de qualquer outro aspecto da utilização do serviço móvel aeronáutico (R) por satélite.

4. Modo de funcionamento e localização das estações terrenas aeronáuticas:

a) Modo de funcionamento: quando a estação de satélite dispõe de múltiplas frequências, é ou não necessário continuar a aplicar o método actual, que consiste em assegurar a separação das linhas aéreas utilizando frequências distintas, quer dizer:

— Pôr à disposição de todas as estações terrenas todas as frequências do serviço (R) utilizadas pelo satélite; ou
— Repartir a carga do tráfego entre as frequências disponíveis, sendo limitada a utilização de cada uma delas a uma região geográfica determinada; ou ainda
— Prever qualquer outro arranjo;

b) Se for caso disso, estabelecimento de uma lista (por ordem de frequências) mencionando as estações terrenas que devem utilizar uma frequência determinada do satélite;
c) Diversos.

5. Disposições que permitem o escoamento do tráfego aeronáutico entre pontos fixos:

a) Características técnicas relativas às instalações terminais;
b) Características técnicas relativas ao material instalado a bordo do satélite;
c) Características do satélite que permitam às instalações terminais terem independentemente acesso aos retransmissores estabelecidos por meio desse satélite (acesso múltiplo ou aleatório);
d) Faixas de frequências a utilizar;
e) Afastamento necessário entre as frequências de emissão e de recepção do satélite;
f) Preparação e utilização de instalações terminais de preço módico;
g) Organismos que deveriam fornecer, possuir ou explorar satélites ou instalações terminais; medida em que convém encaminhar as comunicações entre pontos fixos do serviço aeronáutico;
h) Diversos.

6. Estimativa do custo de um sistema de satélites compreendendo o material em terra, o material a bordo das aeronaves e o material a bordo do ou dos satélites.

7. Questões de exploração relativas a um sistema de satélites, incluindo o material indicado no § 6 acima, em especial:

a) O quadro geral em que o sistema tem de funcionar;
b) O processo evolutivo de adopção do sistema.

RECOMENDAÇÃO N.º 406

Relativa à revisão do Plano de adjudicação das frequências para o serviço móvel aeronáutico (OR) (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que os planos de adjudicação das frequências para o serviço móvel aeronáutico estabelecidos pela Conferência Internacional Administrativa das Radiocomunicações Aeronáuticas (CIARA) (Genebra, 1949) e adoptadas pela Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1951), foram adoptadas em grande medida pela Conferência Administrativa das Radiocomunicações (Genebra, 1959) e incluídos no Regulamento das Radiocomunicações;
b) Que a Conferência Administrativa Extraordinária das Radiocomunicações encarregada da revisão do plano de adjudicação para o serviço móvel aeronáutico (R) (Genebra, 1966) decidiu incluir esse plano como apêndice 27;
c) Que a Conferência Administrativa Extraordinária das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978) adoptou princípios técnicos para o estabelecimento do plano de adjudicação de frequências para o serviço móvel aeronáutico (R), entre os quais, designadamente, o emprego do espaçamento entre frequências portadoras de 3 kHz para uma utilização de classes de emissão e de potência determinadas que podem ser retomadas directamente para o estabelecimento do plano de adjudicação do serviço móvel aeronáutico (OR);
d) Que desde a Conferência Administrativa Radiocomunicações (Genebra, 1959) não houve qualquer revisão do plano de adjudicação do serviço móvel aeronáutico (OR);
e) Que desde 1959 numerosos países se tornaram Membros da União;

---

(1) Substitui a Resolução n.º 13 da Conferência Administrativa das Radiocomunicações (Genebra, 1959) e a Recomendação Aer2-8 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

f) Que a presente Conferência adoptou a Resolução n.º 403, relativa à utilização das frequências de 3023 kHz e 5680 kHz, comuns aos serviços móveis aeronáuticos (R) e (OR);

g) Que a Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973) prevê, no n.º 44 do artigo 7, que uma conferência administrativa mundial das radiocomunicações possa proceder à revisão parcial do Regulamento das Radiocomunicações:

emite o parecer

de que o plano do serviço móvel aeronáutico (OR), tal como figura no apêndice 26 do Regulamento das Radiocomunicações, deve ser objecto de um novo exame e de que importa que as administrações procedam com urgência ao estudo das necessidades relativamente a comunicações das suas ligações aeronáuticas, tanto nacionais como internacionais, a fim de determinarem em que momento será necessário empreender esse novo exame nas condições mais favoráveis aos interesses aeronáuticos;

recomenda

que o conselho de administração convoque uma conferência administrativa mundial das radiocomunicações encarregada de proceder a um novo exame do apêndice 26 e das disposições correspondentes do Regulamento das Radiocomunicações.

RECOMENDAÇÃO N.º 407

Relativa ao n.º 27/123 do apêndice 27 Aer2 (subdivisão da zona 5B (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) As discussões havidas acerca da proposta de modificação do n.º 27123 do apêndice 27 Aer2;

b) O facto de que as administrações interessadas concordaram em prosseguir entre elas as consultas relativas à divisão da zona 5B:

recomenda

1. Que as administrações interessadas procedam a essas consultas a fim de se chegar a uma solução satisfatória;

2. Que as administrações interessadas apresentem os resultados das suas consultas à próxima conferência administrativa mundial das radiocomunicações competente, a fim de que esta chegue a uma conclusão definitiva ao n.º 27/123.

RECOMENDAÇÃO N.º 500

Relativa à elaboração da documentação técnica necessária para a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão em Ondas Decamétricas

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

que, se os textos da CCIR fornecem já um volume importante de documentação técnica sobre a radiodifusão em ondas decamétricas, há todavia assuntos que necessitam de estudos complementares e que, em certos casos, a documentação disponível deve ser adaptada com vista à sua utilização para fins de planificação;

notando, em especial,

a) Que a CCIR recomendou um método de avaliação do campo e do desenvolvimento de transmissão na faixa 7 (ondas decamétricas) fundado nas informações disponíveis mais eficazes, e que ela empreendeu a elaboração de um novo método informático que engloba os elementos especiais considerados necessários para melhorar a precisão dessas avaliações nas distâncias longas e médias, bem como nas regiões equatoriais e nas regiões de altitude elevada;

b) Que se possuem poucas informações sobre as previsões de propagação em numerosas regiões equatoriais;

---

(1) Substitui a Recomendação Aer2-7 da Conferência Administrativa Mundial das Radiocomunicações do Serviço Móvel Aeronáutico (R) (Genebra, 1978).

c) Que o emprego de antenas direccionais é indispensável para uma utilização eficaz do espectro na faixa 7 (ondas decamétricas) e que as radiações em direcções diferentes da direcção desejada podem causar interferências:

solicita à CCIR

1. Que conclua os seus trabalhos relativos ao estabelecimento de um método melhorado de previsões por ordenador (parecer n.º 533), tendo em conta especialmente trajectos transequatoriais de médio e grande comprimento e regiões situadas em latitudes elevadas;

2. Que adopte o método aplicado actualmente nas previsões de propagação de modo que seja melhor adaptado à planificação do serviço de radiodifusão e que recomende os valores dos índices de actividade solar;

3. Que emita, quando ainda os não houver, pareceres relativos às relações de protecção, inclusive nos casos em que o sinal desejado é de um tipo diferente aos valores apropriados de espaçamento dos canais e ao valor mínimo da relação sinal/ruído para uma recepção satisfatória;

4. Que tome as medidas necessárias para que o manual de diagramas de antenas da CCIR inclua todos os principais tipos de antenas de uso corrente;

5. Que prepare dados sobre os aperfeiçoamentos práticos das antenas direccionais e os apresente sob forma que convenha à planificação;

convida as administrações

a participarem activamente nesses estudos e a fornecerem à CCIR as informações de que disponham sobre as questões acima indicadas e especialmente sobre os valores de campo observados na faixa 7 (ondas decamétricas), com vista a uma comparação com os valores previstos.

RECOMENDAÇÃO N.º 501

Relativa ao estudo da introdução da técnica da faixa lateral única nas faixas de ondas decamétricas atribuídas ao serviço de radiodifusão, para a preparação da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão em Ondas Decamétricas.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que o emprego da faixa lateral única permite uma utilização mais eficaz do espectro;

b) Que a introdução dessa técnica para fins de radiodifusão em ondas decamétricas apresenta problemas de ordem técnica e económica:

solicita à CCIR

que apresse os estudos relativos à introdução da técnica da faixa lateral única no serviço de radiodifusão em ondas decamétricas e às especificações de um sistema apropriado de faixa lateral única, prestando atenção especial aos problemas económicos respeitantes aos emissores e aos receptores;

convida as administrações

a fornecerem à CCIR informações sobre este assunto.

RECOMENDAÇÃO N.º 502

Relativa às especificações dos receptores de televisão de preço módico

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que se está a tomar consciência cada vez maior das possibilidades oferecidas pela televisão como instrumento de desenvolvimento nacional;

b) Que foi demonstrado que a recepção directa de emissões de televisão a partir de satélites é realizável no plano técnico e interessante sob o ponto de vista económico;

c) Que, dentro dos recursos limitados de que dispõem, numerosos países em desenvolvimento poderiam desejar explorar ao máximo as vantagens da televisão;

d) Que a existência de um receptor de televisão eficaz e de preço módico constituiria um estimulante poderoso para a introdução e o desenvolvimento de serviços de radiodifusão televisiva nos países em desenvolvimento;

e) Que se pode prever que haverá necessidade de receptores de televisão monocromática e a cores para receber as emissões provenientes de estações de Terra e de satélites;
f) Que a CCIR já empreendeu o estudo de especificações para receptores de televisão monocromática de preço módico, para uso doméstico e para uso comunitário, do mesmo modo que o estudo das características de um sistema de recepção para o serviço de radiodifusão (televisão) por satélite;
g) Que um acordo geral sobre a qualidade de funcionamento de receptores de televisão apropriados ajudaria consideravelmente os fabricantes desses receptores a produzirem aparelhos do tipo pretendido, de acordo com normas de qualidade adequadas, e isso por um custo tão baixo quanto possível;
h) Que é necessário ter em conta, na concepção e produção dos receptores de televisão, os progressos rápidos da técnica, assim como a obsolência:

convida a CCIR

1. A estabelecer especificações de qualidade de funcionamento para um ou vários tipos de receptores de televisão de preço módico, em conformidade com a alínea *e*) acima e que convenham à produção em série;
2. A colaborar, se necessário, com outros organismos internacionais que trabalhem no mesmo domínio, a fim de ultimarem no mais curto prazo possível especificações para esses receptores de preço módico;

solicita ao secretário-geral

que comunique ao Secretário-Geral das Nações Unidas, especialmente para conhecimento do director da Organização das Nações Unidas para o Desenvolvimento Industrial, os resultados desses trabalhos, acompanhados de sugestões relativamente às medidas a tomar, e que comunique ao director-geral da UNESCO para informação.

RECOMENDAÇÃO N.º 503

Relativa à radiodifusão em ondas decamétricas

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) A saturação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão;
b) A importância das interferências na via adjacente;

notando

que é possível melhorar esta situação aplicando os pareceres pertinentes da CCIR;

recomenda às administrações

1. Que dispensem atenção especial às disposições relativas ao «espectro fora de faixa» contidas no parecer n.º 328-4 da CCIR;
2. Que encoragem, em toda a medida do possível, os construtores a ultimarem e a constituírem receptores de radiodifusão conformes com as disposições do parecer n.º 332-4 da CCIR, relativo à selectividade dos receptores;

convida as administrações

a tirarem partido, tanto quanto seja praticamente possível, do funcionamento sincronizado dos emissores, tendo em conta o parecer n.º 205-1 da CCIR;

convida a CCIR

a efectuar outros estudos relativos aos pareceres mencionados acima, tendo em conta as necessidades da radiodifusão em ondas decamétricas, com vista a actualizar esses três pareceres sempre que seja necessário.

RECOMENDAÇÃO N.º 504

Relativa à preparação de um plano de radiodifusão na faixa de 1605-1705 kHz na Região 2

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a faixa de 1605-1705 kHz foi atribuída pela presente Conferência ao serviço de radiodifusão na Região 2;

b) Que, em conformidade com o n.º **480**, a utilização desta faixa pelo serviço de radiodifusão está sujeita à elaboração de um plano de radiodifusão por uma conferência administrativa regional das radiocomunicações;

c) Que o quadro de atribuição das faixas de frequências prevê, além disso, que, na Região 2, a faixa de 1605-1625 kHz seja atribuída em exclusivo ao serviço de radiodifusão e que a faixa de 1625-1705 kHz seja atribuída ao serviço de radiodifusão em partilha com outros serviços;

tendo em conta

as disposições do n.º **346** do Regulamento das Radiocomunicações:

recomenda

1. Que seja convocada uma conferência administrativa regional das radiocomunicações com vista a estabelecer um plano para o serviço de radiodifusão na faixa de 1605-1705 kHz na Região 2;

2. Que essa conferência seja convocada o mais tardar para 1985;

3. Que a data exacta de entrada em vigor do plano seja fixada quando da referida conferência administrativa regional das radiocomunicações. Todavia, a utilização destas faixas pelo serviço de radiodifusão não deveria começar antes de 1 de Julho de 1987 para as frequências compreendidas entre 1625 e 1665 kHz e antes de 1 de Julho de 1990 para as frequências compreendidas entre 1665 e 1705 kHz;

convida

1. O conselho de administração a tomar as medidas necessárias para a convocação de uma conferência administrativa das radiocomunicações para a Região 2 encarregada de planificar a utilização da faixa de 1605-1705 kHz pelo serviço de radiodifusão;

2. A CCIR a efectuar os estudos técnicos necessários para a convocação de uma conferência de radiodifusão para a Região 2, tendo em conta as atribuições feitas a outros serviços nas Regiões 1 e 3 e a necessidade de estabelecer critérios de partilha;

encoraja as administrações da Região 2

a favorecerem o desenvolvimento e a produção em quantidade suficiente de receptores que convenham para a faixa de radiodifusão estendida à frequência de 1705 kHz.

RECOMENDAÇÃO N.º 505

Relativa a estudos de propagação na faixa de 12 GHz para o serviço de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que os critérios técnicos adoptados quando da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977), encarregada de estabelecer um plano de consignações para o serviço de radiodifusão por satélite nas Regiões 1 e 3, compreendiam uma margem máxima de 2 dB, com um ângulo de elevação de 45°, para a atenuação pelas precipitações;

b) Que certos estudos inclinaram que a margem necessária na zona tropical poderia ser superior a 2 dB;

c) Que a Reunião Especial Preparatória da CCIR (Genebra, 1978) reconheceu que, para a aplicação da técnica proposta no Relatório n.º 721 da CCIR, os dados disponíveis sobre as taxas de precipitação são de natureza a conduzir a uma subavaliação da atenuação que se produz nas regiões tropicais;

d) Que é igualmente necessário reunir uma quantidade de informações sobre diversos outros factores de propagação a tomar em conta para planificar o serviço de radiodifusão por satélite;

recomenda à CCIR

1. Que acelere o estudo dos efeitos da atenuação devida às precipitações nas regiões tropicais e que especifique, o mais rapidamente possível, os valores da atenuação compatíveis com um funcionamento satisfatório do serviço de radiodifusão por satélite;

2. Que prossiga o estudo dos efeitos da atenuação devida às precipitações, com pequenos ângulos de elevação, em todas as zonas hidrometeorológicas;

3. Que prossiga o estudo dos efeitos das tempestades de areia e de poeira;

---

(1) Substitui a Recomendação Sat-3 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

4. Que estude a relação existente entre as características de propagação durante 99 % do mês mais desfavorável e as da proppagação durante o ano;

5. Que estude, no caso das emissões de polarização circular, o nível da componente despolarizada em relação à componente polarizada;

solicita ao director da CCIR

que informe todas as administrações dos valores de atenuação devidos às precipitações que tenham sido especificados.

RECOMENDAÇÃO N.º 506

Relativa às harmónicas da frequência fundamental das estações de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a faixa de frequências de 23,6-24 GHz está atribuída ao serviço de radioastronomia a título primário;

b) Que a segunda harmónica da frequência fundamental das estações de radiodifusão por satélite funcionando na faixa de 11,8-12 GHz poderia perturbar consideravelmente as observações de radioastronomia na faixa de 23,6-24 GHz se não fossem tomadas medidas eficazes para reduzir o nível dessa harmónica;

atendendo

às disposições do n.º **306** do Regulamento das Radiocomunicações;

recomenda

que, ao determinarem as características das suas estações espaciais do serviço de radiodifusão por satélite, especialmente na faixa de 11,8-12 GHz, as administrações tomem todas as medidas necessárias para reduzir o nível da segunda harmónica abaixo dos valores indicados nos pareceres pertinentes da CCIR.

RECOMENDAÇÃO N.º 507

Relativa às radiações não essenciais no serviço de radiodifusão por satélite (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, devido ao nível elevado da sua potência, as estações espaciais do serviço de radiodifusão por satélite causarão provavelmente, devido a radiações não essenciais, interferências aos serviços assegurados nas faixas de frequências adjacentes ou em relação harmónica;

b) Que se deve ter em conta, quando da planificação do serviço de radiodifusão por satélite, a necessidade de reduzir a um nível aceitável a interferência causada:

Aos serviços assegurados nas faixas adjacentes que se encontram no limite inferior e no limite superior da faixa de 12 GHz atribuída ao serviço de radiodifusão;

Ao serviço de radioastronomia a que está atribuída a faixa de 23,6-24 GHz;

c) Que a CCIR prossegue o estudo deste problema de acordo com o programa de estudos pertinente;

convida a CCIR

a prosseguir com urgência o estudo das questões técnicas e de exploração apresentadas pelas radiações não essenciais das estações espaciais do serviço de radiodifusão por satélite.

---

(1) Substitui a Recomendação Sat-2 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

(2) Substitui a Recomendação Sat-6 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).

RECOMENDAÇÃO N.º 508

Relativa às antenas de emissão do serviço de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é necessário dispor de documentação abundante sobre as antenas de emissão para a planificação do serviço de radiodifusão por satélite;
b) Que a CCIR prossegue o estudo destes problemas de acordo com as questões e os programas de estudos pertinentes:

convida a CCIR

1. A prosseguir o estudo dos diagramas de referência para as componentes co-polar e contrapolar das antenas de emissão do serviço de radiodifusão por satélite, tanto para a recepção individual como para a recepção comunitária, e, em especial, o estudo dos meios que permitiam obter uma melhor supressão dos lóbulos laterais e das consequências económicas que daí advêm;
2. A prosseguir o estudo das características técnicas que permita obter uma precisão de orientação da antena de emissão tal que:

O afastamento do feixe de antena em relação à sua direcção de orientação nominal não exceda 0,1°;
O ângulo de rotação do feixe de emissão em volta do seu eixo não exceda + 2°.

RECOMENDAÇÃO N.º 600

Relativa à utilização da faixa de frequências de 9300-9500 MHz (2)(3)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

notando

a) Que existem duas classes principais de radiodetectores meteorológicos de aeronave que funcionam, respectivamente nas faixas de 5350-5460 MHz e 9300-9500 MHz;
b) Que existe um número considerável de radiodetectores de navio dos quais a maior parte funciona na faixa de 9300-9500 MHz;
c) Que existem igualmente na faixa 9300-9500 MHz radiodetectores em Terra do serviço de radionavegação marítima, do serviço de radionavegação aeronáutica e do serviço meteorológico;
d) Que a utilização da faixa de 5350-5460 MHz atribuída, a título primário, exclusivamente ao serviço de radionavegação aeronáutica é limitada aos dispositivos de radiodetecção aerotransportados;
e) Que os radiodetectores de navio partilham unicamente com os radiodetectores de terra a utilização das faixas de 2900-3100 MHz e 5470-5650 MHz atribuídas, a título primário, respectivamente, apenas ao serviço de radionavegação e ao serviço de radionavegação marítima;
f) Que se verificou ser necessário atribuir a faixa de 9300-9500 MHz, na base de igualdade de direitos, ao serviço de radionavegação aeronáutica e ao serviço de radionavegação marítima;
g) Que na faixa de 9300-9320 MHz a utilização de radiodetectores de navio deixou de ser autorizada, a fim de facilitar o desenvolvimento das balizas de radiodetectores de frequência fixa nessa faixa;
h) Que na faixa de 9320-9500 MHz a utilização de balizas de radiodetecção de frequência fixa do serviço de radionavegação marítima, em terra ou no mar, não é autorizada;

considerando

a) Que é da maior importância que nenhuma interferência prejudicial seja causada aos serviços de radionavegação que asseguram a salvaguarda da vida humana;
b) Que convém que as condições de funcionamento de um serviço de salvaguarda da vida humana sejam as mesmas em todo o Mundo;
c) Que, na falta de coordenação, o aumento da utilização da faixa de 9300-9500 MHz só pode aumentar a probabilidade de interferências prejudiciais entre o serviço de radionavegação aeronáutica e o serviço de radionavegação marítima;

recomenda

1. Que as administrações, a Organização da Aviação Civil Internacional (OACI) e a Organização Consultiva Intergovernamental da Navegação Marítima (OMCI) estudem esta questão logo que possam; e, especialmente,

---

(1) Substitui a Recomendação Sat-4 da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977).
(2) V. também a Resolução n.º 600.
(3) Substitui a Recomendação n.º 12 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

2. Que determinem se, e em que proporções, uma interferência reconhecida como tecnicamente possível entre os dois serviços se torna prejudicial em circunstâncias operacionais;

3. Que, se tal eventualidade se produzir, procurem a possibilidade de reduzir a interferência prejudicial por meios técnicos de exploração e de procedimento, admitindo que os novos equipamentos devem sempre corresponder às mais elevadas normas técnicas;

convida

as administrações, a Organização da Aviação Civil Internacional e a Organização Consultiva Intergovernamental da Navegação Marítima a comunicarem à União os resultados dos seus estudos, assim como as suas opiniões e as propostas que daí resultem.

RECOMENDAÇÃO N.º 601

Relativa às frequências a utilizar no serviço de radionavegação aeronáutica para um sistema destinado a evitar as colisões entre aeronaves (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que ainda não se ultimou um sistema eficaz para evitar as colisões de aeronaves e melhorar, assim, a segurança da navegação aeronáutica, tendo em conta especialmente a sua velocidade cada vez maior, mas que um tal sistema se impõe com urgência;

b) Que, se, uma vez ultimado, esse sistema exigisse o emprego de frequências radioeléctricas, deveria funcionar numa das faixas atribuídas ao serviço de radionavegação aeronáutica;

c) Que é impossível prever, na hora actual, se as faixas atribuídas ao serviço de radionavegação aeronáutica convirão para um tal sistema;

recomenda

que as administrações e a Organização da Aviação Civil Internacional (OACI) prestem atenção especial aos trabalhos de desenvolvimento de um sistema eficaz para evitar as colisões entre aeronaves, tendo em conta o facto de que, se as frequências radioeléctricas se revelarem necessárias e se as faixas atribuídas ao serviço de radionavegação aeronáutica não forem convenientes para esse sistema, haverá que estudar a questão numa base internacional.

RECOMENDAÇÃO N.º 602

Relativa aos radiofaróis marítimos

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que os radiofaróis marítimos são regidos na zona europeia marítima pelo Acordo Regional Relativo aos Radiofaróis Marítimos na Zona Europeia da Região 1, Paris, 1951, chamado daqui em diante «Acordo de Paris, 1951»;

b) Que o Acordo de Paris, 1951, se baseia largamente na disposição geográfica dos radiofaróis existentes antes de 1939 e na situação da navegação marítima nessa época;

c) Que, desde a conclusão do Acordo de Paris, 1951, a disposição geográfica e certas características dos radiofaróis marítimos foram modificadas por acordos bilaterais ou multilaterais, para ter em conta, em especial, as mudanças surgidas nos hábitos ou na regulamentação da navegação marítima na zona em questão;

d) Que o Acordo de Paris, 1951, se baseia essencialmente na utilização de receptores radiogoniométricos auditivos;

e) Que se assiste, de há alguns anos para cá, a um aumento importante do número de receptores radiogoniométricos, que só dependem da onda portadora dos radiofaróis e que, por outro lado, não utilizam a modulação para separar os radiofaróis que funcionam na mesma frequência;

f) Que é, portanto, desejável que, após o exame das características técnicas de funcionamento dos radiofaróis marítimos por uma conferência administrativa mundial das radiocomunicações competente, seja convocada uma conferência especializada na base do artigo 32 da Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973), a fim de proceder à revisão do Acordo de Paris, 1951;

---

(1) Substitui a Recomendação n.º 20 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

g) Que esse exame deveria incidir tanto sobre a extensão da zona abrangida pelo Acordo como sobre as características técnicas do alcance, o valor do campo nos limites de alcance, o espaçamento entre canais adjacentes, a percentagem de modulação ou qualquer outra disposição julgada necessária;

notando

A existência no capítulo VIII do Regulamento das Radiocomunicações (artigo 35, secção IV, parágrafo C «Radiofaróis marítimos») das disposições dos n.os **2860** a **2866**;

A existência no capítulo III (artigo 8.º, secção 1) do n.º **405**, que define a Zona Europeia Marítima:

recomenda

1. Que as administrações interessadas examinem a questão dos limites da zona abrangida pelo Acordo e apresentem propostas sobre este assunto à próxima conferência administrativa mundial das radiocomunicações competente;

2. Que todas as administrações e a CCIR se debrucem urgentemente sobre as características técnicas dos radiofaróis marítimos e apresentem as suas conclusões sobre o assunto à próxima conferência administrativa mundial das radiocomunicações competente;

convida o conselho de administração

a tomar as medidas necessárias para que as questões relativas às estações de radiofaróis marítimos que interessam aos serviços móveis sejam inscritas na agenda da próxima conferência administrativa mundial das radiocomunicações para os serviços móveis, de tal modo que esta última possa considerar uma modificação dos artigos pertinentes do Regulamento das Radiocomunicações;

pede ao secretário-geral

que comunique o texto desta recomendação à Organização Consultiva Intergovernamental da Navegação Marítima (OMCI) e à Associação Internacional de Sinalização Marítima (AISM).

RECOMENDAÇÃO N.º 603

Relativa às disposições técnicas relativas aos radiofaróis marítimos na Zona Africana (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a necessidade de facilitar o estabelecimento de novos radiofaróis marítimos na faixa de 283,5-315 kHz, especialmente nas localidades vizinhas das Zonas Europeia e Africana:

recomenda

que as administrações dos países da Zona Afreicana adoptem disposições análogas às do Acordo Regional Relativo aos Radiofaróis Marítimos na Zona Europeia da Região 1, Paris, 1951.

RECOMENDAÇÃO N.º 604

Relativa à utilização futura e às características das radiobalizas de localização de sinistros (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, segundo os termos do artigo 39 do Regulamento das Radiocomunicações, os sinais das radiobalizas de localização de sinistros têm por finalidade essencial facilitar a determinação da posição de náufragos durante as operações de busca e de salvamento;

b) Que a Resolução A.91 (IV) da Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) indica que as radiobalizas de localização de sinistros se destinam principalmente à aproximação por rádio, mas que podem também ser utilizadas para o alerta quando as circunstâncias se prestem a isso;

---

(1) Substitui a Recomendação n.º 21 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

(2) Substitui a Recomendação Mar2-12 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

c) Que, pela sua Resolução A.217 (VII), a OMCI recomenda às administrações que exijam que todos os navios estejam equipados, se for conveniente, com radiobalizas de localização de sinistros funcionando nas frequências radioeléctricas mais apropriadas;

d) Que a OMCI considera obrigatório actualmente o equipamento de todos os navios de passageiros e os navios de carga de tonelagem bruta superior ou igual a 300 t com radiobalizas de localização de sinistros;

considerando, em especial,

que a Resolução A.279 (VIII), a OMCI sublinhou a necessidade urgente de uniformizar as características das radiobalizas de localização de sinistros;

constatando

a) Que o Regulamento das Radiocomunicações existem, para as radiobalizas de localização de sinistros, disposições relativas às frequências de 2182 kHz, 121,5 MHz e 243 MHz;

b) Que a Conferência Mundial das Telecomunicações Espaciais (Genebra, 1971), no que respeita às radiobalizas de localização de sinistros, reservou a faixa de frequências de 406-406,1 MHz para o serviço móvel por satélite, unicamente para a utilização e o desenvolvimento de sistemas de radiobalizas de localização de sinistros de pequena potência usando técnicas espaciais;

c) Que a Resolução A.91 (IV) da OMCI recomenda que a frequência portadora de 2182 kHz seja utilizada como frequência de primeira escolha pelas radiobalizas de localização de sinistros;

d) Que as características técnicas das radiobalizas de sinistros que funcionam na frequência portadora de 2182 kHz estão especificadas no artigo 39 do Regulamento das Radiocomunicações e no seu apêndice 37, bem como no parecer n.º 439 da CCIR;

e) Que, nos termos da Resolução n.º 601, as radiobalizas de sinistros que funcionam nas frequências de 121,5 MHz devem estar em conformidade com os pareceres pertinentes da CCIR, assim como com as normas e práticas recomendadas pela Organização da Aviação Civil Internacional (OACI):

recomenda

1. Que, tendo em conta os assuntos de interesse comum que têm neste domínio, a OMCI e a OACI sejam convidadas a reexaminar, nos mais curtos prazos, os seus conceitos sobre as radiobalizas de localização de sinistros em relação com as operações de busca e salvamento da vida humana no mar;

2. Que, depois a OMCI e a OACI terem precisado os seus conceitos, seja pedido à CCIR que estude as questões técnicas e de exploração próprias das radiobalizas de localização de sinistros, inclusive as frequências preferidas, especialmente em relação com as necessidades fundamentais da aproximação por rádio e com as características técnicas dessas radiobalizas, tendo em conta a necessidade da sua uniformização.

RECOMENDAÇÃO N.º 605

Relativa às características técnicas e às frequências dos equipamentos de resposta a bordo dos navios (1)(2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que, a tonelagem e a velocidade dos navios de comércio aumentam em todo o Mundo;

b) Que, em cada ano, grande número de navios mercantes são vítimas de colisões que provocam perdas de vidas humanas e de bens e que essas colisões comportam elevados riscos para o meio ambiente natural;

c) Que importa estabelecer uma correlação entre os alvos radar e os navios que fazem emissões radiotelefónicas em ondas métricas;

d) Que estudos e ensaios mostraram que os equipamentos de resposta a bordo dos navios podem tornar mais visíveis e melhorar as imagens dos alvos radar relativamente às imagens radar normais;

e) Que os estudos em curso e os ensaios relativos aos equipamentos de resposta a bordo dos navios mostram que se pode esperar a curto prazo um desenvolvimento desses aparelhos, o que permitirá uma melhoria adequada das imagens radar e uma identificação dos alvos radar, e oferecerá eventualmente possibilidades de transmissão de dados;

f) Que pode ser necessário proteger esses equipamentos de resposta contra interferências;

g) Que convém que a escolha das características técnicas desses equipamentos de resposta seja coordenada com os outros utentes do espectro das frequências radioeléctricas cujas operações poderiam ser prejudicadas;

---

(1) Receptor-emissor que emite automaticamente um sinal quando recebe a interrogação apropriada.

(2) Substitui a Recomendação Mar2-14 da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

pede à CCIR

que, após consulta às organizações internacionais apropriadas, recomende a ordem de grandeza das frequências e das larguras de faixa necessárias para o efeito e que melhor convenham, assim como as características técnicas a que devem satisfazer tais dispositivos, tendo em atenção a compatibilidade electromagnética com os outros serviços a que a mesma faixa de frequências é atribuída;

convida

as administrações e a Organização Intergovernamental Consultiva da Navegação Marítima (OMCI) a continuar o estudo das vantagens que poderiam resultar, para a exploração, da utilização generalizada de equipamentos de resposta a bordo dos navios e a examinar se haveria vantagem em adoptar, com vista a pô-lo em serviço ulteriormente, um sistema aprovado no plano internacional;

recomenda

que enquanto aguardam desenvolvimento e avaliações mais avançadas de natureza técnica e de exploração, as administrações se preparem para tomar, quando da próxima conferência administrativa mundial das radiocomunicações competente, as medidas necessárias para a utilização de tais dispositivos.

RESOLUÇÃO N.º 620

Relativa ao serviço dos auxiliares da meteorologia na faixa de 27,5-28 MHz (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

recomenda

às administrações que consignaram frequências da faixa de 27,5-28 MHz às estações do serviço dos auxiliares de meterologia que tomem disposições para transferir essas consignações, logo que possível, para faixas mais elevadas atribuídas ao mesmo serviço;

convida a Organização Meteorológica Mundial

a estudar esta questão e a proceder, se necessário, à coordenação necessária entre as administrações.

RECOMENDAÇÃO N.º 700

Relativa à utilização e à partilha das faixas de frequências atribuídas às radiocomunicações espaciais (2)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

as Resoluções n.os 1721 (XVI), parte D, e 1802 (XVII), parte IV. 3, da Assembleia Geral das Nações Unidas, em cada uma das quais é designadamente mencionada a convicção dos Membro das Nações Unidas de que os sistemas de telecomunicações por satélites devem ser organizadas numa base mundial e de maneira tal que todos os países possam a eles ter acesso sem qualquer discriminação;

considerando, além disso

as consequências de ordem económica e social que traria para todas as nações a introdução de um sistema de telecomunicações mundial por satélite, como o mostrou um relatório destinado aos Membros e Membros associados da UNESCO em cumprimento de uma decisão tomada em Dezembro de 1962 pela 12.ª Sessão da Conferência Geral dessa instituição;

reconhecendo

que os Membros da União Internacional das Telecomunicações têm todos interesse em utilizar equitativa e racionalmente as faixas de frequências atribuídas às radiocomunicações espaciais e que têm, dessa maneira, o direito de as utilizar;

---

(1) Substitui a Recomendação n.º 33 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).
(2) Substitui a Recomendação Spa10 da Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1963).

recomenda aos Membros da União

que a utilização e a exploração das faixas de frequências atribuídas às radiocomunicações espaciais sejam sujeitas a acordos internacionais baseados em princípios de justiça e de equidade e de natureza a permitirem a utilização e a partilha dessa faixas no interesse mútuo de todas as nações.

RECOMENDAÇÃO N.º 701

Relativa à utilização da faixa de frequências de 1330-1400 MHz pelo serviço de radioastronomia

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as observações de radiações radioeléctricas de átomos de hidrogénio neutro na faixa de 1330-1400 MHz têm importância primordial para a compreensão de estrutura de galáxias longínquas e, por consequência, da evolução do universo;
b) Que o serviço de radioastronomia foi inscrito no quadro de atribuição das faixas de frequências na faixa de 1330-1400 MHz;
c) Que o serviço de radioastronomia se dedica à recepção de radiações electromagnéticas de nível extremamente fraco, de origem extraterrestre, e que deve ser protegido contra as radiações artificiais tanto quanto seja possível;
d) Que é limitada a possibilidade de o serviço de radioastronomia partilhar faixas de frequências com outros serviços;

recomenda

1. Que, ao preparar as suas propostas para a próxima conferência administrativa das radiocomunicações competente, as administrações estudem as disposições a tomar, na faixa de 1330-1400 MHz, para assegurar ao serviço de radioastronomia maior protecção contra outros serviço que produzam radiações;
2. Que, ao estabelecerem planos de consignações de frequência, as administrações tenham em conta que as observações de radioastronomia são efectuadas na faixa de 1330-1400 MHz.

RECOMENDAÇÃO N.º 702

Relativa à utilização das faixas de frequências de 1400-1727 MHz, 101-120 GHz e 197-220 GHz para pesquisa de emissões intencionais de origem extraterrestre

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que é particularmente importante para a humanidade determinar se existem civilizações extraterrestre;
b) Que é nas faixas de 1400-1727 MHz, 101-120 GHZ e 197-220 GHZ que é melhor a probabilidade de descobrir um sinal emitido por uma civilização extraterrestre, porque estas faixas contêm riscas do espectro com interesse fundamental em física e que estão ligadas aos fenómenos universais;
c) Que nas fixas mencionadas no considerando *b*) existe uma probabilidade de descobrir, com uma relação sinal-ruído máxima, uma radiação emitida por civilizações extraterrestre;
d) Que a busca de civilizações extraterrestres foi inscrita nas faixas de 1400-1727 MHz, 101-120 GHz e 197-220 GHz do quadro de atribuição das faixas de frequências;
e) Que as tentativas visando reconhecer sinais provenientes de civilizações extraterrestres supõem a recepção de radiações de nível extremamente fraco e que essa recepção deve, por conseguinte, ser protegida contra radiações artificiais, tanto quanto seja possível;
f) Que para a recepção de sinais emitidos por uma civilização extraterrestre há muito poucas possibilidades de partilhar faixas de frequências com serviços radioeléctricos activos;

recomenda

que ao elaborarem as suas propostas para a próxima conferência administrativa das radiocomunicações competente, as administrações estudem a oportunidade de tomar disposições que visem assegurar, nas faixas de 1400-1727 MHz, 101-120 GHZ e 197-220 GHz, um meio ambiente protegido apropriado para a recepção de radiações de origem extraterrestre;

convida

as organizações interessadas na busca de civilizações extraterrestres a tomarem em consideração os seguinte pontos:
1. As disposições pertinentes do Regulamento das Radiocomunicações;

2. A necessidade de manter uma estreita coordenação com todas as administrações nacionais relativamente à utilização das frequências;

3. A necessidade de escolher, para as instalações de recepção destinadas a essas observações, localizações tão afastadas quanto possível de fontes de interferência radioeléctrica;

4. Os relatórios e pareceres pertinentes da CCIR:

RECOMENDAÇÃO N.º 703

Relativa à necessidade de fazer cessar o funcionamento das estações dos serviços fixo e móvel nas faixas de frequências de 149,9-150,05 MHz e 399,9-400,05 MHz, atribuídas ao serviço de radionavegação por satélite (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as faixas de frequências de 149,9-150,05 MHZ e 399,9-400,05 MHz foram atribuídas em exclusivo, em todo o Mundo, ao serviço de radionavegação por satélite;

b) Que numerosas administrações têm necessidade de prazos prolongados para poderem assegurar, noutras faixas apropriadas, o funcionamento dos serviços fixo e móvel existentes;

c) Que é do interesse de todas as administrações que o serviço de radionavegação por satélite seja posto a funcionar a curto prazo, especialmente no que respeita à sua aplicação à navegação marítima;

d) Que as interferências causadas aos utentes do serviço de radionavegação por satélite poderiam fazer perigar a segurança da vida humana e de bens;

e) Que a CCIR estuda actualmente as possibilidades de partilha das faixas de frequências entre o serviço de radionavegação por satélite e os serviços de Terra, mas que não está ainda em condições de formular conclusões sobre o assunto;

recomenda

1. Que, na expectativa de uma conclusão positiva da CCIR relativamente à possibilidade de partilha entre as estações do serviço de radionavegação por satélite e os serviço fixo e móvel, as administrações tomem todas as medidas possíveis para proteger contra interferências prejudiciais o funcionamento das estações terrenas móveis que utilizem o serviço de radionavegação por satélite;

2. Que, à luz das disposições do parágrafo precedente, as administrações sejam convidadas a, logo que possível, porem termo ao funcionamento das estações dos serviços fixo e móvel nas faixas de 149,9-150,05 MHz e de 399,9-400,05 MHz, especialmente daquelas que estão situadas nas regiões costeiras.

RECOMENDAÇÃO N.º 704

Relativa à compatibilidade entre o serviço de radiodifusão na faixa de 100-108 MHz e o serviço de radionavegação aeronáutica na faixa de 108-117,975 MHz

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a radiodifusão em ondas métricas é cada vez mais utilizada com potências elevadas na faixa de 100-108 MHz;

b) Que a faixa de 108-117,975 MHz é utilizada mundialmente por sistemas de radionavegação aeronáutica aprovados no plano internacional;

c) Que a parte da faixa compreendida entre 108 e 11,975 MHz é utilizada pelos sistemas de aterragem por instrumentos (ILS) empregados pelas aeronaves para a aterragem automática;

d) Que a faixa compreendida entre 108 e 117,975 MHz é utilizada pelo sistema de radiofarol de alinhamento omnidireccional em ondas métricas (VOR);

e) Que, em certas partes das Regiões 2 e 3, se têm produzido interferências entre o serviço de radiodifusão e o serviço de radionavegação aeronáutica;

consciente

a) De que os produtos de intermodulação provenientes de combinações de emissões de radiodifusão podem cair na faixa de 108-117,975 MHz, atribuída ao serviço de radionavegação aeronáutica;

b) De que se podem formar produtos de intermodulação no receptor de radionavegação;

---

(1) Substitui a Recomendação Spa-8 da Conferência Administrativa Extraordinária das Radiocomunicações (Genebra, 1963).

c) De que emissões de radiodifusão de grande potência podem provocar o bloqueamento dos receptores de radionavegação;
d) De que as emissões do serviço de radionavegação aeronáutica podem causar interferências ao serviço de radiodifusão:

pede à CCIR

1. Que estude com urgência o problema das interferências entre os dois serviços;
2. Que determine os critérios apropriados de protecção dos dois serviços;

convida

a Organização de Aviação Civil Internacional (OACI) e as outras organizações internacionais apropriadas a estudar com urgência o problema e a comunicar os resultados à CCIR;

recomenda

que, ao consignarem frequências ao serviço de radiodifusão na faixa de 100-108 MHz e ao serviço de radionavegação aeronáutica na faixa de 108-117,975 MHz, as administrações tenham em atenção os riscos de interferência possíveis e apliquem medidas de protecção apropriadas.

RECOMENDAÇÃO N.º 705

Relativa aos critérios a aplicar à partilha das frequências entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra na faixa de 620-790 Mhz (1).

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que frequências da faixa de 620-790 MHz podem ser consignadas a estações de televisão com modulação de frequência do serviço de radiodifusão por satélite;
b) Que é necessário fixar um limite da densidade de fluxo de potência a fim de proteger eficazmente o serviço de radiodifusão de Terra;

notando

a) Que nas suas conclusões a reunião especial mista da CCIR (Genebra, 1971) indicou os limites seguintes da densidade de fluxo de potência, a fim de proteger o serviço de radiodifusão de Terra:

$$\begin{cases} 121 \text{ dB (W/m}^2\text{) para } \delta \leq 20° \\ 121 + 0{,}4(\delta - 20) \text{ dB (W/m}^2\text{) para } 20° < \delta \leq 60° \\ 105 \text{ dB (W/m}^2\text{) para } 60° < \delta \leq 90° \end{cases}$$

sendo δ o ângulo de chegada acima do plano horizontal (em graus);
b) Que ensaios suplementares efectuados por uma administração depois da reunião especial mista da CCIR mostraram que podem ser necessário adoptar os seguintes valores, mais prudentes, para os limites de densidade de fluxo de potência:

$$\begin{cases} 130 \text{ dB (W/m}^2\text{) para } \delta \leq 20° \\ 130 + 0{,}4(\delta - 20) \text{ dB (W/m}^2\text{) para } 20° < \delta \leq 60° \\ 114 \text{ dB (W/m}^2\text{) para } 60° < \delta \leq 90° \end{cases}$$

sendo δ o ângulo de chegada acima do plano horizontal (em graus);
c) Que o Relatório n.º 631-1 da CCIR dá o resultado dos estudos efectuados até 1978;
d) Que é necessário colher informações suplementares sobre a relação de protecção contra a interferência causada por um sinal de televisão com modulação de frequência a um sinal de televisão de faixa lateral residual, tanto para os sistemas de 625 linhas como para os de 525 linhas;
e) Que com os sistemas de recepção de televisão de Terra utilizando as técnicas actuais, o campo mínimo a proteger pode em certos casos ser inferior aos valores recomendados no parecer n.º 417-2 da CCIR;
f) Que se pode ser levado a ter em conta as reflexões no solo;
g) Que a técnica de dispersão da energia pode reduzir a relação de protecção necessária e que convém utilizá-la se ela se revelar eficaz.

---

(1) Substitui a Recomendação Spa2-10 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

recomenda

1. Que devido à falta de informações suficientes sobre as experiências efectuadas nas condições de exploração, e a fim de proporcionar critérios de partilha a título provisório, a densidade de fluxo de potência máxima produzida à superfície da Terra na zona de serviço de uma estação de radiodifusão de Terra (v. o parecer n.º 417-2 da CCIR) por uma estação espacial do serviço de radiodifusão por satélite não exceda os valores seguintes na faixa de 620-790 MHz:

$$121 \text{ dB } (W/m^2) \text{ para } \delta \leq 20°$$
$$129 + 0{,}4(\delta - 20) \text{ dB } (W/m^2) \text{ para } 20° < \delta \leq 60°$$
$$105 \text{ dB } (W/m^2) \text{ para } 60° < \delta \leq 90°$$

sendo δ o ângulo de chegada acima do plano horizontal (em graus);

2. Que este limites só sejam excedidos sobre o território de um país se houver acordo da sua administração;

3. Que se evite emitir portadoras não moduladas;

4. Que a CCIR estude com urgência os critérios a aplicar para a partilha das frequências entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra na faixa de 620-790 Mhz e que redija um parecer sobre os valores da densidade de fluxo de potência a utilizar para substituir os limites provisórios indicados acima;

5. Que, nos seus estudos, a CCIR tome especialmente em consideração os seguintes factores:

5.1. Relação de protecção necessária contra a interferência causada por um sinal de televisão com modulação de frequência a uma sinal de televisão de faixa lateral residual, tanto para os sistemas de 525 linhas como para os de 625 linhas;

5.2. Campo mínimo a proteger do serviço de televisão de Terra, tendo em conta o estado da técnica;

5.3. Efeito das reflexões no solo;

5.4. Número dos satélites de radiodifusão visíveis de um receptor de radiodifusão de Terra;

5.5. Efeito da discriminação de polarização;

5.6. Efeito da directividade da antena;

6. Que, nos seus estudos, a CCIR examine as vantagens da técnica de dispersão da energia no serviço de radiodifusão por satélite (televisão).

RECOMENDAÇÃO N.º 706

Relativa à partilha das frequências entre, por um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, por outro lado, os serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz.

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que foram efectuadas em diversas faixas de frequências atribuídas aos serviços de exploração da Terra por satélite e de pesquisa espacial para o funcionamento de detectores passivos a bordo de engenhos espaciais;

b) Que as atribuições efectuadas na faixa de 18,6-18,8 GHz são-no em partilha com os serviços fixo, móvel, excepto móvel aeronáutico, e por fixo por satélite;

c) Que a aplicação dos critérios de partilha contidos no Relatório n.º 694 da CCIR poderia limitar o desenvolvimento dos serviços fixo, móvel, excepto móvel aeronáutico, e fixo, por satélite;

convida a CCIR

1. A fazer reexaminar o conteúdo do Relatório n.º 694 por todas as comissões de estudos relacionados com ele (especialmente as comissões de estudos 4 e 9);

2. A prosseguir os estudos que já produziram o Relatório n.º 609-1, tendo em conta as necessidades dos serviços de exploração da Terra por satélite (detectores passivos) e de pesquisa espacial (detectores passivos);

3. A estudar as restrições mínimas que poderiam ser aplicadas aos serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite (espaço para Terra) para assegurar um funcionamento satisfatório dos detectores passivos;

4. A estudar as restrições máximas que podem ser toleradas pelos serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite sem comprometer o funcionamento de todos os serviços susceptíveis de utilizar esta faixa de frequências.

RECOMENDAÇÃO N.º 707

Relativa à utilização da faixa de frequências de 32-32 GHz, partilhada entre o serviço intersatélites e o serviços de radionavegação

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a faixa de 32-33 GHz é atribuída ao serviço intersatélites e ao serviço de radionavegação ;
b) Que o serviço de radionavegação apresenta aspectos de segurança:
c) Que a nota 893 foi incluída no artigo 8;

recomenda

que, com urgência, sejam empreendidos estudos relativamente aos critérios a aplicar para a partilha da faixa de frequências 32-33 GHz entre os dois serviços pré-citados;

pede à CCIR

que efectue esses estudos;

recomenda, além disso,

que uma futura conferência administrativa mundial das radiocomunicações competente reveja os pareceres da CCIR, com o objectivo de incluir os critérios de partilha acima mencionados no artigo 28.

RECOMENDAÇÃO N.º 708

Relativa às faixas de frequências partilhadas pelos serviços de radiocomunicação espacial entre si, bem como entre os serviços de radiocomunicação espacial e os serviços de radiocomunicação de Terra (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) O valor, para a Conferência, da documentação contida no Relatório Espacial Preparatória da CCIR (Genebra, 1978);
b) O facto de que a XIV Assembleia Plenária da CCIR aprovou um certo número de questões e de programas de estudos de acordo com os quais essa Comissão deve ainda estudar problemas muito diversos relativos às radiocomunicações espaciais;

considerando, entretanto,

a) Que certos pareceres da CCIR, de que a seguir se indica a lista, necessitam da continuação dos trabalhos e dos estudos:

Parecer n.º 355-2: «Partilha de frequências entre sistemas do serviço fixo por satélite e dos serviços de radiocomunicação de Terra que funcionam na mesma faixa de frequências»;
Parecer n.º 465-1: «Diagrama de radiação de referência de estação terrena, a utilizar para a coordenação e para a avaliação das interferências na faixa das frequências compreendidas entre 2 e 10 GHz aproximadamente»;
Parecer n.º 466-2: «Nível máximo admissível da interferência, numa via telefónica de uma rede de satélite geostacionário do serviço fixo por satélite utilizando a modulação de frequência com multiplexagem em frequência, produzida por outras redes deste serviço»;

a) Que as discussões da presente Conferência, especialmente as relativas aos artigos 27, 28 e 29 e aos outros artigos pertinentes so Regulamento das Radiocomunicações, mostraram que há necessidade de informações suplementares para responder às questões e programas de estudos que a seguir se indicam e que estão a ser examinados pela CCIR:

Questão n.º 1-2/4: «Antenas para os sistemas do serviço fixo por satélite»;
Questão n.º 2-3/4: «Características técnicas dos sistemas do serviço fixo por satélite»;
Programa de estudos n.º 2A-3/4: «Possibilidade de partilha das faixas de frequências entre os sistemas do serviço fixo por satélite e os serviço de radiocomunicação de Terra»;
Programas de estudos n.º 2J-2/4: «Factores técnicos de que depende a eficácia de utilização da órbitra dos satélites geostacionários por redes de satélites de radiocomunicação partilhando faixas de frequências atribuídas ao serviço fixo por satélite»;

c) Que seria útil conhecer os valores numéricos precisos da densidade de fluxo de potência produzida pelas estações espaciais do serviço de radiodifusão por satélite que permitissem estabelecer uma distinção entre a «recepção individual» e a recepção comunitária» no serviço de radiodifusão por satélite;

---

(1) Substitui a Recomendação Spa2-15 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

d) Que a partilha das frequências entre o serviço de radionavegação e o serviço fixo por satélite (Terra para espaço) foi adoptada na faixa de frequências de 14-14,3 GHz;

recomenda

1. Às administrações, às explorações privadas reconhecidas e a outros participantes nos trabalhos da CCIR que dêem prioridade à apresentação de contribuições para o estudo das questões pré-citadas, de modo que possam ser preparadas propostas de pareceres, quando das reuniões das comissões de estudos competentes, para fins de exame pela Assembleia Plenária da CCIR;

2. À CCIR que estude ou, se for o caso, que continue a estudar;

2.1. Os diagramas de referência de antenas de estação terrena que possam convir à fixação de normas de funcionamento mínimas, com vista a recomendar diagramas para esse fim para melhorar a utilização das faixas de frequências partilhadas entre o serviço fixo por satélite e os serviços de radiocomunicação de Terra, bem como, entre serviços de radiocomunicação espacial, e melhorar a utilização da órbita dos satélites geostacionários;

2.2. Os diagramas de referência de antenas de satélite que possam convir à fixação de normas de funcionamento mínimas, especialmente fora do feixe de radiação principal, para melhorar a utilização da órbita dos satélites geostacionários e para aumentar as possibilidades de reutilização das frequências;

2.3. Os diagramas de referência de antenas de polarização cruzadas que possam convir à fixação de normas de funcionamento mínimas e, a este respeito, estudar igualmente;

2.3.1. As partes de espectro das frequências em que seria mais vantajoso utilizar polarizações ortogonais lineares ou polarizações ortogonais circulares;

2.3.2. A oportunidade, tendo em conta factores técnicos e considerações relativas à utilização da órbita de utilizar polarizações ortogonais num mesmo satélite comparativamente com uma tal utilização em dois satélites;

2.4. Os limites a impor às radiações não essenciais, assim como às tolerâncias de frequência nos serviços de radiocomunicação espacial e nos serviços de radiocomunicação de Terra, na medida em que esses limites e essas tolerâncias possam afectar a partilha as faixas de frequências;

2.5. Os critérios de interferência admissível para os diversos serviços de radiocomunicação espacial e de radiocomunicação de Terra que partilham as faixas de frequências atribuídas pela presente Conferência, a fim de permitir a determinação:

2.5.1. Da distância de coordenação e da probabilidade de interferência entre estações aquém dessa distância;

2.5.2. Dos limites a impor à densidade de fluxo de potência produzida à superfície da Terra pelas estações espaciais;

2.6. O nível máximo de interferência admissível que pode ser causada a uma ligação por satélite geostacionária por qualquer outra rede de satélite geostacionário e pelo conjunto de todas as outras redes de satélite geostacionário, espacialmente no caso:

2.6.1. De sinais telefónicos modulados em frequência;

2.6.2. De sinais de televisão modulados em frequência;

2.6.3. De sinais de modulação digital;

assim como a forma mais apropriada como convém especificar essas interferência admissíveis neste e noutros casos;

2.7. Os critérios de interferência a aplicar à partilha de frequências entre redes de satélite não geostacionário e redes de satélite geostacionário;

2.8. A possibilidade de estabelecer um critério técnico para expressar a eficácia da utilização da órbita dos satélites geostacionários;

2.9. A possibilidade de melhorar e de simplificar o método que permite determinar a zona de coordenação, tal como está descrito no apêndice 28 do Regulamento das Radiocomunicações;

2.10. As condições de partilha das frequências nas faixas atribuídas pela presente Conferência ao serviço de radiodifusão por satélite, com vista a emitir logo que possível pareceres apropriados que permitam às administrações e à IFRB dispor de dados técnicos necessários para aplicar os procedimentos de exame, especialmente os enunciados nos artigos 11, 12 e 13 do Regulamento das Radiocomunicações e na Resolução n.º 33;

2.11. A determinação dos níveis de densidade de fluxo de potência necessários para a recepção individual e para a recepção comunitária no serviço de radiodifusão por satélite, com vista a especificar valores numéricos que permitam estabelecer uma distinção entre esses tipos de recepção;

2.12. Os critérios de partilha das frequências entre o serviço de radionavegação e o serviço fixo por satélite (Terra para espaço) na faixa de frequências de 14-14,3 GHz.

RECOMENDAÇÃO N.º 709

Relativa à partilha das faixas de frequências entre o serviço móvel aeronáutico e o serviço intersatélites

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as faixas de 54,25-58,2 GHz, 59-64 GHz, 116-134 Ghz, 170-182 GHz e 185-190 GHz estão atribuídas ao serviço intersatélites e ao serviço móvel;

b) Que as faixas acima mencionadas estão situadas em partes do espectro das frequências radioeléctricas vizinhas dos picos de absorção atmosférica;

c) Que, entretanto, nem sequer a absorção atmosférica é por si mesma suficiente para impedir que sejam causadas interferências prejudiciais às estações do serviço intersatélites por estações que funcionam a bordo de aeronaves voando a grande altitude;

d) Que por essa razão as estações de aeronave do serviço móvel aeronáutico podem funcionar sob reserva de não causarem interferência prejudicial ao serviço intersatélites [v. o n.º **909**, cujo texto é reproduzido na nota (1)];

recomenda

que se proceda urgentemente a estudos dos critérios de partilha aplicáveis a esses dois serviços nas faixas de frequências acima mencionadas;

pede à CCIR

que efectue esses estudos;

recomenda, além disso,

que uma futura conferência administrativa mundial das radiocomunicações competente examine novamente as atribuições nessas faixas, tendo em conta os resultados do trabalho da CCIR.

RECOMENDAÇÃO N.º 710

Relativa à utilização de radiodetectores aerotransportados nas faixas de frequências partilhadas pelo serviço intersatélites e o serviço de radiolocalização

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que as faixas de 59-64 GHz e 126-134 GHz estão atribuídas ao serviço intersatélites e ao serviço de radiolocalização;

b) Que estas faixas estão situadas nas partes do espectro das frequências radioeléctricas vizinhas dos picos de absorção atmosférica;

c) Que, entretanto, a absorção atmosférica por si mesma nem sempre é suficiente para impedir que sejam causadas interferências prejudiciais a estações do serviço intersatélite por radiodetectores que funcionam a bordo de aeronaves voando a grande altitude;

d) Que por esta razão os radiodetectores aerotransportados do serviço de radiolocalização podem funcionar com a condição de não causarem interferência prejudicial ao serviço intersatélites [v. o n.º **910**, cujo texto vem reproduzido na nota (2)];

recomenda

que se proceda com urgência a estudos sobre os critérios de partilha aplicáveis a esses dois serviços nas faixas de frequências acima mencionadas;

solicita à CCIR

que se efectue esses estudos;

recomenda, além disso;

que uma futura administrativa mundial das radiocomunicações competente examine de novo as atribuições nestas faixas, tendo em conta os resultados dos trabalhos da CCIR.

RECOMENDAÇÃO N.º 711

Relativa à coordenação das estações terrenas (3)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

---

(1) N.º **909**: nas faixas de 54,25-58,2 GHz, 116-134 GHz, 170-182 GHz, 185-190 GHz as estações do serviço móvel aeronáutico podem funcionar sob reserva de não causarem interferência prejudicial ao serviço intersatélites (v. o n.º **435**).

(2) N.º **910**: nas faixas de 59-64 GHz e 126-134 GHz os radiodetectores aerotransportados do serviço de radiolocalização podem funcionar desde que não causem interferência prejudicial ao serviço intersatélites (v. o n.º **435**).

(3) Substitui a Recomendação Spa2-9 da Conferência Administrativa Mundial das Telecomunicações Espaciais (Genebra, 1971).

considerando

a) Que, nos termos do artigo 11 do Regulamento das Radiocomunicações, as consignações de frequência às estações terrenas em certas faixas partilhadas, com igualdade de direitos entre serviços de radiocomunicação de Terra e serviços de radiocomunicação espacial devem ser objecto de uma coordenação, de modo a evitar as interferências prejudiciais mútuas;

b) Que o método de cálculo descrito no apêndice 28 ao Regulamento das Radiocomunicações se aplica somente às frequências da faixa de 1 GHz a 40 GHz;

c) Que os quadros I e II desse apêndice não incluem valores numéricos de todos os parâmetros necessários para certos serviços de radiocomunicação espacial e para certos serviços de radiocomunicação de Terra que partilham faixas de frequências com igualdade de direitos;

convida a CCIR

a prosseguir com urgência os seus estudos:

Sobre os dados relativos aos serviços de radiocomunicação espacial e de radiocomunicação de Terra que partilham faixas de frequências com igualdade de direitos e que não figuram nos quadros I e II do apêndice 28 ao Regulamento das Radiocomunicações;

Sobre a elaboração de métodos de cálculo que permitem determinar a zona de coordenação das estações terrenas para as frequências inferiores a 1 GHz e superiores a 40 GHz;

recomendações às administrações

que utilizem até à próxima conferência administrativa mundial das radiocomunicações competente:

Os pareceres da CCIR eventualmente aplicáveis, no que se refere aos valores que não figuram nos quadros I e II do apêndice 28 ao regulamento das Radiocomunicações;

Os métodos de determinação da zona de coordenação para as frequências inferiores a 1GHz e superiores a 40 GHz que sejam objecto de parecer da CCIR.

RECOMENDAÇÃO N.º 712

Relativa à interdependência entre a concepção dos receptores, o argumento dos canais e os critérios de partilha no serviço de radiodifusão por satélite (1)

A Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979),

considerando

a) Que a concepção dos receptores, o agrupamento dos canais e os critérios de partilha são inter dependentes e que têm influência importante na elaboração de um plano para o serviço de radiodifusão por satélite;

b) Que, até ao presente, talvez não se tenha prestado suficiente atenção a estes factores e à influência que exercem na aplicação de tal plano;

convida a CCIR

a estudar o problema da interdependência entre a concepção dos receptores, o agrupamento dos canais e os critérios de partilha, bem como a influência desses factores na exploração do serviço de radiodifusão por satélite.

APÊNDICE 25 Mar2 (2)

Plano de adjudicação de frequências às estações costeiras radiotelefónicas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 e 23 000 kHz

(V. os n.os **4198** e **4212** do Regulamento das Radiocomunicações e o apêndice 16)

Nota a). — As frequências na coluna 1 são frequências consignadas (v. o n.º **142**). Cada frequência é seguida, entre parêntesis, da indicação da frequência portadora, assim como do número da via. (V. a secção A do apêndice 16 ao Regulamento das Radiocomunicações.)

Nota b). — As estações costeiras radiotelefónicas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 e 23 000 kHz devem utilizar a potência mínima necessária para cobrir a sua zona de serviço. Não devem em caso algum utilizar uma potência de ponta superior a 10 kW por via. (V. o n.º **4373** do Regulamento das Radiocomunicações.)

Nota c). — A actualização do plano que figura no presente apêndice efectuar-se-á em conformidade com o procedimento que consta do artigo 16 do Regulamento das Radiocomunicações.

---

(1) Substitui a Recomendação n.º Sat-7 da Conferência Administrativa das Radiocomunicações (Genebra, 1959).

(2) Actos Finais da Conferência Administrativa Mundial das Radiocomunicações Marítimas (Genebra, 1974).

Coluna 1	Coluna 2	Coluna 3
Frequência consignada Frequência portadora Número da via	País ou zona	Observações

1	2	3
4358,8 (4357,4) (Via n.º 401)	Alemanha (República Federal da). Chile. Coreia. Cuba. Dinamarca. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Gabão. Gibraltar. Grécia. Iémene (República Democrática Popular do). Ilhas Cook. Ilha Niue. Ilhas Turcas e Caiques. Indonésia. Japão. Jugoslávia. Noruega. Panamá. Paraguai. República da África do Sul. Samoa Ocidental. Somália. Suécia. Tailândia. Turquia. Ucrânia. Uruguai. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste). Zaire.	
4361,9 (4360,5) (Via n.º 402)	Alasca. Albânia. Argentina. Bangladesh. Bolívia. China. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Ghana. Guam. Guatemala. Hawai. Honduras. Irão. Itália. Japão. Madagáscar. Panamá (Zona do Canal do). Papuásia-Nova Guiné. Polónia (República Popular da). Porto Rico. Reino Unido. Tailândia. Tunísia. URSS (Ásia Meridional). URSS (Noroeste).	

1	2	3
436,5 (4363,6) (Via n.º 403	Argentina. Canadá (Este). Canadá (Norte). Canadá (Oeste). Dinamarca. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Fiji. Gabão. Grécia. Hawai. Índia (Este). Iraque. Macau. México. Mónaco. Noruega. Panamá. Paquistão. Peru. Porto Rico. República da África do Sul. Sri Lanka (Ceilão). Suécia. Togo. Ucrânia. URSS (Extremo Oriente).	
4368,1 (4366,7) (Via n.º 404)	Alasca. Austrália. Bangladesh. Brasil. Chile (Sul). China. Congo (Brazzaville). Costa do Marfim. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). França. Gibraltar. Guadalupe (Departamento Francês de). Ilha da Páscoa. Ilhas de São Pedro e Miquelon. Irão. Israel. Japão. Martinica (Departamento Francês da). México. Nova Caledónia e Dependências. Omã. Polónia (República Popular da). Reunião (Departamento Francês de). Senegal. Tailândia.	
4371,2 (4369,8) (Via n.º 405).	Alasca. Austrália (Este). Barbados. Brasil. Camarões. Canárias. Chile. China. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Gâmbia. Grécia. Hawai. Irão.	

1	2	3
	Jamaica. Países Baixos. República da África do Sul. República Democrática Alemã. Roménia. Singapura. Uruguai. URSS (Ásia Meridional). URSS (Europa). URSS (Extremo Oriente).	
4374,3 (4372,9) (Via n.º 406)	Alasca. Albânia. Arábia Saudita. Argentina. China. Chipre. Colombia. Congo (Brazzaville). Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Fiji. Finlândia. Guam. Hawai. Islândia. Khmer (República). Madagáscar. Novas Hébridas. Panamá (Zona do Canal do). Paquistão. Polónia (República Popular da). Porto Rico. Reino Unido. Sri Lanka (Ceilão). Tunísia.	
4377,4 (4376) (Via n.º 407)	Alasca. Argentina. Barbados. Camarões. Canadá (Centro). Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai. Índia (Este). Irão. Japão. Noruega. Países Baixos. Peru. Porto Rico. Quénia. República da África do Sul. República Democrática Alemã. Singapura. Turquia. URSS (Ásia Setentrional). URSS (Noroeste).	
4380,5 (4379,1) (Via n.º 408)	Alasca. Antilhas Holandesas. Argentina. Bélgica. Canadá (Este). Canadá (Oeste). Egipto. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai.	

1	2	3
	Indonésia. Irão. Itália. Japão. Jugoslávia. Libéria. México. Moçambique. Nova Zelândia. Polónia (República Popular da). Suíça. Suriname.	
4383,6 (4382,2) (Via n.º 409)	Arábia Saudita. Bolívia. Brasil. Canárias. China. Cuba. Dinamarca. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. Ghana. Índia (Oeste). Itália. Noruega. Papuásia-Nova Guiné. Suécia. Tailândia. Turquia. Venezuela. Zaire.	
386,7 (4385,3) (Via n.º 410)	Argélia. Argentina (Sul). Bermudas. Canadá (Oeste). Canárias. China. Estados Unidos da América (Este). Fiji. Grécia. Guam. Húngara (República Popular). Irão. Israel. Jamaica. Kmer (República). Malta. Mauritânia. Nova Zelândia. Países Baixos. Paraguai. Reino Unido. República Democrática Alemã. Roménia. Seychelles. Sri Lanka (Ceilão).	
4389,8 (4388,4) (Via n.º 411)	Argentina (Norte). Bangladesh. Bélgica. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Hong-Kong. Ilhas Falkland (Malvinas). Ilhas Gilbert e Ellice. Ilhas Kerguelen. Indonésia. Irão. Japão.	

1	2	3
	Libéria. Turquia. Uerânia. URSS (Noroeste).	
4392,9 (4491,5) (Via n.º 412)	Alemanha (República Federal da). Austrália. Barbados. Daomé. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. Iémene (República Democrática Popular do). Índia (Oeste). Iraque. Itália. Japão. Peru. Uerânia. URSS (Ásia Setentrional). URSS (Europa). URSS (Noroeste).	
4396 (4394,6) (Via n.º 413)	Açores. Alasca. Argélia. Alemanha (República Federal da). Angola. Argentina. Bahrein. Bangladesh. Canadá (Este). Canadá (Oeste). Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Finlândia. Grécia. Guam. Guiné-Bissau. Hawai. Ilhas de Cabo Verde. Japão. Madeira. México. Mónaco. Panamá (Zona Canal do). Porto Rico. Portugal. São Tomé e Príncipe. Timor Português. Uerânia. URSS (Extremo Oriente).	
4399,1 (4397,7) (Via n.º 414)	Alasca. Alemanha (República Federal da). Ascensão. Chipre. Comores. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Sul). Finlândia. Indonésia. Islândia. Japão. Nigéria. Paquistão. Peru. Porto Rico. Quénia. Santa Helena. URSS (Europa).	

1	2	3
	URSS (Extremo Oriente).	
4402,2 (4400,8) (Via n.º 415)	Alasca. Argentina. Austrália. Bahrein. China. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Grécia. Guam. Hawai. Irão. Libéria. Madagáscar. Malásia. Noruega. Paquistão. Panamá (Zona do Canal do). Porto Rico. Roménia. URSS (Europa). URSS (Nordeste).	
4405,3 (4403,9) (Via n.º 416)	Alasca. Bangladesh. Brasil. Canárias. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). França. Grécia. Hungria (República Popular da). Indonésia. Irão. Islândia. Jamaica. Japão. Maurícia. Peru. Polinésia Francesa. Reino Unido. URSS (Europa).	
4408,4 (4407) (Via n.º 417)	Argentina. Austrália. Bélgica. Checoslováquia. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Hong-Kong. Iémene (República Democrática Popular do). Índia (Oeste). Japão. Jugoslávia. Malásia. Marrocos. Papuásia-Nova Guiné. Reino Unido. Tanzânia (Tanganhica). Tanzânia (Zanzibar). Turquia. URSS (Extremo Oriente).	
4411,5 (4410,1) (Via n.º 418)	Argentina. Bulgária. Canadá (Este). Canadá (Oeste). Cuba.	

1	2	3
	Dinamarca. Egipto. Espanha. Estados Unidos da América (Centro). Filipinas. Hawai. Ilhas de São Pedro e Miquelon. Indonésia. Israel. Japão. Mauritânia. Noruega. Reunião (Departamento Francês de). Roménia. Suécia. (Territórios Franceses dos Afars e dos Issas). URSS (Ásia Meridional).	
4414,6 (4413,2) (Via n.º 419)	Austrália. Brasil. Checoslováquia. Chile. China. Coreia. Costa do Marfim. Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Guam. Hawai. Islândia. Japão. Jugoslávia. Koweit. Líbia. Paquistão. Países Baixos. Porto Rico. República Democrática Alemã. Tanzânia (Tanganhica). Tanzânia (Zanzibar). URSS (Noroeste). Venezuela.	
4417,7 (4416,3) (Via n.º 420)	Alasca. Bulgária. Camarões. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Filipinas. Guam. Hawai. Índia (Este). Irão. Itália. Japão. Jordânia. Malásia. Marrocos. Noruega. Panamá (Zona do Canal do). Porto Rico. Suécia. Turquia. URSS (Ásia Meridional). URSS (Ásia Setentrional).	
4423,9 (4422,5) (Via n.º 422)	Alasca. Bélgica. Canadá (Oeste). Canárias. China. Cuba. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia.	

1	2	3
	Grécia. Guiana (Departamento Francês da). Húngara (República Popular). Indonésia. Iraque. Japão. Libéria. Líbia. Marrocos. Reino Unido. URSS (Europa).	
4427 (4425,6) (Via n.º 423)	Alasca. Alemanha (República Federal da). China. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Indonésia. Israel. Itália. Japão. Nigéria. Panamá (Zona do Canal do). Papuásia-Nova Guiné. Paquistão. Polónia (República Popular da). Quénia.	
4430,1 (4428,7) (Via n.º 424)	Alasca. Argélia. Argentina. Austrália (Oeste). China. Dinamarca. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guadalupe (Departamento Francês de). Guam. Hawai. Marrocos. Martinica (Departamento Francês da). Noruega. Panamá. Paquistão. Porto Rico. Suécia. Suíça. Tailândia.	
4433,2 (4431,8) (Via n.º 425)	Alasca. Bélgica. Chile. Dinamarca. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Grécia. Guam. Hawai. Hungria (República Popular da). Japão. Koweit. Líbia. Malásia. Nigéria. Noruega. Nova Zelândia. Panamá (Zona do Canal do).	

1	2	3
	Países Baixos. Porto Rico.	
4436,3 (4434,9) (Via n.º 426)	Açores. Alasca. Argélia. Angola. Argentina. Bulgária. China. Chipre. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Guiné-Bissau. Hawai. Ilhas de Cabo Verde. Japão. Líbano. Madeira. Moçambique. Noruega. Panamá (Zona do Canal do). Paquistão. Porto Rico. Portugal. Reino Unido. São Tomé e Príncipe. Tailândia. Timor Português.	
6507,8 (6506,4) (Via n.º 601)	Alasca. Argélia. Alemanha (República Federal da). Arábia Saudita. Argentina (Centro). Argentina (Sul). Bangladesh. Canadá (Oeste). Canárias. Checoslováquia. Chile (Centro). Chile (Norte). China. Congo (Brazzaville). Egipto. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Ghana. Grécia. Guam. Hawai. Hungria (República Popular da). Indonésia. Irão. Iraque. Islândia. Japão. Jugoslávia. Líbia. Malásia. México (Este). México (Oeste). Nigéria. Nova Zelândia. Paquistão. Peru. Porto Rico. Roménia. Sri Lanka (Ceilão). Ucrânia. URSS (Ásia Meridional).	

1	2	3
	URSS (Europa).	
6510,9 (6509,5) (Via n.º 602)	Alasca. Bangladesh. Bélgica. Bolívia. Bulgária. Canadá (Este). Canadá (Oeste). Coreia. Costa do Marfim. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Gabão. Ghana. Gibraltar. Guam. Hawai. Indonésia. Irão. Itália. Jugoslávia. Koweit. Madagáscar. Mónaco. Países Baixos. Panamá. Peru. Polónia (República Popular da). Porto Rico. Portugal. República da África do Sul. Singapura. Tunísia. Turquia. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa). URSS (Extremo Oriente). Venezuela.	
6514 (6512,6 (Via n.º 603)	Alasca. Albânia. Argélia. Arábia Saudita. Argentina. Bangladesh. Bermudas. Canadá (Norte). Canadá (Oeste). Chipre. Costa do Marfim. Dinamarca. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. Gabão. Grécia. Guam. Hawai. Hong-Kong. Hungria (República Popular da). Índia (Este). Indonésia. Irão. Iraque. Islândia. Israel. Japão. Líbia.	

1	2	3
	Mauritânia. México. Noruega. Peru. Porto Rico. Quénia. Roménia. Samoa Ocidental. Suécia. Tailândia. Togo. Ucrânia. URSS (Extremo Oriente). URSS (Noroeste).	
6517,1 (6515,7) (Via n.º 604)	Alasca. Austrália. Bangladesh. Bulgária. Camarões. Canadá (Oeste). Chile. China. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Hong-Kong. Indonésia. Irão. Israel. Itália. Joguslávia. Khmer (República). Madagáscar. Mauritânia. México. Nigéria. Papuásia-Nova Guiné. Paquistão. Peru. Polónia (República Popular da). Porto Rico. Tunísia. Turquia. URSS (Noroeste).	
6520,2 (6518,8) (Via n.º 605)	Alasca. Argélia. Bangladesh. Barbados. Bolívia. Bulgária. Canadá (Este). Canadá (Oeste). Canárias. Congo (Brazzaville). Coreia. Daomé. Dinamarca. Egipto. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Filipinas. Guam. Hawai. Hungria (República Popular da). Índia (Oeste). Indonésia. Irão.	

1	2	3
	Iraque. Jamaica. Japão. Jugoslávia. Koweit. Líbia. Madagáscar. Nigéria. Noruega. Países Baixos. Peru. Porto Rico. Suécia. Tailândia. Ucrânia. Uruguai. URSS (Extremo Oriente).	
8720,3 (8718,9) (Via n.º 801)	Alasca. Bahrein. Bangladesh. Bolívia. Chile. Dinamarca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Fiji. Guam. Hawai. Israel. Japão. Malásia. Nigéria. Noruega. Panamá (Zona do Canal do). Porto Rico. República da África do Sul. Roménia. Suécia. URSS (Ásia Setentrional).	
8723,4 (8722) (Via n.º 802)	Açores. Alasca. Argélia. Angola. Argentina. Austrália. China. Estados Unidos da América (Este). Estados Unidos da América (Sul). Finlândia. Grécia. Guiné-Bissau. Hawai. Ilhas de Cabo Verde. Índia (Este). Iraque. Madeira. Moçambique. Países Baixos. Portugal. Reino Unido. República Democrática Alemã. São Tomé e Príncipe. Sri Lanla (Ceilão). Timor Português.	
8726,5 (8725,1) (Via n.º 803)	Antilhas Holandesas. Bélgica. Canadá (Este). Coreia. Cuba. Espanha. Estados Unidos da América (Centro).	

1	2	3
	Noruega. Papuásia-Nova Guiné. Paquistão. República da África do Sul. Senegal. Suécia. Turquia. URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste).	
8729,6 (8728,2) (Via n.º 804)	Argentina. Canárias. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Grécia. Iraque. Japão. Mónaco. Peru. Polónia (República Popular da). Quénia. Serra Leoa. Singapura. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Extremo Oriente).	
8732,7 (8731,3) (Via n.º 805)	Albânia. Bélgica. Bolívia. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Finlândia. Hong-Kong. Irão. Islândia. Israel. Japão. Libéria. Nova Caledónia e Dependências. Países Baixos. Papuásia-Nova Guiné. República da África do Sul. URSS (Europa). URSS (Extremo Oriente).	
8735,8 (8734,4) (Via n.º 806)	Alasca. Argentina. Bahrein. Bangladesh. Bélgica. Costa do Marfim. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Filipinas. Gabão. Grécia. Guam. Hawai. Itália. Japão. Países Baixos. Panamá (Zona do Canal do). Polónia (República Popular da). Porto Rico. Tailândia. Ucrânia.	

1	2	3
8738,9 (8737,5) (Via n.º 807)	Canadá (Oeste). Checoslováquia. Chile. Chipre. Congo (Brazzaville). Cuba. Egipto. Estados Unidos da América (Centro). Gibraltar. Islândia. Japão. Koweit. Madagáscar. Mauritânia. Nova Zelândia. Paquistão. Santa Helena. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa).	
8742 (8740,6) (Via n.º 808)	Alasca. Arábia Saudita. Argentina. Ascensão. Canárias. Dinamarca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Filipinas. Grécia. Guam. Hawai. Ilhas Baamas. Japão. Noruega. Novas Hébridas. República da África do Sul. Roménia. Sri Lanka (Ceilão). Suécia. Suriname.	
8745,1 (8743,7) (Via n.º 809)	Argélia. Austrália (Oeste). Canárias. Checoslováquia. Chile. Cuba. Daomé. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia. Grécia. Islândia. Japão. Koweit. México. Mónaco. Noruega. Paquistão. Quénia. Reino Unido. República Democrática Alemã. Tailândia.	
8748,2 (8746,8) (Via n.º 810)	Argentina. Bangladesh. Bulgária. Canadá (Este). China. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul).	

1	2	3
	Fiji. Indonésia. Irão. Japão. Jugoslávia. Moçambique. Noruega. Polónia (República Popular da). Timor Português. Togo. Turquia.	
8751,3 (8749,9) (Via n.º 811)	Arábia Saudita. Argentina. Austrália. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Gabão. Hong-Kong. Hungria (República Popular da). Japão. Jugoslávia. Noruega. Peru. Suécia. Turquia.	
8754,4 (8753) (Via n.º 812)	Alasca. Argentina (Sul). Bahrein. Bélgica. Canadá (Norte). China. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Hawai. Indonésia. Israel. Jamaica. Japão. Nova Zelândia. Paquistão. Polónia. Reino Unido. URSS (Europa). URSS (Noroeste). Zaire.	
8757,5 (8756,1) (Via n.º 813)	Açores. Alasca. Argélia. Angola. Austrália. Bélgica. Chile (Norte). China. Dinamarca. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guam. Guiné-Bissau. Hawai. Hungria (República Popular da). Ilhas de Cabo Verde. Índia (Oeste). Madeira.	

1	2	3
	Moçambique. Noruega. Panamá (Zona do Canal do). Porto Rico. Portugal. São Tomé e Príncipe. Timor Português.	
8760,6 (8759,2) (Via n.º 814)	Alasca. Argentina. Canadá (Oeste). Cuba. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. Grécia. Hawai. Ilhas Gilbert e Ellice. Indonésia. Itália. Japão. Libéria. Paquistão. Quénia. Reino Unido. Tailândia. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa). URSS (Extremo Oriente).	
8763,7 (8762,3) (Via n.º 815)	Alemanha (República Federal da). Autrália (Oeste). Bélgica. Chile. China. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guiana (Departamento Francês da). Iraque. Japão. Marrocos. Singapura. URSS (Europa). URSS (Noroeste). Zaire.	
8766,8 (8765,4) (Via n.º 816)	Alasca. Argentina. Barbados. China. Congo (Brazzaville). Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Fiji. Grécia. Guam. Hawai. Ilhas Turcas e Caiques. Indonésia. Paquistão. Porto Rico. Reino Unido. Tunísia. URSS (Europa). URSS (Noroeste).	
8769,9 (8768,5) (Via n.º 817)	Alasca. Alemanha (República Federal da). Austrália.	

1	2	3
	Bangladesh. Bermudas. Canadá (Este). Chile. Egipto. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. França. Guam. Hawai. Iémene (República Democrática Popular do). Irão. México. Nigéria. Panamá. Porto Rico. Roménia. Tailândia. URSS (Europa). URSS (Extremo Oriente).	
8773 (8771,6) (Via n.º 818)	Alasca. Argentina. Bahrein. Bulgária. Camarões. Canárias. China. Chipre. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai. Líbia. Malásia. Noruega. Novas Hébridas. Panamá (Zona do Canal do). Paquistão. Porto Rico. Seychelles. Suécia. Ucrânia.	
8776,1 (8774,7) (Via n.º 819)	Alasca. Brasil. Canadá (Oeste). Dominicana (República). Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guam. Hawai. Iémene (República Democrática Popular do). Ilha da Páscoa. Indonésia. Itália. Japão. Nigéria. Panamá. Reino Unido. Reunião (Departamento Francês de). Tailândia. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa). URSS (Noroeste).	
8779,2 (8777,8	Alasca. Alemanha (República Federal da).	

1	2	3
(Via n.º 820)	Argentina. Chipre. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Filipinas. Grécia. Guam. Hawai. Índia (Este). Irão. Itália. Japão. Panamá (Zona do Canal do). Porto Rico. Samoa Ocidental. Tanzânia (Tanganhica). Tanzânia (Zanzibar). URSS (Noroeste). Zaire.	
8785,4 (8784) (Via n.º 822)	Bangladesh. Barbados. Brasil. China. Costa do Marfim. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Hungria (República Popular da). Irão. Jugoslávia. Marrocos. Quénia. Reino Unido. Suíça. Tailândia. Turquia. Ucrânia.	
8788,5 (8787,1) (Via n.º 823)	Argentina. Canadá (Este). Dinamarca. Ghana. Grécia. Índia (Oeste). Iraque. Itália. Jamaica. Japão. Noruega. Roménia. Suécia. Tanzânia (Tanganhica). Tanzânia (Zanzibar). Timor Português. URSS (Extremo Oriente). URSS (Noroeste).	
8791,6 (8790,2) (Via n.º 824)	Alemanha (República Federal da). Brasil. China. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guiana. Irão. Jamaica. Marrocos. Omã. Peru. Polónia (República Popular da). Reino Unido. Reunião (Departamento Francês de). Singapura. Suíça.	

1	2	3
	Tunísia. URSS (Noroeste).	
8794,7 (8793,3) (Via n.º 825)	Alasca. Argélia. Argentina. Barbados. Canadá (Centro). Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Filipinas. França. Ghana. Guadalupe (Departamento Francês de). Hungria (República Popular da). Ilhas Cook. Ilhas Kerguelen. Índia (Este). Irão. Martinica (Departamento Francês da). Noruega. Ucrânia. URSS (Ásia Meridional). URSS (Extremo Oriente).	
8797,8 (8796,4) (Via n.º 826)	Camarões. Canadá (Oeste). China. Colômbia. Estados Unidos da América (Centro). Estados Unidos da América (Este). Guam. Indonésia. Itália. Japão. México. Países Baixos. Paraguai. Paquistão. Quénia. Reino Unido. República Democrática Alemã. Ucrânia.	
8800,9 (8799,5) (Via n.º 827)	Alasca. Argentina. Bangladesh. Coreia. Dinamarca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Etiópia. Guam. Hawai. Ilha Niue. Irão. Israel. Jugoslávia. Macau. Noruega. Panamá (Zona do Canal do). Peru. Porto Rico. Suécia. Território Francês dos Afars e dos Issas. Venezuela.	
8804 (8802,6) (Via n.º 828)	Alasca. Albânia. Alemanha (República Federal da). Brasil. Estados Unidos da América (Este). Estados Unidos da América (Oeste).	

1	2	3
	França. Guadalupe (Departamento Francês de). Guam. Hawai. Hungria (República Popular da). Indonésia. Japão. Khmer (República). Líbano. Marrocos. Martinica (Departamento Francês da). Maurícia. Mauritânia. Noruega. Panamá (Zona do Canal do). Paquistão. Porto Rico. Turquia. Ucrânia.	
8807,1 (8805,7) (Via n.º 829)	Austrália. Bangladesh. Bélgica. China. Chipre. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Finlândia. Gâmbia. Irão. Líbia. México. Noruega. Paraguai. Polinésia Francesa. Suécia. Ucrânia. Venezuela.	
8810,2 (8808,8) (Via n.º 830)	Brasil. Bulgária. Estados Unidos da América (Sul). França. Iémene (República Democrática Popular do). Ilhas de São Pedro e Miquelon. Ilhas Salomão. Índia (Oeste). Indonésia. Irão. Jogoslávia. Khmer (República). Papuásia-Nova Guiné. Peru. Polónia (República Popular da). Porto Rico. URSS (Ásia Meridional). URSS (Extremo Oriente).	
8813,3 (8811,9) (Via n.º 831)	China. Congo (Brazzaville). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Gâmbia. Ilhas Falkland (Malvinas). Irão. Islândia. Itália. Japão. Madagáscar. Malásia. Marrocos. Paquistão. Porto Rico.	

1	2	3
	Reino Unido. República Democrática Alemã. Suíça. Turquia.	
13 102,2 (13 100,8) (Via n.º 1201)	Argentina. Canadá (Norte). China. Chipre. Daomé. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Filipinas. Gabão. Guiana (Departamento Francês da). Indonésia. Paquistão. Reino Unido. Ucrânia. URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste).	
13 105,3 (13 103,9) (Via n.º 1202)	Arábia Saudita. Bangladesh. Chile. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Fiji. Ghana. Grécia. Hungria (República Popular da). Japão. Marrocos. Reino Unido. República Democrática Alemã. Suíça. Tunísia. URSS (Ásia Setentrional).	
13 108,4 (13 107) (Via n.º 1203)	Açores. Alasca. Angola. Austrália (Este). China. Colômbia. Dinamarca. Egipto. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guiné-Bissau. Hawai. Ilhas de Cabo Verde. Iraque. Líbia. Madeira. Moçambique. Noruega. Portugal. São Tomé e Príncipe. Suécia. Timor Português. URSS (Extremo Oriente). Venezuela.	
13 111,5 (13 110,1) (Via n.º 1204)	Alasca. Bolívia. Congo (Brazzaville). Estados Unidos da América (Este).	

1	2	3
	Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. França. Grécia. Guam. Hawai. Israel. Japão. Macau. Noruega. Panamá. Panamá (Zona do Canal do). Paquistão. Porto Rico. República Democrática Alemã. Tailândia. URSS (Europa).	
13 114,6 (13 113,2) (Via n.º 1205)	Alasca. Alemanha (República Federal da). Argentina. Bangladesh. Costa do Marfim. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Iémene (República Democrática Popular do). Itália. Japão. Moçambique. Noruega. Nova Caledónia e Dependências. Porto Rico. Timor Português. Ucrânia. URSS (Europa).	
13 117,7 (13 116,3) (Via n.º 1206)	Albânia. Austrália (Oeste). China. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Irão. Islândia. Itália. Japão. Khmer (República). Madagáscar. Marrocos. Peru. Reino Unido. República Democrática Alemã. Turquia.	
13 120,8 (13 119,4) (Via n.º 1207)	Açores. Angola. Antilhas Holandesas. Argélia. Bélgica. Canadá (Oeste). China. Grécia. Guiné-Bissau. Ilhas de Cabo Verde. Ilhas Gilbert E Ellice. Irão. Israel. Japão. Jugoslávia.	

1	2	3
	Madeira. Moçambique. Países Baixos. Paquistão. Portugal. São Tomé e Príncipe. Suriname. Timor Português. URSS (Noroeste).	
13 123,9 (13 122,5) (Via n.º 1208)	Alemanha (República Federal da). Argentina. Bangladesh. Canárias. China. Chipre. Estados Unidos da América (Este). Estados Unidos da América (Sul). Grécia. Hungria (República Popular da). Islândia. Japão. Libéria. Quénia. URSS (Europa).	
13 127 (13 125,6) (Via n.º 1209)	Alasca. Bahrein. Brasil. Canadá (Oeste). Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Indonésia. Itália. Japão. México. Nova Zelândia. Peru. Polónia (República Popular da). República da África do Sul. Turquia. URSS (Europa). URSS (Noroeste).	
13 130,1 (13 128,7) (Via n.º 1210)	Chile. Dinamarca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Gabão. Grécia. Guam. Índia (Oeste). Indonésia. Noruega. Reunião (Departamento Francês da). Roménia. Suécia. Território Francês dos Afars e dos Issas. Uruguai. URSS (Ásia Setentrional). URSS (Extremo Oriente).	
13 133,2 (13 131,8) (Via n.º 1211)	Alasca. Brasil. China. Cuba. Dinamarca. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste).	

1	2	3
	Estados Unidos da América (Sul). Ilha da Páscoa. Iraque. Itália. Japão. Malásia. Noruega. Suécia. Turquia. URSS (Ásia Meridional). URSS (Ásia Setentrional).	
13 136,3 (13 134,9) (Via n.º 1212)	Alasca. Alemanha (República Federal da). Costa do Marfim. Estados Unidos da América (Este). Estados Unidos da América (Sul). Gibraltar. Grécia. Hawai. Indonésia. Japão. Maurícia. Peru. Porto Rico. Reino Unido. URSS (Europa). URSS (Extremo Oriente).	
13 139,4 (13 138) (Via n.º 1213)	Argentina. Barbados. Bélgica. Canadá (Este). Canárias. China. Coreia. Finlândia. Grécia. Índia (Este). Irão. Iraque. Israel. Itália. Libéria. Noruega. Países Baixos. Quénia. Samoa Ocidental. URSS (Ásia Setentrional).	
13 142,5 (13 141,1) (Via n.º 1214)	Alasca. Austrália. Brasil. Canadá (Oeste). Cuba. Dinamarca. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Grécia. Guam. Hungria (República Popular da). Irão. Noruega. Porto Rico. Reino Unido. Suécia. Tailândia. URSS (Extremo Oriente).	
13 145,6 (13 144,2) (Via n.º 1215)	Argélia. Bélgica. Camarões. Dinamarca.	

1	2	3
	Espanha. Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Índia (Oeste). Islândia. Israel. Japão. Países Baixos. Panamá (Zona do Canal do). Paquistão. Peru. Porto Rico. Roménia. Seychelles. Suécia.	
13 148,7 (13 147,3) (Via n.º 1216)	Alasca. Albânia. Argentina. China. Congo (Brazzaville). Egipto. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Guam. Hawai. Irão. Líbano. Marrocos. Panamá (Zona do Canal do). Polónia (República Popular da). Porto Rico. Singapura. Turquia.	
13 151,8 (13 150,4) (Via n.º 1217)	Argélia. Bulgária. Cuba. Dinamarca. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guadalupe (Departamento Francês de). Guam. Índia (Este). Iraque. Japão. Martinica (Departamento Francês da). Noruega. Paraguai. Santa Helena. Suécia. URSS (Ásia Meridional). URSS (Extremo Oriente).	
13 154,9 (13 153,5) (Via n.º 1218)	Alasca. Alemanha (República Federal da). Bangladesh. Bélgica. Camarões. Canárias. Chile. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Ilha Niue. Irão. Itália. Japão. Noruega.	

1	2	3
	Panamá (Zona do Canal do). Porto Rico. Turquia. URSS (Europa).	
13 158 (13 156,6) (Via n.º 1219)	Alasca. Bélgica. Brasil. Bulgária. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Japão. Marrocos. Noruega. Países Baixos. Singapura. Suécia. Ucrânia. URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste). Venezuela.	
13 161,1 (13 159,7) (Via n.º 1220)	Alasca. Argentina. Bangladesh. Bermudas. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Fiji. Filipinas. Grécia. Guam. Hawai. Irão. Islândia. Japão. Nigéria. Panamá (Zona do Canal do). Polónia (República Popular da). Porto Rico. Reino Unido. Tunísia.	
13 167,3 (13 165,9) (Via n.º 1222)	Argentina. Canadá (Este). França. Guadalupe (Departamento Francês de). Hawai. Ilhas Cook. Índia (Oeste). Irão. Japão. Martinica (Departamento Francês da). México. Noruega. Reino Unido. Roménia. Turquia. URSS (Extremo Oriente).	
13 170,4 (13 169) (Via n.º 1223)	Arábia Saudita. Bangladesh. Brasil. Checoslováquia. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guam. Japão. Marrocos.	

1	2	3
	Noruega. Suécia. Ucrânia.	
13 173,5 (13 172,1) (Via n.º 1224)	Alasca. Alemanha (República Federal da). Chile. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia. Ghana. Guam. Hawai. Jamaica. Japão. Jugoslávia. Koweit. Mónaco. Nova Zelândia. Panamá (Zona do Canal do). Porto Rico. Reino Unido. República da África do Sul. Sri Lanka (Ceilão).	
13 176,6 (13 175,2) (Via n.º 1225)	China. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Sul). Grécia. Irão. Madagáscar. México. Nigéria. Noruega. Papuásia-Nova Guiné. Roménia. URSS (Noroeste).	
13 179,7 (13 178,3) (Via n.º 1226)	Austrália. Bangladesh. Checoslováquia. Chile. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Irão. Japão. Noruega. Togo. Turquia. URSS (Noroeste).	
13 182,8 (13 181,4) (Via n.º 1227)	Alasca. Austrália. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia. Guam. Hawai. Hong-Kong. Índia (Este). Jugoslávia. Koweit. Panamá (Zona do Canal do). Paraguai. Polónia (República Popular da). Porto Rico. Suíça. Tanzânia (Tanganhica). Tanzânia (Zanzibar). Turquia. URSS (Extremo Oriente).	

1	2	3
	Zaire.	
13 185,9 (13 184,5) (Via n.º 1228)	Brasil. Chile. China. Cuba. Espanha. Estados Unidos da América (Centro). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Etiópia. Hungria (República Popular da). Noruega. Paquistão. Reino Unido. Ucrânia. URSS (Europa).	
13 189 (13 187,6) (Via n.º 1229)	Argentina. Austrália. Bulgária. Canadá (Este). Coreia. Estados Unidos da América (Oeste). França. Japão. Jugoslávia. Polónia (República Popular da). Quénia. URSS (Ásia Meridional). URSS (Ásia Setentrional). URSS (Europa). URSS (Noroeste).	
13 192,1 (13 190,7) (Via n.º 1230)	Argentina. Bangladesh. Chipre. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Hawai. Itália. Japão. Mauritânia. Quénia. Reino Unido. Suíça. Ucrânia.	
13 195,2 (13 193,8) (Via n.º 1231)	Alasca. Austrália. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Etiópia. França. Grécia. Guam. Hawai. Hong-Kong. Irão. Líbia. Nigéria. Noruega. Panamá (Zona do Canal do). Paraguai. Peru. Polónia (República Popular da). Porto Rico.	
13 198,3 (13 196,9) (Via n.º 1232)	Alasca. Argélia. Argentina. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Guam.	

1	2	3
	Hawai. Japão. Mauritânia. Paquistão. Reino Unido. República Democrática Alemã. URSS (Ásia Meridional).	
17 234,3 (17 232,9) (Via n.º 1601)	Alasca. Argentina. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Sul). Hawai. Japão. Noruega. Seychelles. Suécia. Tunísia. Ucrânia. URSS (Europa). URSS (Noroeste).	
17 237,4 (17 236) (Via n.º 1602)	Arábia Saudita. Austrália (Este). Bangladesh. Camarões. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Marrocos. Reino Unido. URSS (Ásia Setentrional). URSS (Europa). URSS (Extremo Oriente).	
17 240,5 (17 239,1) (Via n.º 1603)	Alasca. Argentina (Norte). Bangladesh. Bolívia. China. Chipre. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guadalupe (Departamento Francês de). Hungria (República Popular da). Itália. Martinica (Departamento Francês da). Noruega. Suécia.	
17 243,6 (17 242,2) (Via n.º 1604)	Austrália. Canadá (Este). Congo (Brazzaville). Etiópia. França. Grécia. Japão. Khmer (República). México. Noruega. Roménia. Venezuela.	
17 246,7 (17 245,3) (Via n.º 1605)	Costa do Marfim. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Filipinas. França. Índia (Oeste). Irão. Japão.	

1	2	3
	Noruega. Polinésia Francesa. Suécia. Ucrânia. URSS (Europa).	
17 249,8 (17 248,4) (Via n.º 1606)	Bangladesh. Brasil. Cuba. Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Islândia. Itália. Japão. Nova Zelândia. Porto Rico. Reino Unido. Turquia. URSS (Europa).	
17 252,9 (17 251,5) (Via n.º 1607)	Alasca. Antilhas Holandesas. Canadá (Este). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Ilhas Gilbert e Ellice. Índia (Este). Irão. Libéria. Mónaco. Noruega. Polónia (República Popular da). URSS (Extremo Oriente). URSS (Noroeste).	
17 256 (17 254,6) (Via n.º 1608)	Canadá (Oeste). Checoslováquia. China. Dinamarca. Itália. Mauritânia. Noruega. Paquistão. Peru. República da África do Sul. Suécia. Suriname. Turquia.	
17 259,1 (17 257,7) (Via n.º 1609)	Arábia Saudita. Bélgica. Congo (Brazzaville). Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Ilhas Cook. Índia (Este). Israel. Japão. Reino Unido. URSS (Noroste).	
17 262,2 (17 260,8) (Via n.º 1610)	Alemanha (República Federal da). Austrália. China. Egipto. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Indonésia. Irão.	

1	2	3
	Mauritânia. Noruega. Tunísia. Ucrânia. Uruguai. URSS (Noroeste).	
17 265,3 (17 263,9) (Via n.º 1611)	Brasil. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Finlândia. Gibraltar. Japão. Jugoslávia. Líbia. Malásia. Peru. Reino Unido. Suíça. Turquia.	
17 268,4 (17 267) (Via n.º 1612)	Alasca. Austrália. Cuba. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Marrocos. Paquistão. Porto Rico. Ucrânia. URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste).	
17 271,5 (17 270,1) (Via n.º 1613)	Alasca. Bélgica. Brasil. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guam. Hawai. Irão. Israel. Noruega. Panamá (Zona do Canal do). Porto Rico. Roménia. Singapura. URSS (Extremo Oriente).	
17 274,6 (17 273,2) (Via n.º 1614)	Canadá (Oeste). China. Dinamarca. Egipto. Etiópia. Finlândia. Gabão. Ilha Niue. Itália. México. Noruega. Suécia. URSS (Ásia Setentrional).	
17 277,7 (17 276,3) (Via n.º 1615)	Açores. Angola. Colômbia. Finlândia.	

1	2	3
	Guiné-Bissau. Ilhas de Cabo Verde. Irão. Islândia. Madeira. Moçambique. Portugal. Reino Unido. São Tomé e Príncipe. Suíça. Timor Português. Turquia. URSS (Extremo Oriente).	
17 280,8 (17 279,4) (Via n.º 1616)	Alasca. Alemanha (República Federal da). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Ghana. Hawai. Irão. Itália. Japão. Marrocos. Turquia. URSS (Noroeste).	
17 283,9 (17 282,5) (Via n.º 1617)	Bangladesh. Brasil. Canárias. Dinamarca. França. Gabão. Grécia. Hungria (República Popular da). Irão. Israel. México. Noruega. Peru. Suécia. URSS (Ásia Setentrional). URSS (Extremo Oriente).	
17 287 (17 285,6) (Via n.º 1618)	Argentina. Bahrein. Bermudas. Dinamarca. Índia (Oeste). Japão. Jugoslávia. Marrocos. Noruega. Reino Unido. Suécia. Turquia.	
17 290,1 (17 288,7) (Via n.º 1619)	Alasca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). França. Grécia. Guam. Hawai. Koweit. Libéria. Maurícia. Noruega. Panamá (Zona do Canal do). Peru. Porto Rico. República Democrática Alemã. URSS (Extremo Oriente).	
17 293,2	Canárias.	

1	2	3
(17 291,8) (Via n.º 1620)	Estados Unidos da América (Centro). Estados Unidos da América (Este). Etiópia. Japão. Líbia. Noruega. Turquia. Ucrânia. URSS (Europa).	
17 299,4 (17 298) (Via n.º 1622)	Austrália. Bangladesh. Dinamarca. França. Ghana. Grécia. Japão. Koweit. Noruega. Roménia. Suécia. Venezuela.	
17 302,5 (17 301,1) (Via n.º 1623)	Alasca. China. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Guam. Hawai. Países Baixos. Panamá (Zona do Canal do). Paquistão. Paraguai. Porto Rico. Reino Unido. Reunião (Departamento Francês de). Ucrânia.	
17 305,6 (17 304,2) (Via n.º 1624)	Alemanha (República Federal da). Bangladesh. Daomé. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Itália. Japão. Quénia. Samoa Ocidental. Turquia. URSS (Europa).	
17 308,7 (17 307,3) (Via n.º 1625)	Alasca. Bélgica. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guam. Hawai. Irão. Islândia. Japão. Nigéria. Polónia (República Popular da). Porto Rico.	
17 311,8 (17 310,4) (Via n.º 1626)	Canadá (Oeste). Cuba. Estados Unidos da América (Este). Grécia. Hong-Kong. Iraque.	

1	2	3
	Países Baixos. Reino Unido. URSS (Ásia Setentrional). URSS (Extremo Oriente). URSS (Noroeste).	
17 314,9 (17 313,5) (Via n.º 1627)	Bélgica. Espanha. Etiópia. Grécia. Hungria (República Popular da). Japão. Jugoslávia. Nigéria. Noruega. Peru. URSS (Europa.	
17 318 (17 316,6) (Via n.º 1628)	Bangladesh. Cuba. França. Grécia. Guadalupe (Departamento Francês de). Iraque. Israel. Martinica (Departamento Francês da). Roménia. URSS (Extremo Oriente). URSS (Noroste).	
17 321,1 (17 319,7) (Via n.º 1629)	Argélia. Austrália. Canadá (Este). Grécia. Irão. Japão. Noruega. Reino Unido. República Democrática Alemã. Senegal.	
17 324,2 (17 322,8) (Via n.º 1630)	Alasca. Bélgica. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Índia (Oeste). Islândia. Panamá (Zona do Canal do). Porto Rico. URSS (Europa).	
17 327,3 (17 325,9) (Via n.º 1631)	Argélia. Bulgária. Chile. China. Estados Unidos da América (Este). Grécia. Iraque. Polónia (República Popular da). Suíça. Togo.	
17 330,4 (17 329) (Via n.º 1632)	Açores. Alasca. Argentina. Bangladesh. Chipre. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Hungria (República Popular da). Japão.	

1	2	3
	Madagáscar. Madeira. Paquistão. Portugal. Reino Unido.	
17 333,5 (17 332,1) (Via n.º 1633)	Alasca. Brasil. China. Estados Unidos da América (Este). Estados Unidos da América (Oeste). França. Grécia. Guam. Hawai. Panamá (Zona do Canal do). Polónia (República Popular da). Porto Rico. República da África do Sul. República Democrática Alemã. URSS (Ásia Meridional).	
17 336,6 (17 335,2) (Via n.º 1634)	Alemanha (República Federal da). Canadá (Norte). Coreia. Costa do Marfim. Espanha. Grécia. Iraque. Japão. Roménia.	
17 339,7 (17 338,3) (Via n.º 1635)	Açores. Angola. Austrália. Bangladesh. Bulgária. Dinamarca. Guiné-Bissau. Ilhas de Cabo Verde. Japão. Macau. Madeira. Moçambique. Noruega. Portugal. Reino Unido. São Tomé e Príncipe. Suécia. Timor Português.	
17 342,8 (17 341,4) (Via n.º 1636)	Alasca. Argélia. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia. Grécia. Guam. Hawai. Índia (Este). Japão. Países Baixos. Panamá (Zona do Canal do). Paquistão. Porto Rico.	
17 345,9 (17 344,5) (Via n.º 1637)	Coreia. Espanha. Hong-Kong. Jamaica. Madagáscar. Nova Zelândia. Paraguai. Reino Unido. URSS (Ásia Meridional).	

1	2	3
17 349 (17 347,6) (Via n.º 1638)	Alasca. Bulgária. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Finlândia. Guam. Hawai. Jugoslávia. Marrocos. Paquistão. Polónia (República Popular da).	
17 352,1 (17 350,7) (Via n.º 1639)	Alasca. Albânia. Alemanha (República Federal da). Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai. Iraque. Países Baixos. Panamá (Zona do Canal do). Porto Rico. Zaire.	
17 355,2 (17 353,8) (Via n.º 1640)	Barbados. Chile. Etiópia. Grécia. Japão. Nigéria. Reino Unido. República Democrática Alemã. Sri Lanka (Ceilão). Tailândia. URSS (Europa).	
17 358,3 (17 356,9) (Via n.º 1641)	Argélia. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Iraque. Japão. Noruega. Singapura. Suécia. Ucrânia.	
22 597,4 (22 596) (Via n.º 2201)	Austrália. Camarões. China. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Etiópia. Grécia. Guam. Hungria (República Popular da). Paquistão. URSS (Noroeste).	
22 600,5 (22 599,1) (Via n.º 2202)	Argentina. Bangladesh. Canadá (Este). Hungria (República Popular da). Irão. Itália. Mauritânia. Nigéria. Noruega. Peru. Reino Unido. Ucrânia.	

1	2	3
	URSS (Extremo Oriente).	
22 603,6 (22 602,2) (Via n.º 2203)	Austrália (Este). Bulgária. Costa do Marfim. Dinamarca. Irão. Japão. Khmer (República). Marrocos. Noruega. Suécia. Venezuela.	
22 606,7 (22 605,3) (Via n.º 2204)	Argentina. Bermudas. Canadá (Norte). Finlândia. França. Israel. Jugoslávia. Koweit. Nigéria. República da África do Sul. URSS (Extremo Oriente). URSS (Noroeste).	
22 609,8 (22 608,4) (Via n.º 2205)	Argélia. Austrália. Congo (Brazzaville). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Irão. Países Baixos. URSS (Europa). URSS (Extremo Oriente). URSS (Noroeste).	
22 612,9 (22 611,5) (Via n.º 2206)	Alasca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Índia (Oeste). Japão. Jugoslávia. Marrocos. Nigéria. Peru. Polónia (República Popular da). Porto Rico. Reino Unido. República da África do Sul. Venezuela.	
22 616 (22 614,6) (Via n.º 2207)	Açores. Alemanha (República Federal da). Angola. Bangladesh. China. Ilhas de Cabo Verde. Israel. Madeira. Moçambique. Portugal. Timor Português. Tunísia. URSS (Europa).	
22 619,1 (22 617,7) (Via n.º 2208)	Argentina (Norte). Bulgária. Congo (Brazzaville). Dinamarca. Índia (Este).	

1	2	3
	Japão. Marrocos. Noruega. Suécia.	
22 622,2 (22 620,8) (Via n.º 2209)	Alasca. Bélgica. Bolívia. Coreia. Daomé. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Guam. Hawai. Marrocos. Panamá (Zona do Canal do). Paquistão. Polónia (República Popular da). Porto Rico. URSS (Noroeste).	
22 625,3 (22 623,9) (Via n.º 2210)	Bangladesh. Espanha. Estados Unidos da América (Este). Finlândia. Grécia. Japão. Países Baixos. Ucrânia.	
22 628,4 (22 627) (Via n.º 2211)	Cuba. Dinamarca. Gabão. Itália. Japão. Noruega. Paquistão. Peru. Suécia. Ucrânia.	
22 631,5 (22 630,1) (Via n.º 2212)	Alasca. Austrália. Chipre. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Etiópia. Gibraltar. Guam. Hawai. Hungria (República Popular da). Panamá (Zona do Canal do). Porto Rico. Reino Unido. Singapura.	
22 634,6 (22 633,2) (Via n.º 2213)	Bulgária. Canadá (Este). Dinamarca. Espanha. Ghana. Iraque. Líbia. Noruega. Nova Zelândia. Suécia. Turquia. URSS (Europa). URSS (Extremo Oriente).	
22 637,7 (22 636,3) (Via n.º 2214)	Bangladesh. Bélgica. China. Espanha. Estados Unidos da América (Este).	

1	2	3
	Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Irão. Reino Unido. Suíça. Turquia. Uruguai. URSS (Noroeste).	
22 640,8 (22 639,4) (Via n.º 2215)	Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Ghana. Grécia. Iraque. Japão. Noruega. Peru. Polónia (República Popular da).	
22 643,9 (22 642,5) (Via n.º 2216)	Canadá (Oeste). Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Sul). Etiópia. Grécia. Guam. Itália. Japão. Koweit. Mauritânia. Noruega.	
22 647 (22 645,6) (Via n.º 2217)	Alasca. Alemanha (República Federal da). Bangladesh. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Guam. Hawai. Hong-Kong. Irão. Israel. Libéria. Panamá (Zona do Canal do). Peru. Porto Rico.	
22 650,1 (22 648,7) (Via n.º 2218)	Alasca. Chipre. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). França. Guam. Hawai. Hong-Kong. Noruega. Paquistão. Porto Rico. Suécia. Ucrânia.	
22 653,2 (22 651,8) (Via n.º 2219)	Bangladesh. Bélgica. China. Cuba. Grécia. Libéria. Mónaco. Polónia (República Popular da).	

1	2	3
	Samoa Ocidental.	
22 656,3 (22 654,9) (Via n.º 2220)	Canadá (Oeste). Checoslováquia. Filipinas. Grécia. Paquistão. Reino Unido. República Democrática Alemã. Senegal.	
22 662,5 (22 661,1) (Via n.º 2222)	Açores. Alemanha (República Federal da). Angola. Arábia Saudita. Coreia. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. Grécia. Ilhas de Cabo Verde. Madeira. Moçambique. Portugal. Timor Português.	
22 665,6 (22 664,2) (Via n.º 2223)	Alasca. Alemanha (República Federal da). Austrália. Bangladesh. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Hawai. Itália. Japão. Porto Rico. Togo. Turquia.	
22 668,7 (22 667,3) (Via n.º 2224)	Alasca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Guam. Hawai. Iraque. Maurícia. Panamá (Zona do Canal do). Porto Rico. República Democrática Alemã.	
22 671,8 (22 670,4) (Via n.º 2225)	Argélia. Bélgica. Chile. Costa do Marfim. Grécia. Índia (Oeste). Islândia. Japão. México.	
22 674,9 (22 673,5) (Via n.º 2226)	Albânia. Bangladesh. Canárias. China. Egipto.	

1	2	3
	Etiópia. França. Islândia. República Democrática Alemã. Roménia.	
22 678 (22 676,6) (Via n.º 2227)	Argélia. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Grécia. Guadalupe (Departamento Francês de). Índia (Este). Japão. Martinica (Departamento Francês da). Paquistão. Reino Unido. Ucrânia.	
22 681,1 (22 679,7) (Via n.º 2228)	Austrália. Bangladesh. Dinamarca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Marrocos. Noruega. Quénia. Suécia. URSS (Extremo Oriente).	
22 684,2 (22 682,8) (Via n.º 2229)	Canadá (Este). Espanha. Etiópia. Índia (Oeste). Japão. Reino Unido. Tailândia. Ucrânia.	
22 687,3 (22 685,9) (Via n.º 2230)	Alasca. Austrália. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai. Noruega. Panamá (Zona do Canal do). Porto Rico. República Democrática Alemã. Suécia. Turquia. URSS (Ásia Meridional).	
22 690,4 (22 689) (Via n.º 2231)	Alasca. Arábia Saudita. Canadá (Oeste). Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Finlândia. França. Grécia. Ilha Niue. Japão. Malásia. URSS (Europa).	

1	2	3
22 693,5 (22 692,1) (Via n.º 2232)	Cuba. Grécia. Iraque. Países Baixos. Polónia (República Popular da). Suíça. URSS (Europa). URSS (Extremo Oriente).	
22 696,6 (22 695,2) (Via n.º 2233)	Alasca. Bangladesh. Egipto. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Guam. Hawai. Ilhas Cook. Irão. Noruega. Panamá (Zona do Canal do). Porto Rico. Reino Unido. Roménia.	
22 699,7 (22 698,3) (Via n.º 2234)	Argentina. Canárias. Dinamarca. Etiópia. Indonésia. Japão. Líbia. México. Noruega. Roménia. Suécia.	
22 702,8 (22 701,4) (Via n.º 2235)	Alasca. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da AMérica (Sul). França. Grécia. Guam. Hawai. Irão. Japão. Porto Rico. URSS (Noroeste).	
22 705,9 (22 704,5) (Via n.º 2236)	Dinamarca. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Grécia. Iraque. Japão. Noruega. Nova Zelândia. Ucrânia.	
22 709 (22 707,6) (Via n.º 2237)	Açores. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Estados Unidos da América (Sul). Irão. Itália. Japão.	

1	2	3
	Madeira. Noruega. Portugal. Roménia.	
22 712,1 (22 710,7) (Via n.º 2238)	Argélia. Alemanha (república Federal da). Austrália. Brasil. Grécia. Hungria (República Popular da). Iraque. Japão. México. URSS (Europa).	
22 715,2 (22 713,8) (Via n.º 2239)	Alasca. Bélgica. Espanha. Estados Unidos da América (Este). Estados Unidos da América (Oeste). Guam. Hawai. Índia (Este). Irão. Jugoslávia. Noruega. Panamá (Zona do Canal do). Porto Rico. Turquia.	
22 718,3 (22 716,9) (Via n.º 2240)	Chile. Grécia. Jamaica. Japão. Madagáscar. Noruega. Paquistão. Reino Unido. Tunísia.	

APÊNDICE 26

Plano de adjudicação das frequências para o serviço móvel aeronáutico e informações correspondentes

PARTE I

Disposições gerais

SECÇÃO I

Definições

1. *Plano de adjudicação das frequências.*

Plano que indica as frequências a utilizar numa zona ou por um país, sem precisar as estações a que essas frequências podem ser consignadas.

2. *Significação da terminologia* empregada no presente apêndice para os diferentes métodos de repartição das frequências:

Repartição das frequências	Em francês	Em inglês	Em espanhol	Em português
Serviços	Attribution (attribuer)	Allocation (to allocate)	Atribución (atribuir)	Atribuição (atribuir)
Zonas	Allotissement (allotir)	Allotment (to allot)	Adjudicación (adjudicar)	Adjudicação (adjudicar)
Estações	Assignation (assigner)	Assignement (to assign)	Asignación (asignar)	Consignação (consignar)

3. V. o n.º **27/3** (1).
4. V. o n.º **27/4** (1).
5. V. o n.º **27/5** (1).
6. V. o n.º **27/6** (1).
7. *Família de frequências do serviço aeronáutico.*

Grupo de frequências escolhidas em diferentes faixas do serviço móvel aeronáutico para permitir o estabelecimento de comunicações entre as aeronaves em voo e as estações aeronáuticas correspondentes, quaisquer que sejam as horas e as distâncias.

Secção II

Princípios técnicos e de exploração para a elaboração do plano de adjudicação das frequências para o serviço móvel aeronáutico (OR)

A) Determinação da largura das vias

1. *Espaçamento entre frequências.*

Os espaçamentos entre frequências indicados no quadro seguinte permitem o emprego de sistemas de comunicação de rendimento elevado.

Faixa (kHz)	Espaçamento entre frequências (kHz)	Faixa (kHz)	Espaçamento entre frequências (kHz)
2 850-3 155	7	8 815- 9 040	08,5
3 400-3 500	7	11 175-11 400	9,5
3 900-3 950	7	13 200-13 360	10
4 650-4 750	7	15 010-15 100	10
5 480-5 730	7,5	17 900-18 030	10
6 525-6 765	7,5		

a) Supõe-se que para as emissões da classe A3 as frequências de modulação têm por limite superior 3000 Hz e para as outras classes de emissões autorizadas a radiação das faixas laterais não excede a das emissões da classe A3.

b) A utilização para as diversas classes de emissão (A1, A2, A3, A4 e F1) das vias tal como derivam do quadro precedente será objecto de arranjos especiais entre as administrações interessadas a fim de evitar as interferências que poderiam resultar da utilização simultânea de uma memsa via para emissões de classes diferentes, não se concedendo qualquer prioridade de princípio a uma classe de emissão especial.

c) Reconhece-se que é possível fraccionar em duas ou mais vias A1 cada uma das vias que resultam dos espaçamentos acima.

d) O agrupamento de vias adjacentes derivadas do quadro precedente, para satisfazer necessidades especiais, ficará sujeito a arranjos especiais entre as administrações interessadas.

e) Os arranjos indicados nas alíneas *b*), *c*) e *d*) anteriores serão concluídos em virtude das disposições do artigo 43 (Acordos especiais) da Convenção Internacional das Telecomunicações e do artigo 4 do Regulamento das Radiocomunicações.

---

(1) Apêndice 27 Aer2.

2. *Frequências a adjudicar.*

No quadro seguinte encontra-se a lista das frequências a adjudicar nas faixas exclusivas reservadas ao serviço móvel aeronáutico, na base da largura de faixa prevista no § 1 anterior:

kHz

2850–3155	4650–4750	8815–9040	15 010–15 100
3 023,5 (*a*) (R) e (OR) 3 032 3 039 3 046 3 053 3 060 3 074 3 081 3 088 3 095 3 102 3 109 3 116 3 123 3 130 3 137 3 144 3 151 (OR) 18 vias	4 703,5 4 710,5 4 717,5 4 727,5 4 731,5 4 738,5 4 745,5 (OR) 7 vias	8 967 8 975,5 8 984 8 992,5 9 001 9 009,5 9 018 9 026,5 9 035 (OR) 9 vias	15 016 15 026 15 036 15 046 15 056 15 066 15 076 15 086 15 092,5 (*b*) 15 096,5 (*b*) (OR) 10 vias
	5480–5730		
	5 680 (*a*) (R) e (OR) 5 688 5 695,5 5 703 5 710,5 5 718 5 725,5 (OR) 6 vias	11 175–11 400	17 900–18 030
3900–3950	6525–6765	11 180,5 11 190 11 199,5 11 205 11 218,5 11 228 11 237,5 11 247 11 256,5 11 266 11 273 (*b*) (OR) 11 vias	17 975 (*b*) 17 983,5 17 993,5 18 003,5 18 013,5 18 023,5 (OR) 6 vias
Região 1 3 904 3 911 3 918 3 925 3 932 3 939 3 946 (OR) 7 vias	6 685 (*b*) 6 687,5 (*b*) 6 693 6 700,5 6 708 6 715,5 6 723 6 730,5 6 738 6 745,5 6 753 6 760,5 (OR) 12 vias	13 200–13 360	
		13 205,5 13 215,5 13 225,5 13 235,5 13 245,5 13 255,5 (OR) 6 vias	

(*a*) Ver Resolução n.º 403 da CAMR79.
(*b*) Esta frequência só deve ser utilizada para emissões da classe A1.

3. *Vias comuns aos serviços (R) e (OR).*

Fica autorizada no Mundo inteiro, como se indica na parte II do presente apêndice, a utilização das vias comuns aos serviços (R) e (OR) e cujas frequências centrais são de 3023,5 kHz e 5680 kHz (1).

Não obstante as disposições do plano de adjudicação que figura na parte II do presente apêndice, pode igualmente utilizar-se a frequência 5680 kHz nas estações aeronáuticas, para as comunicações com estações de aeronave, quando as outras frequências das estações aeronáuticas não estiverem disponíveis ou forem desconhecidas. Esta utilização será limitada, contudo, a zonas e condições tais que não possa resultar qualquer interferência prejudicial às outras comunicações autorizadas do serviço móvel aeronáutico.

4. V. o n.º ***27/20*** (2).

5. *Adaptação do procedimento de adjudicação.*

Os planos de adjudicação contidos neste apêndice não esgotam todas as possibilidades de partilha. Assim, para fazer face a necessidades especiais de exploração que os presentes planos de adjudicação não satisfaçam, as administrações podem consignar frequências escolhidas nas faixas de ondas decamétricas do serviço móvel aeronáutico em

(1) V. a Resolução n.º 403 da CAMR79.
(2) Apêndice 27 Aer2.

zonas diferentes daquelas a que estão adjudicadas nos referidos planos. Todavia, a utilização das frequências assim consignadas não deverá diminuir a protecção de que gozam essas mesmas frequências, nas zonas a que estão adjudicadas pelos planos, para valor inferior ao determinado pela aplicação do procedimento previsto na secção II-B da parte I e do § 4 (*d*) da secção II da parte III do presente apêndice, para os serviços (R) e (OR), respectivamente.

6. Quando for necessário satisfazer as exigências da exploração das linhas aéreas internacionais, as administrações poderão adoptar os procedimentos de adjudicação para a consignação das frequências do serviço móvel aeronaútico (R). Essas consignações serão seguidamente sujeitas à aprovação prévia das administrações interessadas.

7. Recorrer-se-á à coordenação descrita no § 4 quando for oportuno fazê-lo para a utilização racional das frequências em causa.

8. Além das disposições deste apêndice que prevêem a estensão de certas frequências das ZLAMP-EU e ME, para corresponder às necessidades de vôos internacionais do e para o territótrio da URSS, a administração deste país poderá utilizar, para o mesmo fim, as frequências adjudicadas às ZLARN-2 e 3 e às suas subdivisões. Não deverá daí resultar diminuição da protecção para aquém das normas mencionadas no § 5 anterior para o conjunto das estações do serviço móvel aeronáutico.

B) Curvas de alcance da interferência

1. *Definição das curvas.*

As curvas anexas indicam, para as diferentes ordens de grandeza das frequências, o limite das distâncias mínimas aceitáveis a que se devem situar duas estações terrestres que emitam na mesma frequência e cuja potência radiada seja de 1 kW (emissão não modulada), a fim de assegurar, no limite de alcance útil da emissão desejada de uma das estações terrestres, uma relação sinal útil/sinal interferente de 15 dB, a bordo de uma estação de aeronave.

O alcance útil não é indicado nas curvas.

2. *Tipo de mapa utilizado.*

Essas curvas, a traçar em papel vegetal, só podem ser utilizadas com um planisfério elaborado segundo uma projecção de Mercator e cuja escala seja idêntica à indicada em cada uma das curvas. Elas não devem, pois, ser utilizadas com mapas que não estejam de acordo com estas definições. Os planisférios anexos, em que figuram os limites das ZLAMP e das ZLARN, estão igualmente elaborados na escala conveniente e podem utilizar-se com as curvas.

3. *Mudança de escala ou de sistema de projecção.*

Se se pretender utilizar outros mapas em projecção de Mercator com escala diferente, será necessário desenhar, a partir das coordenadas que figuram nos quadros seguintes, novas curvas para ter em consideração a mudança de escala.

Ao traçar as novas curvas é necessário ter presente que o ponto de intersecção do eixo vertical de simetria, isto é, um meridiano, e do eixo perpendicular que representa um paralalelo deve ficar à latitude 00°; na curva 00°, à latitude 20° N., na curva 20°, a 40° N., na de 40°, etc.

As coordenadas geográficas que figuram nos quadros seguintes são dadas em relação ao meridiano 180°, tomado como eixo de simetria para a construção das curvas.

4. V. o n.° **27/30** (1).

5. *Modo de emprego.*

Toma-se um dos mapas anexos ao presente apêndice e escolhe-se o vegetal que contenha a curva correspondente á ordem de grandeza das frequências e às condições de partilha que se pretende estudar.

Coloca-se o centro do vegetal (isto é, a intersecção do eixo de simetria e do eixo horizontal) na linha que delimita a zona ou na posição geográfica do emissor. Anota-se a latitude desse ponto e toma-se a curva a ela correspondente.

Para um emissor situado num ponto qualquer exterior à curva a relação de protecção definida no § 1 anterior será superior a 15 dB.

Para um emissor situado num qualquer ponto interior à curva a relação de protecção obtida será inferior a 15 dB.

A orientação das curvas é tal que são utilizáveis para o hemisfério norte; para o hemisfério sul deverão inverter-se. Deve-se tomar esta precaução quando se tiver de seguir os limites das zonas e passar de um para outro hemisfério.

---

(1) Apêndice 27 Aer2.

6. *Elementos para o traçado das curvas.*

3,0 MHz noite

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 31,5°	E.-W. 31,5°	N.-S. 31,5°	E.-W. 33,6°	N.-S. 31,5°	E.-W. 41°	N.-S. 31,5°	E.-W. 49°	N.-S. 31,5°	E.-W. 64°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180°	31,5° N.	180°	51,5° N.	160° W.	70° N.	127° W.	70° N.	106° W.	70° N.
	155° W.	20° N.	160° W.	47° N.	140° W.	60° N.	125° W.	60° N.	115° W.	60° N.
	148,5° W.	00°	150° W.	39° N.	138° W.	50° N.	131° W.	50° N.	128° W.	50° N.
	155° W.	20° S.	146° W.	30° N.	140° W.	40° N.	138° W.	40° N.	140° W.	40° N.
	180°	31,5° S.	146° W.	20° N.	143° W.	30° N.	150° W.	29° N.	150° W.	35° N.
			150° W.	07° N.	150° W.	22° N.	160° W.	23° N.	160° W.	32° N.
			160° W.	05° S.	160° W.	14° N.	167° W.	20° N.	170° W.	29° N.
			170° W.	10° S.	169° W.	10° N.	180°	18,5° N.	180°	28,5° N.
			180°	11,5° S.	180°	08,5° N.				

3,5 MHz noite

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 36°	E.-W. 36°	N.-S. 36°	E.-W. 38°	N.-S. 36°	E.-W. 47°	N.-S. 36°	E.-W. 56°	N.-S. 36°	E.-W. 73°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180°	36° N.	180°	56° N.	140° W.	70° N.	118° W.	70° N.	93° W.	70° N.
	170° W.	35° N.	170° W.	55° N.	133° W.	60° N.	119° W.	60° N.	100° W.	68° N.
	159° W.	30° N.	160° W.	53° N.	131° W.	50° N.	124° W.	50° N.	110° W.	58° N.
	150° W.	21° N.	150° W.	47° N.	133° W.	40° N.	132° W.	40° N.	120° W.	50° N.
	145° W.	10° N.	144° W.	40° N.	140° W.	27° N.	140° W.	32° N.	130° W.	43° N.
	144° W.	00°	140° W.	20° N.	150° W.	16° N.	150° W.	24° N.	140° W.	35° N.
	145° W.	10° S.	145° W.	10° S.	160° W.	08° N.	160° W.	17° N.	150° W.	30° N.
	150° W.	21° S.	150° W.	00° S.	170° W.	05° N.	170° W.	15° N.	160° W.	27° N.
	160° W.	30° S.	160° W.	10° S.	180°	04° N.	180°	14° N.	170° W.	25° N.
	170° W.	35° S.	170° W.	14° N.					180°	24° N.
	180°	36° S.	180°	16° N.						

4,7 MHz noite

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 50°	E.-W. 50°	N.-S. 50°	E.-W. 53°	N.-S. 50°	E.-W. 65°	N.-S. 50°	E.-W. 77°	N.-S. 50°	E.-W. 100°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	160° W.	47° N.	180°	70° N.	103° W.	70° N.	83° W.	70° N.	50° W.	70° N.
	147° W.	40° N.	150° W.	66° N.	110° W.	50° N.	94° W.	60° N.	78° W.	60° N.
	138° W.	30° N.	130° W.	50° N.	115° W.	40° N.	103° W.	50° N.	98° W.	50° N.
	133° W.	20° N.	126° W.	40° N.	127° W.	20° N.	114° W.	40° N.	112° W.	40° N.
	131° W.	10° N.	125° W.	30° N.	140° W.	06° N.	124° W.	30° N.	130° W.	28° N.
	130° W.	00°	127° W.	20° N.	150° W.	02° S.	134° W.	21° N.	140° W.	19° N.
	131° W.	10° S.	130° W.	07° N.	160° W.	07° S.	140° W.	16° N.	160° W.	12° N.
	133° W.	20° S.	140° W.	10° S.	170° W.	09° S.	150° W.	07° N.	170° W.	10,5 °N.
	138° W.	30° S.	150° W.	20° S.	180°	10° S.	160° W.	05° N.	180°	10° N.
	147° W.	40° S.	170° W.	29° S.			180°	00°		
	160° W.	47° S.	180°	30° S.						
	170° W.	48° S.								
	180°	50° S.								

5,6 e 6,6 MHz noite

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 58°	E.-W. 58°	N.-S. 58°	E.-W. 63°	N.-S. 58°	E.-W. 76°	N.-S. 58°	E.-W. 92°	N.-S. 58°	E.-W. 116°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180° 122° W. 180°	58° N. 00° 58° S.	130° W. 120° W. 118° W. 115° W. 115° W. 117° W. 120° W. 122° W. 130° W. 138° W. 150° W. 180°	70° N. 60° N. 50° N. 40° N. 30° N. 20° N. 10° N. 00° 10° S. 20° S. 30° S. 38° S.	80° W. 92° W. 98° W. 104° W. 111° W. 118° W. 127° W. 134° W. 150° W. 180°	70° N. 60° N. 50° N. 40° N. 30° N. 20° N. 10° N. 00° 10° S. 18° S.	48° W. 73° W. 88° W. 99° W. 110° W. 120° W. 130° W. 146° W. 180°	70° N. 60° N. 50° N. 40° N. 30° N. 20° N. 10° N. 00° 08° S.	08° W. 66° W. 88° W. 104° W. 120° W. 125° W. 143° W. 180°	70° N. 60° N. 50° N. 40° N. 25° N. 20° N. 10° N. 02° N.

3,0 e 3,5 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		60°	
	N.-S. 6,3°	E.-W. 6,3°	N.-S. 6,3°	E.-W. 6,7°	N.-S. 6,3°	E.-W. 8,5°	N.-S. 6,3°	E.-W. 12,6°

4,7 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		60°	
	N.-S. 10,8°	E.-W. 10,8°	N.-S. 10,8°	E.-W. 11,5°	N.-S. 10,8°	E.-W. 14°	N.-S. 10,8°	E.-W. 21,6°

5,6 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		60°	
	N.-S. 13,6°	E.-W. 13,6°	N.-S. 13,6°	E.-W. 14,5°	N.-S. 13,6°	E.-W. 17,6°	N.-S. 13,6°	E.-W. 27,2°

6,6 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		60°	
	N.-S. 17,2°	E.-W. 17,2°	N.-S. 17,2°	E.-W. 18,3°	N.-S. 17,2°	E.-W. 22,4°	N.-S. 17,2°	E.-W. 34,4°

Nota. — Para as faixas 3,0/3,5/4,7/5,6/6,6 MHz, não é necessário indicar pontos intermediários para o traçado das curvas, as quais correspondem, aproximadamente, a uma circunferência nas condições de propagação diurna.

9,0 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 34,3°	E.-W. 34,3°	N.-S. 34,3°	E.-W. 36,5°	N.-S. 34,3°	E.-W. 44,8°	N.-S. 34,3°	E.-W. 53,5°	N.-S. 34,3°	E.-W. 69°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180°	34° N.	180°	54° N.	148° W.	70° N.	122° W.	70° N.	100° W.	69° N.
	170° W.	33° N.	160° W.	50° N.	135° W.	60° N.	122° W.	60° N.	111° W.	60° N.
	160° W.	28° N.	150° W.	42° N.	133° W.	50° N.	127° W.	50° N.	120° W.	53° N.
	150° W.	17° N.	145° W.	30° N.	135° W.	40° N.	134° W.	40° N.	130° W.	45° N.
	146° W.	00°	146° W.	20° N.	140° W.	28° N.	140° W.	34° N.	140° W.	37° N.
	150° W.	17° S.	147° W.	10° N.	150° W.	17° N.	150° W.	24° N.	150° W.	32° N.
	160° W.	28° S.	153° W.	00	160° W.	11° N.	160° W	20° N.	160° W.	28,5° N.
	170° W.	33° S.	160° W.	08° S.	170° W.	07° N.	170° W.	17° N.	170° W.	26° N.
	180°	34° S.	170° W.	13° S.	180°	06° N.	180°	16° N.	180°	25° N.
			180°	14° S.						

10,0 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 49,5°	E.-W. 49,5°	N.-S. 49,5°	E.-W. 53°	N.-S. 49,5°	E.-W. 64,5°	N.-S. 49,5°	E.-W. 78°	N.-S. 49,5°	E.-W. 100°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180°	49,5° N.	180°	69,5° N.	102° W.	70° N.	100° W.	70° N.	50° W.	70° N.
	170° W.	49° N.	160° W.	68° N.	103° W.	60° N.	90° W.	60° N.	70° W.	66° N.
	160° W.	46° N.	140° W.	62° N.	109° W.	50° N.	101° W.	50° N.	80° W.	60° N.
	150° W.	41° N.	130° W.	52° N.	115,5° W	40° N.	110° W.	40° N.	98° W.	50° N.
	140° W.	32° N.	127° W.	40° N.	120° W.	31° N.	120° W.	30° N.	110° W.	42° N.
	133° W.	20° N.	127° W.	30° N.	130° W.	17° N.	130° W.	22° N.	120° W.	36° N.
	131° W.	10° N.	130° W.	11° N.	140° W.	07° N.	140° W.	12° N.	130° W.	30° N.
	130,5° W	00°	140° W.	08° S.	150° W.	00°	150° W.	07° N.	140° W.	22° N.
	131° W.	10° S.	150° W.	18° S.	160° W.	06° S.	160° W.	03° N.	150° W.	16° N.
	133° W.	20° S.	160° W.	25° S.	170° W.	09° S.	170° W.	01° N.	160° W.	13° N.
	140° W.	32° S.	170° W.	28° S.	180°	09,5° S.	180°	00,5° N.	170° W.	11° N.
	150° W.	41° S.	180°	29,5° S.					180°	10,5° N.
	160° W.	46° S.								
	170° W.	49° S.								
	180°	49,5° S.								

11,3 MHz dia

Latitude — Alcance de interferência nos eixos	00°		20°		40°		50°		60°	
	N.-S. 54,0°	E.-W. 54,0°	N.-S. 54,0°	E.-W. 58°	N.-S. 54,0°	E.-W. 71,0°	N.-S. 54,0°	E.-W. 85°	N.-S. 54,0°	E.-W. 109°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180°	54° N.	145° W.	70° N.	93° W.	70° N.	64° W.	70° N.	30° W.	70° N.
	160° W.	52° N.	128° W.	60° N.	98° W.	60° N.	80° W.	62° N.	71° W.	60° N.
	150° W.	47° N.	123° W.	50° N.	104° W.	50° N.	95° W.	50° N.	90° W.	50° N.
	140° W.	40° N.	120° W.	40° N.	109° W.	40° N.	110° W.	35° N.	107° W.	40° N.
	132° W.	30° N.	120° W.	30° N.	120° W.	24° N.	120° W.	26° N.	120° W.	32° N.
	128° W.	20° N.	122° W.	20° N.	130° W.	12° N.	140° W.	08° N.	140° W.	15° N.
	127° W.	10° N.	124° W.	10° N.	140° W.	00°	150° W.	03° N.	150° W.	11° N.
	126° W.	00°	130° W.	04° S.	150° W.	06° S.	160° W.	01° S.	160° W.	08° N.
	127° W.	10° S.	140° W.	17° S.	160° W.	10° S.	170° W.	03° S.	170° W.	07° N.
	128° W.	20° S.	150° W.	25° S.	180°	14° S.	180°	04° S.	180°	06° N.
	132° W.	30° S.	170° W.	33° S.						
	140° W.	40° S.	180°	34° S.						
	150° W.	47° S.								
	160° W.	52° S.								
	180°	54° S.								

C) Potência radiada

Salvo indicação contrária figurando nas partes II e IV, supõe-se que as potências de ponta radiadas são as seguintes:

Classe de emissão	Estações	Potência de ponta radiada
A1	Estações terrestres	1 kW
	Estações de aeronave	50 W
A3 (taxa de modulação 100 %)	Estações terrestres	4 kW
	Estações de aeronaves	50 W

PARTE II

Princípios técnicos e de exploração aplicados na adjudicação das frequências ao serviço móvel aeronáutico (OR)

SECÇÃO I

Faixas de frequências e vias disponíveis

1. *Faixas de frequências.*

As faixas de frequências disponíveis para o serviço móvel aeronáutico (OR) formam três categorias distintas:

a) Faixas atribuídas exclusivamente ao serviço móvel aeronáutico (OR);
b) Faixas atribuídas em partilha especificamente ao serviço móvel aeronáutico (OR) e a outros serviços;
c) Faixas atribuídas ao serviço móvel e de que o serviço móvel aeronáutico (OR) se não encontra especificadamente excluído.

2. *Frequências a funcionar*

A) Faixas exclusivas:

Na parte I indicam-se as frequências a consignar nas faixas atribuídas exclusivamente ao serviço móvel aeronáutico (OR).

B) Faixas partilhadas:

As vias que se propõe atribuir ao serviço móvel aeronáutico (OR) nas faixas que ele partilha com outros serviços têm a mesma largura que as das faixas exclusivas. Contudo, não se designou especificamente nenhuma frequência dessas faixas para estas atribuições. Determinou-se o número de vias cuja atribuição se propõe nestas faixas para o serviço móvel aeronáutico (OR), tendo em vista especialmente a largura das faixas e o número de serviços que as partilham.

C) Vias comuns aos serviços (R) e (OR):

Está autorizada em todo o Mundo e nas condições definidas no n.º 3 da secção II da parte I a utilização das vias comuns aos serviços (R) e (OR) e cujas frequências centrais são 3023,5 kHz e 5680 kHz (1).

3. *Escolha das frequências.*

A) Faixas exclusivas:

Satisfizeram as necessidades até ao limite das faixas disponíveis — inclusive as necessidades comuns a várias regiões — com o auxílio das frequências das faixas atribuídas no Mundo inteiro exclusivamente ao serviço móvel aeronáutico (OR). Na Região 1, as necessidades excedentes foram satisfeitas na maior medida possível por meio das frequências da faixa 3900-3950 kHz, atribuídas em exclusivo aeronáutico (OR) nessa região.

B) Faixas partilhadas.

O restante das necessidades foi satisfeito na maior medida possível com as frequências das faixas indicadas no n.º 1, alíneas *b*) e *c*), da presente secção e considerada nesta ordem.

(1) V. a Resolução n.º 403 da CAMR 79.

SECÇÃO II

Adaptação dos princípios técnicos

1. *Fracionamento das vias.*

Para utilizar as faixas de modo mais racional considerou-se que é possível alojar numa via, prevista para emissão de classe A3, quer uma emissão de classe A3, quer duas ou mais emissões A1, A3A, quer ainda outros tipos complexos de transmissão. Quando uma via estiver subdividida, as subdivisões não devem ser utilizadas por administrações diferentes. Quando se utilizarem as vias suplementares assim obtidas, deverá ter-se o cuidado de não causar interferência prejudicial aos utilizadores das vias adjacentes.

2. *Modificação da classe de uma emissão.*

Em virtude da necessidade de se evitarem interferências prejudiciais, por um lado, e, por outro lado, de utilizar do modo mais eficaz as faixas de frequências disponíveis, fica autorizada a modificação da classe de uma emissão no caso em que tal modificaçãonão exija qualquer alargamento da faixa necessária.

3. *Adjudicação de vias adjacentes (OR).*

Quando um país assim o pedir, as adjudicações a esse país serão agrupadas em vias adjacentes, se as condições geográficas o permitirem e sempre que isso se revelar possível.

4. *Relações de protecção e partilhas.*

a) Nas zonas em que se revelou necessário aumentar o número de repetições das consignações, satisfez-se por meio de uma via adjudicada a uma administração vários pedidos formulados por essa administração, mesmo no caso de daí poder resultar uma diminuição da relação de protecção entre as emissões das estações interessadas;

b) Nas zonas em que o número de pedidos excede muito a média, as relações de protecção podem ser reduzidas por acordo entre as administrações interessadas;

c) Foram repetidas certas consignações, apesar de haver forte probabilidade de interferências entre estações dependentes de administrações diferentes: ao fazê-lo, admitiu-se que todas as estações em questão só emitiriam intermitentemente. Nesta caso, todas as estações interessadas têm direitos iguais de utilização da frequência comum e nenhuma estação ou grupo de estações beneficia de qualquer prioridade sobre as outras;

d) Certas frequências foram consignadas sob a forma de consignações chamadas «secundárias». Neste caso, uma estação que disponha de uma frequência sob a forma de uma consignação chamada «primária» é protegida pelas seguintes disposições contra as interferências que possa provocar outra estação que disponha da mesma frequência a título de consignação secundária:

A potência emitida pela estação que dispõe da consignação secundária deve ser inferior à da estação que dispõe da mesma frequência a título de consignação primária;

A distância entre as estações interessadas deve ser, pelo menos, igual a metade da distância de repetição necessária para assegurar uma relação de protecção de 20 dB.

5. *Limitação da potência das estações.*

As administrações interessadas devem estabelecer acordo para reduzir de noite a potência radiada pelas estações aeronáuticas, a fim de poderem utilizar essas frequências durante a noite.

PARTE IV

Plano de adjudicação das frequências para o serviço móvel aeronáutico (OR) nas faixas compreendidas entre 2505 kHz e 23 350 kHz

1. No plano foram utilizadas as seguintes abreviaturas:

a) *Lista alfabética das abreviaturas que designam os países:*

AFS União Sul-Africana.
AGL Angola.
ALB Albânia (República Popular da).
ALS Estado do Alasca, Estados Unidos da América.
ARG República Argentina.
ARS Arábia Saudita.
ATN Antilhas Holandesas.

AUS	Austrália (Federação da).
AUT	Áustria.
AZR	Açores.
B	Brasil.
BER	Bermudas.
BLR	República Socialista Soviética da Bielorrússia.
BOL	Bolívia.
BUL	Bulgária (República Popular da).
CAF	República Centro-Africana.
CAN	Canadá
CAR	Carolinas.
CBG	Camboja.
CHL	Chile.
CHN	China.
CLM	Colômbia (República da).
CLN	Ceilão.
CME	Camarões (Estado dos) (sob tutela da França).
COG	República do Congo.
CPV	Cabo Verde (ilhas de).
CTI	República da Costa do Marfim.
CTR	Costa Rica.
CUB	Cuba.
CYP	Chipre.
D	Alemanha.
DAH	República do Daomé.
DNK	Dinamarca.
DOM	República Dominicana.
E	Espanha.
EGY	República Árabe Unida (região egípcia).
EQA	Equador.
ETH	Etiópia.
F	França e Argélia.
FJI	Fiji (ilhas).
FNL	Finlândia.
G	Reino Unido da Grã-Bretanha e da Irlanda do Norte.
GAB	República do Gabão.
GDL	Guadalupe (Distrito Francês de).
GIB	Gilbraltar.
GNP	Guiné Portuguesa.
GRC	Grécia.
GRL	Gronelândia.
GTM	Guatemala.
GUB	Guiana Inglesa.
GUF	Guiana (Distrito Francês da).
HKG	Hong-Kong.
HND	Honduras (República das).
HOL	Países Baixos.
HTI	Haiti (República do).
HVO	República do Alto Volta.
HWA	Estado do Havai, Estados Unidos da América.
I	Itália.
IND	Índia.
INP	Índia Portuguesa.
INS	Indonésia (República da).
IOB	Índias Ocidentais Inglesas.
IRN	Irão.
IRQ	Iraque.
ISL	Islândia.
ISR	Estado de Israel.
J	Japão.
JON	Ilha Johnston.
KEN	Quénia.
LAO	Laos.

LBN	Líbano.
LBY	Líbia.
MAC	Macau.
MDG	Madagáscar (República Malgaxe).
MDW	Ilhas Midway.
MEX	México.
MLA	Malásia.
MLI	Federação do Mali.
MLT	Malta.
MOZ	Moçambique.
MRA	Marianas.
MRC	Marrocos (Reino de).
MRL	Marshall.
MRT	Martinica (Distrito Francês da).
MTN	República Islâmica da Mauritânia.
NCG	Nicarágua.
NCL	Nova Caledónia e dependências.
NGN	Nova Guiné Holandesa.
NGR	República da Nigéria.
NHB	Novas Hébridas (arquipélago) (condomínio franco-britânico).
NOR	Noruega.
NZL	Nova Zelândia.
OCE	Polinésia Francesa.
PAK	Paquistão.
PAP	Papua (Territórios de).
PHL	Filipinas (República das).
PNR	Panamá (República do).
PNZ	Zona do Canal do Panamá.
POL	Polónia (República Popular da).
POR	Portugal.
PRG	Paraguai.
PRU	Peru.
PTR	Porto Rico.
REU	Reunião (Distrito Francês de).
RHS	Rodésia do Sul.
ROU	República Popular Romena.
S	Suécia.
SLV	Salvador (República do).
SMB	Somália Britânica.
SMF	Costa Francesa dos Somális.
SNG	Singapura.
STP	São Tomé e Príncipe.
SUI	Suíça.
SUR	Suriname.
SYR	República Árabe Unida (região síria).
TCD	República do Chade.
TCH	Checoslováquia.
TGO	Togo (República do).
TMP	Timor Português.
TUN	Tunísia.
UKR	República Socialista Soviética da Ucrânia.
URG	Uruguai.
URS	União das Repúblicas Socialistas Soviéticas.
URS-AM	União das Repúblicas Socialistas Soviéticas — Ásia Central.
URS-C	União das Repúblicas Socialistas Soviéticas — Cáucaso.
URS-E	União das Repúblicas Socialistas Soviéticas — Europa.
URS-SEO	União das Repúblicas Socialistas Soviéticas — Sibéria e Extremo Oriente.
USA	Os 48 Estados contíguos dos Estados Unidos da América (excepto os Estados do Alasca e do Havai).
VEN	Venezuela.
VTN	Vietname.
WAK	Wake (ilha).
YUG	Jugoslávia.

b) Outras abreviaturas:

N. = Norte. E. = Este. S. = Sul. W. = Oeste.

Exemplos:

«N.-46° N.» *significa* «ao norte de 46° norte».
«55° W.-64° W. e N.-7° S.» *significa* «entre 55° oeste e 64° oeste e ao norte de 7° sul».
W = Watts.
kW = Kilowatts.

Exemplo:

«CUB (500 W)» significa «Cuba, potência limitada a 500 watts na antena».
(6) *significa* «estações francesas».
(7) *significa* «estações dos Estados Unidos da América».
(81) *significa* «Alemanha de Leste».
■ *significa* «redes da comunidade francesa».

Plano das frequências (OR)

A) Faixas exclusivas

Região 1 **Faixa de 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
CAF ■	ARS	CAF ■	ALB	AZR	D
COG ■	BLR	CME ■	AZR	CAF ■	ETH
CTI ■	CAF ■	COG ■	CAF ■	COG ■	POR
DAH ■	COG ■	CTI ■	CME ■	CTI ■	ROU
EGY	CTI ■	DAH ■	COG ■	D	S
F ■	DAH ■	F ■	CTI ■	DAH ■	SYR
GAB ■	EGY	GAB ■	DAH ■	E	URS-AM (1 kW)
HVO ■	F ■	HVO ■	DNK	GAB ■	URS-E
IRQ	GAB ■	ISL	F (excepto Argélia) ■	GRC	
MDG ■	HVO ■	ISR	GAB ■	HVO ■	
MLI ■	MDG ■	MDG ■	HVO ■	MDG ■	
MRC (6)	MLI ■	MLI ■	MDG ■	MLI ■	
MTN ■	MRC (6)	MTN ■	MLI ■	MTN ■	
NGR ■	MTN ■	NGR ■	MTN ■	NGR ■	
NOR	NGR ■	POR	NGR ■	SYR	
POL	NOR	SMF ■	POR	TCD ■	
SMF (350 W) ■	SMF ■	TCD ■	TCD ■	URS-AM	
TCD ■	TCD ■	TCH	TGO ■	URS-E	
TUN	TUN	URS-E	UKR	URS-SEO (1 kW)	
URS-E	URS-AM (500 W)	URS-SEO (1 kW)	URS-SEO (1 kW)		
URS-SEO (1 kW)	URS-C				
	YUG				

3074	3081	3088	3095	3102	3109
AGL	ARS	AFS	ARS (2,5 kW)	AFS	AFS
AZR	AZR	D	CYP	BLR	D (81)
BUL	CYP	EGY	EGY	D (81)	EGY
CPV	D	G	F (excepto Argélia) ■	EGY	G
EGY	EGY	GRC (250 W)	G	ETH	I
F (excepto Argélia) ■	FNL	POR	GIB	G	MRC (7)
G	G	SUI (200 W)	KEN	GIB	S
GIB	KEN	UKR	LBY	MLT	URS-E
GNP	LBY	URS-AM (1 kW)	MLT	SUI	
MOZ	MLT	URS-E	POL	URS-C	
POR	POR		RHS		
S	ROU		SMB		
STP	SMB		URS-AM (1 kW)		
TUN	URS-E		URS-C		
URS-AM (1 kW)	URS-SEO (1 kW)		URS-SEO (1 kW)		
URS-E					

3116	3123	3130	3137	3144	3151
AFS D (81) F (Algérie) ■ G TCH TUN URS-AM (1 kW) URS-C URS-E URS-SEO (1 kW)	EGY G (N) HOL I MARC (7) UKR URS-E URS-SEO (N.46º N. & W.-170º E.)	EGY E (500 W) GRC HOL URS-E URS-SEO (1 kW)	BUL E (500 W) EGY HOL URS-AM (1 kW) URS-C URS-E URS-SEO (1kW)	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algérie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN UKR URS-C URS-E URS-SEO (1 kW) YUG	BUL CAF ■ CME ■ COG ■ CTI D DAH ■ EGY F (Algérie) ■ GAB HVO ■ MDG ■ MLI MRC 6 MTN ■ NGR ■ TCD ■ TUN URS-E URS-SEO (1 kW)

Região 2 **Faixa de 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
ALS ARG B(42º W.-51º W. & N.-9º S.) CAN * CLM DOM (250 W) GRL HWA SLV (250 W) USA	ALS ARG (S.-43º S.) B BER (7) CAN * GDL ■ GRL HWA MRT ■ NCG USA	ARG CAN CLM (S. 5º W.-64º W.) CTR (250 W) HTI (250 W) HWA MEX	ALS ARG CHL (N.-41º S. & N.-7º S.) CAN (E-98º W.) CUB GTM (250 W) HWA PNR (250 W) USA (W.-98º W.)	B CAN CHL (N.41º S.) (300 W) CHL (S.-41º S.) GDL ■ HWA MEX MRT ■	ALS ARG (S.-34º S.) B (12º-21º S. & 46º-53º W.) BER (7) CAN CUB (Guanta- namo) (7) GRL GUB (7) HWA JOB (7) PNR (250 W) PNZ PRU (250 W) PTR USA
3074	3081	3088	3095	3102	3109
ALS ARG B (E.-42º W. & N.-10º S.) CAN (*) CLM (N.-4º N.) GRL GTM (250 W) HTI (250 W) USA	ARG (S.-43º S.) B (10º S.-18º S. & E.-43º W.) CAN GUF ■ HWA PRG (250 W) PRU (250 W) SLV (250 W) URG (250 W) VEN (250 W)	ALS B (*) BER (7) CAN (*) (300 W) CHL (S.-31º S.) CUB (Guanta- namo) (7) GRK HWA PNZ PTR USA	ARG (S.-28º S.) B (42º W.-57º W. & N.-9º S.) CAN DOM (250 W) HWA MEX PRU (250 W)	ALS B BER (7) CAN (*) (300 W) CHL (S.-36º S.) GDL ■ GRL HND MRT ■ USA	ALS B (40º-50º W. & 9º-17º S.) B (S.-17º S.) BER (7) CAN (*) CHL CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA

3116	3123	3130	3137	3144	3151
B (E.-46° W. e 18°- -24° S.) B (S.-24° S.) (350 W) CAN CHL CTR (250 W) DOM (250 W) EQA (250 W) MEX VEN (250 W)	ALS ARG (S.-35° S.) B (E.-43° W. e 10°- -18° S.) BER (7) BOL CAN (3) GRL GUB (7) HWA USA	ATN BOL (250 W) CAN CHL (S.-41° S.) CHL (N.-41° S.) (300 W) CUB EQA (250 W) GTM (250 W) HWA URG	ALS B (E.-46° W. e 18°- 24° S.) B (S.-24° S.) (350 W) BER (7) CAN (3) CHL DOM (250 W) EQA (250 W) GRL GTM (250 W) HWA PRG (250 W) USA VEN (250 W)	ALS ARG B (E.-42° W. e N.- -10° S.) BER (7) CAN (3) GRL GUB (7) HWA IOB (7) PNZ PRT USA	ARG, B, BOL } (2) CAN CHL, CLM } (2) DOM (250 W) EQA (250 W) (2) MEX PRG (250 W), PRU (250 W), URG, VEN (250 W) } (2)

(*) Ver nota 3 seguinte.
(1) Utilização nocturna limitada entre 7° e 16° S. a W. de 56° W.
(2) Apenas estações de aeronaves.
(3) O Canadá só utilizará esta frequência se não provocar interferência nas estações situadas nos Estados Unidos da América que trabalhem na mesma frequência.

Região 3　　**Faixa de 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
AUS (500 W) CAR (7) CBG (350 W) CHN (Região 5) (3 kW) IND (350 W) JON LAO (350 W) MDW MRA (7) MRL (7) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PHL (Porto Princesa) (300 W) VTN (350 W) WAK	AUS (S.) (500 W) CBG (250 W) CHN (Região 8) (3 kW) IND (350 W) INS (500 W) LAO (250 W) NCL (250 W) ■ NGN (500 W) NHB (250 W) NZL (1 kW) OCE (250 W) ■ PHL (Aparri) (200 W) VTN (250 W)	AUS (S.) (500 W) CBG (250 W) CHN (Região 5) (500 W) FJI (1 kW) INS (500 W) IRN (250 W) LAO (250 W) NCL (250 W) ■ NHB (250 W) NZL (1 kW) OCE (250 W) ■ PAK (250 W) PHL (Mindoro) (200 W) US (Pacífico, excepto Filipinas e Japão) (1 kW) VTN (250 W)	AUS (500 W) CAR (7) CHN (Região 6) (3 kW) FJI (1 kW) IND (350 W) INS (500 W) IRN (250 W) JON MDW MRA (7) MRL (7) NZL (1 kW) PHL (Zamboanga) (300 W) VTN (Saigão) (250 W) WAK	AUS (500 W) INS (500 W) JON MDW PHL (Baler) (200 W) VTN (Hanói) (500 W)	AUS (500 W) CAR (7) CBG (350 W) INS (500 W) IRN (350 W) J (1 kW) JON LAO (350 W) MDW MRA (7) MRL (7) (1 kW) PHL (Manila) (7) (1 kW) RYUKYU (7) (1 kW) VTN (350 W) WAK
3074	3081	3088	3095	3102	3109
AUS (5 kW) CAR (7) CHN (Região 7) (3 kW) CLN (2,5 kW) HKG (2,5 kW) JON MDW MLA (2,5 kW) MRA (7) MRL (7) PAK (E.) (500 W) PARK (Karachi) (500 W) PHL (Manila) (7) SNG (2,5 kW) WAK	AUS (5 kW) CHN (Região 2) (3 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PHL (Labo) (200 W) SNG (2,5 kW)	AUS (1 kW) CAR (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	AUS (5 kW) CHN (Região 2) (3 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PAK (E.) (250 W) PHL (Cebu) (200 W) SNG (2,5 kW)	AUS (500 W) CAR (7) (1 kW) CHN (Região 7) (3 kW) CLN (2,5 kW) HKG (2,5 kW) J (1 kW) JON (1 kW) MDW (1 kW) MLA (2,5 kW) MRA (7) (1 kW) MRL (7) (1 kW) PAK (250 W) PHL (7) (1 kW) SNG (2,5 kW) WAK (1 kW)	AUS (S.) (500 W) CAR (7) (1 kW) CHN (Região 3) (3 kW) CHN (7) (1 kW) INS (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NGN (1 kW) PAK (250 W) PHL (7) (1 kW) WAK (1 kW)

3116	3123	3130	3137	3144	3151
AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW) PHL (Cagayan) (400 W) PHL (Misamis) (400 W) SNG (2,5 kW)	AUS (S.) (500 W) CAR (7) (1 kW) CHN (Região 1) (3 kW) CHN (7) (1 kW) FJI (1 kW) INS (500 W) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NGN (500 W) NZL (1 kW) PAK (350 W) PHL (7) (1 kW) WAK (1 kW)	AUS (S.) (500 W) CHN (Região 4) (3 kW) INS (500 W) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PAK (Karachi) (1,5 kW) PHL (Cebu) (300 W)	AUS (S.) (5 kW) CAR (7) CHN (Região 6) (3 kW) INP (100 W) JON MDW MRA (7) MRL (7) PHL (Cebu) (400 W) PHL (7) (1 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (1 kW) CHN (7) (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) PHL (7) (1 kW) WAK (1 kW)	AUS (500 W) CHN (Região 4) (3 kW) NGN (500 W) PHL (Cagayan) (400 W) PHL (Misamis) (440 W)

Região 1 **Faixa de 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
AFS ARS CYP EGY G GIB KEN LBY MLT POL SMB URS-C URS-SEO	AFS ARS CYP D EGY G KEN LBY MLT MRC (7) SMB URS-AM URS-E YUG	AGL ALB AZR CME (Douala) (750 W) ■ CPV GNP HOL ISR (250 W) MOZ POR SMF ■ STP TCD (Ft. Lamy) (1 kW) ■ TUN UKR URS-AM URS-E URS-SEO * F (Argélia) (300 W) ■ F (S.) (300 W) ■ I MDG (300 W) ■	AGL AZR CME (Douala) (750 W) ■ CPV D EGY GNP I MOZ POR SMF ■ STP TCD (Ft. Lamy) (1 kW) ■ URS-C URS-E URS-SEO * F (Argélia) (100 W) ■ F (Costa Ocidental) (100 W) ■ MDG (100 W) ■	AFS BUL CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ S SMF ■ TCD ■ TCH TUN URS-C URS-E	AFS AUT AZR BLR BUL CAF ■ COG ■ CTI ■ D DAH ■ EGY ETH (500 W) F (excepto Argélia) ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ NOR POR TCD ■ URS-AM URS-C	CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ EGY F (Argélia) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ SUI TCD ■ TGO ■ TUN URS-SEO (*) I (S) POR (400 W)

(*) Em base secundária.

Região 2 **Faixa de 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
B (E.-57° W.) CAN CHL (N.-33° S.) (300 W) CHL (S.-33° S.) DOM (250 W) EQA (250 W) HWA MEX	ALS B (E.-46° W. e 3° S.-13° S.) (300 W) BER (7) CAN (*) CHL (S.-41° S.) CUB (Guantanamo) (7) GRL GUB (7) IOB (7) PNZ PRG (250 W) PRU (250 W) PTR URG (100 W) USA	ARG BER (7) CAN CLM GRL HWA USA	ALS (1 kW) ARG BER (7) CAN (*) CUB (Guantanamo) (7) GRL GUB (7) JOB (7) PNZ PTR USA	ALS BER (7) CAN (*) CUB (750 W) GDL ■ GRL GUF ■ HWA MRT ■ NCG (300 W) PRU (250 W) URG USA (excepto E.-98° W. e S.-36° N.)	ARG (S.-45° S.) B BOL (250 W) CAN GDL (300 W) ■ HWA MEX MRT (300 W) ■	BER (7) CAN CHL GRL HND (300 W) HWA PRG (100 W) URG (100 W) USA (excepto Florida) USA (Florida) (300 W) VEN (250 W)

(*) Em base secundária.

Região 3 **Faixa de 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
AUS (S.) (500 W) CAR (7) CHN (Região 2) (1 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) INP (100 W) JON MAC (100 W) MDW MLA (2,5 kW) MRA (7) MRL (7) NZL (1 kW) PAK (E. e N.-W.) (400 W) PHL (S.) (400 W) SNG (2,5 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (5 kW) CBG (1 kW) CHN (7) (5 kW) FJI (1 kW) IND (350 W) INS (500 W) J (5 kW) JON (5 kW) LAO (1 kW) MDW (5 kW) MRA (7) (5 kW) MRL (7) (5 kW) NZL (1 kW) PHL (7) (5 kW) VTN (1 kW) WAK (5 kW)	AUS (5 kW) CLN (2,5 kW) HKG (2,5 kW) JON MDW MLA (2,5 kW) MRA (7) MRL (7) PAK (E.) (400 W) PAK (Karachi) (1,5 kW) PHL (Cebu) (300 W) SNG (2,5 kW) WAK	AUS (S.) (excepto Brisbane) (500 W) CAR (7) (3 kW) CBG (1 kW) CHN (7) (3 kW) INP (100 W) INS (W.-Java) (1 kW) J (3 kW) JON (3 kW) LAO (1 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PAK (400 W) PHL (7) (3 kW) TMP (100 W) VTN (1 kW) WAK (3 kW)	AUS (S.) (500 W) CHN (3 kW) IND (excepto Sadhiya) (350 W) INS (1 kW) JON MDW MRA (7) MRL (7) NCL (500 W) ■ NGN (kW) NHB (500 W) OCE (500 W) ■ WAK	AUS CAR (7) (1 kW) CHN (Regiões 4, 5 e 6) (3 kW) FJI IND (S.-30° N. e W.-90° E.) (350 W) J (1 kW) JON MDW MLA (2,5 kW) MRA (7) (1 kW) MRL (7) NZL SNG (2,5 kW) WAK	AUS (5 kW) CBG 500 W) FJI (1 kW) IND (350 W) IRN (500 W) JON LAO (500 W) MDW MRA (7) MRL (7) NZL (1 kW) PHL (N.) (400 W) VTN (500 W) WAK

Região 1 **Faixa de 5680-5730 kHz**

5688	5695,5	5703	5710,5	5718	5725,5
AGL ALB AZR BLR CPV D EGY G GNP MOZ POR STP URS-AM (500 W) URS-C (500 W) URS-E (500 W) URS-SEO (500 W)	AFS ARS (W.-55° E.) (500 W) CAF (S.-5° N.) (750 W) ■ CME (Douala) (750 W) ■ COG (750 W) ■ CTI (750 W) ■ CYP EGY G GAB (750 W) ■ GIB HVO (W.-0°) (750 W) ■ IRQ KEN LBY MDG (N.-20° S.) (750 W) ■ MLI (W.-0°) (750 W) ■ MLT MTN (750 W) ■ SMB TCH URS-E URS-SEO (1 kW)	AZR BLR CAF ■ CME ■ COG ■ CTI ■ DAH ■ E EGY GAB ■ HOL HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ POR (100 W) SMF ■ TCD ■ TGO ■ URS-E URS-SEO (1 kW) YUG (*) F (Orão) (300 W) ■ MRC (6) (300 W)	AFS CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ GRC (100 W) HVO ■ IRQ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR POL REU ■ SMF ■ SYR TCD ■ TGO ■ TUN URS-AM (50 W)	AFS AUT BUL CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM URS-C URS-E URS-SEO (50 W)	AFS CAF (750 W) ■ CME (750 W) ■ COG (750 W) ■ CTI (750 W) ■ DAH (750 W) ■ EGY GAB (750 W) ■ HVO (750 W) ■ I ISL MDG (N.-20° S.) (750 W) ■ MLI (750 W) ■ MTN (750 W) ■ NGR (750 W) ■ S TCD (S.-12°N.) (750 W) ■ UKR URS-C (1 kW) URS-E (*) F (Argélia) (300 W) ■ MCR (6) (300 W) POR (400 W)

(*) Em base secundária.

Região 2 **Faixa de 5680-5730 kHz**

5688	5695,5	5703	5710,5	5718	5725,5
ATN (500 W) ARG (S.-36° S.) CAN EQA (250 W) MEX PRG (250 W)	ALS (1 kW) ARG (S.-41° S.) BER (7) BOL CAN GRL USA VEN (N.-5° N.) (250 W)	ARG BOL (250 W) CAN CLM MEX	ALS B (E.-55° W.) CAN CHL CLM GDL (300 W) ■ GRL MRT (300 W) ■ USA	B CAN CHL (N.-41° N.) (300 W) CHL (S.-41° S.) CUB (400 W)	ALS B (excepto N.-8° S. e W.-47° W.) (350 W) BER (7) CAN CHL CUB (Guantanamo) (7) GRL GUB (7) IOB (7) PNZ PTR URG (100 W) USA

Região 3 **Faixa de 5680-5730 kHz**

5688	5695,5	5703	5710,5	5718	5725,5
AUS (500 W) CHN (Regiões 4, 5 e 6) (1 kW) IND (S.-30° N.) (350 W) INS (Java e Samatra) (1 kW) MRA (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (S.) (400 W) WAK (1 kW)	AUS (5 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PAK (500 W) SNG (2,5 kW)	AUS (S.) (500 W) FJI (1 kW) IND (350 W) INS (500 W) IRN (500 W) MAC (100 W) NZL (1 kW) PHL (Cebu) (400 W) PHL (N.) (400 W)	AUS (500 kW) CHN (3 kW) INP (100 W) MLA (2,5 kW) PHL (S.) (400 W) SNG (2,5 kW) TMP (100 W)	AUS (5 kW) CAR (7) (1 kW) CBG (500 W) CHN (7) (1 kW) FJI (1 kW) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NZL (1 kW) PAK (Karachi) PHL (7) (1 kW) VTN (500 W) WAK (1 kW)	AUS (1 kW) CAR (7) (1 kW) CBG (550 W) CHN (7) (1 kW) IND (350 W) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (1 kW) VTN (500 W) WAK (1 kW)

Região 1 **Faixa de 6685-6765 kHz**

6685 (Al)	6687,5 (Al)	6693	6700,5	6708	6715,5
AGL ARS (S.-20° N.) CPV D (81) GNP MOZ NOR POR STP SUI URS-AM URS-C URS-SEO	AFS ALB AZR EGY FNL G YUG	ARS BUL CYP EGY G GIB KEN LBY MLT SMB URS-SEO	ARS (2,5 kW) CYP D EGY G GIP KEN LBY MLT SMB URS-SEO (1 kW)	AFS CYP EGY G KEN LBY MLT SMB URS-E URS-SEO (1 kW) YUG	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ ISR (250 W) MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS

6723	6730,5	6738	6745,5	6753	6760,5
AFS EGY (1 kW) HOL MRC (7) URS-C (1 kW) URS-E	AGL AZR CPV DNK (300 W) D ETH GNP ISL MOZ POR ROU STP SYR (300 W) URS-AM (500 W)	EGY (1 kW) G MRC (6) TCH URS-C (1 kW)	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY F ■ FNL GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E URS-SEO	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY (500 W) F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E	ARS (S.-20° N.) BLR CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TGO ■ TUN UKR URS-AM (1 kW) URS-C
(*) I (100 W)					

(*) Em base secundária

Região 2 **Faixa de 6685-6765 kHz**

6685 (Al)	6657,5 (Al)	6693	6700,5	6708	6715,5
B CAN MEX	ALS NCG (300 W) URG (1 kW) USA	ARG CAN GDL ■ GUF ■ MEX MRT ■	ARG BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B CAN CUB	B CAN MEX
6723	6730,5	6738	6745,5	6753	6760,5
ALS ARG BER (7) CAN CUB (Guantanamo) (7) GRI GUB (7) IOB (7) PNZ PTR USA	ALS ARG BER (7) CAN CUB (Guantanamo) (7) GRI GUB (7) IOB (7) PNZ PTR USA	ALS BER (7) CHL CLM (100 W) HND HWA URG (100 W) USA	BOL CAN CHL (S.-33° S.) (100 W) CUB GDL (100 W) ■ GUF (100 W) ■ MRT (100 W) ■	B CAN CHL (S.-41° S.) (300 W) MEX	ALS ARG ATN BER (7) HWA USA

Região 3 **Faixa de 6685-6765 kHz**

6685 (Al)	6687,5 (Al)	6693	6700,5	6708	6715,5
AUS (500 W) CBG (500 W) CLN HKG LAO (500 W) MLA SNG VTN (500 W)	AUS (S.) (500 W) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (350 W) J (3 kW) JON (3 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (3 kW) WAK (3 kW)	AUS (5 kW) CLN FJI (1 kW) HKG IND (N.-25° N. e E.-75° E.) MLA NZL (1 kW) SNG	AUS (5 kW) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW) PAK (400 W) PHL (S.) (400 W) SNG (2,5 kW)	AUS (S.) (500 W) CNL (250 W) FJI (1 kW) INS (1 kW) MAC (100 W) NGN (1 kW) NZL (1 kW) PAK (1 kW)	AUS (excepto Darwin) (500 W) CHN (Regiões 4, 5 e 6) (1 kW) FJI (1 kW) INS (Java) INP (100 W) NZL (1 kW) PHL (S.) (400 W) TMP (100 W)
6723	6730,5	6738	6745,5	6753	6760,5
AUS (excepto Pt Moresby) (1 kW) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (500 W) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2,5 kW) MRA (7) (3 kW) MRL (7) (3kW) NZL (1 kW) PHL (7) (3 kW) SNG (2,5 kW) WAK (3 kW)	AUS (excepto Pt Moresby) (5 kW) CAR (7) (3 kW) CHN (7) (3 kW) IND (S.-30° N.) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2,5 kW) MRA (7) (3 kW) MRL (7) (3 kW) PAP (Pt Moresby) (500 W) PHL (7) (3 kW) SNG (2,5 kW) WAK (3 kW)	AUS (1 kW) CLN (2,5 kW) CHN (3 kW) MLA (2,5 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PAK (Karachi) (400 W) SNG (2,5 kW)	AUS (excepto Darwin) (5 kW) CBG (500 W) FJI (1 kW) IND (500 W) IRN (500 W) LAO (500 kW) NZL (1 kW) PHL (400 W) VTN (500 W)	AUS (excepto Brisbane e Pt Moresby) (500 W) CAR (7) (1 kW) CBG (1 kW) CHN (7) (1 kW) IND (excepto Sadhiya) (500 W) INS (Java) (500 W) J (1 kW) JON (1 kW) LAO (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (1 kW) ■ NHB (1 kW) NZL (500 kW) OCE (1 kW) ■ PHL (Cebu) (400 W) VTN (1 kW) WAK (1 kW)	AUS (excepto Darwin) (500 W) CAR (7) CHN (Regiões 4, 5 e 6) (1 kW) INP (100 W) J JON MDW MLA (1 kW) MRA (7) MRL (7) SNG (1 kW) TMP (100 W) WAK

Região 1 **Faixa de 8965-9040 kHz**

8967	8975,5	8984	6992,5	9001
AFS ARS CYP D EGY G GIB KEN LBY MLT SMB	AFS AZR ISR (100 W) MRC (7) (1 kW) URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM	AGL AZR CPV GNP MOZ POL (500 W) POR STP URS-E URS-SEO (50 W)	BLR CAF ■ CME ■ COG ■ EGY GAB ■ HOL MDG ■ NOR REU ■ TCD ■ (*) CTI (300 W) ■ DAH (300 W) ■ F (Orão) (100 W) ■ HVO (300 W) ■ MLI (300 W) ■ MRC (6) (300 W) MTN (300 W) ■ NGR (300 W) ■ TUN (100 W)

9009,5	9018	9026,5	9035
BUL CAF (500 W) ■ CME (500 W) ■ COG (500 W) ■ G GAB (500 W) ■ MDG (500) W) ■ REU (500 W) ■ TCD (500 W) ■ URS-SEO YUG	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN UKR	COG (Brazzaville) (400 W) ■ D EGY MLI (Dacar) (400 W) ■ MDG (400 W) ■ REU (400 W) ■ TCH URS-AM URS-C	DNK I MRC (7) POL
(*) CTI ■ DAH ■ HVO ■ MLI ■ MTN ■ NGR ■		(*) MRC (6) (Rabat) (300 W)	

(*) Em base secundária.

Região 2 — **Faixa de 8965-9040 kHz**

8967	8975.5	8984	8992.5	9001
B CAN HWA MEX	ARG ATN USA (1 kW)	ALS ARG BER (7) CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CAN CHL GDL ■ GUF ■ MEX MRT ■	ALS B CUB (300 W) USA

9009,5	9018	9026,5	9035
B CAN MEX VEN (250 W)[2]	ALS BOL CHL (S.-41° S.) (300 W) CUB HWA	ALS ARG BER (7) CAN (1 kW) CUB (Guantanamo) (7) GRL (750 W) GUB (7) IOB (7) PNZ PTR USA	ALS CAN (1) CHL CLM (300 W) URG (100 W) USA

(1) Apenas estações de aeronave.

Região 3 — **Faixa de 8965-9040 kHz**

8967	8975.5	8984	8992.5	9001
AUS CLN FJI HKG MDW MLA NZL SNG	AUS CBG CLN LAO VTN	AUS (500 W) CBG LAO MRL (7) VTN WAK	FJI IND PHL NZL	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL WAK

9009,5	9018	9026,5	9035
FJI INS IRN NGN NZL	AUS (Darwin) (500 W) CHN JON (1 kW) MLA NCL ■ NHB OCE ■ PAK (W.) SNG	AUS (500 W) CAR (7) CHN (7) HKG INP J JON MDW MLA MRA (7) MRL (7) PHL (7) SNG WAK	CAR (7) CHN (N) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHK (7) TMP WAK

Região 1 **Faixa de 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
AGL AZR CPV EGY GNP MOZ NOR POL POR (250 W) STP	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F (Argélia) ■ GAB ■ HVO ■ ISR (100 W) MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ URS	ARS CYP D EGY G GIB KEN LBY MLT SMB	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-SEO	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	D MRC (7) YUG (A3 apenas)

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
AFS URS	CYP (500 W) DNK EGY G GIB LBY MLT URS-AM URS-SEO	ETH (100 W) HOL UKR URS-AM URS-C URS-E URS-SEO	AZR D MRC (7) POR URS-E (500 W)	BUL ROU URS-AM URS-C URS-E
(*)			(*)	
CTI (500 W) ■ DAH (500 W) ■ F (Argélia) (500 W) ■ HVO (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ TUN (500 W) ■			EGY (300 W)	CAF (500 W) ■ COG (500 W) ■ CTI (500 W) ■ DAH (500 W) ■ F (Argélia) (500 W) ■ GAB (500 W) ■ HVO (500 W) ■ MDG (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ REU (500 W) ■ TCD (500 W) ■

(*) Em base secundária.

Região 2 **Faixa de 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
ALS ARG ATN CLM USA	CAN (1 kW) CHL MEX	B BER (7) HWA USA	ARG CAN CUB	ALS ARG BER (7) CAN GDL ■ GRL GUF ■ HWA MRT ■ USA	ALS BER (7) CAN CHL CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
ARG BER (1 kW) (7) CAN (1 kW) MEX	B CAN (350 W) MEX (400 W)	B USA	ALS ARG BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	B CAN MEX (400 W)

Região 3 **Faixa de 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS	AUS CLN HKG MDW MLA SNG	AUS CBG LAO VTN	CBG LAO MDW NCL ■ NHB OCE ■ VTN	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHL (7) WAK

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
AUS (500 W) PHL	AUS CLN HKG MLA SNG	CHN (N.-30° N.) INS	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	PHL

Região 1 **Faixa de 13 200-13 260 kHz**

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
ARS CYP D EGY G GIB KEN LBY MLT SMB	D EGY MRC (7) (*) CAF (Bangui) (1 kW) ■ CME (Douala) (1 kW) ■ COG (Brazzaville) (1 kW) ■ MDG (1 kW) ■ MLI (Dacar) (1 kW) ■ REU (1 kW) ■	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F (Argélia ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ } (300 W) TUN URS	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (100 W)	CAF (Bangui) (750 W) ■ CME (Douala) (750 W) COG (Brazzaville) (750 W) ■ MDG (750 W) ■ MLI (Dacar) (1 kW) ■ POL REU (750 W) ■ URS	AGL AZR CPV GNP HOL MOZ NOR POR ROU STP

(*) Em base secundária.

Região 2 **Faixa de 13 200-13 260 kHz**

13 205,5	13 215.5	13 225,5	13 235,5	13 245,5	13 255,5
ALS ARG ATN (300 W) HWA (1 kW) MEX	ALS ARG (300 W) BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B CAN (350 W) CUB (350 W)	ALS ARG (300 W) BER (300 W) (7) CAN (400 W) CUB (Guantanamo) (7) GDL ■ GRL (300 W) GUB (7) GUF ■ IOB (7) MRT ■ PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) USA	ARG CAN HWA MEX

Região 3 **Faixa de 13 200-13 260 kHz**

13 205,5	13 215,5	13 225.5	13 235,5	13 245.5	13 255,5
AUS CLN HKG JON (1 kW) MDW (1 kW) MLA SNG	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK WAK	AUS (500 W) CBG (100 W) LAO (100 W) VTN (100 W)	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL WAK	IND JON MDW NGN

Região 1 **Faixa de 15 010-15 060 kHz**

15 016	15 026	15 036	15 046	15 056
D MRC (7)	AGL AZR CPV GNP MOZ STP URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ REU ■ TCD ■ URS (*) F (Argélia) (200 W) ■ MRC (6) (200 W)	ETH (250 W) G	AFS MRC (7) NOR

(*) Em base secundária.

Região 1 **Faixa de 15 060-15 100 kHz**

15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (50 W) URS-SEO	AUT ■ CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	DNK POL (500 W) URS	G URS-SEO	HOL

Região 2 **Faixa de 15 010-15 100 kHz**

15 016	15 026	15 036	15 046	15 056
ALS ARG (S.-30° S.) (300 W) BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL MEX (N.-19° N.) (400 W)	B CAN GRL MEX (N.-19° N.) (300 W)	ALS (1 kW) ARG CUB (300 W)	ALS ARG (300 W) BER (7) USA

15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
BER (7) CHL (300 W) CUB (Guantanamo) (7) GUB (7) IOB (7) PNZ PTR USA	ALS ARG (300 W) USA	B (S.-5º S. e E.-55º W.) (300 W) HWA (1 kW) MEX	B MEX (N.-19º N.) (300 W)	ALS ARG (300 W) ATN USA

Região 3 **Faixa de 15 010-15 100 kHz**

15 016	15 026	15 036	15 046	15 056
CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INP MAC TMP	—	AUS PAK	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK

15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
AUS CBG (50 W) (1) LAO (50 W) (1) VTN (50 W) (1)	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (50 W)	PHL (300 W)	INS (*) CHN (250 W)

(1) Apenas estações de aeronave.

(*) Em base secundária.

Região 1 **Faixa de 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
AGL AZR CPV D GNP I MOZ MRC (7) STP URS (50 W)	ARS CYP D EGY G GIB KEN LBY MLT SMB	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■	POL URS	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MRC (7) MTN ■ NGR ■	URS

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
		NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN		REU ■ SMF ■ TCD ■ TGO ■ TUN	

Região 2 **Faixa de 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
ALS ARG (300 W) BER (7) CAN GRL HWA (1 kW) USA	ALS B	ALS ARG GDL ■ GUF ■ MRT ■	ARG MEX	ALS BER (7) CAN CHL (300 W) CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) GRL (1 kW) USA (1 kW)

Região 3 **Faixa de 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
INP MAC TMP	AUS CLN HKG MLA PAK SNG	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (400 W)	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS

Região 1 **Faixa de 3900-3950 kHz**

3904	3911	3918	3925	3932	3939	3946
AFS CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Argélia) ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■	BLR (500 W) CAF ■ COG ■ CTI ■ DAH ■ EGY F (excepto Argélia) ■ G GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■	AFS ALB EGY F ■ G MRC (6) UKR (500 W) URS-AM URS-E URS-SEO	AZR D EGY F (excepto Argélia) ■ G MLT POR URS-E URS-SEO	AFS AUT CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ F (Argélia) ■ G GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■	D (81) E (500 W) G (N.-52° N.) GRC (250 W) POL URS-C URS-SEO	AFS F ■ GRC (250 W) MRC (6) NOR POL URS-E URS-SEO

3904	3911	3918	3925	3932	3939	3946
NGR ■ TCD ■ TUN URS-AM URS-E URS-SEO (1 kW) YUG	TCD ■ URS-E URS-SEO YUG			NGR ■ SMF ■ TCD ■ TUN URS-E URS-SEO (*) ROU (W.-25° E.) (100 W)		

(*) Em base secundária.

B) Faixas partilhadas (*)

Região 1 **Faixa de 3155-3200, 3200-3230 e 3800-3900 kHz**

3861	3867	3873	3874	3879	3891	3897
CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	G MLT	CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	AGL CPV F (excepto Argélia) ■ GNP MOZ NOR POR STP	G MLT

Região 2 **Faixa de 2505-2850, 3155-3200 e 3200-3230 kHz**

Por acordos regionais

Região 3 **Faixa de 3155-3200, 3200-3230 e 3900-3950 kHz**

3155-3200
Por acordos regionais

A	B	C	D	E
AUS (5 kW) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PHL (N.) (300 W) VTN (1 kW)	AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2.5 kW) PHL (S.) (300 W) SNG (2,5 kW)	AUS (S.) (500 W) INP 100 W) MAC (100 W) PHL (S.) (300 W) TMP (100 W)	AUS (500 W) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PHL (N.) (300 W) VTN (1 kW)	AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW) PHL (S.) (300 W) SNG (2,5 kW)

3200-3230 Por acordos regionais	**3900-3950**			
	3920	3923	3930	3937
AUS (500 W) PHL (N.) (300 W)	AUS	PHL (S.) (300 W)	AUS PHL (S.) (300 W)	AUS PHL (N.) (300 W)

(*) As consignações correspondem às que figuram nas listas regionais da UIT.

Região 1 C) Faixas partilhadas (frequências não adjudicadas) **Faixa de 4750-4850 kHz**

A	B	C	D	E
EGY G MLT ROU (Bucareste) (500 W)	G I MRC (6)	EGY F (Argélia) ■ G YUG	EGY F (excepto Argélia) ■ MRC (6)	F ■ MRC (6) S TUN

Região 2 **Faixa de 4438-4650 kHz**

A	B	C	D	E	F	G
ARG (S.-45° S.) B CAN MEX	ALS ARG BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PRT USA	ALS ARG B (N.-10° S. e E.--50° W) CLM USA	B (excepto S.-Rio Grande) CAN CHL CUB (E.-Santa Clara) (500 W) MEX	B CAN CHL (S.-35° S.) MEX	ALS ARG BER (7) CAN CUB (Guantanamo) (7) GUB (7) HWA IOB (7) PNZ PTR USA	ALS ARG B (N.-15° S.) GDL ■ HWA MRT ■ NCG USA

Região 1 **Faixa de 5430-5480 kHz**

A	B	C
AZR EGY HOL POR YUG	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ ROU (100 W) SMF ■ TCD ■ TGO ■ TUN	G I (S.-40° N.) (100 W) SUI
(*) F (Argélia) (100 W) ■ F (S. e W.) (100 W) ■ MRC (6) (100 W) TUN (100 W)		

(*) Em base secundária.

Região 3 **Faixa de 5430-5480 kHz**

A	B	C
AUS CLN FJI HKG MLA NZL PAK PHI (S.) SNG	CBG (500 W) IND (500 W) INS (500 W) LAO (500 W) MAC (100 W) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (200 W) TMP (100 W) VTN (500 W)	AUS (500 W) CAR (7) CHN (1 kW) INP (100 W) J JON MDW MRA (7) MRL (7) PHL (7) WAK

Região 1 **Faixa de 23 200-23 350 kHz**

A	B	C	D	E
CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	D MRC (7)	F ■	D MRC (7)

Região 2 **Faixa de 23 200-23 350 kHz**

A	B	C	D	E	F
ARG	ALS ATN HWA SUR	ALS BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	ALS HWA	ALS BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL HWA

Região 3 **Faixa de 23 200-23 350 kHz**

A	B	C	D	E	F
CBG LAO VTN	INS JON MDW	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK

APÊNDICE 27 Aer2

Plano de adjudicação de frequências ao serviço móvel aeronáutico (R) e informações conexas

(V. o artigo 50 do Regulamento das Radiocomunicações)

PARTE I

Disposições gerais

SECÇÃO I

Definições

1. *Plano de adjudicação de frequência.*

27/1 Plano que indica as frequências a utilizar numa zona, sem precisar as estações a que essas frequências podem ser consignadas.

27/2 2. Significação da terminologia empregada no presente apêndice para os diferentes métodos de repartição de frequências:

Repartição das frequências a	Em francês	Em inglês	Em espanhol	Em português
Serviços	Attribution (attribuer)	Allocation (to allocate)	Atribución (atribuir)	Atribuição (atribuir)
Zonas	Allotissement (allotir)	Allotment (to allot)	Adjudicación (adjudicar)	Adjudicação (adjudicar)
Estações	Assignation (assigner)	Assignement (to assign)	Asignación (asignar)	Consignação (consignar)

27/3 3. *Uma linha aérea mundial principal* é uma linha de grande comprimento, compreendendo um ou vários troços, cujo carácter é essencialmente internacional, que se estende por vários países e exige comunicações a grande distância.

27/4 4. *Uma zona de passagem das linhas aéreas mundiais principais* (ZLAMP) é uma zona que abrange certo número de linhas aéreas mundiais principais que geralmente seguem uma mesma corrente de tráfego e que geograficamente são suficientemente próximas para poderem ser servidas logicamente pelas mesmas famílias de frequências.

27/5 5. *As linhas aéreas regionais e nacionais* são todas as linhas aéreas que utilizam o serviço móvel aeronáutico (R) e que não satisfazem à definição de linhas aéreas mundiais principais dada no n.° **27/3**.

27/6 6. *Uma zona das linhas aéreas regionais e nacionais* (ZLARN) é uma zona de engloba um certo número de linhas aéreas definidas no n.° **27/5.**

27/7 7. *Uma zona de adjudicação* VOLMET é uma zona cujos limites englobam todos os pontos onde uma instalação destinada a difusões em ondas decamétricas pode emitir utilizando uma família de frequências adjudicada à zona em causa.

27/8 8. *Uma zona de recepção* VOLMET é uma zona interior da qual as aeronaves devem poder receber as emissões de uma ou de várias estações situadas na zona de adjudicação VOLMET à qual ela está associada.

27/8-A 8-A. *Uma zona mundial de adjudicação* é uma zona à qual são adjudicadas frequências que permitem o estabelecimento de comunicações a grande distância entre uma estação aeronáutica situada nessa zona e uma aeronave em serviço em qualquer sítio do mundo (1).

27/9 9. *Uma família de frequências do serviço móvel aeronáutico (R)* é constituída por duas ou mais frequências escolhidas em diferentes faixas do serviço móvel aeronáutico (R) e destinadas ao estabelecimento de comunicações na zona de utilização autorizada (v. os n.os **27/189** a **27/207**) a qualquer hora, entre as estações de aeronave e as estações aeronáuticas correspondentes.

Secção II

Princípios técnicos e de exploração aplicados na elaboração do plano de adjudicação de frequências para o serviço móvel aeronáutico (R)

A) Características e utilização das vias

1. *Espaçamentos entre frequências.*

27/10 1.1. O espaçamento entre frequências portadoras (frequências de referência) é de 3 kHz. Este espaçamento é suficiente para sistemas de comunicação que utilizam as classes de emissão referidas nos n.os **27/49** a **27/52** nas faixas de frequências compreendidas entre 2850 kHz e 17 970 kHz atribuídas em exclusivo ao serviço móvel aeronáutica (R). A frequência portadora (frequência de referência) das vias indicadas no plano de ser um múltiplo inteiro de 1 kHz.

27/8.1. (1) O tipo de comunicações a que se refere o n.° **27/8-A** pode ser objecto de regulamentação pelas administrações.

27/11 1.2. Para as emissões radiotelefónicas, as frequências de áudio têm por limites 300 Hz e 2700 Hz; para as outras classes de emissão autorizadas, a largura de faixa ocupada não ultrapassa o limite superior das emissões da classe A3J.

Todavia, a especificação destes limites não implica qualquer restrição no que respeita à extensão de emissões que não as da classe A3J, desde que sejam respeitados os limites relativos às emissões não desejadas (v. os n.os **27/66-B** e **27/66-C**.

27/11-A *Nota.* — Para os tipos de emissor de estação de aeronave e de estação aeronáutica instalados pela primeira vez antes de 1 de Fevereiro de 1983, as frequências de áudio são limitadas a 3000 Hz.

27/11-B 1.3. A fim de evitar a possibilidade de interferências, uma via dada não deverá ser utilizada na mesma zona de adjudicação para a radiotelefonia e para a transmissão de dados.

27/12 1.4. A fim de evitar as interferências prejudiciais susceptíveis de se verificarem em consequência do emprego simultâneo de uma mesma via para emissões de classes diferentes, a utilização, para as diversas classes de emissão que não as A3J e A2H, das vias derivadas das frequências indicadas no n.º **27/16** deverá ser objecto de acordos especiais entre as administrações interessadas e aquelas cujos serviços são susceptíveis de ser desfavoravelmente influenciados.

27/13 *(Suprimido.)*

27/14 1.5. Para evitar possíveis interferências, as vias adjacentes derivadas das frequências indicadas no quadro (n.º **27/16**) não foram, em geral, adjudicadas às mesmas ZLAMP, ZLARN ou zonas VOLMET. Todavia, para satisfazer necessidades especiais, as administrações interessadas poderão fazer acordos especiais para a consignação de vias adjacentes derivadas das frequências indicadas no referido quadro.

27/15 1.6. Os acordos indicados nos n.os **27/12** e **27/14** serão *concluídos* em virtude das disposições dos artigos da Convenção Internacional das Telecomunicações e do Regulamento das Radiocomunicações intitulados «Acordos especiais» (*).

2. *Frequências adjudicadas.*

27/16 No quadro seguinte encontra-se a lista das frequências portadoras (frequências de referência) adjudicadas nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R), na base dos espaçamentos entre frequências especificados no n.º 27/10 (1).

(*) Nota do secretariado-geral: o artigo pertinente do Regulamento das Radiocomunicações é agora o artigo 7, intitulado «Acordos especiais».

27/16.1. (1) Para calcular a frequência consignada a partir de uma frequência portadora (frequência de referência) dada no quadro, v. os n.os **27/72, 27/72-B** e **27/73.**

kHz

2850–3025	4650–4700	6525-6685	10 005–10 100	13 260-13 360
2 851 2 938 2 854 2 941 2 857 2 944 2 860 2 947 2 863 2 950 2 866 2 953 2 869 2 956 2 872 2 959 2 875 2 962 2 878 2 965 2 881 2 968 2 884 2 971 2 887 2 974 2 890 2 977 2 893 2 980 2 896 2 983 2 899 2 986 2 902 2 989 2 905 2 992 2 908 2 995 2 911 2 998 2 914 3 001 2 917 3 004 2 920 3 007 2 923 3 010 2 926 3 013 2 929 3 016 2 932 3 019 2 935 – } 57 vias 3 023 (R) e (OR)	4 651 4 675 4 654 4 678 4 657 4 681 4 660 4 684 4 663 4 687 4 666 4 690 4 669 4 693 4 672 4 696 } 16 vias	6 526 6 607 6 529 6 610 6 532 6 613 6 535 6 616 6 538 6 619 6 541 6 622 6 544 6 625 6 547 6 628 6 550 6 631 6 553 6 634 6 556 6 637 6 559 6 640 6 562 6 643 6 565 6 646 6 568 6 649 6 571 6 652 6 574 6 655 6 577 6 658 6 580 6 661 6 583 6 664 6 586 6 667 6 589 6 670 6 592 6 673 6 595 6 676 6 598 6 679 6 601 6 682 6 604 – } 53 vias	10 006 10 054 10 009 10 057 10 012 10 060 10.015 10 063 10 018 10 066 10 021 10 069 10 024 10 072 10 027 10 075 10 030 10 078 10 033 10 081 10 036 10 084 10 039 10 087 10 042 10 090 10 045 10 093 10 048 10 096 10 051 – } 31 vias	13 261 13 312 13 264 13 315 13 267 13 318 13 270 13 321 13 273 13 324 13 276 13 327 13 279 13 330 13 282 13 333 13 285 13 336 13 288 13 339 13 291 13 342 13 294 13 345 13 297 13 348 13 300 13 351 13 303 13 354 13 306 13 357 13 309 – } 33 vias
3400-3500	5450-5480	8815-8965	11 275-11 400	17 900-17 970
3 401 3 452 3 404 3 455 3 407 3 458 3 410 3 461 3 413 3 464 3 416 3 467 3 419 3 470 3 422 3 473 3 425 3 476 3 428 3 479 3 431 3 482 3 434 3 485 3 437 3 488 3 440 3 491 3 443 3 494 3 446 3 497 3 449 – } 33 vias	**Região 2** 5 451 5 466 5 454 5 469 5 457 5 472 5 460 5 475 5 463 – } 9 vias	8 816 8 891 8 819 8 894 8 822 8 897 8 825 8 900 8 828 8 903 8 831 8 906 8 834 8 909 8 837 8 912 8 840 8 915 8 843 8 918 8 846 8 921 8 849 8 924 8 852 8 927 8 855 8 930 8 858 8 933 8 861 8 936 8 864 8 939 8 867 8 942 8 870 8 945 8 873 8 948 8 876 8 951 8 879 8 954 8 882 8 957 8 885 8 960 8 888 – } 49 vias	11 276 11 339 11 279 11 342 11 282 11 345 11 285 11 348 11 288 11 351 11 291 11 354 11 294 11 357 11 297 11 360 11 300 11 363 11 303 11 366 11 306 11 369 11 309 11 372 11 312 11 375 11 315 11 378 11 318 11 381 11 321 11 384 11 324 11 387 11 327 11 390 11 330 11 393 11 333 11 396 11 336 – } 41 vias	17 901 17 937 17 904 17 940 17 907 17 943 17 910 17 946 17 913 17 949 17 916 17 952 17 919 17 955 17 922 17 958 17 925 17 961 17 928 17 964 17 931 17 967 17 934 – } 23 vias
	5480-5680			
	5 481 5 580 5 484 5 583 5 487 5 586 5 490 5 589 5 493 5 592 5 496 5 595 5 499 5 598 5 502 5 601 5 505 5 604 5 508 5 607 5 511 5 610 5 514 5 613 5 517 5 616 5 520 5 619 5 523 5 622 5 526 5 625 5 529 5 628 5 532 5 631 5 535 5 634 5 538 5 637 5 541 5 640 5 544 5 643 5 547 5 646 5 550 5 649 5 553 5 652 5 556 5 655 5 559 5 658 5 562 5 661 5 565 5 664 5 568 5 667 5 571 5 670 5 574 5 673 5 577 5 676 } 66 vias 5 680 (R) e (OR)			

27/17 a 27/19 27/20

(Suprimidos.)

4. A Organização da Aviação Civil Internacional (ICAO) assegura a coordenação internacional das radiocomunicações do serviço móvel aeronáutico (R). Esta Organização deverá ser consultada, em todos os casos apropriados, para utilizar operacionalmente as frequências previstas no plano.

5. *Adaptação do procedimento de adjudicação.*

27/21 O plano de adjudicação contido no presente apêndice não esgota, evidentemente, todas as possibilidades de partilha. Assim, para fazer face a necessidades especiais de exploração que o presente plano não satisfaça de outra maneira, as administrações podem consignar frequências das faixas do serviço móvel aeronáutico (R) em zonas diferentes daquelas a que estão adjudicadas no plano. Todavia, a utilização das frequências assim consignadas não deve diminuir a protecção de que gozam essas mesmas frequências, nas zonas a que estão adjudicadas pelo plano, para valor inferior ao determinado pela aplicação do procedimento previsto para o serviço (R) na secção II-B da parte I do presente apêndice.

27/22 6. Quando for indispensável satisfazer as necessidades da exploração das linhas aéreas internacionais, as administrações podem adaptar o procedimento de adjudicação para consignar frequências do serviço móvel aeronáutico (R); essas consignações serão objecto de um acordo prévio por parte de administrações cujos serviços possam ser desfavoravelmente influenciados.

27/23 7. Recorrer-se-á à coordenação descrita no n.º **27/20** quando for oportuno e conveniente fazê-lo para utilizar racionalmente as frequências em causa e, nomeadamente, nos casos em que os procedimentos especificados no n.º **27/22** não sejam satisfatórios.

B. Curvas de alcance da interferência

27/24 1. *Disposições gerais.*

27/24-A 1.1. *Alcance útil.*

Em função de determinados factores (potência de emissor, perda de propagação, nível de ruído, etc.), existe um limite no que respeita à distância a que é possível estabelecer comunicações fiáveis entre uma estação aeronáutica e uma estação de aeronave. Esta distância limite, baseada no trajecto de propagação mais desfavorável, é designada «alcance útil». Admite-se, frequentemente, que a distância limite é o limite da zona das linhas aéreas.

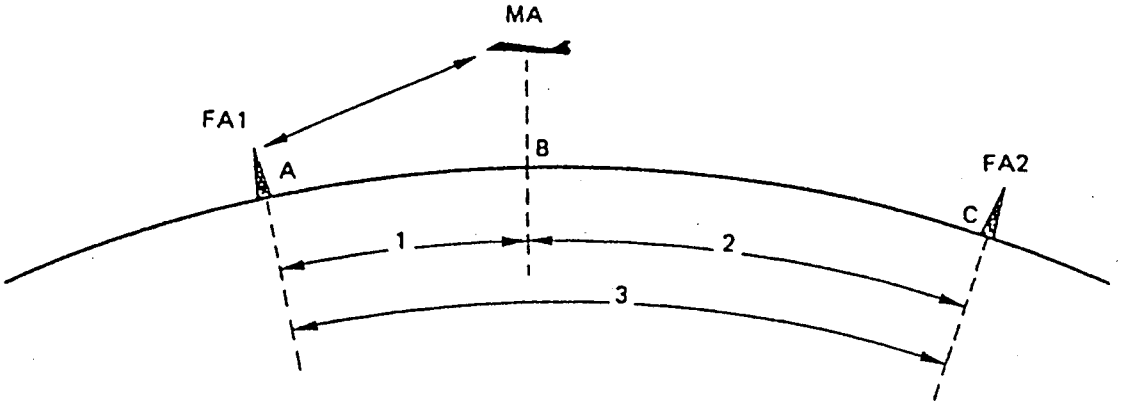
27/24-B 1.2. *Alcance de interferência.*

É a distância mínima entre o limite de alcance útil da emissão desejada e a estação susceptível de causar interferências, que assegura uma relação sinal útil/sinal interferente de 15 dB. Esta relação de protecção é estabelecida entre o sinal desejado recebido por uma estação de aeronave no limite do alcance útil e o sinal proveniente de uma estação aeronáutica que, emitindo na mesma frequência, é susceptível de causar interferências. O alcance de interferência foi calculado para diferentes frequências indicadas nos quadros que figuram nos n.ºs **27/39** a **27/48**, em condições de propagação diurna e nocturna, em latitudes médias, para uma actividade solar média e para uma potência aparente radiada média de 1 kW da estação aeronáutica.

27/24-C 1.3. *Distância de repetição.*

É a distância a que se pode partilhar uma frequência; esta distância é igual à soma do alcance útil e do alcance de interferência.

27/24-D 1.4. O desenho da figura 1 ilustra a utilização do conceito de alcance de interferência no planeamento de frequências, baseada na determinada da distância de repetição.



FA1 = estação aeronáutica em comunicação com a estação de aeronave MA.
FA2 = estação aeronáutica em comunicação com estações de aeronave que não a estação MA.
MA = estação de aeronave em comunicação com a estação aeronáutica FA1.
1 = alcance útil AB.
2 = alcance de interferência CB.
3 = distância de repetição AC.

Fig.1 — Alcance útil, alcance de interferência, distância de repetição

27/24-E 1.5. As curvas em vegetal anexas ao presente apêndice indicam, para as frequências mencionadas, o alcance de interferência, definido no n.º **27/24-B,** entre uma estação aeronáutica interferente e uma estação de aeronáutica interferente a uma estação de aeronave a funcionar no limite do seu alcance útil. Devido à variação das condições de propagação, não só de hora para hora, durante os períodos do dia e da noite, mas também de dia para dia, segundo a estação do ano, o nível de actividade solar e a localização geográfica, é de esperar uma variação notável da relação de protecção de 15 dB; como tal, poderá ser assegurada uma protecção maior durante a maior parte do tempo, especialmente quando a aeronave não funciona no limite do seu alcance útil.

27/24-F 1.6. Na documentação técnica publicada pela IFRB (por exemplo, nos textos do ciclo de estudos da IFRB sobre a gestão de frequências e a utilização do espectro de frequências: documento n.º 11/76 ou revisões) encotram-se informações suplementares sobre o alcance útil, o alcance de interferência, a distância de repetição e sobre a utilização das curvas.

27/25 1.7. Existem dois tipos de curvas a utilizar, respectivamente, com os planisférios em projecção de Mercator e com os mapas em projecção azimutal de superfícies iguais de Lambert para as zonas polares. As curvas para mapas em projecção de Mercator abrangem as regiões compreendidas entre 60° de latitude norte e 60° de latitude sul. As curvas para os mapas em projecção de Lambert abrangem as zonas situadas ao norte de 30° N. e ao sul de 30° S. Os mapas em projecção de Lambert apresentam uma zona de sobreposição com os mapas em projecção de Mercator entre os paralelos 30° N. e 60° N. e os paralelos 30° S. e 60° S.

Essas zonas de sobreposição servem para assegurar a continuidade entre as curvas dos dois sistemas.

27/26 2. *Tipos de mapas utilizados.*

As curvas referidas nos n.ºs **27/24-E** e **27/25** só podem ser utilizadas cin um planisfério ou um mapa polar cuja projecção e escala sejam idênticas em cada uma das curvas. Não devem, pois, ser utilizadas com mapas que não estejam de acordo com estas definições. Os planisférios e os mapas polares a utilizar com o presente apêndice, nos quais figuram os limites das ZLAMP, das ZLARN e das zonas de VOLMET, serão elaborados em escala que permita utilizar as curvas directamente. As zonas de aurora estão representadas nos mapas polares.

3. *Mudança de escala ou de sistema de projecção.*

27/27 3.1. Se se deseja utilizar outros mapas com uma escala ou com uma projecção diferente, é necessário desenhar, a partir das coordenadas que figuram nos quadros seguintes, novas curvas para ter em conta a mudança de escala ou de projecção.

27/28 3.2. Ao desenhar as novas curvas, o ponto de intersecção do eixo vertical, isto é, um meridiano, e do eixo perpendicular que representa um paralelo deve estar à latitude 0°, para a curva 0°, 20° N., para a curva 20°, 40 N., para a curva 40°, etc.

27/29 3.3. As coordenadas geográficas que figuram nos n.ºs **27/39** a **27/48** são dadas em relação ao meridiano 180° tomado como eixo de simetria para a construção das curvas.

4. *Condições de partilha entre as zonas.*

4.1. *Faixas compreendidas entre 3 e 11,3 MHz.*

27/30 4.4.1. As curvas foram elaboradas nas condições de partilha seguintes:

Zonas	Faixas compreendidas entre (MHz)	Condições de partilha
Entre duas ZLAMP ou duas zonas VOLMET ou entre uma ZLAMP e uma zona VOLMET.	3 e 6,6 9 e 11,3	Propagação nocturna. Propagação diurna. *Nota.* — Admite-se que as condições de partilha são as mesmas para 6,6 MHz e para 5,6 MHz.
Entre uma ZLAMP ou uma zona VOLMET e uma ZLARN.	3 e 5,6 6,6 e 11,3	Propagação nocturna. Propagação diurna.
Entre duas ZLARN	3 e 4,7 5,6 e 11,3	Propagação nocturna. Propagação diurna.

27/31 4.1.2. Curvas suplementares permitem determinar as possibilidades de repetição das frequências das faixas de 3, 3,5 e 4,7 MHz, para utilização diurna.

4.2. *Faixas compreendidas entre 13 e 18 MHz.*

27/31-A 4.2.1. O plano de adjudicação revisto para as faixas de 13 e 18 MHz baseia-se unicamente na protecção durante o dia. Dele resultam as seguintes possibilidades de partilha:

27/31-B 4.2.2. O factor de repetição é, no mínimo, igual a 3 para a faixa de 13 MHz e igual a 4 para a faixa de 18 MHz. Note-se que se poderá reduzir a separação em longitude, para permitir uma repetição de 4 (em 13 MHz) e de 6 (em 18 MHz), tendo em conta as condições de exploração e as circunstâncias locais.

27/31-C 4.2.3. A partilha é feita em função das localizações prováveis das estações aeronáuticas e não em função dos limites das zonas.

5. *Modo de utilização das curvas para as faixas compreendidas entre 3 e 11,3 MHz.*

27/32 5.1. Selecciona-se, de entre os mapas anexos ao presente apêndice, o mapa da ZLAMP, ZLARN ou zona VOLMET apropriado e escolhe-se o vegetal correspondente à ordem de grandeza da frequência e às condições de partilha que se pretende estudar.

27/33 5.2. Devem-se utilizar os mapas e os vegetais em projecção de Lambert para as zonas polares situadas a norte de 60° N. e a sul de 60 S.; os mapas e vegetais em projecção de Mercator devem-se utilizar entre 60° N. e 60° S.

27/34 5.3. Coloca-se o centro do vegetal (isto é, a intersecção do eixo de simetria e do eixo horizontal sobre a linha que delimita a zona (utilizar a linha que delimita a zona de recepção no caso de VOLMET), no ponto dessa linha mais próximo do emissor susceptível de causar interferências, ou na localização do emissor susceptível de causar interferências. Anota-se a latitude do ponto escolhido e utiliza-se a curva de alcance de interferência correspondente a essa latitude.

27/35 5.4. Para um emissor situado num ponto qualquer exterior à curva a relação de protecção definida no n.º **27/24-B** será superior a 15 dB.

27/36 5.5. Para um emissor situadao num ponto qualquer ao interior da curva, a relação de protecção obtida será inferior a 15 dB. Todavia, se o emissor está situado no interior da curva e se o trajecto da propagação atravessaa uma zona de aurora, admite-se que a atenuação do sinal no interior dessa zona resultará numa relação de protecção superior a 15 dB.

27/37 5.6. A orientação das curvas em projecção de Mercator é tal que elas são utilizáveis para o hemisfério norte; para o hemisfério sul devem inverter-se. É de ter em conta este facto quando se trata de seguir os limites de zonas que passam de um hemisfério para o outro.

27/38 *(Suprimido.)*

6. *Elementos para traçado das curvas.*

27/39 **3,0 MHz e 3,5 MHz, dia — Elementos para o traçado das curvas de interferência a 700 Km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	6,3	180,0	16,3	180,0	26,3	180,0	36,3	180,0	46,3
	178,9	6,2	178,9	16,2	178,8	26,2	178,6	36,2	178,4	46,2
	177,8	5,9	177,8	15,9	177,6	25,9	177,3	35,9	176,9	45,9
	176,8	5,5	176,7	15,4	176,5	25,4	176,1	35,4	175,5	45,4
	175,9	4,8	175,8	14,8	175,5	24,8	175,1	34,7	174,3	44,7
	175,2	4,0	175,0	14,0	174,7	24,0	174,2	33,9	173,3	43,9
	174,5	3,1	174,4	13,1	174,1	23,0	173,5	33,0	172,5	42,9
	174,1	2,2	173,9	12,1	173,6	22,0	173,0	32,0	172,0	41,9
	173,8	1,1	173,7	11,0	173,4	21,0	172,8	30,9	171,8	40,8
	173,7	0,0	173,6	9,9	173,3	19,9	172,7	29,8	171,8	39,7
	173,8	- 1,1	173,7	8,8	173,4	18,8	172,9	28,7	172,0	38,6
	174,1	- 2,2	174,0	7,8	173,8	17,7	173,3	27,7	172,5	37,6
	174,5	- 3,1	174,5	6,8	174,3	16,8	173,9	26,7	173,2	36,6
	175,2	- 4,0	175,2	5,9	175,0	15,9	174,6	25,8	174,1	35,8
	175,9	- 4,8	175,9	5,2	175,8	15,1	175,5	25,1	175,1	35,1
	176,8	- 5,5	176,8	4,5	176,8	14,5	176,5	24,5	176,2	34,5
	177,8	- 5,9	177,8	4,1	177,8	14,1	177,6	24,1	177,4	34,0
	178,9	- 6,2	178,9	3,8	178,9	13,8	178,8	23,8	178,8	33,8
	180,0	- 6,3	180,0	3,7	180,0	13,7	180,0	23,7	180,0	33,7

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	56,3	180,0	66,3	180,0	76,3	180,3	86,3	Qualquer longitude	83,7
	178,0	56,2	177,3	66,2	175,4	76,2	163,9	86,1		83,7
	176,2	55,9	174,7	65,8	171,2	75,8	152,2	85,4		83,7
	174,5	55,3	172,5	65,3	167,7	75,1	145,2	84,5		83,7
	173,0	54,6	170,6	64,5	164,9	74,3	141,9	83,4		83,7
	171,8	53,8	169,1	63,6	162,9	73,4	140,8	82,4		83,7
	171,0	52,8	168,1	62,7	161,8	72,3	141,3	81,3		83,7
	170,4	51,8	167,5	61,6	161,3	71,2	142,8	80,2		83,7
	170,2	50,7	167,3	60,5	161,5	70,1	144,9	79,2		83,7
	170,3	49,6	167,5	59,4	162,1	69,1	147,6	78,2		83,7
	170,6	48,5	168,1	58,3	163,2	68,0	150,5	77,3		83,7
	171,2	47,5	169,0	57,4	164,6	67,1	153,8	76,5		83,7
	172,1	46,6	170,1	56,4	166,4	66,2	157,3	75,8		83,7
	173,1	45,7	171,4	55,6	168,3	65,5	160,8	75,2		83,7
	174,3	45,0	172,9	55,0	170,4	64,9	164,6	74,6		83,7
	175,6	44,5	174,6	54,4	172,7	64,4	168,4	74,2		83,7
	177,0	44,0	176,3	54,0	175,1	64,0	172,2	73,9		83,7
	178,5	43,8	178,2	53,8	177,5	63,8	176,1	73,8		83,7
	180,0	43,7	180,0	53,7	180,0	63,7	180,0	73,7		83,7

27/40

3;0 MHz, noite — Elementos para o traçado das curvas de interferência a 3500 km

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	31,5	180,0	41,5	180,0	51,5	180,0	61,5	180,0	71,5
	173,9	31,0	173,1	40,9	171,7	50,8	169,3	60,7	164,3	70,4
	168,2	29,4	166,7	39,2	164,2	48,9	160,1	58,4	152,1	67,5
	163,0	26,9	161,1	36,4	158,0	45,8	153,0	54,9	144,2	63,5
	158,5	23,6	156,4	32,8	153,2	41,9	148,0	50,6	139,7	58,7
	154,9	19,6	152,9	28,6	149,8	37,4	144,9	45,8	137,5	53,6
	152,0	15,1	150,3	23,9	147,6	32,5	143,3	40,7	137,0	48,4
	150,1	10,3	148,7	18,9	146,4	27,4	142,9	35,5	137,6	43,2
	148,9	5,2	148,0	13,7	146,3	22,1	143,4	30,3	139,1	38,1
	148,5	0,0	148,1	8,5	146,9	17,0	144,7	25,2	141,3	33,2
	148,9	– 5,2	149,0	3,4	148,3	11,9	146,7	20,9	144,1	28,6
	150,1	– 10,3	150,6	– 1,6	150,3	7,1	149,3	15,8	147,4	24,3
	152,0	– 15,1	152,9	– 6,3	153,1	2,6	152,5	11,5	151,1	20,4
	154,9	– 19,6	156,0	– 10,5	156,4	– 1,4	156,2	7,8	155,3	16,9
	158,5	– 23,6	159,7	– 14,2	160,3	– 4,8	160,3	4,6	159,8	14,0
	163,0	– 26,9	164,1	– 17,3	164,7	– 7,7	164,8	2,0	164,5	11,6
	168,2	– 29,4	169,1	– 19,6	169,6	– 9,8	169,7	0,1	169,5	9,9
	173,9	– 31,0	174,4	– 21,0	174,7	– 11,1	174,8	– 1,1	174,7	8,9
	180,0	– 31,5	180,0	– 21,5	180,0	– 11,5	180,0	– 1,5	180,0	8,5

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	81,5	0	88,5	0	78,5	0	68,5	Qualquer longitude	58,5
	149,5	79,9	78,0	25,3	25,3	77,7	14,2	68,3		58,5
	133,9	75,6	90,4	79,7	46,5	75,7	28,0	67,7		58,5
	127,6	70,7	97,5	74,7	62,9	72,9	41,3	66,7		58,5
	125,7	65,6	103,3	69,8	75,9	69,7	53,8	65,4		58,5
	126,0	60,3	108,7	65,0	86,6	66,4	65,5	63,9		58,5
	127,6	55,2	113,9	60,3	95,8	62,9	76,4	62,3		58,5
	129,9	50,2	118,9	55,9	104,1	59,6	86,7	60,5		58,5
	132,9	45,4	124,1	51,6	111,9	56,3	96,5	58,8		58,5
	136,4	40,8	129,2	47,6	119,2	53,2	105,8	57,1		58,5
	140,2	36,5	134,5	43,9	126,2	50,4	114,8	55,5		58,5
	144,4	32,6	139,8	40,5	133,1	47,7	123,4	54,0		58,5
	148,8	29,0	145,3	37,4	139,9	45,4	131,9	52,6		58,5
	153,6	25,9	150,8	34,8	146,6	43,3	140,1	51,4		58,5
	158,5	23,3	156,5	32,6	153,3	41,6	148,2	50,4		58,5
	163,7	21,2	162,3	30,8	160,0	40,3	156,2	49,6		58,5
	169,1	19,7	168,1	29,5	166,6	39,3	164,2	49,0		58,5
	174,5	18,8	174,1	28,8	173,3	38,7	172,1	48,6		58,5
	180,0	18,5	180,0	28,5	180,0	38,5	180,0	48,5		58,5

27/41 **3,5 MHz, noite — Elementos para o traçado das curvas de interferência a 4000 Km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	36,0	180,0	46,0	180,0	56,0	180,0	66,0	180,0	76,0
	172,8	35,4	171,7	45,3	169,7	55,1	166,1	64,9	157,6	74,5
	166,0	33,5	164,0	43,2	160,6	52,7	154,7	62,0	142,8	70,6
	160,0	30,6	157,5	39,9	153,4	49,0	146,6	57,7	134,9	65,5
	155,0	26,8	152,3	35,7	148,1	44,4	141,5	52,6	131,2	59,9
	150,9	22,2	148,4	30,8	144,5	39,2	138,7	47,0	129,9	54,0
	147,8	17,1	145,7	25,5	142,3	33,6	137,4	41,2	130,2	48,2
	145,7	11,6	144,1	19,8	141,4	27,7	137,4	35,4	131,6	42,4
	144,4	5,9	143,4	13,9	141,4	21,9	138,3	29,5	133,8	36,7
	144,0	0,0	143,6	8,1	142,3	16,1	140,0	23,9	136,5	31,3
	144,4	– 5,9	144,6	2,3	143,9	10,4	142,4	18,4	139,8	26,2
	145,7	– 11,6	146,4	– 3,3	146,3	5,0	145,4	13,3	143,6	21,5
	147,8	– 17,1	149,0	– 8,6	149,4	0,0	149,0	8,6	147,8	17,2
	150,9	– 22,2	152,4	– 13,4	153,1	– 4,5	153,2	4,4	152,4	13,3
	155,0	– 26,8	156,6	– 17,6	157,5	– 8,4	157,8	0,8	157,4	10,1
	160,0	– 30,6	161,6	– 21,2	162,5	– 11,6	162,9	– 2,1	162,8	7,5
	166,0	– 33,5	167,3	– 23,8	168,0	– 14,0	168,4	– 4,2	168,3	5,6
	172,8	– 35,4	173,5	– 25,4	173,9	– 15,5	174,1	– 5,6	174,1	4,4
	180,0	– 36,0	180,0	– 26,0	180,0	– 16,0	180,0	– 6,0	180,0	4,0

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	86,0	0	84,0	0	74,0	0	64,0	Qualquer longitude	54,0
	126,9	82,7	46,5	81,9	20,9	73,4	13,4	63,8		54,0
	115,7	77,1	69,8	77,6	39,7	71,6	26,5	63,2		54,0
	113,9	71,3	83,0	72,8	55,5	69,1	39,2	62,3		54,0
	114,9	65,4	92,2	67,8	68,8	66,1	51,3	61,0		54,0
	117,1	59,6	99,7	62,8	80,1	62,8	62,8	59,6		54,0
	120,1	54,0	106,4	57,9	90,1	59,4	73,7	58,0		54,0
	123,5	48,5	112,6	53,2	99,0	56,0	84,1	56,3		54,0
	127,4	43,3	118,6	48,7	107,3	52,7	93,9	54,5		54,0
	131,5	38,3	124,5	44,5	115,2	49,5	103,4	52,8		54,0
	135,9	33,7	130,4	40,5	122,8	46,5	112,6	51,2		54,0
	140,7	29,4	136,3	36,9	130,1	43,7	121,5	49,6		54,0
	145,7	25,5	142,3	33,6	137,4	41,3	130,2	48,2		54,0
	150,9	22,1	148,4	30,8	144,5	39,1	138,7	47,0		54,0
	156,4	19,3	154,6	28,4	151,6	37,3	147,1	45,9		54,0
	162,1	17,0	160,8	26,5	158,7	35,9	155,4	45,1		54,0
	168,0	15,3	167,2	25,1	165,8	34,8	163,6	44,5		54,0
	174,0	14,3	173,6	24,3	172,9	34,2	171,8	44,1		54,0
	180,0	14,0	180,0	24,0	180,0	34,0	180,0	44,0		54,0

27/42 **4,7 MHz, dia — Elementos para o traçado das curvas de interferência a 1200 km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	10,8	180,0	20,8	180,0	30,8	180,0	40,8	180,0	50,8
	178,1	10,6	178,0	20,6	177,8	30,6	177,5	40,6	177,1	50,6
	176,3	10,1	176,1	20,1	175,8	30,1	175,2	40,1	174,3	50,0
	174,6	9,3	174,3	19,3	173,8	29,2	173,1	39,2	171,8	49,1
	173,0	8,3	172,7	18,2	172,2	28,1	171,2	38,0	169,7	47,8
	171,7	6,9	171,4	16,8	170,3	26,7	169,7	36,5	168,0	46,4
	170,6	5,4	170,3	15,2	169,7	25,1	168,6	34,9	166,8	44,7
	169,8	3,7	169,6	13,5	168,9	23,3	167,9	33,1	166,1	42,9
	169,4	1,9	169,1	11,7	168,6	21,5	167,5	31,3	165,8	41,0
	169,2	0,0	169,0	9,8	168,5	19,6	167,6	29,4	166,0	39,2
	169,4	– 1,9	169,3	8,0	168,8	17,8	168,0	27,6	166,6	37,3
	169,8	– 3,7	169,8	6,2	169,4	16,0	168,7	25,8	167,5	35,6
	170,6	– 5,4	170,6	4,5	170,4	14,4	169,8	24,2	168,7	34,0
	171,7	– 6,9	171,7	3,0	171,5	12,9	171,0	22,8	170,2	32,6
	173,0	– 8,3	173,1	1,7	172,9	11,6	172,6	21,5	171,9	31,4
	174,6	– 9,3	174,6	0,6	174,5	10,6	174,3	20,5	173,8	30,5
	176,3	– 10,1	176,3	– 0,2	176,3	9,8	176,1	19,8	175,8	29,8
	178,1	– 10,6	178,1	– 0,6	178,1	9,4	178,0	19,3	177,9	29,3
	180,0	– 10,8	180,0	– 0,8	180,0	9,2	180,0	19,2	180,0	29,2

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	60,8	180,0	70,8	180,0	80,8	0	89,2	Qualquer longitude	79,2
	176,2	60,6	174,4	70,6	168,7	80,5	71,1	88,0		79,2
	172,6	60,0	169,3	69,8	159,4	79,5	87,5	86,3		79,2
	169,5	59,0	165,0	68,7	152,9	78,1	96,6	84,6		79,2
	167,0	57,6	161,8	67,3	149,1	76,4	103,6	82,9		79,2
	165,1	56,1	159,6	65,6	147,2	74,6	109,9	81,2		79,2
	163,8	54,4	158,4	63,8	146,8	72,8	115,8	79,6		79,2
	163,2	52,5	158,0	62,0	147,4	70,9	121,4	78,1		79,2
	163,1	50,7	158,3	60,1	148,9	69,1	126,9	76,7		79,2
	163,5	48,8	159,1	58,3	150,8	67,4	132,3	75,3		79,2
	164,3	47,0	160,4	56,6	153,3	65,8	137,7	74,1		79,2
	165,5	45,3	162,1	54,9	156,0	64,3	143,0	73,0		79,2
	167,0	43,8	164,2	53,5	159,1	63,0	148,3	72,0		79,2
	168,3	42,5	166,4	52,2	162,3	61,9	153,6	71,2		79,2
	170,3	41,3	168,9	51,2	165,7	60,9	158,9	70,5		79,2
	172,9	40,4	171,6	50,3	169,1	60,2	164,2	69,9		79,2
	175,8	39,7	174,3	49,7	172,7	59,6	169,4	69,5		79,2
	177,6	39,3	177,1	49,3	176,3	59,3	174,7	69,3		79,2
	180,0	39,2	180,0	49,2	180,0	59,2	180,0	69,2		79,2

27/43 **4,7 MHz, noite, e 10,0 MHz, dia — Elementos para o traçado das curvas de interferência a 5500 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	49,5	180,0	59,5	180,0	69,5	180,0	79,5	178,7	89,5
	168,5	48,5	165,5	58,2	159,6	67,8	144,9	76,7	97,0	82,4
	158,2	45,6	153,2	54,7	144,6	63,3	128,3	70,7	98,4	74,8
	149,7	41,2	144,1	49,6	135,4	57,2	121,5	63,5	101,0	67,2
	143,0	35,6	137,8	43,3	130,1	50,3	119,0	56,0	104,1	59,7
	138,1	29,3	133,6	36,5	127,3	43,0	118,6	48,4	107,5	52,4
	134,6	22,3	131,1	29,2	126,1	35,4	119,5	40,8	111,0	45,1
	132,3	15,1	129,8	21,6	126,1	27,8	121,2	33,4	114,8	38,1
	130,9	7,6	129,5	14,1	127,0	20,3	123,5	26,0	118,9	31,2
	130,5	0,0	130,1	6,5	128,7	12,8	126,5	18,9	123,2	24,7
	130,9	− 7,6	131,5	− 1,0	131,2	5,6	130,0	12,1	127,9	18,4
	132,3	− 15,1	133,8	− 8,2	134,4	− 1,3	134,1	5,7	132,9	12,6
	134,6	− 22,3	137,0	− 15,2	138,3	− 7,8	138,8	− 0,3	138,4	7,3
	138,1	− 29,3	141,2	− 21,6	143,2	− 13,0	144,2	− 5,7	144,3	2,5
	143,0	− 35,6	146,6	− 27,4	148,9	− 19,0	150,2	− 10,4	150,7	− 1,6
	149,7	− 41,2	153,2	− 32,4	155,5	− 23,4	156,9	− 14,2	157,6	− 5,0
	158,2	− 45,6	161,2	− 36,2	163,1	− 26,7	164,2	− 17,1	164,8	− 7,5
	168,5	− 48,5	170,3	− 38,7	171,3	− 28,8	172,0	− 18,9	172,3	− 9,0
	180,0	− 49,5	180,0	− 39,5	180,0	− 29,5	180,0	− 19,5	180,0	− 9,5

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	0	80,5	0	70,5	0	60,5	0	50,5	Qualquer longitude	40,5
	40,2	78,2	22,2	69,5	15,3	60,0	11,9	50,3		40,5
	63,5	73,1	41,5	66,9	30,1	58,7	23,8	49,8		40,5
	77,1	67,0	57,1	63,1	43,8	56,7	35,4	48,9		40,5
	86,6	60,7	69,8	58,6	56,4	54,0	46,7	47,8		40,5
	94,2	54,3	80,4	53,8	67,8	51,0	57,7	46,6		40,5
	100,8	47,9	89,6	48,8	78,4	47,8	68,3	44,9		40,5
	107,0	41,7	97,9	43,8	88,2	44,4	78,7	43,2		40,5
	112,9	35,6	105,7	38,9	97,5	41,0	88,7	41,5		40,5
	118,8	29,8	113,1	34,2	106,3	37,6	98,4	39,8		40,5
	124,7	24,4	120,4	29,8	114,8	34,4	108,0	38,1		40,5
	130,8	19,3	127,6	25,6	123,1	31,4	117,3	36,5		40,5
	137,1	14,7	134,8	21,9	131,3	28,7	126,5	35,0		40,5
	143,7	10,6	142,1	18,5	139,5	26,3	135,6	33,7		40,5
	150,5	7,1	149,5	15,7	147,6	24,3	144,5	32,6		40,5
	157,6	4,3	157,0	13,5	155,7	22,6	153,5	31,7		40,5
	164,9	2,2	164,6	11,8	163,8	21,5	162,3	31,0		40,5
	172,4	0,9	172,3	10,8	171,9	20,7	171,2	30,6		40,5
	180,0	0,5	180,0	10,5	180,0	20,5	180,0	30,5		40,5

27/44 **5,6 MHz, dia — Elementos para o traçado das curvas de interferência a 1500 km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	13,5	180,0	23,5	180,0	33,5	180,0	43,5	180,0	53,5
	177,6	13,3	177,5	23,3	177,2	33,3	176,8	43,3	176,1	53,2
	175,3	12,7	175,0	22,6	174,6	32,6	173,8	42,5	172,5	52,5
	173,2	11,7	172,8	21,6	172,1	31,5	171,0	41,4	169,3	51,3
	171,2	10,3	170,8	20,2	170,0	30,0	168,7	39,9	166,6	49,6
	169,6	8,6	169,1	18,5	168,3	28,3	166,9	38,0	164,6	47,7
	168,3	6,7	167,8	16,5	167,0	26,2	165,5	36,0	163,2	45,6
	167,3	4,6	166,9	14,3	166,1	24,1	164,7	33,7	162,4	43,3
	166,7	2,3	166,4	12,1	165,7	21,8	164,4	31,4	162,3	41,0
	166,5	0,0	166,3	9,7	165,7	19,4	164,5	29,1	162,6	38,7
	166,7	— 2,3	166,6	7,4	166,1	17,1	165,1	26,8	163,4	36,4
	167,3	— 4,6	167,3	5,2	166,9	14,9	166,0	24,6	164,6	34,3
	168,3	— 6,7	168,3	3,1	168,0	12,9	167,3	22,6	166,1	32,4
	169,6	— 8,6	169,7	1,2	169,5	11,0	169,0	20,9	168,0	30,7
	171,2	— 10,3	171,4	— 0,4	171,2	9,5	170,8	19,3	170,1	29,2
	173,2	— 11,7	173,3	— 1,7	173,2	8,2	172,9	18,1	172,4	28,0
	175,3	— 12,7	175,4	— 2,7	175,4	7,3	175,2	17,2	174,8	27,2
	177,6	— 13,3	177,7	— 3,3	177,7	6,7	177,6	16,7	177,4	26,7
	180,0	— 13,5	180,0	— 3,5	180,0	6,5	180,0	16,5	180,0	26,5

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	63,5	180,0	73,5	180,0	83,5	0	86,5	Qualquer longitude	76,5
	174,8	63,2	172,0	73,1	160,8	82,9	35,2	86,0		76,5
	170,1	62,4	164,9	72,1	147,7	81,4	59,4	84,7		76,5
	166,1	61,0	159,4	70,6	140,7	79,4	75,5	83,1		76,5
	162,9	59,3	155,6	68,7	137,6	77,1	87,2	81,4		76,5
	160,7	57,3	153,3	66,5	137,0	74,8	96,7	79,6		76,5
	159,3	55,1	152,3	64,2	137,8	72,5	104,9	77,9		76,5
	158,7	52,8	152,3	61,9	139,6	70,2	112,4	76,3		76,5
	158,8	50,4	153,0	59,6	142,0	68,1	119,3	74,7		76,5
	159,5	48,1	154,4	57,4	144,9	66,0	125,9	73,3		76,5
	160,7	46,0	156,2	55,3	148,2	64,1	132,2	71,9		76,5
	162,3	43,9	158,4	53,3	151,7	62,4	138,4	70,7		76,5
	164,2	42,1	161,0	51,6	155,4	60,9	144,5	69,6		76,5
	166,4	40,4	163,8	50,1	159,3	59,6	150,5	68,7		76,5
	168,9	39,0	166,8	48,8	163,3	58,5	156,5	67,9		76,5
	171,5	37,9	170,0	47,8	167,4	57,6	162,4	67,3		76,5
	174,3	37,1	173,3	47,1	171,6	57,0	168,3	66,9		76,5
	177,1	36,7	176,6	46,6	175,8	56,6	174,1	66,6		76,5
	180,0	36,5	180,0	46,5	180,0	56,5	180,0	66,5		76,5

27/45 **5,6 MHz e 6,6 MHz, noite — Elementos para o traçado das curvas de interferência a 6500 km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	58,5	180,0	68,5	180,0	78,5	180,0	88,5	0	81,5
	164,2	57,1	158,1	66,6	144,0	75,4	102,4	81,3	46,7	78,3
	150,8	53,2	142,2	61,6	126,6	68,7	100,1	72,0	68,5	71,7
	140,8	47,6	132,2	54,9	119,2	60,8	101,1	64,3	80,1	64,4
	133,6	40,8	126,2	47,2	116,0	52,4	102,9	55,8	88,0	56,7
	128,7	33,2	127,7	39,1	114,9	43,9	105,3	47,4	94,2	49,1
	125,3	25,2	120,8	30,7	115,1	35,4	108,0	39,1	99,7	41,5
	123,1	17,0	120,1	22,2	116,0	26,9	110,9	30,9	104,9	34,0
	121,9	8,5	120,2	13,7	117,7	18,5	114,3	22,9	110,0	26,7
	121,5	0,0	121,1	5,2	119,9	10,3	118,0	15,1	115,1	19,6
	121,9	— 8,5	122,8	— 3,2	122,8	2,3	122,1	7,6	120,5	12,9
	123,1	— 17,0	125,2	— 11,3	126,4	— 5,5	126,8	0,5	126,3	6,5
	125,3	— 25,2	128,6	— 19,2	130,8	— 12,8	132,0	— 6,2	132,4	0,5
	128,7	— 33,2	133,0	— 26,7	136,1	— 19,7	138,0	— 12,3	139,0	— 4,8
	133,6	— 40,8	138,9	— 33,5	142,5	— 25,8	144,9	— 17,7	146,2	— 9,5
	140,8	— 47,6	146,4	— 39,5	150,2	— 31,0	152,6	— 22,2	154,0	— 13,3
	150,8	— 53,2	156,0	— 44,3	159,1	— 35,0	161,1	— 25,6	162,3	— 16,1
	164,2	— 57,1	167,4	— 47,4	169,2	— 37,6	170,4	— 27,8	171,0	— 17,9
	180,0	— 58,5	180,0	— 48,5	180,0	— 38,5	180,0	— 28,5	180,0	— 18,5

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	0	71,5	0	61,5	0	51,5	0	41,5	Qualquer longitude	31,5
	25,7	70,1	17,6	60,7	13,6	51,1	11,4	41,3		31,5
	46,4	66,2	34,0	58,6	26,9	49,9	22,7	40,8		31,5
	61,7	61,0	43,4	55,3	39,6	48,0	33,8	40,0		31,5
	73,3	55,1	61,0	51,2	51,6	45,6	44,8	38,9		31,5
	82,7	48,8	71,9	46,6	62,8	42,7	55,5	37,6		31,5
	90,7	42,4	81,7	41,7	73,8	39,6	66,0	36,1		31,5
	98,0	36,0	90,6	36,7	83,2	36,2	76,2	34,4		31,5
	104,8	29,7	99,0	31,8	92,7	32,8	86,2	32,7		31,5
	111,6	23,6	107,0	26,9	101,8	29,4	96,1	31,0		31,5
	115,1	17,8	114,9	22,2	110,7	26,1	105,7	29,3		31,5
	124,9	12,3	122,7	17,9	119,5	23,0	115,3	27,6		31,5
	131,8	7,3	130,5	13,8	128,1	20,2	124,7	26,1		31,5
	139,2	2,7	138,4	10,3	136,7	17,7	134,0	24,9		31,5
	146,8	— 1,1	146,5	7,2	145,3	15,5	143,3	23,6		31,5
	154,7	— 4,3	154,7	4,8	154,0	13,8	152,5	22,7		31,5
	162,9	— 6,6	163,0	3,0	162,6	12,5	161,7	22,1		31,5
	171,4	— 8,0	171,5	1,9	171,3	11,8	170,8	21,6		31,5
	180,0	— 8,5	180,0	1,5	180,0	11,5	180,0	21,5		31,5

27/46

6,6 MHz, dia — Elementos para o traçado das curvas de interferência a 1900 km

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	17,1	180,0	27,1	180,0	37,1	180,0	47,1	180,0	57,1
	176,9	16,8	176,7	26,8	176,3	36,8	175,7	46,8	174,7	56,7
	174,0	16,0	173,6	26,0	172,9	35,9	171,7	45,8	169,7	55,7
	171,3	14,8	170,7	24,6	169,7	34,5	168,1	44,3	165,5	54,0
	168,8	13,0	168,2	22,8	167,0	32,6	165,2	42,3	162,2	51,9
	166,7	10,9	166,1	20,6	164,9	30,3	162,9	39,9	159,8	49,4
	165,1	8,5	164,5	18,1	163,3	27,7	161,3	37,2	158,2	46,6
	163,9	5,8	163,3	15,4	162,3	24,9	160,4	34,4	157,5	43,7
	163,1	2,9	162,7	12,5	161,3	22,0	160,2	31,5	157,5	40,8
	162,9	0,0	162,7	9,6	161,9	19,1	160,4	28,5	158,1	37,9
	163,1	— 2,9	163,1	6,6	162,4	16,2	161,3	25,7	159,3	35,1
	163,9	— 5,8	163,9	3,8	163,5	13,4	162,5	23,0	160,9	32,5
	165,1	— 8,5	165,2	1,2	165,0	10,9	164,2	20,5	162,9	30,1
	166,7	— 10,9	167,0	— 1,2	166,8	8,6	166,3	18,3	165,2	28,0
	168,8	— 13,0	169,1	— 3,2	169,0	6,6	168,6	16,4	167,8	26,2
	171,3	— 14,8	171,5	— 4,9	171,5	5,0	171,2	14,9	170,7	24,8
	174,0	— 16,0	174,2	— 6,1	174,2	3,9	174,1	13,8	173,7	23,7
	176,9	— 16,8	177,1	— 6,8	177,1	3,1	177,0	13,1	176,8	23,1
	180,0	— 17,1	180,0	— 7,1	180,0	2,9	180,0	12,9	180,0	22,9

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	67,1	180,0	77,1	180,0	87,1	0	82,9	Qualquer longitude	72,9
	172,6	66,7	167,3	76,5	137,0	85,7	23,3	82,5		72,9
	166,0	65,5	157,1	75,0	123,8	83,1	43,5	81,6		72,9
	160,7	63,6	150,3	72,8	120,8	80,1	60,0	80,2		72,9
	156,8	61,3	146,2	70,1	121,4	77,2	73,5	78,6		72,9
	154,4	58,6	144,4	67,3	123,5	74,3	84,9	76,9		72,9
	153,1	55,8	144,0	64,3	126,5	71,5	94,8	75,2		72,9
	152,8	52,8	144,7	61,4	130,1	68,8	103,6	73,5		72,9
	153,3	49,9	146,3	58,6	133,9	66,3	111,8	71,8		72,9
	154,4	47,1	148,4	55,9	138,0	63,9	119,4	70,3		72,9
	156,1	44,4	151,0	53,3	142,3	61,7	126,8	68,8		72,9
	158,2	41,9	153,9	51,0	146,7	59,7	133,8	67,5		72,9
	160,7	39,6	157,2	49,0	151,3	58,0	140,7	66,3		72,9
	163,5	37,6	160,7	47,2	155,9	56,5	147,4	65,3		72,9
	166,5	36,0	164,3	45,7	160,7	55,2	154,0	64,4		72,9
	169,7	34,6	168,1	44,5	165,4	54,2	160,6	63,8		72,9
	173,1	33,7	172,0	43,6	170,3	53,5	167,1	63,3		72,9
	176,5	33,1	176,0	43,1	175,1	53,0	173,5	63,0		72,9
	180,0	32,9	180,0	42,9	180,0	52,9	180,0	62,9		72,9

27/47 **9,0 MHz, dia — Elementos para o traçado das curvas de interferência a 3800 km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	34,2	180,0	44,2	180,0	54,2	180,0	64,2	180,0	74,2
	173,3	33,6	172,3	43,5	170,6	53,4	167,5	63,2	160,6	72,9
	166,9	31,9	165,1	41,6	162,1	51,2	157,0	60,6	146,8	69,4
	161,2	29,1	158,9	38,5	155,3	47,8	149,3	56,6	138,8	64,8
	156,4	25,5	154,0	34,6	150,2	43,4	144,2	51,9	134,6	59,5
	152,5	21,2	150,2	30,0	146,6	38,5	141,2	46,6	133,0	53,9
	149,5	16,3	147,6	24,9	144,4	33,2	139,8	41,1	132,9	48,3
	147,4	11,1	145,9	19,4	143,4	27,6	139,6	35,5	134,0	42,8
	146,2	5,6	145,2	13,9	143,3	22,0	140,3	29,9	135,9	37,3
	145,8	0,0	145,4	8,3	144,1	16,4	141,9	24,4	138,4	32,1
	146,2	– 5,6	146,3	2,7	145,7	11,0	144,1	19,2	141,5	27,2
	147,4	– 11,1	148,1	– 2,6	147,9	5,9	147,0	14,3	145,1	22,6
	149,5	– 16,3	150,6	– 7,7	150,9	1,1	150,4	9,8	149,1	18,4
	152,5	– 21,2	153,9	– 12,3	154,5	– 3,2	154,4	5,8	153,6	14,8
	156,4	– 25,5	157,9	– 16,3	158,7	– 7,0	158,8	2,3	158,4	11,6
	161,2	– 29,1	162,6	– 19,6	163,4	– 10,1	163,7	– 0,5	163,5	9,1
	166,9	– 31,9	168,0	– 22,1	168,7	– 12,3	168,9	– 2,5	168,8	7,3
	173,3	– 33,6	173,9	– 23,7	174,2	– 13,7	174,4	– 3,8	174,4	6,2
	180,0	– 34,2	180,0	– 24,2	180,0	– 14,2	180,0	– 4,2	180,0	5,8

Latitude	50º		60º		70º		80º		90º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	84,2	0	85,8	0	75,8	0	65,8	Qualquer longitude	55,8
	137,8	81,6	56,0	83,2	22,4	75,1	13,7	65,6		55,8
	123,5	76,7	77,1	78,6	42,0	73,3	27,0	65,0		55,8
	119,5	71,2	88,4	73,7	58,2	70,7	39,9	64,0		55,8
	119,2	65,6	96,4	68,7	71,4	67,6	52,2	62,8		55,8
	120,6	60,0	103,2	63,8	82,5	64,3	63,8	61,3		55,8
	123,0	54,5	109,3	59,0	92,2	60,8	74,7	59,7		55,8
	126,0	49,2	115,1	54,3	101,0	57,5	85,1	58,0		55,8
	129,5	44,1	120,7	49,9	109,1	54,2	94,9	56,2		55,8
	133,4	39,3	126,3	45,7	116,7	51,0	104,3	54,5		55,8
	137,6	34,8	132,0	41,9	124,1	48,1	113,4	52,9		55,8
	142,1	30,7	137,7	38,3	131,3	45,4	122,2	51,4		55,8
	146,9	26,9	143,5	35,2	138,3	42,9	130,8	50,0		55,8
	152,0	23,7	149,3	32,4	145,3	40,8	139,2	48,7		55,8
	157,2	20,9	155,3	30,1	152,3	39,0	147,5	47,7		55,8
	162,7	18,7	161,4	28,2	159,2	37,6	155,7	46,9		55,8
	168,4	17,1	167,6	26,9	166,1	36,6	163,8	46,3		55,8
	174,2	16,1	173,3	26,1	173,1	36,0	171,9	45,9		55,8
	180,0	15,8	180,0	25,8	180,0	35,8	180,0	45,8		55,8

27/48 **11,3 MHz, dia — Elementos para o traçado das curvas de interferência a 6000 km**

Latitude	0º		10º		20º		30º		40º	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	180,0	54,0	180,0	64,0	180,0	74,0	180,0	84,0	0	86,0
	166,6	52,8	162,3	62,5	153,3	71,8	128,2	79,7	66,2	81,2
	154,8	49,5	148,2	58,3	136,6	66,3	115,0	72,2	82,1	73,8
	145,5	44,5	138,5	52,4	127,7	59,3	111,4	64,2	90,0	66,1
	138,5	38,3	132,2	45,4	123,2	51,6	111,0	58,2	95,7	58,5
	133,5	31,3	128,2	37,9	121,1	43,6	111,9	48,1	100,6	50,9
	130,0	23,9	126,0	30,0	120,6	35,5	113,6	40,1	105,2	43,4
	127,7	16,1	124,9	22,0	121,1	27,5	116,0	32,2	109,7	36,1
	126,4	8,1	124,8	13,9	122,3	19,5	118,8	24,6	114,3	29,0
	126,0	0,0	125,6	5,9	124,3	11,6	122,2	17,1	119,1	22,2
	126,4	– 8,1	127,1	– 2,1	127,0	4,0	126,0	9,9	124,2	15,7
	127,7	– 16,1	129,5	– 9,8	130,4	– 3,4	130,4	3,1	129,6	9,5
	130,0	– 23,9	132,8	– 17,2	134,6	– 10,3	135,4	– 3,2	135,4	3,9
	133,5	– 31,3	137,2	– 24,2	139,7	– 16,7	141,1	– 9,0	141,7	– 1,2
	138,5	– 38,3	142,9	– 30,5	145,8	– 22,4	147,6	– 14,1	148,5	– 5,6
	145,5	– 44,5	150,0	– 36,0	152,9	– 27,2	154,8	– 18,2	155,6	– 9,1
	154,8	– 49,5	158,7	– 40,3	161,2	– 30,9	162,7	– 21,4	163,6	– 11,8
	166,6	– 52,8	163,9	– 43,0	170,3	– 33,2	171,2	– 23,3	171,7	– 13,4
	180,0	– 54,0	180,0	– 44,0	180,0	– 34,0	180,0	– 24,0	180,0	– 14,0

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordenadas para o traçado das curvas.	0	76,0	0	66,0	0	56,0	0	46,0	Qualquer longitude	36,0
	31,1	74,2	19,5	65,1	14,4	55,6	11,6	45,8		36,0
	53,5	69,9	37,2	62,8	28,3	54,3	23,2	45,3		36,0
	68,6	64,2	52,3	59,2	41,5	52,4	34,5	44,5		36,0
	79,4	58,1	65,0	55,0	53,7	49,8	45,7	43,4		36,0
	88,1	51,7	75,8	50,3	65,1	46,9	56,5	42,0		36,0
	95,5	45,3	85,4	45,3	75,7	43,7	67,1	40,5		36,0
	102,3	38,9	94,1	40,3	85,6	40,3	77,4	38,3		36,0
	108,7	32,7	102,2	35,4	95,0	36,9	87,4	37,1		36,0
	115,0	26,3	110,0	30,6	104,0	33,5	97,2	35,4		36,0
	121,4	21,1	117,5	26,0	112,7	30,3	106,8	33,7		36,0
	127,8	15,8	125,1	21,8	121,2	27,2	116,2	32,1		36,0
	134,5	11,0	132,6	17,9	129,7	24,5	125,5	30,6		36,0
	141,4	6,7	140,2	14,4	138,1	22,0	134,7	29,2		36,0
	148,6	3,0	148,0	11,5	146,4	19,9	143,9	28,1		36,0
	156,1	− 0,0	155,8	9,1	154,8	18,2	152,9	27,2		36,0
	163,9	− 2,2	163,8	7,4	163,2	17,0	162,0	26,5		36,0
	171,0	− 3,5	171,9	6,4	171,6	16,3	171,0	26,1		36,0
	180,0	− 4,0	180,0	6,0	180,0	16,0	180,0	26,0		36,0

C) Classes de emissão e potência

1. *Classes de emissão.*

27/49 No serviço móvel aeronáutico (R) é permitido utilizar as emissões seguintes, desde que sejam respeitadas as disposições especiais aplicáveis a cada caso e desde que essa utilização não cause interferências prjudiciais aos outros utentes da via em causa.

27/50 1.1. *Telefonia — modulação de amplitude:*

Dupla faixa lateral ..... (1)A3
Faixa lateral única, onda portadora completa ..... (1)A3H
Faixa lateral única, onda portadora suprimida A3J

1.2. *Telegrafia (incluindo as transmissões automáticas de dados).*

27/51 1.2.1. *Modulação de amplitude:*

Telegrafia sem modulação por uma frequência de áudio (manipulação por tudo ou nada) (2)A1
Telegrafia por modulação por tudo ou nada de uma ou várias frequências de áudio de modulação ou manipulação por tudo ou nada da emissão modulada, incluindo a chamada selectiva, faixa lateral única, onda portadora completa A2H
Telegrafia harmónica multivias, faixa lateral única, onda portadora suprimida A7J
Outras emissões, tais como a transmissão automática de dados, faixa lateral única, onda portadora suprimida A9J

27/52 1.2.2. *Modulação de frequência:*

Telegrafia por manipulação por desvio de frequência sem modulação por uma frequência de áudio, sendo uma das duas frequências emitida num dado instante ..... (3)F1

27/53 *(Suprimido.)*

---

(1) As emissões A3 e A3H só podem ser utilizadas em 3023 kHz e 5680 kHz e no casos previstos no § 5 da Resolução n.º 402.

(2) V. o n.º **27/52**.

(3) São permitidas as classes de emissão A1 e F1 desde que não causem interferências prejudiciais às emissões das classes A2H, A3J, A7J e A9J. Além disso, as classes de emissão A1 e F1 deverão estar de acordo com as disposições dos n.º **27/65** a **27/66-C** e é necessário ter o cuidado de colocar estas emissões no centro ou próximo do centro da via. Todavia, com emissores de faixa lateral única é permitida uma frequência de áudio modulante se a onda portadora for suprimida de acordo com as disposições do n.º **27/63.**

2. *Potência.*

27/54 2.1 Salvo indicação contrária na parte II do presente apêndice, as potências de ponta fornecidas à linha de alimentação da antena não ultrapassam os valores máximos indicados no quadro a seguir; admite-se que as potências aparentes radiadas de ponta correspondentes são iguais a dois terços desses valores.

Classe de emissão	Estações	Potência de ponta máxima
A2H, A3J, A7J e A9J	Estações aeronáuticas	6 kW
A3 (*a*) e A3H (*a*)	Estações de aeronave	400 W
(Taxa de modulação 100 %)	—	–
Outras emissões, tais como A1, F1	Estações aeronáuticas	1,5 kW
	Estações de aeronave	100 W

(*a*) As emissões das classes A3 e A3H devem ser utilizadas somente em 3023 kHz e 5680 kHz assim como nos casos previstos no n.º 5 da Resolução n.º 402.

27/55 2.2 Admite-se que a potência de ponta máxima especificada no quadro anterior para as estações aeronáuticas produzirá a potência aparente radiada média de 1 kW adoptada para o traçado das curvas que indicam os alcances de interferência.

27/56 2.3. A fim de assegurar comunicações de qualidade satisfatória com as aeronaves, as estações aeronáuticas que servem as ZLAMP, as zonas VOLMET ou as zonas mundiais de adjudicação podem utilizar potências mais elevadas que as potências máximas especificadas no n.º **27/54**, excepto no caso das frequências de 3023 kHz e 5680 kHz, que estão sujeitas às disposições especiais dos n.ºs **27/208** a **27/214**. Se assim for, a administração com jurisdição sobre a estação aeronáutica interessada terá em conta as disposições do n.º **694** do Regulamento das Radiocomunicações e procederá em cada caso de modo que:

27/57 *a*) Seja efectuada uma coordenação com as administrações interessadas quando são possíveis interferências prejudiciais;

27/58 *b*) Não seja causada qualquer interferência prejudicial às estações que utilizam frequências de acordo com as disposições pertinentes do plano de adjudicação;

27/59 *c*) Nas outras ZLAMP, ZLARN ou zonas VOLMET, às quais são adjudicadas a ou as mesmas frequências, sejam mantidas as relações de protecção especificadas para essas zonas;

27/60 *d*) As características de directividade da antena sejam tais que fique reduzida ao mínimo a radiação nas direcções em que não é necessária e especialmente para as outras ZLAMP, ZLARN ou zonas VOLMET, às quais estão adjudicadas a mesma ou as mesmas frequências;

27/61 *e*) De acordo com as disposições do Regulamento das Radiocomunicações, sejam notificados à IFRB os pormenores completos relativos a cada consignação, incluindo as características da antena de emissão.

27/62 2.4. Admite-se que a potência dos emissores de aeronave pode, na prática, ultrapassar os limites especificados no n.º **27/54,** mas a utilização de uma potência mais elevada (que normalmente não deverá ultrapassar um valor de ponta de 600 W) não deve causar interferência prejudicial às estações que utilizam frequências de acordo com os princípios técnicos que servem de base ao plano de adjudicação.

D) Limites dos níveis de potência das emissões não desejadas

1. *Disposições de ordem técnica relativas à utilização de emissões de faixa lateral única.*

27/63 1.1. *Definição do nível da portadora:*

Portadora	Nível N (dB) da portadora em relação à potência de ponta
Portadora completa (por exemplo: A2H)	$0 \geq N \geq -6$
Portadora suprimida (por exemplo: A3J)	Estações de aeronave $N \leq -26$ Estações aeronáuticas $N \leq -40$

27/64 *(Suprimido)*

2. *Tolerância aplicável aos níveis das emissões fora da largura de faixa necessária.*

27/65 2.1. No caso de uma emissão de faixa lateral única, a potência média fornecida numa qualquer frequência à linha de alimentação da antena de uma estação aeronáutica ou de uma estação de aeronave será inferior à potência média (*Pm*) do emissor, de acordo com as indicações dadas no quadro do n.º **27/66**.

27/66 2.2. Para os tipos de emissor de estação de aeronave e para os emissores de estação aeronáutica instalados até 1 de Fevereiro de 1983:

Afastamento Δ em relação à frequência consignada (kHz)	Atenuação mínima em relação à potência média (P_m) (dB)
$2 \leq \Delta < 6$	25
$6 \leq \Delta < 10$	35
$10 \leq \Delta$	Estações de aeronave: 40. Estações aeronáuticas: $43 + 10 \log_{10} P_m$ (watts).

27/66-A *Nota.* — Todos os emissores postos em serviço pela primeira vez depois de 1 de Fevereiro de 1983 deverão estar de acordo com as especificações do n.º 27/66-C.

27/66-B 2.3. No caso de uma emissão de faixa lateral única, a potência de ponta (P_p) fornecida numa qualquer frequência à linha de alimentação da antena de uma estação aeronáutica ou de uma estação de aeronave é inferior à potência de ponta (P_p) do emissor, de acordo com as indicações dadas no qudro do n.º **27/66-C**.

27/66-C 2.4. Para os emissores de estação de aeronave instalados depois de 1 de Fevereiro de 1983 e para os emissores de aeronáutica utilizados depois de 1 de Fevereiro de 1983:

Afastamento Δ em relação à frequência consignada (kHz)	Atenuação mínima em relação à potência média (P_m) (dB)
$1{,}5 \leq \Delta < 4{,}5$	30
$4{,}5 \leq \Delta < 7{,}5$	38
$7{,}5 \leq \Delta$	Estações de aeronave: 43. Estações aeronáuticas: (*a*).

(*a*) Para as potências de emissão inferiores ou iguais a 50 W: $43 + 10 \log_{10}(P_p)$ (watts). Para as potências de emissão superiores a 50 W, a atenuação deve ser de, pelo menos, 60 dB.

27/67 a 27/71 *(Suprimidos.)*

E) Outras disposições de ordem técnica

1. *Frequências consignadas.*

27/72 1.1. Para uma estação que faz emissões em faixa lateral única, com excepção da classe de emissão A2H, a frequência consignada deve ser superior em 1400 Hz à frequência portadora (frequência de referência).

27/72-A 1.2. Para as estações aeronáuticas equipadas com sitemas de chamada selectiva, a classe de emissão A2H deve ser indicada na coluna «Informações suplementares» da ficha de notificação (v. o apêndice 1 ao Regulamento das Radiocomunicações).

27/72-B 1.3. Para as classes de emissão A1 e F1, a frequência consignada é escolhida de acordo com as disposições da nota relativa aos n.ºs **27/51** e **27/52**.

27/73 1.4. A frequência consignada a uma estação que utiliza emissões em faixa lateral dupla (A3) deverá ser a frequência portadora (frequência de referência).

PARTE II

Plano de adjudicação de frequências para o serviço móvel aeronáutico (R)

nas suas faixas exclusivas entre 2850 e 22 000 kHz

Secção I

Descrição dos limites das zonas e subdivisões de zonas

27/74 1. As descrições dos limites dadas a seguir referem-se às zonas a que são adjudicadas frequências de acordo com o plano de adjudicação de frequências elaborado pela Conferência.

27/75 2. Essas zonas são igualmente representadas graficamente em mapas a utilizar com o presente apêndice. Se existirem diferenças entre uma zona tal como representada no mapas e tal como descrita a seguir, fará fé a descrição.

27/76 3. A menção do nome de um país ou de uma zona geográfica nas descrições ou nos mapas, bem como o traçado de fronteiras nos mapas, não implicam, da parte da UIT, qualquer tomada de posição quanto ao estatuto político desse país ou dessa zona geográfica, nem qualquer reconhecimento oficial dessas fronteiras.

27/77 4. Na descrição dos limites das zonas de passagem das linhas aéreas mundiais principais (ZLAMP), qualquer linha que une dois pontos e que não é definida de outro modo é um arco de círculo máximo.

27/78 Na descrição dos limites das zonas das linhas aéreas regionais e nacionais (ZLARN) e das subdivisões dessas zonas, qualquer linha que une dois pontos e que não é definida de ouro modo é uma recta numa projecção de Mercator.

27/79 Na descrição dos limites das zonas VOLMET, qualquer linha que une dois pontos é um arco de círculo máximo.

ARTIGO 1

Descrição dos limites das zonas de passagem das linhas aéreas mundiais principais (ZLAMP)

27/80 *Zona de passagem das linhas aéreas mundiais principais — CARAÍBAS*

(ZLAMP-CAR)

Do ponto 20° N. 120° W., pelos pontos 35° N. 120° W., 35° N. 85° W., 43° N. 74° W., 40° N. 60° W., 00° 48° W. e 00° 80° W., até ao ponto 20° N. 120° W.

27/81 (*Suprimido.*)

27/82 *Zona de passagem das linhas aéreas mundiais principais — CENTRO ESTE DO PACÍFICO:*

(ZLAMP-CEP)

Do ponto 50° N. 122° W., pelos pontos 38° N. 120° W., 15° N. 110°W., 20° S. 145° W., 20° S. 152° W., e 30° N. 165° W., até ao ponto 50° N. 122° W.

27/83 *Zona de passagem das linhas aéreas mundiais principais — CENTRO OESTE DO PACÍFICO:*

(ZLAMP-CWP)

Do ponto 40° N. 117° E., pelos pontos 25° N. 155° W., 17° N. 155°W., 0° 165° W., 00° 170° E., 12° S. 165°E., 12° S. 136° E., 09° N. 115° E. e 23° N. 114° E., até ao ponto 40° N. 117°E.

27/84 *Zona de passagem das linhas aéreas mundiais principais — EUROPA:*

(ZLAMP-EUR)

Do ponto 33° N. 12° W., pelos pontos 54° N. 12° W., 70° N. 00°, 74° N. 40° E., 74° N. 52° E., 60° N. 52°E., 40° N. 36° E., 29° N. 35° 30' E. e 32° N. 13° E., até ao ponto 33° N. 12° W.

27/85 (*Suprimido.*)

27/85-A *Zona de passagem das linhas aéreas mundiais principais — OCEANO ÍNDICO:*

(ZLAMP-INO)

Do Pólo Sul, pelos pontos 30° S. 26° E., 20° N. 35°W., 30° N. 60° E., 30° N. 90° E., 30° S. 120°E. e 40° S. 160° E., até ao Pólo Sul.

27/86 *Zona de passagem das linhas aéreas mundiais principais — MÉDIO ORIENTE:*

(ZLAMP-MID)

Do ponto 51° N. 30° E., pelos pontos 57° N. 37° E., 50° N. 80° E., 44° N. 94° E., 08° N. 76° E., 11° 45' N. 42° E., 16° N. 42° E. e 30° N. 30° E., até ao ponto 51° N. 30° E.

27/87 *Zona de passagem das linhas aéreas mundiais principais — NORTE ATLÂNTICO:*

(ZLAMP-NAT)

Do Pólo Norte, pelos pontos 60° N. 135° W., 49° N. 120° W., 49° N. 74° W. 39° N. 78° W., 18° N. 66° W., 05° N. 55° W., 16° N. 26° W., 32° N. 08° W., 44° N. 02° E. e 60° N. 20° E., até ao Pólo Norte.

27/87-A *Zona de passagem das linhas aéreas mundiais principais — NORTE DA ÁSIA CENTRAL:*

(ZLAMP-NCA)

Do Pólo Norte, pelos pontos 75.° N. 10° E., 60° N. 25° E., 30° N. 73° E., 37° N. 73° E., 49° N. 85° E., 42° N. 97° E., 42° N. 110° E., 45° N. 113° E., 46° 30' N. 120° E., 49° N. 116° E., 54° N. 123° E., 45° N. 133° E., 40° N. 124° E., 30° N. 124° E., 25° N. 135° E. e 65° N. 170° W., até ao Pólo Norte.

27/88 a 27/93 (*Suprimidos.*)

27/94 *Zona de passagem das linhas aéreas mundiais principais — NORTE DO PACÍFICO:*

(ZLAMP-NP)

Do Pólo Norte, pelos pontos 60° N. 135° W., 47° N. 118° W., 30° N. 165° W., 30° N. 115° E., 41° N. 116° E. e 55° N. 135° E., até ao Pólo Norte.

27/95 *Zona de passagem das linhas aéreas mundiais principais — ÁFRICA:*

(ZLAMP-AFI)

Do ponto 40° N. 35° W., pelos pontos 37° N. 03° W., 37° N. 44°E., a fronteira entre a República do Iraque e o Irão, os pontos 29° N. 48° E., 26° N. 56° E., 20° N. 62° E., 22° S. 60° E., 35° S. 30° E., 35.° S. 16° E., 05° N. 03° W. e 05° N. 35° W., até ao ponto 40° N. 35° W.

27/96 e 27/97 (*Suprimidos.*)

27/98 *Zona de passagem das linhas aéreas mundiais principais — ATLÂNTICO SUL:*

(ZLAMP-SAT)

Do Pólo Sul, pelos pontos 30° S. 75° W., 19° S. 53° W., 00° 60° W., 25° N. 25° N. 25° W., 41° N. 15° W., 41° N. 03° W., 15° N. 03° W. e 20° S. 32° E., até ao Pólo Sul.

27/99 (*Suprimido.*)

27/100 *Zona de passagem das linhas aéreas mundiais principais — AMÉRICA DO SUL:*

(ZLAMP-SAM)

Do Pólo Sul, pelos pontos 15° N. 125° W., 15° N. 60° W., 10° N. 60° W., 05° S. 30° W. e 36° S. 52° W., até ao Pólo Sul.

27/101 (*Suprimido.*)

27/102 *Zona de passagem das linhas aéreas mundiais principais — SUESTE ASIÁTICO:*

(ZLAMP-SEA)

Do ponto 26° N. 130° E., pelos pontos 00° 130° E. 00° 135° E., 12° S. 145 ° E., 12° S. 160° E., 25° S. 155° E. 40° S. 150° E., 35° S. 115° E., 18° N. 62° E. e 26° N. 65° E., até ao ponto 26° N. 130° E.

27/103 *Zona de passagem das linhas aéreas mundiais principais — PACÍFICO SUL:*

(ZLAMP-SP)

Do Pólo Sul, pelos pontos 38° S. 145° E., 00° 167° E., 0° 175° W., 22° N. 158° W., 22° N. 156° W. e 00° 120° W., até ao Pólo Sul.

27/103-A *Zona de passagem das linhas aéreas mundiais principais — ÁSIA ORIENTAL:*

(ZLAMP-EA)

Do ponto 55° N. 124° E., pelos pontos 37° N. 145° E., 26° N. 130° E., 00° 130° E., 00° 80° E., 18° N. 62° E., 37° N. 67° E. e 55° N. 80° E., até ao ponto 55° N. 124° E.

ARTIGO 2

Descrição dos limites das zonas e subdivisões de zonas das linhas aéreas regionais e nacionais (ZLARN)

27/104 *Zona das linhas aéreas regionais e nacionais 1:*

(ZLARN — 1)

Esta zona é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 15° W., passa pelos pontos 72° N. 15° W., 40° N. 50° W., 30° N., 39° W., 30° N. 10° W., 31° N. 10° W. e 31° N. 10° E., e tem, depois, o traçado seguinte: fronteira Líbia-Tunísia até ao Mediterrâneo, costas das Líbia e da República Árabe do Egipto até Alexandria, dirige-se, em seguida, para o Cairo e daí para leste, ao longo do paralelo do Cairo, até a intersecção como o meridiano 40° E., depois para o norte, ao longo deste meridiano até à margem sul do mar Negro e ao longo da costa turca para o oeste até a intersecção com o meridiano 30° E., segue este meridiano até á fronteira Roménia-URSS, depois as fronteiras da URSS com a Roménia, a

Hungria, a República Socialista da Checoslováquia, a Polónia, a costa soviética do Báltico até à fronteira entre a Finlândia e a URSS e entre a Noruega e a URSS. Passa, em seguida, pelo ponto 70° N. 32° E. e segue o meridiano 32° E. até ao Pólo Norte.

27/105 *Subdivisão de zona 1A:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 65° N. 26° W., passa pelos pontos 40° N. 50° W., 40° N., 20° W., 60° N. 20° W. e 60° N. 26° W., voltando ao seu ponto de partida 65° N. 26° W.

27/106 *Subdivisão de zona 1B:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Norte e seguindo o meridiano 15° W., passa pelos pontos 72° N. 15° W., 65° N. 26° W., 60° N. 26° W., 60° N. 20° W., 50° N. 20° W. e 50° N. 10° W., dirige-se depois para leste, passando pelas águas territoriais entre as ilhas anglo-normandas e a costa francesa, que atinge no meridiano 03° W., para seguir ao longo da costa na direcção nordeste, depois a fronteira da França com a Bélgica, o Luxemburgo e a República Federal da Alemanha, depois a fronteira Suíça-República Federal da Alemanha e República Federal da Alemanha-Áustria. Prossegue pela fronteira entre a República Socialista da Checoslováquia e a República Federal da Alemanha, seguindo depois a fronteira entre a República Federal da Alemanha e República Democrática Alemã, em direcção ao mar Báltico, dirige-se depois para ocidente ao longo da costa da República Federal da Alemanha, até à fronteira entre a República Federal da Alemanha e a Dinamarca, Segue por esta fronteira até ao mar do Norte e daí, ao longo do paralelo 55° N., atinge o ponto 55° N. 04° E., passando, em seguida, pelos pontos 56° N. 03° E., 59° N. 02° E. e 62° N. 01° E., para, segundo o meridiano 01° E., atingir o Pólo Norte.

27/107 *Subdivisão de zona 1C:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 01° E. até ao ponto 62° N. 01° E. e passa em seguida pelos pontos 59° N. 02° E., 56° N. 03° E. e 55° N. 04° E., para seguir o paralelo 55° N. em direcção a leste e depois a fronteira que separa a Dinamarca e a República Federal da Alemanha, até ao mar Báltico. Segue então a costa da República Federal da Alemanha, ao longo do mar Báltico, até à fronteira entre a República Federal da Alemanha e a República Democrática Alemã; segue ao longo desta fronteira, das fronteiras ocidentais da República Socialista da Checoslováquia e da Áustria, da fronteira Suíça-Áustria, da fronteira Listenstaina-Áustria, depois, novamente, da Suíça-Áustria, para se dirigir em seguida para leste ao longo das fronteiras meridionais da Áustria e da Hungria; daí segue a fronteira entre a Hungria e a Roménia, depois a fronteira da URSS com a Hungria e a República Socialista da Checoslováquia e a Polónia até à costa do mar Báltico. Depois segue a costa soviética do mar Báltico, as fronteiras entre a Finlândia e a URSS, e entre a Noruega e a URSS, passa pelo ponto 70° N. 32° E., para atingir finalmente o Pólo Norte seguindo o meridiano 32° E.

27/108 *Subdivisão de zona 1D:*

Esta subdivisão é delimitada por uma linha que, parte do ponto de junção das fronteiras da URSS, da Hungria e da Roménia e se dirige para ocidente, ao longo das fronteiras meridionais da Hungria e da Áustria, até à fronteira da Suíça com a Itália; segue, depois, a fronteira França-Itália, até ao Mediterrâneo e, daí, passa pelos pontos 43° N. 10° E., 41° N. 10° E. e 41° N. 07° E., daqui segue o meridiano 07° E. até à costa da África do Norte e prossegue ao longo desta costa, passando por Tunes, Trípoli e Benghazi, até à fronteira da Líbia com a República Árabe do Egipto. Continua ao longo da Costa até Alexandria, dirige-se para o Cairo segue depois o paralelo do Cairo até ao seu ponto de intersecção com o meridiano 40° E., dirige-se, em seguida, para o norte, seguindo o meridiano 40° E. até à intersecção com a fronteira que separa a República Árabe da Síria da República do Iraque e segue esta fronteira até à fronteira turca. Prossegue depois ao longo da fronteira que separa a Turquia da República do Iraque, do Irão e da URSS, até à costa do mar Negro, Continua ao longo da costa turca do mar Negro para atingir o meridiano 30° E. e segui-lo até à fronteira da Roménia com a URSS, seguindo esta fronteira até ao ponto de junção das fronteiras da URSS, da Hungria e da Roménia.

27/109 *Subdivisão de zona 1E:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 50° N. 20° W., passa pelos pontos 40° N. 20° W., 40° N. 50° W., 30° N. 39° W., 30° N. 10° W., 31° N. 10° W. e 31 N. 10° E.; segue depois a fronteira da Líbia com a Tunísia até ao Mediterrâneo e, daí, ao longo da costa tunisina, até ao seu ponto de intersecção com o meridiano 10° E. e, ao longo deste meridiano, até ao ponto 43° N. 10° E. Segue depois as fronteiras franco-italiana e ítalo-suíça, as fronteiras que separam a Áustria da Suíça, do Listenstaina e, de novo, da Suíça. Continua pela fronteira que separa a Suíça da República Federal da Alemanha e pelas fronteiras que separam a França da República Federal da Alemanha, do Luxemburgo e da Bélgica até à costa da Mancha e, partindo daí para ocidente, atravessa as águas territoriais entre as ilhas anglo-normandas e a costa francesa, para atingir o ponto 50° N. 10° W. e voltar ao seu ponto de partida 50° N. 20° W.

27/110 *Zona das linhas aéreas regionais e nacionais 2:*

(ZLARN — 2)

Esta zona é delimitada por uma linha que, partindo do Pólo Norte, passa pelo ponto 70° N. 32° E., para seguir a fronteira entre a Noruega e a URSS e entre a Finlândia e a URSS até à costa do mar Báltico, seguindo depois as águas territoriais soviéticas ao longo da costa do mar Báltico até à fronteira que separa a URSS da Polónia, para seguir depois a fronteira que separa a URSS dos países seguintes: Polónia, República Socialista da Checoslováquia, Hungria e Roménia, até ao ponto de intersecção da costa do mar Negro com o meridiano 30° E.; segue este meridiano até à costa turca do mar Negro, segue esta costa até à intersecção das fronteiras da Turquia e da URSS, e, daí, ao longo da sua fronteira comum e da fronteira Irão-URSS, até ao mar Cáspio, e, em seguida, a costa iraniana deste mar. Daí segue a fronteira meridional da URSS até ao ponto de junção das fronteiras da Mongólia, da República Popular da China e da URSS a cerca de 49° N. 88° E., para seguir depois o meridiano 88° E. até ao paralelo 55° N., continuando por este paralelo até 60° E., e atingir o Pólo Norte seguindo o meridiano 60° E.

27/111 *Subdivisão de zona 2A:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 32° E. até ao ponto 70° N. 32° E., para seguir depois a fronteira entre a Noruega e a URSS e entre a Filândia e a URSS até à costa do mar Báltico e continuar pelas águas territoriais soviéticas do mar Báltico até ao ponto 55° N. 20° E., daí, passa por Moscovo e pelo ponto 55° N. 60° E., atinge o Pólo Norte seguindo o meridiano 60° E.

27/112 *Subdivisão de zona 2B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 55° N. 88° E., passa pelos pontos 55° N. 60° E. e 47° N. 53° E., para seguir depois, a costa oriental do mar Cáspio até à costa do Irão e, daí, dirigindo-se para leste pela fronteira meridional da URSS até ao ponto de junção das fronteiras da Mongólia, da República Popular da China e da URSS, cerca de 49° N. 88° E., e, daí, ao longo do meridiano 88° E., para voltar ao seu ponto de partida 55° N. 88° E.

27/113 *Subdivisão de zona 2C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 55° N. 60° E., vai até Moscovo e, daí, até, ao ponto 55° N. 20° E., para se dirigir, em seguida, para sul seguindo a fronteira que separa a URSS da Polónia, depois a fronteira entre a URSS e os países seguintes: Polónia, República Socialista da Checoslováquia, Hungria e Roménia, até à costa do mar Negro no seu ponto de intersecção com o meridiano 30° E. Segue então o meridiano 30° E. até à costa turca do mar Negro e por esta costa até à sua intersecção com a fronteira entre a Turquia e a URSS; segue esta fronteira comum e a fronteira Irão-URSS até ao mar Cáspio, segue depois a costa meridional do mar Cáspio e dirige-se para norte seguinte a costa oriental deste mar e, passando pelo ponto 47° N. 53° E., volta ao seu ponto de partida, 55° N. 60° E.

27/114 *Zona das linhas aéreas regionais e nacionais 3:*

(ZLARN — 3)

Esta zona é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 60° até ao ponto 55° N. 60° E., para seguir o paralelo 55° N. até ao ponto de intersecção com o meridiano 88° E. e, daí, este meridiano, até ao ponto de junção das fronteiras da Mongólia, da República Popular da China e da URSS a cerca de 49° N. 88° E.; segue depois a fronteira Mongólia-República Popular da China e URSS-República Popular da China, até à costa. Passa então entre as águas territoriais soviéticas e japonesas e, pelos pontos 43° N. 147° E., 50° N. 164° E. e 65° N. 170° W., atinge o Pólo Norte, seguindo o meridiano 170° W.

27/115 *Subdivisão de zona 3A:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 60° E. até ao ponto 55° N. 60° E. e continua pelo paralelo 55° N. até ao seu ponto de intersecção com o meridiano 88° E., daí passa pelos pontos 60° N. 88° E. e 60° N. 110° E. e atinge o Pólo Norte, seguindo o meridiano 110° E.

27/116 *Subdivisão de zona 3B:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Norte, segue o meridiano 110° E. e passa em seguida pelos pontos 60° N.110° E., 60° N. 147° E., 43° N. 147° E., 50° N. 164° E. e 65° N. 170° W. atinge o Pólo Norte seguindo o meridiano 170° W.

27/117 *Subdivisão de zona 3C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 60° N. 88° E., atinge o ponto de junção das fronteiras entre a Mongólia, a República Popular da China e a URSS, cerca de 49° N. 88° E.,

para seguir a fronteira Mongólia-República Popular da China e a fronteira URSS-República Popular da China até à costa. Passa depois entre as águas territoriais soviéticas e japonesas, pelos pontos 43° N. 147° E. e 60° N. 147° E. atinge o seu ponto de partida, 60° N. 88° E.

27/118 *Zona das linhas aéreas regionais e nacionais 4:*

(ZLARN — 4)

Esta zona é delimitada por uma linha que, partindo do ponto 30° N. 39° W., passa pelos pontos seguintes: 10° N. 20° W., 05° S. 20° W. e 05° S. 12° E., segue a fronteira que separa a República Popular do Congo da República Popular da Angola, segue depois a fronteira setentrional da República Popular do Zaire, continua pela fronteira da República Popular do Congo, do Império Centro-Africano e do Sudão, e daí dirige-se para norte ao longo da fronteira ocidental do Sudão; partir daí, esta linha segue a fronteira ocidental da República Árabe do Egipto, continua para norte até ao Mediterrâneo e prossegue pelas costas mediterrânica e atlântica da África do Norte até ao ponto situado a 30° N. 10° W. Daí segue o paralelo 30° N., em direcção a ocidente, para voltar ao seu ponto de partida, 30° N. 39° W.

27/119 *Subdivisão de zona 4A:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 30° N. 39° W., passa pelo ponto 21° N. 31° W, e depois por Gao e Zinder. Desta cidade prossegue pela fronteira setentrional da Nigéria, até um ponto situado a oeste de N'Djamena; segue depois o paralelo de N'Djamena até ao ponto 12° N. 22° E. Dirige-se, em seguida, para norte, seguindo a fronteira ocidental do Sudão e a fronteira ocidental da República Árabe do Egipto até ao Mediterrâneo, para seguir as costas mediterrânica e atlântica da África do Norte, até ao ponto 30° N. 10° W., e daí o paralelo 30° N. até ao seu ponto de partida, 30° N. 39° W.

27/120 *Subdivisão de zona 4B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 21° N. 31° W., passa pelos pontos 10° N. 20° W., 05° S. 20° W. e 05° S. 12° E. e daí segue a fronteira meridional da República Popular do Congo, do Império Centro-Africano, até ao ponto de junção das fronteiras da República do Zaire, do Sudão e do Império Centro-Africano. Daí segue a fronteira ocidental do Sudão até ao ponto 12° N. 22° E., para seguir depois o paralelo de N'Djamena até à fronteira da Nigéria. Daí, dirige-se para ocidente, seguindo esta fronteira até ao ponto 13° 12' N. 10° 45' E., passa por Zinder e Gao e volta ao seu ponto de partida, 21° N. 31° W.

27/121 *Zona das linhas aéreas regionais e nacionais 5:*

(ZLARN — 5)

Esta zona é delimitada por uma linha que, partindo do ponto 41° N. 40° E., passa pelo ponto 37° N. 40° E., para seguir a fronteira que separa a Turquia da República Árabe Síria até à costa mediterrânica, e daí continua até ao ponto em que a fronteira comum da Líbia e da República Árabe do Egipto a costa do Norte de África, ficando Chipre fora da zona. Dirige-se em seguida para sul, seguindo a fronteira ocidental da República Árabe do Egipto e do Sudão até à fronteira do Quénia. Daí dirige-se para leste pela fronteira norte do Quénia e, em direcção ao sul, segue a fronteira que separa o Quénia da Somália para atingir a costa oriental da África no ponto 02° S. 41° E. Continua passando pelos pontos 02° S. 73° E. e 37° N. 73° E., e segue em direcção a leste, pela fronteira entre a República do Afeganistão e o Paquistão; daí para ocidente, segue a fronteira meridional da URSS até ao mar Cáspio. Prossegue depois pela fronteira norte do Irão e da Turquia até ao seu ponto de partida, 41° N. 40° E.

27/122 *Subdivisão de zona 5A:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 37° N. 40° E., segue a fronteira que separa a Turquia da República Árabe Síria, até à costa mediterrânica, e daí atinge o ponto de intersecção da fronteira egipto-libanesa e da costa do Norte de África, sem passar por Chipre. Dirige-se depois para sul, ao longo da fronteira ocidental da República Árabe do Egipto, e segue para leste, a fronteira comum à República Árabe do Egipto e ao Sudão, para atingir o ponto 24° N. 37° E. Continua, passando pelos pontos 11° 45' N. 42° E., 11° 45' N. 55° E., 20° N. 52° E. e 26° N. 52° E. e segue as fronteiras que separam o Irão da República do Iraque e a República do Iraque da Turquia, para voltar ao seu ponto de partida, 37° N. 40° E.

27/123 *Subdivisão de zona 5B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 41° N. 40° E., passa pelo ponto 37° N. 40° E. e dirige-se depois para leste, pela fronteira que separa a Turquia da República Árabe Síria e da República do Iraque, e pela fronteira que separa a República do Iraque e o Irão, até ao ponto 30° N. 49° E., e daí corta o golfo Pérsico ao meio, passando por 26° N. 52° E e 24° N. 60° E., Bombaim, e 37° N. 73° E., para seguir, em direcção a leste, a fronteira que separa a República do Afeganistão e, em direcção a ocidente, a fronteira meridional das URSS, até ao mar Cáspio. Daí segue a fronteira norte do Irão e da Turquia até 41° N. 40° E.

27/124 *Subdivisão de zona 5C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 26° N. 52° E., passa pelos pontos 13° N. 52° E., 13° N. 54° E. e 54° E, e 02° S. 73° E., Bombaim, 24° N. 60° E. e daí corta o golfo Pérsico ao meio e atinge o ponto 26° N. 52° E.

27/125 *Subdivisão de zona 5C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto de junção das fronteiras da República Árabe do Egipto, da Líbia e do Sudão, segue em direcção ao sul pela fronteira ocidental do Sudão até à fronteira norte do Quénia, continua pela fronteira norte do Quénia, para se dirigir para sul seguindo a fronteira que separa o Quénia da Somália até à costa oriental da África, num ponto situado a 02° S. 42° E., passa depois pelos pontos 02° S. 54° E., 13° N. 54° E., 13° N. 52° E. e 12° N. 44° E., e daí dirige-se para noroeste, cortando o mar Vermelho a meio até ao ponto 24° N. 37° E. Daí segue ao longo da fronteira meridional da República Árabe do Egipto, para voltar ao seu ponto de partida.

27/126 *Zona das linhas aéreas regionais e nacionais 6:*

(ZLARN — 6)

Esta zona é delimitada por uma linha que, partindo aproximadamente do ponto 49° N. 88° E., segue pela fronteira que separa a China da URSS, o Afeganistão do Paquistão, o Irão do Paquistão até ao ponto 23° N. 61° E. e daí atinge Bombaim; segue depois pelo meridiano 73° E. e passa pelos pontos 02° S. 73° E., 02° S. 92° E., 10° S. 92° E., 10° S. 141° E., 00° 160° E., 03° 30' N. 160° E., 03° 30' N. 170° W., 10° N. 170° W., 50° N. 164° E. e 43° N. 147° E. Daí, passa, em direcção a ocidente, entre as águas territoriais japonesas e soviéticas, segue as fronteiras nordeste e setentrional da China, para voltar ao seu ponto de partida, aproximadamente a 49° N. 88° E.

27/127 *Subdivisão de zona 6A:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 37° N. 75° E., segue a fronteira que separa o Paquistão da República do Afeganistão, o Irão do Paquistão, até ao ponto 23° N. 61° E., daí continua até Bombaim, em seguida até ao ponto 24° N. 80° E. e daí até Calcutá. Segue depois a costa do Bangladesh e da Birmânia até à fronteira que separa a Birmânia da Tailândia e, depois, ao longo desta fronteira e da que separa a Birmânia da República Democrática Popular do Laos, para subir ao longo da fronteira que separa a República Popular da China da Birmânia. Daí dirige-se para ocidente pela fronteira meridional da República Popular da China, para voltar ao seu ponto de partida, 37° N. 75° E.

27/128 *Subdivisão de zona 6B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 39° 49' 41" N. 124° 10' 06" E., passa pelos pontos 39° 31' 51" N. 124° 06' 31" E. e 39° N. 124° E. e atinge o ponto 32° 30' N. 124° E. Entre o ponto 32° 30' N. 124° E. e o ponto 25° N. 123° E. o limite desta subdivisão não é definido. Do ponto 25° N. 123° E. a linha passa pelos pontos 21° N. 121° 30' E., 20° N. 120° E., 20° N. 176° W., 50° N. 164° E. e 43° N. 147° E., dirige-se depois para o ocidente, passando entre as águas territoriais japonesas e soviéticas e segue a fronteira que separa a República Popular Democrática da Coreia da URSS; continua pela fronteira que separa a República Popular da China da República Democrática Popular da Coreia, para voltar ao seu ponto de partida, 39° 49' 41" N. 124° 10' 06" E.

27/129 *Subdivisão de zona 6C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 20° N. 130° E., passa pelos pontos 04° N. 130° E. 04° N. 118° E., e daí, pelas fronteiras meridionais de Sabah e de Sarawak, até à costa, dirigindo-se depois para sul pela costa ocidental do Bornéu até ao meridiano 110° E. e por este meridiano até ao ponto 10° S. 110° E. Daí passa pelos pontos 10° S. 141° E., 00° 141° E., 00° 160° E., 03° 30' N. 160° E., 03° 30' N. 170° W., 10° N. 170° W. e 20° N. 176° W. e, deste último ponto, volta a atingir o ponto 20° N. 130° E.

27/130 *Subdivisão de zona 7D:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto de junção das fronteiras da República Popular da China, da Índia e da Birmânia, se dirige para sul pelas fronteiras que separam a Birmânia da Índia e a Birmânia do Bangladesh e atinge o golfo de Bengala; daí segue a costa da Birmânia até ao seu ponto mais meridional. Dirige-se em seguida para a ilha de Weh (ao largo da costa setentrional de Samatra) e passa pelos pontos 02° S. 92° E. e 10° S. 92° E. até ao ponto 10° S. 110° E.; daí dirige-se para leste, até ao ponto 10° S. 141° E., e sobe para norte até ao ponto 00° 141° E., passa pelo ponto 04° N. 130° E. e pelos pontos 20° N. 130° E. e 20° N. 113° E. Dirige-se depois para sul, contornando a ilha de Hainão; continua pela fronteira que separa a República Popular da China do Vietname e, depois, pelas fronteiras que separam a República Popular da China da República Democrática Popular de Laos e a República Popular da China da Birmânia, para voltar ao seu ponto de partida, no ponto de junção das fronteiras da República Popular da China, da Índia e da Birmânia.

27/131 *Subdivisão de zona 6E:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 20° N. 73° E., passa pelos pontos 02° S. 73° E. e 02° S. 92° E., depois pela ilha de Weh (ao largo da costa setentrional de Samatra), até ao ponto 10° N. 97° E.; daí segue pela costa da Birmânia, do Bangladesh e da Índia e atinge Calcutá, para continuar, pelo ponto 24° N. 80° E., até ao seu ponto de partida, 20° N. 73° E.

27/132 *Subdivisão de zona 6F:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 25° N. 123° E., passa pelos pontos 21° N. 121° 30' E., 20° N. 120° E. e 20° N. 113° E., contorna, pelo sul, a ilha de Hainão e segue depois as fronteiras entre a República Popular da China e o Vietname, a República Democrática Popular do Laos e a Birmânia, até ao ponto de junção das fronteiras da República Popular da China, da Índia e da Birmânia; dirige-se depois para sul, ao longo das fronteiras que separam a Birmânia da Índia e do Bangladesh, até ao golfo de Bengala. Continua pela costa da Birmânia até ao seu ponto mais meridional e dirige-se depois para a ilha de Weh (ao largo da costa de Samatra). Passa depois pelos pontos 02° S. 92° E., 10° S. 92° E. e 10° S. 110° E. e dirige-se para norte, seguindo o meridiano 110° E.; prossegue, em seguida, pelo limite da subdivisão 6C até aos pontos 20° N. 130° E. e 43° N. 147° E., dirige-se para ocidente entre as águas territoriais do Japão e da URSS e segue a fronteira que separa a República Democrática Popular da Coreia da URSS e depois a fronteira que separa a República Democrática Popular da China da República Democrática Popular da Coreia, até aos pontos 39° 49' 41" N. 124° 10' 06" E. 39° 31' 51" E. 124° 06' 31" E. e 39° N. 124° E. e, depois, até ao ponto 32° 30' N. 124° E.

Entre os pontos 32° 30' N. 124° E. e 25° N. 123° E. o limite desta subdivisão não é definido.

27/132-A *Subdivisão de zona 6G:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 32° 30' N. 124° E., se dirige para norte até ao ponto 39° N. 124° E., passa pelo ponto 39° 31' 51" N. 124° 06' 31" E. e atinge o ponto 39° 49' 41" N. 124° 10' 06" E. na fronteira que separa a República Popular da China e a República Popular Democrática da Coreia. Segue ao longo da fronteira da República Popular da China até ao ponto da junção das fronteiras da Índia e da Birmânia. Daí dirige-se para sul, ao longo das fronteiras que separam a Índia da Birmânia e o Bangladesh da Birmânia, até ao golfo de Bengala. Segue depois pela costa da Birmânia até ao seu ponto mais meridional, dirige-se para a ilha Weh (ao largo da costa setentrional de Samatra) para continuar pelos pontos 02° S. 92° E. e 10° S. 92° E., até ao ponto 10° S. 110° E. Dirige-se para leste até ao ponto 10° S. 141° E., em seguida para norte até ao ponto 00° 141° E. e passa pelos pontos 04° N. 130° E., 20° N. 130° E. e 20° N 120° 40' E. Daí dirige-se para norte até aos pontos 21° N. 121° 30' E. e 25° N. 123° E.

Entre os pontos 25° N. 123° E. e 32° 30' N. 124° E. o limite desta subdivisão de zona não é definido.

Nas regiões em que as subdivisões 6D, 6F e 6G são comuns, as frequências adjudicadas à subdivisão de zona 6G devem ser utilizadas unicamente pelas estações aeronáuticas da República Popular da China; as frequências adjudicadas às subdivisões de zona 6D e 6F devem ser utilizadas unicamente pelas estações aeronáuticas das administrações dos outros países situados nas regiões comuns. Igualmente nestas regiões comuns, a utilização operacional pela República Popular da China das frequências adjudicadas a subdivisão 6G deve ser limitada à zona definida por uma linha que, partindo do ponto 21° 32' 52" N. 108° E., passa pelos pontos 20° N 108° E., 20° N. 107° E., 18° N. 107° E., 18° N, 108° E., 15° N. 110° E., 10° N. 110° E., 06° N. 108° E., 03° 30' N. 112° E., 04° N. 113° E., 08° N. 116° E., 10° N. 118° E., 14° N. 119° E. e 18° N. 119° E., até ao ponto 20° N. 120° 40' E. e, daí, segue o limite da subdivisão de zona 6D até ao ponto 21° 32' 52" N. 108° E.

27/133 *Zona das linhas aéreas regionais e nacionais 7:*

(ZLARN — 7)

Esta zona é delimitada por uma linha que, partindo do Pólo Sul, segue o meridiano 20° W. até ao ponto 05° S. 20° W.; segue o paralelo 05° S. até ao ponto 05° S. 12° E., continua pela fronteira que separa a República Popular de Angola, pela fronteira setentrional da República do Zaire, pela fronteira que separa a Uganda do Sudão e pela fronteira que separa o Quénia dos seguintes países: Sudão, Etiópia e Somália.

Passa depois pelos pontos 02° S. 42° E. e 02° S. 60° E. e segue o meridiano 60° E. até ao ponto 11° S. 60° E.; volta finalmente ao Pólo Sul, passando pelos pontos 11° S. 65° E., 40° S. 65° E. 40° S. 60° E.

27/134 *Subdivisão de zona 7A:*

Esta subdivisão é delimitada por uma linha que, partindo do Pólo Sul, segue o meridiano 20° W. e passa em seguida pelos pontos 05° S. 20° W., 05° S. 10° E., 40° S. 10° E. e 40° S. 60° E. e volta a atingir o Pólo Sul, segundo o meridiano 60° E.

27/135 *Subdivisão de zona 7B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 05° S. 10° E., passa pelo ponto 05° S. 12° E. para seguir a fronteira que separa a República Popular do Congo da República Popular de Angola

e a fronteira setentrional da República do Zaire até ao ponto de junção das fronteiras da Uganda, da República do Zaire e do Sudão; daí segue as fronteiras orientais da República do Zaire, a República de Ruanda, da República do Burundi e, de novo, da República do Zaire. Continua pelas fronteiras meridionais da República do Zaire e da República Popular de Angola até à costa do Atlântico Sul, passa pelo ponto 17° S. 10° E. e volta ao seu ponto de partida 05° S. 10° E.

27/136 *Subdivisão de zona 7C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto de junção das fronteiras da Uganda, da República do Zaire e do Sudão, segue a fronteira ocidental da Uganda e da Tanzânia e prossegue pela fronteira meridional da Tanzânia até à Costa. Daí passa pelos pontos 11° S. 41° E., 11° S. 60° E., 02° S. 60° E. e 02° S. 41° E. até à costa. Daí passa pelos 11° S. 41° E., 110 S. 60° E. e 02° S. 41° E. até à costa oriental da África, dirige-se depois para norte, seguindo as fronteiras oriental e setentrional do Quénia e a fronteira setentrional da Uganda e atinge o ponto de junção das fronteiras da República do Zaire, do Sudão e da Uganda.

27/137 *Subdivisão de zona 7D:*

Esta subdivisão é delimitada por uma linha que, partindo da fronteira que separa a Tanzânia de Moçambique, no lago Niassa, se dirige para sul ao longo de toda a fronteira ocidental de Moçambique até à costa da África; passa depois pelos pontos 27° S. 33° E., 40° S. 33° E., 40° S. 65° E., 11° S. 65° E. e 11° S. 41° E. e segue a fronteira setentrional de Moçambique até ao lago Niassa.

27/138 *Subdivisão de zona 7E:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 17° S. 10° E., passa pelos pontos 40° S. 10° E., 40° S. 33° E. e 27° S. 33° E. seguindo, depois, toda a fronteira ocidental de Moçambique e a parte da fronteira ocidental da Tanzânia até à extremidade norte do lago Niassa. Daí segue a fronteira que separa o Malawi da Tanzânia e a que separa a Zâmbia da Tanzânia e continua pelas fronteiras que separam a República do Zaire da Zâmbia, a República Popular de Angola da Zâmbia e a República Popular de Angola da Namíbia até à costa, para voltar ao seu ponto de partida, 17° S. 10° E.

27/138-A *Subdivisão de zona 7F:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 05° S. 10° E., passa pelo ponto 05° S. 12° E. e segue a fronteira que separa a República Popular do Congo e a República Popular de Angola, até ao ponto de junção das fronteiras da República Popular do Congo, da República Popular de Angola e a República do Zaire; daí segue a fronteira que separa a República Popular de Angola e a República do Zaire até à costa atlântica e segue ao longo desta costa até ao rio Zaire; continua pelas fronteiras norte, este e sul da República Popular de Angola até à costa do Atlântico Sul, passa pelo ponto 17° S 10° E. e volta ao seu ponto de partida, 05° S. 10° E.

27/139 *Zona das linhas aéreas regionais e nacionais 8:*

(ZLARN — 8)

Esta zona é delimitada por uma linha que, partindo do Pólo Sul, segue o meridiano 60° E. até ao ponto 40° S. 60° E. e passa depois pelos pontos 40° S. 65° E., 11° S. 65° E., 11° S. 60° E., 02° S. 60° E., 02° S. 92° E., 10° S. 92° E. e 10° S. 110° E., para atingir o Pólo Sul, seguindo o meridiano 110° E.

27/140 *(Suprimido.)*

27/141 *Zona das linhas aéreas regionais e nacionais 9:*

(ZLARN — 9)

Esta zona é delimitada por uma linha que, partindo do Pólo Sul segue o meridiano 160° E., até ao ponto 27° S. 160° E.; daí, passa pelos pontos 19° S. 153° E., 10° S. 145° E., 10° S. 141° E., 00° 141° E., 00° 160° E., 03° 30' N. 160° E. e 03° 30' N 120° W., para atingir o Pólo Sul, seguindo o meridiano 120° W.

27/142 *(Suprimido.)*

27/143 *Subdivisão de zona 9B:*

A linha que delimita esta subdivisão é definida pelos pontos 00° 141° E., 10° S. 141° E., 10° S. 145° E., 27° S. 160° E., 27° S. 157° W., 03° 30' N. 157° W., 03° 30' N. 160° E., 00° 160° E. e 00° 141° E.

27/144 *Subdivisão de zona 9C:*

A linha que delimita esta subdivisão parte do Pólo Sul, segue o meridiano 170° W. até 03° 30' N., passa pelo ponto 03° 30' N. 120° W., e volta a atingir o Pólo Sul, seguindo o meridiano 120° W.

27/145 *Subdivisão de zona 9 D:*

A linha que delimita esta subdivisão parte do Pólo Sul, segue o meridiano 160° E. até ao ponto 27° S. 160° E., passa pelo ponto 27° S. 170° W. e atinge o Pólo Sul, seguindo o meridiano 170° W.

27/145-A *Zona das linhas aéreas regionais e nacionais 10:*

(ZLARN—10)

Esta zona é delimitada por uma linha que, partindo do ponto 50° N. 164° E., passa pelo ponto 66° N 169° W. e segue o meridiano 169° W. até ao Pólo Norte. Passa depois pelos pontos 82° N. 30° E, 82° N. 00°, 73° N. 00° e 73° N. 15° W., segue o meridiano 15° W. até ao ponto 72° N. 15° W. Passa depois pelos pontos 40° N. 50° W., 40° N. 65° W., 44° 30' N. 73° W., 41° N. 81° W., 41° N. 88° W., 48° N. 91° W., 48° N. 127° W e 50° N. 130° W., para se dirigir, em seguida, para oeste e voltar ao seu ponto de partida, 50° N. 164° E.

27/146 *Subdivisão de zona 10A:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 50° N. 164° E., passa pelo ponto 66° N. 169° W.; daí segue o meridiano 169° W. até ao Pólo Norte, passa pelo ponto 50° N. 130° W. e volta depois para oeste, até ao seu ponto de partida, 50° N. 164° E.

27/147 *Subdivisão de zona 10B:*

A linha que delimita esta zona parte do ponto 57° N. 140° W., passa pelo Pólo Norte, depois pelos pontos 48° N. 91° W., 48° N. 127° W. e 57° N. 139° W., e volta ao seu ponto de partida, 57° N. 140° W.

27/148 *Subdivisão de zona 10C:*

A linha que delimita esta subdivisão é definida pelos pontos 57° N. 140° W., 60° N. 140° W., 60° N. 91° W., 48° N. 91° W., 48° N. 127° W., 57° N. 139° W. e 57° N. 140° W.

27/149 *Subdivisão de zona 10D:*

A linha que delimita esta subdivisão parte do ponto 48° N. 98° W., passa depois pelo Pólo Norte e pelos pontos 69° N. 45° W., 61° N. 70° W., 45° N. 72° W., 41° N. 81° W., 41° N. 88° W., 48° N. 91° W. e 48° N. 98° W.

27/150 *Subdivisão de zona 10E:*

A linha que delimita esta subdivisão passa pelos pontos 45° N. 74° W., 61° N. 72° W. e 69° N. 47° W., depois pelo Pólo Norte e pelos pontos 72° N. 15° W., 40° N. 50° W. e 40° N 65°W., para voltar ao seu ponto de partida, 45° N. 74° W.

27/150-A *Subdivisão de zona 10F:*

A linha que delimita esta subdivisão parte do Pólo Norte e passa pelos pontos 82° N. 30° E., 82° N. 0°, 73° N. 0°, 73° N. 20° W., 70° N. 20° W., 63° 30' N. 39° W., 58° 30' N. 43° W., 58° 30' N. 50° W., 63° 30' N. 55° 44' W., 65° 30' N. 58° 39' W., 74° N. 68° 18' W., 76° N. 76° W., 78° N. 75° W. e 82° N. 60° W., e volta ao seu ponto de partida no Pólo Norte.

27/150-B *Zona das linhas aéreas regionais e nacionais 11:*

(ZLARN — 11)

Esta zona é delimitada por uma linha que, partindo do seu ponto 29° N. 180°, passa pelos pontos 50° N. 164° E. e 50° N. 127° W., para seguir a fronteira que separa os Estados Unidos da América do Canadá até ao ponto 46° N. 67° W.; passa depois pelos pontos 40° N. 65° W., 40° N. 50° W., 25° N. 35° W., 25° N. 98° W., 33° N. 119° W., 33° N. 153° W. e 29° N. 153° W., para voltar ao seu ponto de partida, 29° N. 180°.

27/151 *Subdivisão de zona 11A:*

A linha que delimita esta subdivisão parte do ponto 29° N. 180°, passa depois pelos pontos 50° N. 164° E., 50° N. 130° W., 33° N. 130° W., 33° N. 153° W. e 29° N. 153° W., para voltar ao seu ponto de partida, 29° N. 180°.

27/152 *Subdivisão de zona 11B:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 50° N. 130° W., passa pelos pontos 33° N. 130° W., 33° N. 119° W., 25° N. 98° W., 25° N. 65° W., 40° N. 65° W e 46° N. 67° W. Daí segue a fronteira entre os Estados Unidos da América e o Canadá, passando pelo ponto 50° N. 127° W., para voltar ao seu ponto de partida, 50° N. 130° W.

27/152-A *Subdivisão de zona 11C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 25° N. 65° W., passa pelos pontos 40° N. 65° W., 40° N. 50° W. e 25° N. 35° W., para voltar ao seu ponto de partida, 25° N. 65° W.

27/152-B *Zona das linhas aéreas regionais e nacionais 12:*

(ZLARN — 12)

Esta zona é delimitada por uma linha que, partindo do ponto 03° 30' N. 170° W., passa pelo ponto 10° N. 170° W., para seguir depois a linha que separa as Regiões 2 e 3 da UIT até ao ponto 29° N. 180°; passa depois pelos pontos 29° N. 153° W., 33° N. 153° W., 33° N. 120° W., 35° N. 120° W., 32° N. 104° W., 25° N. 91° W., 26° N. 91° W., 26° N. 79° W., 27° N. 76° 30' W., 25° N. 70° W. e 25° N. 35° W., para seguir depois a linha que separa as Regiões 1 e 2 da UIT, até ao ponto 0° 20° W. Daí passa pelos pontos 0° 44° W. e 04° 24' N. 50° 39° W., para seguir depois as fronteiras que se separam o Brasil do Departamento Francês da Guiana, do Suriname, da Guiana, da Venezuela, da Colômbia, até ao ponto de junção das fronteiras do Brasil, do Peru e da Colômbia; segue depois as fronterias que separam o Peru da Colômbia e do Equador, até ao ponto 04° S. 93° W. Daí passa pelos pontos 05° S. 93° W., 05° S. 120° W. e 03° 30' N. 120° W., para voltar ao seu ponto de partida 03° 30' N. 170' W.

27/153 *Subdivisão de zona 12A:*

A linha que delimita esta subdivisão parte do ponto 03° 30' N. 170° W., passa pelo ponto 10° N. 170° W., segue depois a linha que separa as Regiões 2 e 3 da UIT até ao ponto 29° N. 180°; passa pelos pontos 29° N. 153° W. e 03° 30' N. 153° W., para voltar ao seu ponto de partida, 03° 30' N. 170° W.

27/154 *Subdivisão de zona 12B:*

A linha que delimita esta subdivisão parte do ponto 03° 30' N. 153° W., segue o meridiano 153° W. até ao ponto 33° N. 153° W. e passa pelos pontos 33° N. 120° W., 17° N. 115° W., 14° N. 93° W., 02° N. 86° W., 02° N. 93° W., 05° S. 93° W., 05° S. 120° W. e 03° 30' N. 120° W., para voltar ao seu ponto de partida, 03° 30' N. 153° W.

27/155 *Subdivisão de zona 12C:*

A linha que delimita esta subdivisão parte do ponto 33.° N. 120° W., passa pelos pontos 35° N. 120° W., 32° N. 104° W., 25° n. 91° W., 23° N. 83° W., 22° N. 83° W., 13° N. 90° W. e 16° N. 116° W., para voltar ao seu ponto de partida, 33° N. 120° W.

27/156 *Subdivisão de zona 12D:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 20° N. 91° W., passa pelos pontos 26° N. 91° W., 26° N. 79° W., 27° N. 76° 30' W., 26° N. 73° W., 17° N. 58° W. e 10° N. 58° W., depois pelas cidades de Panamá e Colon, pelas inhas de Cygne e pela cidade de Beliza, para voltar ao seu ponto de partida, 20° N. 91° W.

27/157 *Subdivisão de zona 12E:*

A linha que delimita esta subdivisão parte do ponto 15° N. 95° W. e passa pelos pontos 23° N. 92° W., 23° N. 85° W., 19° N. 85° W., 09° N. 77° W. e 02° N. 79° W., depois pelo ponto 01° N. 75° W., segue a fronteira oriental e meridional do Equador até ao ponto 04° S. 81° W.; daí passa pelos pontos 02° N. 81° W., 02° N. 86° W. e 14° N. 93° W., para voltar ao seu ponto de partida, 15° N. 95° W.

27/158 *Subdivisão de zona 12F:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 02° N. 79° W., passa pelo ponto 08° N. 83° W., segue a fronteira que separa o Panamá da Costa Rica, passa pelos pontos 10° N. 83° W., 13° N. 83° W.,13° N. 70° W., 08° N. 70° W., 06° N. 67° W. e 01° N. 66° W., segue a fronteira que separa o Brasil da Colômbia até ao ponto 04° S. 70° W. e daí segue a fronteira que separa a Colômbia do Peru e depois a fronteira que separa a Colômbia do Equador, para voltar ao seu ponto de partida, 02° N. 79° W.

27/159 *Subdivisão de zona 12G:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 07° N. 73° W., passa pelos pontos 14° N. 73° W., 14° N. 58°W. e 01° 31° N. 58° W.; segue depois as fronteiras do Brasil com a Guiana, a Venezuela e a Colômbia, passa pelos pontos 01° 57' N. 68° W. e 05° N. 69° W., para voltar ao seu ponto de partida, 07° N. 73° W.

27/160 *Subdivisão de zona 12H:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 05° N. 70° W., passa pelos pontos 08° 45' N. 60° W., 08°N. 58° W., 08° N. 49° W e 04° 10' N. 51° 36' W.; segue depois as fronteiras que

separam o Brasil do Departamento Francês da Guiana, do Suriname, da Guiana da Venezuela e da Colômbia, até ao seu ponto de junção das fronteiras do Brasil, da Colômbia e do Peru, para voltar ao seu ponto de partida, 05° N. 70° W.

27/161 *Subdivisão de zona 12I:*

A linha que delimita esta subdivisão parte do ponto 25° N. 70° W., passa pelo ponto 25° N. 35° W., segue depois a linha que separa as Regiões 1 e 2 da UIT, até ao ponto 00° 20° W; passa depois pelos pontos 00° 44° W., 08° N. 54° W., 08° N. 58° W. e 17° N. 58° W., para voltar ao seu ponto de partida, 25° N. 70°W.

27/161-A *Subdivisão de zona 7E:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 04° S. 93° W., passa pelos pontos 02° N. 93° W. e 02° N. 79° W., segue a fronteira que separa o Equador da Colômbia até ao ponto de junção das fronteiras da Colômbia, do Peru e do Equador, segue a fronteira que separa o Peru do Equador, para voltar ao seu ponto de partida, 04° S. 93° W.

27/161-B *Zona das linhas aéreas regionais e nacionais 13:*

(ZLARN — 13)

Esta zona é delimitada por uma linha que, partindo do Pólo Sul, segue o meridiano 120° W. até ao ponto 05° S. 120° W., daí segue o paralelo 05° S. até ao ponto 05° S. 93° W., passa pelo ponto 04° S. 82° W. e segue as fronteiras meridionais do Equador, da Colômbia, da Venezuela, da Guiana, do Suriname e do Departamento Francês da Guiana, até ao ponto 04° 24' N. 50° 39' W. Passa depois pelos pontos 04° 24' N. 47° W., 00° 32° W. e 00° 20° W., para atingir o Pólo Sul, seguindo o meridiano 20° W.

27/162 *Subdivisão de zona 13A:*

A linha que delimita esta subdivisão parte do ponto 05° S. 120° W., passa pelos pontos 05° S. 93° W., 04° S. 82° W., 19° S. 81° W., 57° S. 81° W e 57° S. 90° W., depois pelo Pólo Sul, para voltar ao seu ponto de partida, 05° S. 120° W.

27/163 *Subdivisão de zona 13B:*

A linha que delimita esta subdivisão parte do ponto 29° S. 111° W., passa pelos pontos 24° S. 111° W., 24° S. 104° W. e 29° S. 104° W., para voltar ao seu ponto de partida, 29° S. 111° W.

27/164 *Subdivisão de zona 13C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 15° S. 47° W., passa pelos pontos 20° S. 44° W., 23° 19' S. 42° W., 25° S. 45° W., 22° 30' S. 5° 39' W. e 19° 52' S. 58° W., e segue depois as fronteiras do Brasil com o Paraguai, a Bolívia, o Peru, a Colômbia, a Venezuela, a Guiana, o Suriname e o Departamento Francês da Guiana. Passa depois pelos pontos 04° 24' N. 50° 39' W. e 04° 24' N. 47° W., para voltar ao seu ponto de partida, 15° S. 47° W.

27/165 *Subdivisão de zona 13D:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 11° S. 69° 30' W., segue a fronteira entre a Bolívia e o Brasil, passa pelo ponto 20° 10' S. 58° W., segue depois a fronteira entre a Bolívia e o Paraguai até ao ponto 22° 30' S. 62° 30' W., continua pela fronteira entre a Bolívia e a Argentina e passa pelo ponto 23° S. 67° W., segue a fronteira entre a Bolívia e o Chile, passa pelo ponto 16° 30' S. 69° 30' N., segue a fronteira entre a Bolívia e o Peru e volta ao seu ponto de partida, 11° S. 69° 30' W.

27/165-A *Subdivisão de zona 13M:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 19° S. 81° W., passa pelos pontos 04° S. 82° W. e 03° S. 80° W., segue depois a fronteira entre o Peru e o Equador e entre o Peru e a Colômbia até ao ponto 11° S. 69° 30' W.; segue a fronteira entre o Peru e a Bolívia, até ao ponto 17° 30' S. 69° 30' W., e depois a fronteira entre o Peru e o Chile, para voltar ao seu ponto de partida, 19° S. 81° W.

27/165-B *Subdivisão de zona 13N:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 22° 30' S. 62° 30' W., segue a fronteira entre o Paraguai e a Bolívia até ao ponto 20° 10' S. 58° W.; segue depois a fronteira entre o Paraguai e o Brasil até ao ponto 25° 50' S. 54° 30' W. e continua pela fronteira entre o Paraguai e a Argentina, para voltar ao seu ponto de partida, 22° 30' S. 62° 30' W.

27/166 *Subdivisão de zona 13E:*

A linha que delimita esta subdivisão parte do ponto 32° S. 81° W., passa pelo ponto 19° S. 81° W., atinge o ponto de intersecção da costa com a fronteira que separa o Chile do Peru, segue depois as fronteiras que separam o Chile do Peru, da Bolívia e da Argentina até ao paralelo 32° S., para voltar ao seu ponto de partida, 32° S. 81° W.

27/167 *Subdivisão de zona 13F:*

A linha que delimita esta subdivisão parte do ponto 57° S. 81° W., passa pelo ponto 32° S. 81° W. até ao cruzamento do paralelo 32° S. com a fronteira entre o Chile e a Argentina, depois pelos pontos 52° S. 67° W., 57° S. 67° W. e 57° S. 40° W e pelo Pólo Sul, para voltar ao seu ponto de partida, 57° S. 81° W.

27/168 *Subdivisão de zona 13G:*

A linha que delimita esta subdivisão parte do ponto 36° S. 55° W., passa pelo ponto de intersecção do paralelo 32° S. com a fronteira entre a Argentina e o Chile, dirige-se para o norte seguindo a fronteira que separa a Argentina da Bolívia, do Paraguai, do Brasil e o Uruguai, para voltar ao seu ponto de partida, 36° S. 55° W.

27/169 *Subdivisão de zona 13H:*

A linha que delimita esta subdivisão parte do ponto 57° S. 90° W., passa pelos pontos 57° S. 70° W. e 52° S. 70° W., segue depois a fronteira entre o Chile e Argentina até ao cruzamento com o paralelo 32° S., passa pelos pontos 36° S. 55° W., 57° S. 55° W. e 57° S. 25° W., e pelo Pólo Sul, para voltar ao seu ponto de partida, 57° S. 90° W.

27/170 *Subdivisão de zona 13I:*

A linha que delimita esta subdivisão parte do ponto 40° S. 50° W., passa pelo ponto 36° S. 55° W., segue a fronteira que separa o Uruguai da Argentina e do Brasil, passa pelo ponto 35° S. 45° W., para voltar ao seu ponto de partida, 40° S. 50° W.

27/171 *Subdivisão de zona 13J:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 15° S. 47° W., passa pelos pontos 20° S. 44° W., 23° 19' S. 42° W., 29° S. 40° W. e 35° S. 45° W. e segue, depois, as fronteiras do Brasil com o Uruguai, a Argentina, o Paraguai e a Bolívia até ao ponto 19° 52' S. 58° W. Passa depois pelo ponto 18° S. 57° 37' W., para voltar ao seu ponto de partida, 15° S. 47° W.

27/172 *Subdivisão de zona 13K:*

Esta subdivisão delimitada por uma linha que, partindo do ponto 22° 30' S. 50° 39' W., passa pelos pontos 25° S. 45° W., 29° S. 40° W., 20° S. 32° W., 00° 32° W., 04° 24' N. 47° W. e 04° 24' N. 50° 39' W., para voltar ao seu ponto de partida, 22° 30' S. 50° 39' W.

27/173 *Subdivisão de zona 13L:*

A linha que dleimita esta subdividão parte do ponto 00° 32° W., passa pelo ponto 00° 20° W., pelo Pólo Sul, pelos pontos 57° S. 55° W., 36° S. 55° W., 40° S. 50° W. e 20° S. 32° W., para voltar ao seu ponto de partida, 00° 32° W.

27/173-A *Zona das linhas aéreas regionais e nacionais 14:*

(ZLARN — 14)

Esta zona é delimitada por uma linha que, partindo do Pólo Sul, segue o meridiano 110° E. até ao ponto 10° S. 110° E.; daí, passa pelos pontos 10° S. 145° E., 19° S. 153° E. e 27° S. 160° E., para atingir o Pólo Sul, seguindo o meridiano 160° E.

27/173-B *Subdivisão de zona 14A:*

A linha que delimita esta subdivisão parte do Pólo Sul, segue o meridiano 110° E. até ao ponto 19° S. 110° E.; daí, passa pelos pontos 19° S. 118° E., 24° S. 120° E. e 24° S. 131° E., para atingir o Pólo Sul, seguindo o meridiano 131° E.

27/173-C *Subdivisão de zona 14B*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 19° S. 110° E. passa pelos pontos 10° S. 110° E., 10° S. 131° E., 24° S. 131° E., 24° S. 120° E. e 19° S. 118° E., para voltar ao seu ponto de partida, 19° S. 110° E.

27/173-D *Subdivisão de zona 14C:*

Esta subdivisão é delimitada por uma linha que, partindo do ponto 24° S. 131° E., passa pelos pontos 10° S. 131° E., 10° S. 139° E. e 24° S. 139° E., para voltar ao seu ponto de partida, 24° S. 131° E.

27/173-E *Subdivisão de zona 14D:*

A linha que delimita esta subdivisão pate do Pólo Sul e segue o meridiano 131° E. até ao ponto 24° S. 131° E.; daí, passa pelos pontos 24° S. 139° E., 27° S. 139° E., 27° S. 142° E., 34° S. 142° E. e 34° S. 139° E., para atingir o Pólo Sul. seguindo o meridiano 139° E.

27/173-F *Subdivisão de zona 14E:*

Esta subdivisão é delimitada por uma linha que parte do ponto 24° S. 139° E., segue o meridiano 139° E. até ao ponto 10° S. 139° E. passa pelos pontos 10° S. 145° E. e 19° S. 153° E., para voltar ao seu ponto de partida, 24° S. 139° E.

27/173-G *Subdivisão de zona 14F:*

Esta subdivisão é delimitada por uma linha que parte do ponto 27° S. 139° E., segue o meridiano 139° E. até ao ponto 24° S. 139° E., passa pelos pontos 19° S. 153° E. e 27° S. 160° E., para voltar ao seu ponto de partida, 27° S. 139° E.

27/173-H *Subdivisão de zona 14G:*

A linha que delimita esta subdivisão parte do Pólo Sul, segue o meridiano 139° E. até ao ponto 34° S. 139° E., passa pelos pontos 34° S. 142° E., 27° S. 142° E. e 27° S. 160° E. e atinge o Pólo Sul, seguindo o meridiano 160° E.

ARTIGO 3

Descrição dos limites das zonas de adjudicação e das zonas de recepção VOLMET

Zona VOLMET — ÁFRICA-OCEANO ÍNDICO:

(AFI-MET)

27/174 A *zona de adjudicação AFI-MET* é delimitada por uma linha que, partindo do ponto 29° N. 20° W., passa pelos pontos 37° N. 03° W., 37° N. 36° E., 30° N. 35° E., 10° N. 52° E., 22° S. 60° E., 35° S. 35° E., 35° S. 15° E., 08° S. 15° W. e 12° N. 20° W., para atingir o ponto 29° N. 20° W.

27/175 A *zona de recepção AFI-MET* é delimitada por uma linha que, partindo do ponto 37° N. 03° W., passa pelos pontos 37° N. 36° E., 30° N. 35° E., 10° N. 52° E. e 10° N. 100° E., Pólo Sul, 29° N. 40° W. e 29° N. 20° W., para atingir o ponto 37° N. 03° W.

Zona VOLMET — ATLÂNTICO NORTE:

(NAT-MET)

27/176 A *zona de adjudicação NAT-MET* é delimitada por uma linha que, partindo do ponto 41° N. 78° W., passa pelos pontos 51° N. 55° W., 24° N. 50° W. e 24° N. 74° W., para atingir o ponto 41° N. 78° W.

27/177 A *zona de recepção NAT-MET* é delimitada por uma linha que, partindo do ponto 24° N. 97° W., passa pelos pontos 24° N. 85° W., 75° N. 85° W., 75° N. 20° W., 00° 20° W. e 00° 95° W., para atingir o ponto 24° N. 97° W.

Zona VOLMET — EUROPA:

(EUR-MET)

27/178 A *zona de adjudicação EUR-MET* é delimitada por uma linha que, partindo do ponto 33° N. 12° W., passa pelos pontos 54° N. 12° W., 70° N. 00°, 74° N. 40° E., 40° N. 36° E., 29° N. 35° 30' E. e 32° N. 13° E., para atingir o ponto 33° N. 12° W.

27/179 A *zona de recepção EUR-MET* é delimitada por uma linha que, partindo do ponto 15° N. 20° W., passa pelos pontos 40° N. 50° W., 75° N. 50° W., 75° N. 45° E e 15° N. 45° E., para atingir o ponto 15° N. 20° W.

Zona VOLMET — MÉDIO ORIENTE:

(MID-MET)

27/180 A *zona de adjudicação MID-MET* é delimitada por uma linha que, partindo do ponto 50° N. 80° E., passa pelos pontos 29° N. 80° E., 27° N. 85° E., 16° N. 78° E., 22° N. 56° E., 16° N. 42° E., 30° N. 30° E. 51° N. 30° E. e 57° N. 37° E., para atingir o ponto 50° N. 80° E.

27/181 A *zona de recepção MID-MET* é delimitada por uma linha que, partindo do ponto 50° N. 80° E., passa pelos pontos 50° N. 90° E., 35° N. 90° E., 27° N. 85° E., 16° N. 78° E., 22° N. 56° E., 16° N. 42° E., 30° N. 30° E., 51° N. 30° E. e 57° N. 37° E., para atingir o ponto 50° N. 80° E.

Zona VOLMET — NORTE DA ÁSIA CENTRAL:

(NCA-MET)

27/181-A A *zona de adjudicação NCA-MET* é delimitada por uma linha que, partindo do ponto 76° N. 32° E., passa pelos pontos 80° N. 90° E., 75° N. 168° W., 66° N. 168° W., 48° N. 160° E., 42° N. 135° E., 50° N. 130° E., 50° N. 90° E., 35° N. 70° E., 45° N. 30° E. e 60° N. 20° E., para atingir o ponto 76° N. 32° E.

27/181-B A *zona de recepção NCA-MET* é delimitada por uma linha que, partindo do Pólo Norte, passa pelos pontos 40° N. 168° W., 30° N. 140° E., 35° N. 70° E. e 30° N. 20° E., para atingir o Pólo Norte.

Zona VOLMET — PACÍFICO:

(PAC-MET)

27/182 A *zona de adjudicação PAC-MET* é delimitada por uma linha que, partindo do ponto 52° N. 132° E., passa pelos pontos 63°N. 149° W., 38° N. 120° W., 50° S. 120° W, 50° S. 145° E., 28° S. 145° E., 03°S. 129° E. e 22° N. 112° E., para atingir o ponto 52° N. 132° E.

27/183 A *zona de recepção PAC-MET* é delimitada por uma linha que, partindo do ponto 60° N. 100° E., passa pelos pontos 75° N. 160° W., 75° N. 110° W., 65° S. 110° W., 65° S. 145° E., 28° S. 145° E., 03° S. 129° E., 05° N. 80° E. e 40° N. 80° E., para atingir o ponto 60° N. 100° E.

Zona VOLMET — SUESTE ASIÁTICO:

(SEA-MET)

27/184 A *zona de adjudicação SEA-MET* é delimitada por uma linha que, partindo do ponto 55° N. 75° E., passa pelos pontos 55° N, 135° E., 45° N. 135° E., 35° N. 130° E., 10° N. 130° E., 10° S. 155° E., 35° S. 155° E., 35° S. 116° E., 08° N. 75° E. e 26° N. 65° E., para atingir o ponto 55° N. 75° E.

27/185 A *zona de recepção SEA-MET* é delimitada por uma linha que, partindo do ponto 55° N. 50° E., passa pelos pontos 55° N. 180°, 50° S. 180°, 50° S. 709° E., 08° N. 70° E. e 08° N. 50° E., para atingir o ponto 55° N. 50° E.

Zona VOLMET — CARAÍBAS:

(CAR-MET)

27/185-A A *zona de adjudicação CAR-MET* é delimitada por uma linha que, partindo do ponto 30° N. 110° W., passa pelos pontos 30° N. 75° W. e 00° 50° W., segue o Equador até ao ponto 00° 80° W., para atingir o ponto 30° N. 110° W.

27/185-B A *zona de recepção CAR-MET* é delimitada por uma linha que, partindo do ponto 40° N. 120° W., passa pelos pontos 40° N. 20° W., 25° S. 20° W. e 25° S. 120° W., para atingir o ponto 40° N. 120° W.

Zona VOLMET — AMÉRICA DO SUL:

(SAM-MET)

27/185-C A *zona de adjudicação SAM-MET* é delimitada por uma linha que, partindo do ponto 15° N. 83° W., passa pelos pontos 15° N. 60° W., 05° S. 35° W., 55° S. 60° W. e 55° S. 83° W., para atingir o ponto 15° N. 83° W.

27/185-D A *zona de recepção SAM-MET* é delimitada por uma linha que, partindo do ponto 30° N. 120° W., passa pelo ponto 30° N. 00° e pelo Pólo Sul, para atingir o ponto 30° N. 120° W.

ARTIGO 4

Zonas mundiais de adjudicação

27/185-E *Zona mundial I:*

Os limites desta zona de adjudicação correspondem aos do conjunto das ZLARN 1, 2 e 3.

27/185-F *Zona mundial II:*

Os limites desta zona de adjudicação correspondem aos do conjunto das ZLARN 10, 11, 12A, 12B, 12C e 12D.

27/185-G *Zona mundial III:*

Os limites desta zona de adjudicação correspondem aos do conjunto das ZLARN 6, 8, 9 e 14.

27/185-H *Zona mundial IV:*

Os limites desta zona de adjudicação correspondem aos do conjunto das ZLARN 12E a 12J e da ZLARN 13.

27/185-I *Zona mundial V:*

Os limites desta zona de adjudicação correspondem aos do conjunto das ZLARN 4, 5 e 7.

SECÇÃO II

Adjudicação de frequência no serviço móvel aeronáutico (R)

ARTIGO 1

27/186 Plano de adjudicação de frequências por zonas

27/187 Nota *a*) O sinal (*) indica uma restrição no emprego da frequência considerada, cuja significação é dada na coluna 3 do plano de adjudicação de frequências por ordem numérica (n.os **27/195** a **27/207**).

27/188 Nota *b*) A lista que se segue não inclui as frequências comuns no Mundo inteiro aos serviços móveis aeronáuticos (R) e (OR), 3023 kHz e 5680 kHz. A adjudicação destas frequências está indicada no artigo 2:

27/189

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
AFI	2 851 2 878	3 419 3 425 3 467	4 657		5 493 5 652 5 658	6 559 6 574 6 673	8 894 8 903		11 300 11 330	13 273 13 288 13 294	17 961
CAR	2 887	3 455			5 520 5 550	6 577 6 586	8 846 8 918		11 387 11 396	13 297	17 907
CEP	2 869	3 413	4 657		5 547 5 574	6 673	8 843	10 057	11 282	13 300	17 904
CWP	2 998	3 455	4 666		5 652 5 661	6 532 6 562	8 903	10 081	11 384	13 300	17 904
EA	3 016	3 485 3 491			5 655 5 670	6 571	8 897	10 042	11 396	13 297 13 303 13 309	17 907
EUR		3 479			5 661	6 598		10 084		13 288	17 961
INO		3 476			5 634		8 879			13 306	17 961
MID	2 944 2 992	3 467 3 473	4 669		5 658 5 667	6 625 6 631	8 918 8 951	10 018	11 375	13 288 13 312	17 961
NAT	2 872 2 899 2 962 2 971 3 016	3 476	4 675		5 598 5 616 5 649	6 622 6 628	8 825 8 831 8 864 8 879 8 891 8 906		11 279 11 309 11 336	13 291 13 306	17 946
NCA	3 004 3 019		4 678		5 646 5 664	6 592		10 096		13 303 13 315	17 958
NP	2 932				5 628	6 655 6 661		10 048	11 330	13 300	17 904

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
SAM	2 944	3 479	4 669		5 526	6 649	8 855	10 024 10 096	11 360	13 297	17 907
SAT	2 854 2 935	3 452			5 565	6 535	8 861		11 291	13 315 13 357	17 955
SEA		3 470 3 485			5 649 5 655	6 556	8 942	10 066	11 396	13 309 13 318	17 907
SP		3 467			5 559 5 643		8 867	10 084	11 327	13 300	17 904
1						6 556		10 021	11 363		
1B	(*) 2 860 (*) 2 881 2 890	(*) 3 458 (*) 3 473 (*) 3 488			5 484 5 568	6 550 6 595		10 066			
1C	2 977 2 983	3 464 3 470	4 666		5 577 5 595	6 544	8 840		11 366		
1D	2 974 2 980 2 989	3 410 3 416 3 446	4 651		5 622 5 628 5 637	6 604 6 610	8 828	10 060	11 384		
1E	2 965	3 491			5 583	6 667		10 036			
2	2 938 2 950		4 696		5 556	6 583 6 601	8 846 8 855 8 888	10 015 10 045	11 297 11 360 11 390	13 321 13 357	17 964
2A	(*) 2 851 2 863 2 869 2 875 2 881 (*) 2 887 2 896 2 917 2 926 2 932 2 941	(*) 3 416 3 422 3 434 3 440 3 455	(*) 4 657 4 672 4 690		5 481 5 490 5 496 5 502 5 523 5 547 5 559 5 604	6 526 6 532 6 547 6 553 6 559 6 565 6 574 6 673	(*) 8 822 8 876 8 909 8 939	10 048 10 054	11 276 11 285 11 294		
2B	2 857 2 869 2 875 2 881 (*) 2 887 2 896 2 902 2 908 2 914 2 920 2 929	3 401 3 407 (*) 3 416 3 422 3 428 3 449	4 660 4 672 4 681 4 690 4 693		5 490 5 496 5 502 5 508 5 520 5 526 5 550 5 574 5 595 5 607 5 613 5 619	6 526 6 532 6 562 6 568 6 577 6 655 6 661 6 667	8 819 8 834 8 864	10 009 10 024	11 279 11 333 11 339		
2C	2 857 2 863 2 866 2 884 2 893 2 902 2 908 2 914 2 920 2 926 2 932	3 401 3 407 3 428 3 434 3 440 3 449 3 455	(*) 4 657 4 660 4 681 4 693		5 481 5 487 5 508 5 514 5 520 5 526 5 550 5 562 5 574 5 586 5 604	6 535 6 541 6 547 6 553 6 562 6 568 6 577 6 586	8 819 8 834 8 882 8 939	10 009 10 024 10 054	11 276 11 333 11 372		

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
3	2 893 2 935		4 693		5 556	6 583 6 589	8 846 8 954	10 087	11 318 11 336 11 360	13 267 13 321	17 952
3A	2 854 2 860 2 869 2 875 2 881 (*) 2 887 2 896 2 905 (*) 2 291 (*) 2 923 2 959	3 404 (*) 3 416 3 422 (*) 3 431 3 443 3 452	4 672 4 684 4 690		5 484 5 490 5 496 5 502 5 511 5 517 5 568 5 580 5 601 5 625	6 529 6 532 6 538 6 544 6 550 6 556 6 607 6 613 6 619 6 649	8 837 8 861 8 900 8 942	10 045 10 057	11 309 11 324 11 330		
3B	2 851 2 854 2 872 2 878 (*) 2 884 2 902 2 908 2 914 (*) 2 968	3 401 3 407 3 413 3 419 3 425 (*) 3 431 (*) 3 437 3 443	4 657 4 681		5 493 5 499 5 505 5 514 5 520 5 526 5 550 5 562 5 580 5 601	6 529 6 538 6 544 6 559 6 568 6 577 6 595 6 625 6 631	8 822 8 852 8 861 8 879 8 957	10 024 10 039	11 285 11 291 11 327 11 372		
3C	2 851 2 860 (*) 2 866 2 878 2 905 2 950 2 974 2 980 2 986	3 404 3 410 3 419 3 425 3 452	4 684		5 484 5 514 5 562 5 568 5 586 5 637 5 643	6 550 6 556 6 595 6 658 6 664 6 670	8 837 8 852 8 894 8 915	10 039	11 291 11 303 11 324 11 378		
4						6 565	8 873			13 300	17 904
4A	(*) 2 926 2 953	3 437 3 491	(*) 4 672		5 547 5 559	6 526 6 532 6 616	8 816 8 837 8 858	10 039 10 081	11 282 11 318		
4B	2 866 2 893	3 443			5 481 5 574 5 604	6 553 6 577 6 598		10 063	11 324		
5							8 870 8 885	10 012	11 312 11 327	13 354	17 949 17 967
5A	2 986	3 452			5 577 5 583	6 544 6 664	8 822 8 915		11 288		
5B	2 911 2 968	3 431 3 488			5 511 5 568 5 625	6 550 6 595	8 912	10 093			
5C	2 905	3 452			5 583	6 544	8 822				
5D	2 899 2 971	3 482			5 526 5 550	6 535 6 547	8 843	10 048			
6							8 840		11 381	13 291	17 943
6A	2 872 2 923 2 947 3 001	3 479	(*) 4 657 4 675		5 484 5 580 5 601	6 607 6 613 6 658	8 891 8 906 8 948	10 006 10 051 (*) 10 081	11 321 11 357		

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
6B	2 857 2 920	3 479 3 488			5 502 5 595 5 625	6 607 6 613 6 619	8 864 8 885	10 021 10 093	11 339 11 366		17 955
6C	2 881 2 956	3 473	4 651		5 550 5 580	6 544 6 631	8 834 8 918	10 015			
6D	2 866 2 884	3 416			5 490 5 520 5 568 5 574 5 631	6 550 6 568 6 577 6 595	8 882 8 957		11 309 11 372		
6E	2 854 2 872 2 917 3 001	3 443	(*) 4 657 4 675		5 514 5 526 5 550	6 583 6 655 6 661	(*) 8 861 8 906 8 909	10 036 10 051 10 084	11 357 11 363		
6F	2 926 2 941	3 434 3 440			5 496 5 508	6 526 6 667	8 864 8 939	10 060	11 279 11 366		
6G	(*) 2 869 (*) 2 875 2 890 (*) 2 896 2 899 (*) 2 902 (*) 2 911 (*) 2 917 (*) 2 938 2 953 2 962 (*) 2968 2 971 2 977 2 983 2 989 2 995	(*) 3 413 (*) 3 422 (*) 3 431 3 437 3 446 (*) 3 449 3 464 3 482	(*) 4 651 (*) 4 663 (*) 4 669 (*) 4 672 (*) 4 690 (*) 4 696		5 481 5 487 (*) 5 493 (*) 5 499 (*) 5 505 (*) 5 511 (*) 5 517 5 523 5 547 5 553 5 559 5 565 5 571 5 577 5 583 5 592 5 598 5 604 5 610 5 616 5 622 (*) 5 628 (*) 5 634 (*) 5 640	6 529 6 535 6 541 6 547 6 553 6 559 6 565 6 574 6 580 6 586 6 598 6 604 6 610 6 616 6 622 6 628 6 634 6 649 6 652 6 673 6 682	8 816 8 825 8 831 8 843 8 858 8 867 (*) 8 870 8 873 (*) 8 888 (*) 8 912 8 960	(*) 11 018 (*) 10 054 (*) 10 063	(*) 11 276 (*) 11 282 11 288 (*) 11 294 (*) 11 300 11 306 11 315 11 369	13 270 13 276	17 913
7					5 508	6 586	8 888		11 285	13 354	
7B	2 863 2 965	3 455			5 577 5 583	6 652	8 906	10 009			
7C	2 950	3 407			5 592	6 568 6 604	8 834	10 081	11 294		
7D	2 998				5 481			10 096			
7E	2 887	3 485			5 520	6 580 6 628	8 864		11 306		
7F	2 956	3 461			5 547 5 568	6 622	8 846 8 960				
9			4 696		5 583	6 553	8 846 8 852	10 018	11 339		
9B	2 860 2 905	(*) 3 401 3 419	4 660		5 484 5 508	6 538 6 547	8 819 8 837	10 009 10 024	11 393		

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
	(*) 2 929	3 425 (*) 3 476			5 523 5 565	6 598 6 622	8 861 8 906	10 039			
9C	2 851	3 404 3 461	4 675		5 481	6 580	8 873	10 042	11 279 11 312		
9D	3 016	3 404			5 592	6 535	8 873		11 312		
10			4 696	5 454	5 604	6 553	8 819 8 834	10 006 10 012	11 333 11 390	13 285	17 910
10A	2 866 2 875 2 911 2 944 2 956 2 992	3 449 3 470		5 472 5 475	5 484 5 490 5 496 5 565 5 631	6 535 6 580 6 604	8 855 8 876	10 066	11 357 11 363 11 375		
10B	2 854 2 860	3 404 3 467 3 488	4 651 4 666 4 681 4 690 4 693	5 460 5 466	5 553 5 568 5 583	6 547 6 574 6 598	8 837 8 903 8 939				
10C	2 926 2 965	3 491	4 660 4 669	5 457	5 481 5 487 5 502 5 562 5 595	6 541 6 556 6 568	8 867				
10D	2 893 2 935	3 419 3 425 3 458	4 666 4 669 4 678	5 472 5 475	5 484 5 490 5 496 5 586 5 625	6 535 6 544 6 562	8 858 8 900				
10E	2 869 2 944 2 992	3 446 3 473	4 651 4 666 4 684	5 460	5 481 5 559 5 577	6 547 6 598	8 843 8 954		11 276		
10F	2 950		4 663	5 451	5 256	6 673	8 945	10 042			
11B	2 851 2 878 3 004 3 019	3 410 3 428 3 434 3 443	4 672	5 451 5 463 5 469	5 508 5 514 5 523 5 571	6 538 6 550 6 559 6 565	8 822 8 885 8 912	10 045 10 093	11 288 11 306	13 312	17 964
12		3 440			5 568			10 054			17 901
12A	2 950				5 604						
12C	2 920 2 980	3 401 3 464	4 693	5 460	5 484 5 490 5 496 5 502 5 589 5 613	6 535 6 571 6 592 6 622 6 628	8 816 8 948 8 957	10 021 10 039	11 324		
12D		3 407			5 562	6 673	8 876	10 015			
12E	2 860 2 956 2 998	3 461 3 488	4 681	5 454 5 475	5 481 5 487 5 583 5 595 5 604	6 547 6 553 6 598	8 852 8 873	10 063 10 090	11 381 11 393		

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
12F	2 893 2 956 2 965 2 998	3 461 3 488		5 451 5 475	5 508 5 556 5 583 5 604	6 532 6 553	8 873 8 894	10 090	11 297		
12G	2 875 2 956 2 998	3 461 3 488			5 484 5 523 5 559 5 646	6 526 6 616					
12H	2 956 2 998	3 461 3 488		5 451	5 583						
12J	2 860 2 902 2 926 2 965	3 419			5 481 5 496 5 619	6 535 6 547	8 954		11 381 11 384		
13										13 318	17 913
13A								10 048			17 967
13B								10 048			17 967
13C	2 863 2 869 2 992	3 413 3 458 3 473			5 490 5 514 5 553 5 571 5 577	6 541 6 556 6 562 6 568 6 580	8 819 8 834 8 843 8 939	10 042	11 327 11 375	13 309	
13D	2 914 2 983	3 425 3 467	4 660	5 460	5 562	6 622 6 628 6 673	8 867 8 912 8 957	10 084	11 318		
13E	2 851	3 491	4 651 4 663		5 481 5 583 5 604	6 533 6 577	8 858		11 303		17 967
13F	2 851 2 956 2 998	3 446 3 476	4 651 4 663	5 454	5 481 5 583 5 604	6 547 6 553	8 831 8 858 8 864	10 081	11 321 11 330		17 967
13G	2 872 2 971 3 016	3 434 3 470	(*) 4 675	5 469 5 475	5 574	6 586 6 613	8 822 8 885 8 900	10 006 10 021 10 036	11 369		
13H	2 899 2 965	3 455 3 485	4 657	5 463 5 472	5 484 5 547	6 598	8 825 8 906	10 036 10 045	11 282 11 300	13 267	
13I	2 860 2 878 2 887	3 419	4 678 4 693	5 451 5 466	5 496 5 523	6 574	8 873	10 051			
13J	2 857 2 863 2 878 2 890 2 920	3 410 3 428 3 458	4 684 4 696	5 451 5 454	5 559 5 568 5 577	6 550 6 559 6 580	8 816 8 843	10 012 10 018 10 042	11 276		
13K	2 863 2 932 3 004 3 019	3 401 3 458 3 464	4 663 4 672	5 463	5 481 5 547 5 577 5 604	6 547 6 553 6 580	8 843 8 849 8 945	10 009 10 018 10 042 10 060	11 339 11 366	13 309	
13M	2 908 2 977	3 437 3 449	4 660 4 690	5 463	5 502	6 574 6 628	8 837 8 867 8 903	10 066	11 378		

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
13N	2 986	3 443		5 457	5 508	6 604	8 828	10 093			
14	2 851 2 878	3 446 3 461 3 479			5 526 5 604	6 580 6 628	8 822 8 855 8 870	10 045 10 087	11 360	13 264	17 946
14A	2 950	3 413	(*) 4 678			6 547 6 553	8 816 8 894				
14B		3 488	(*) 4 684			6 535 6 604 6 673	8 900 8 954				
14C	2 887	3 452	(*) 4 684			6 541 6 586	8 885 8 912				
14D	2 950	3 407	(*) 4 693		5 481	6 559 6 574	8 843 8 858				
14E		3 413				6 565 6 616	8 891 8 945				
14F		3 488				6 526 6 610	8 825 8 831				
14G	2 869 2 944		(*) 4 678		5 481 5 550 5 580		8 876 8 957				
VAFI	2 860	3 404			5 499	6 538	8 852	10 057		13 261	
VCAR	2 950				5 580				11 315		
VEUR	2 998	3 413			5 640	6 580	8 957		11 378	13 264	
VMID	2 956				5 589		8 945		11 393		
VNAT	2 905	3 485			5 592	6 604	8 870	10 051		13 270 13 276	
VNCA		3 461	4 663		5 676			10 090		13 279	
VPAC	2 863					6 679	8 828			13 282	
VZMA	2 881				5 601			10 087		13 279	
VSEA	2 965	3 458			5 673	6 676	8 849		11 387	13 285	
W I	3 010		4 654 4 687		5 529 5 532 5 535 5 541	6 637 6 643	8 921 8 924 8 930 8 936	10 027 10 030 10 069 10 072 10 078	11 345 11 351	13 324 13 327 13 333 13 336 13 342 13 345 13 351	17 916 17 922 17 931
W II	3 007 3 013	3 494 3 497	4 654 4 687		5 529 5 538 5 544	6 637 6 640 6 646	8 927 8 933 8 936	10 027 10 033 10 075	11 342 11 348 11 354	13 330 13 339 13 348	17 919 17 925 17 934 17 940
W III	3 007		4 687			6 637	8 921 8 930	10 072 10 078	11 342 11 351	13 324 13 333	17 916 17 922

Zonas	Faixas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
										13 327 13 351	17 928 17 934 17 940
W IV	3 010				5 535 5 541	6 643	8 924	10 030 10 069	11 345	13 327 13 336 13 345	17 919 17 928 17 937
W V	3 013				5 532 5 538 5 544	6 640 6 646	8 927 8 933	10 033 10 075	11 348 11 354	13 330 13 339 13 348	17 925 17 931 17 937

(*) V. n.º 27/187.

ARTIGO 1

Plano de adjudicação de frequências (por ordem numérica)

Notas gerais:

1. *Classe das estações — FA:*

27/192 *Classes de emissão:* v. os n.os **27/49** a **27/52.**

Potência: salvo indicações contrárias contidas no Plano, o valor das potências das estações aeronáuticas e das estações de aeronave é o que figura nos n.os **27/54** a **27/62.**

Horário: H24, salvo indicação contrária.

2. Uma frequência adjudicada com a indicação «utilização diurna» pode ser usada durante o período compreendido entre uma hora após o nascer do Sol e uma hora antes do pôr do Sol.

27/193 3. Uma «via comum» é uma via adjudicada em comum a duas ou mais zonas sem ter em conta as condições de interferência recíprocas; a sua utilização é objecto de um acordo entre as administrações

27/194 interessadas.

27/194-A 4. Com excepção das frequências portadoras (frequências de referência) de 3023 kHz e 5680 kHz, as frequências utilizáveis no Mundo inteiro e especificadas nos quadros que figuram no n.º **27/189** e nos n.os **27/195** a **27/207** são reservadas às consignações feitas pelas administrações a estações que servem uma ou mais entidades responsáveis pela exploração de aeronaves, de acordo com os direitos conferidos pela administração interessada. Estas consignações têm por objectivo o estabelecimento de comunicações entre uma estação aeronáutica adequada e uma estação de aeronave, qualquer que seja o ponto do Mundo em que esta se encontre, a fim de controlar a regularidade do voo e zelar pela segurança da aeronave. As frequências utilizáveis em todo o Mundo não deverão ser consignadas pelas administrações às ZLAMP, ZLARN ou zonas VOLMET. Sempre que uma zona de exploração fique totalmente compreendida nos limites de ZLARN ou de subdivisão de ZLARN, as frequências a utilizar são as frequências adjudicadas às ZLARN e as subdivisões de ZLARN.

27/195

Faixa de 2850-3025 kHz **3 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
2 851	M AF1 R 2A 3B 3C 9C 11B 13E 13F 14	CC 3B 3C CC 13E 13F C0011/2A
2 854	M SAT R 3A 3B 6E 10B	CC 3A 3B
2 857	R 2B 2C 6B 13J	CC 2B 2C
2 860	R 1B 3A 3C 9B 10B 12E 12J 131 V VAF1	CC 3A 3C CC 12E 12J C001/1B

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
2 863	R 2A 2C 7B 13C 13J 13H V VPAC	CC 2A 2C CC 13C 13J 13K
2 866	R 2C 3C 4B 6D 10A	C001/3C
2 869	M CEP R 2A 2B 3A 6G 10E 13C 14G	CC 2A 2B 3A C009/6G
2 872	M NAT R 3B 6A 6E 13G	CC 6A 6E
2 875	R 2A 2B 3A 6G 10A 12G	CC 2A 2B 3A C009/6G
2 878	M AFI R 3B 3C 11B 13I 13J 14	CC 3B 3C CC 13I 13J
2 881	R 1B 2A 2B 3A 6C V VSAM	CC 2A 2B 3A C001/1B
2 884	R 2C 3B 6D	C001/3B
2 887	M CAR R 2A 2B 3A 7E 13I 14C	CC 2A 2B 3A 001/2A 2B 3A
2 890	R 1B 6G 13J	
2 893	R 2C 3 4B 10D 12F	CC 2C 3
2 896	R 2A 2B 3A 6G	CC 2A 2B 3A C009/6G
2 899	M NAT R 5D 6G 13H	
2 902	R 2B 2C 3B 6G 12J	CC 2B 2C 3B C009/6G
2 905	R 3A 3C 5C 9B V VNAT	CC 3A 3C
2 908	R 2B 2C 3B 13M	CC 2B 2C 3B
2 911	R 3A 5B 6G 10A	C001/3A C010/6G
2 914	R 2B 2C 3B 13D	CC 2B 2C 3B
2 917	R 2A 6E 6G	C010/6G
2 920	R 2B 2C 6B 12C 13J	CC 2B 2C
2 923	R 3A 6A	C001/3A
2 926	R 2A 2C 4A 6F 10C 12J	CC 2A 2C COO1/4A
2 929	R 2B 9B	C001/9B
2 932	M NP R 2A 2C 13K	CC 2A 2C
2 935	M SAT R 3 10D	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
2 938	R 2 6G	C009/6G
2 941	R 2A 6F	
2 944	M MID SAM R 10A 10E 10G	
2 947	R 6A	
2 950	R 2 3C 7C 10F 12A 14A 14D V VCAR	CC 2 3C CC 14A 14D
2 953	R 4A 6G	
2 956	R 6C 7F 10A 12E 12F 12G 12H 13F V VMID	CC 12E 12F 12G 12H
2 959	R 3A	
2 962	M NAT R 6G	
2 965	R 1E 7B 10C 12F 12J 13H V VSEA	CC 12F 12J
2 968	R 3B 5B 6G	C001/3B C009/6G
2 971	M NAT R 5D 6G 13G	
2 974	R ID 3C	
2 977	R 1C 6G 13M	
2 980	R 1D 3C 12C	
2 983	R 1C 6G 13D	
2 986	R 3C 5A 13N	
2 989	R 1D 6G	
2 992	M MID R 10A 10E 13C	
2 995	R 6G	
2 998	M CWP R 7D 12E 12F 12G 12H 13F V VEUR	CC 12E 12F 12G 12H
3 001	R 6A 6E	CC 6A 6E
3 004	M NCA R 11B 13K	
3 007	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
3 010	W MONDIALE WORLDWIDE MUNDIAL	C100/II IV
3 013	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
3 016	M EA NAT R 9D 13G	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
3 019	M NCA R 11B 13K	

27/196

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
3 023	W MONDIALE WORLDWIDE MUNDIAL (R) e (OR)	V. parte II, secção II, artigo 3.

27/197 **Faixa de 3400-3500 kHz** **3,5 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
3 401	R 2B 2C 3B 9B 12C 13K	CC 2B 2C 3B C001/9B
3 404	R 3A 3C 9C 9D 10B V VAFI	CC 3A 3C CC 9C 9D
3 407	R 2B 2C 3B 7C 12D 14D	CC 2B 2C 3B
3 410	R 1D 3C 11B 13J	
3 413	M CEP R 3B 6G 13C 14A 14E V VEUR	CC 14A 14E C009/6G
3 416	R 1D 2A 2B 3A 6D	CC 2A 2B 3A C001/2A 2B 3A
3 419	M AFI R 3B 3C 9B 10D 12J 13I	CC 3B 3C
3 422	R 2A 2B 3A 6G	CC 2A 2B 3A C001/6G C004/6G
3 425	M AFI R 3B 3C 9B 10D 13D	CC 3B 3C
3 428	R 2B 2C 11B 13J	CC 2B 2C
3 431	R 3A 3B 5B 6G	CC 3A 3B C001/3A 3B C009/6G
3 434	R 2A 2C 6F 11B 13G	CC 2A 2C
3 437	R 3B 4A 6G 13M	C001/3B
3 440	R 2A 2C 6F 12	CC 2A 2C
3 443	R 3A 3B 4B 6E 11B 13N	CC 3A 3B
3 446	R 1D 6G 10E 13F 14	
3 449	R 2B 2C 6G 10A 13M	CC 2B 2C C001/6G C004/6G

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
3 452	M SAT R 3A 3C 5A 5C 14C	CC 3A 3C CC 5A 5C
3 455	M CAR CWP R 2A 2C 7B 13H	CC 2A 2C
3 458	R 1B 10D 13C 13J 13K V VSEA	CC 13C 13J 13K C001/1B
3 461	R 7F 9C 12E 12F 12G 12H 14 V VNCA	CC 12E 12F 12G 12H
3 464	R 1C 6G 12C 13K	
3 467	M AFI MID SP R 10B 13D	CC AFI MID
3 470	M SEA R 1C 10A 13G	
3 473	M MID R 1B 6C 10E 13C	C001/1B
3 476	M INO NAT R 9B 13F	C001/9B
3 479	M EUR SAM R 6A 6B 14	
3 482	R 5D 6G	
3 485	M EA SEA R 7E 13H V VNAT	CC EA SEA
3 488	R 1B 5B 6B 10B 12E 12F 12G 12H 14B 14F	CC 12E 12F 12G 12H CC 14B 14F C001/1B
3 491	M EA R 1E 4A 10C 13E	CC 1E 4A
3 494	W MONDIALE WORLDWIDE MUNDIAL	C100/II
3 497	W MONDIALE WORLDWIDE MUNDIAL	C100/II

27/198

Faixa de 4650-4700 kHz **4,7 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
4 651	R 1D 6C 6G 10B 10E 13E 13F	CC 13E 13F C001/6G
4 654	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
4 657	M AFI CEP R 2A 2C 3B 6A 6E 13H	CC 2A 2C C001/2A 2C CC 6A 6E C001/6A 6E
4 660	R 2B 2C 9B 10C 13D 13M	CC 2B 2C CC 13D 13M

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
4 663	R 6G 10F 13E 13F 13K V VNCA	CC 13E 13F 13K C001/6G
4 666	M CWP R 1C 10B 10D 10E	CC 10B 10D 10E
4 669	M MID SAM R 6G 10C 10D	CC 10C 10D C001/6G
4 672	R 2A 2B 3A 4A 6G 11B 13K	CC 2A 2B 3A COO1/4A C001/6G
4 675	M NAT R 6A 6E 9C 13G	CC 6A 6E C001/13G
4 678	M NCA R 10D 13I 14A 14G	CC 14A 14G C001/14A 14G
4 681	R 2B 2C 3B 10B 12E	CC 2B 2C 3B
4 684	R 3A 3C 10E 13J 14B 14C	CC 3A 3C CC 14B 14C C001/14B 14C
4 687	W MONDIALE WORLDWIDE MUNDIAL	C100/I II III
4 690	R 2A 2B 3A 6G 10B 13M	CC 2A 2B 3A C001/6G
4 693	R 2B 2C 3 10B 12C 13I 14D	CC 2B 2C 3 C001/14D
4 696	R 2 6G 9 10 13J	C001/6G

27/199

Faixa de 5450-5480 kHz **5,4 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
5 451	R 10F 11B 12F 12H 13I 13J	CC 12F 12H CC 13I 13J
5 454	R 10 12E 13F 13J	
5 457	R 10C 13N	
5 460	R 10B 10E 12C 13D	
5 463	R 11B 13H 13K 13M	
5 466	R 10B 13I	
5 469	R 11B 13G	
5 472	R 10A 10D 13H	
5 475	R 10A 10D 12E 12F 13G	CC 12E 12F

27/200

Faixa de 5480-5680 kHz **5,6 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
5 481	R 2A 2C 4B 6G 7D 9C 10C 12E 12J 13E 13F 13K 14D 14G	CC 2A 2C CC 10C 10E CC 12E 12J CC 13E 13F CC 14D 14G
5 484	R 1B 3A 3C 6A 9B 10A 10D 12C 12G 13H	CC 3A 3C
5 487	R 2C 6G 10C 12E	
5 490	R 2A 2B 3A 6D 10A 10D 12C 13C	CC 2A 2B 3A
5 493	M AFI R 3B 6G	C002/6G
5 496	R 2A 2B 3A 6F 10A 10D 12C 12J 13I	CC 2A 2B 3A
5 499	R 3B 6G V VAFI	C002/6G
5 502	R 2A 2B 3A 6B 10C 12C 13M	CC 2A 2B 3A
5 505	R 3B 6G	C003/6G
5 508	R 2B 2C 6F 7 9B 11B 12F 13N	CC 2B 2C
5 511	R 3A 5B 6G	C002/6G
5 514	R 2C 3B 3C 6E 11B 13C	CC 3B 3C
5 517	R 3A 6G	C002/6G
5 520	M CAR R 2B 2C 3B 6D 7E	CC 2B 2C 3B
5 523	R 2A 6G 9B 11B 12G 13I	
5 526	M SAM R 2B 2C 3B 5D 6E 10F 14	CC 2B 2C 3B
5 529	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
5 532	W MONDIALE WORLDWIDE MUNDIAL	C100/I V
5 535	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
5 538	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
5 541	W MONDIALE WORLWIDE MUNDIAL	C100/I IV
5 544	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
5 547	M CEP R 2A 4A 6G 7F 13H 13K	
5 550	M CAR R 2B 2C 3B 5D 6E 14G	CC 2B 2C 3B
5 553	R 6G 10B 13C	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
5 556	R 2 3 12F	CC 2 3
5 559	M SP R 2A 4A 6G 10E 12G 13J	
5 562	R 2C 3B 3C 10C 12D 13D	CC 3B 3C
5 565	M SAT R 6G 9B 10A	
5 568	R 1B 3A 3C 5B 6D 7F 10B 12 13J	CC 3A 3C
5 571	R 6G 11B 13C	
5 574	M CEP R 2B 2C 4B 6D 13G	CC 2B 2C
5 577	R 1C 5A 6G 7B 10E 13C 13J 13K	CC 13C 13J 13K
5 580	R 3A 3B 6A 6C 14G V VCAR	CC 3A 3B
5 583	R 1E 5A 5C 6G 7B 9 10B 12E 12F 12H 13E 13F	CC 5A 5C CC 12E 12F 12H CC 13E 13F
5 586	R 2C 3C 10D	
5 589	R 12C V VMID	
5 592	R 6G 7C 9D V VNAT	
5 595	R 1C 2B 6B 10C 12E	
5 598	M NAT R 6G	
5 601	R 3A 3B 6A V VSAM	CC 3A 3B
5 604	R 2A 2C 4B 6G 10 12A 12E 12F 13E 13F 13K 14	CC 2A 2C CC 12E 12F CC 13E 13F
5 607	R 2B	
5 610	R 6G	
5 613	R 2B 12C	
5 616	M NAT R 6G	
5 619	R 2B 12J	
5 622	R 1D 6G	
5 625	R 3A 5B 6B 10D	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
5 628	M NP R 1D 6G	C003/6G
5 631	R 6D 10A	
5 634	M INO R 6G	C002/6G
5 637	R 1D 3C	
5 640	R 6G V VEUR	C002/6G
5 643	M SP R 3C	
5 646	M NCA R 12G	
5 649	M NAT SEA	
5 652	M AFI CWP	
5 655	M EA SEA	CC EA SEA
5 658	M AFI MID	CC AFI MID
5 661	M CWP EUR	
5 664	M NCA	
5 667	M MID	
5 670	M EA	
5 673	V VSEA	
5 676	V VNCA	

27/201

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
5 680	W MONDIALE WORLDWIDE MUNDIAL (R) e (OR)	V. parte II, secção II, artigo 3.

27/202

Faixa de 6525-6685 kHz | **6,6 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
6 526	R 2A 2B 3A 4A 6F 12G 14F	CC 2A 2B 3A
6 529	R 3B 6G	
6 532	M CWP R 2A 2B 3A 4A 12F	CC 2A 2B 3A

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
6 535	M SAT R 2C 5D 6G 9D 10A 10D 12C 12J 14B	
6 538	R 3A 3B 9B 11B V VAFI	CC 3A 3B
6 541	R 2C 6G 10C 13C 14C	
6 544	R 1C 3A 3B 5A 5C 6C 10D	CC 3A 3B CC 5A 5C
6 547	R 2A 2C 5D 6G 9B 10B 10E 12E 12J 13F 13K 14A	CC 2A 2C CC 12E 12J
6 550	R 1B 3A 3C 5B 6D 11B 13J	CC 3A 3C
6 553	R 2A 2C 4B 6G 9 10 12E 12F 13E 13F 13K 14A	CC 2A 2C CC 12E 12F CC 13E 13F
6 556	M SEA R 1 3A 3C 10C 13C	CC 3A 3C
6 559	M AFI R 2A 3B 6G 11B 13J 14D	
6 562	M CWP R 2B 2C 10D 13C	CC 2B 2C
6 565	R 2A 4 6G 11B 14E	
6 568	R 2B 2C 3B 6D 7C 10C 13C	CC 2B 2C 3B
6 571	M EA R 12C	
6 574	M AFI R 2A 6G 10B 13I 13M 14D	
6 577	M CAR R 2B 2C 3B 4B 6D 13E	CC 2B 2C 3B
6 580	R 6G 7E 9C 10A 13C 13J 13K 14 V VEUR	CC 13C 13J 13K
6 583	R 2 3 6E	CC 2 3
6 586	M CAR R 2C 6G 7 13G 14C	
6 589	R 3	
6 592	M NCA R 12C	
6 595	R 1B 3B 3C 5B 6D	CC 3B 3C
6 598	M EUR R 4B 6G 9B 10B 10E 12E 13H	
6 601	R 2	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
6 604	R 1D 6G 7C 10A 13N 14B V VNAT	
6 607	R 3A 6A 6B	
6 610	R 1D 6G 14F	
6 613	R 3A 6A 6B 13G	
6 616	R 4A 6G 12G 14E	
6 619	R 3A 6B	
6 622	M NAT R 6G 7F 9B 12C 13D	
6 625	M MID R 3B	
6 628	M NAT R 6G 7E 12C 13D 13M 14	CC 13D 13M
6 631	M MID R 3B 6C	
6 634	R 6G	
6 637	W MONDIALE WORLDWIDE MUNDIAL	C100/I II III
6 640	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
6 643	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
6 646	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
6 649	M SAM R 3A 6G	
6 652	R 6G 7B	
6 655	M NP R 2B 6E	
6 658	R 3C 6A	
6 661	M NP R 2B 6E	
6 664	R 3C 5A	
6 667	R 1E 2B 6F	
6 670	R 3C	
6 673	M AFI CEP R 2A 6G 10F 12D 13D 14B	
6 676	V VSEA	
6 679	V VPAC	
6 682	R 6G	

27/203 **Faixa de 8815-8965 kHz** **9 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
8 816	R 4A 6G 12C 13J 14A	
8 819	R 2B 2C 9B 10 13C	CC 2B 2C
8 822	R 2A 3B 5A 5C 11B 13G 14	CC 5A 5C C005/2A
8 825	M NAT R 6G 13H 14F	
8 828	R 1D 13N V VPAC	
8 831	M NAT R 6G 13F 14F	
8 834	R 2B 2C 6C 7C 10 13C	CC 2B 2C
8 837	R 3A 3C 4A 9B 10B 13M	CC 3A 3C
8 840	R 1C 6	
8 843	M CEP R 5D 6G 10E 13C 13J 13K 14D	CC 13C 13J 13K
8 846	M CAR R 2 3 7F 9	CC 2 3
8 849	R 13K V VSEA	
8 852	R 3B 3C 9 12E V VAFI	CC 3B 3C
8 855	M SAM R 2 10A 14	
8 858	R 4A 6G 10D 13E 13F 14D	CC 13E 13F
8 861	M SAT R 3A 3B 6E 9B	CC 3A 3B C011/6E
8 864	M NAT R 2B 6B 6F 7E 13F	CC 6B 6F
8 867	M SP R 6G 10C 13D 13M	CC 13D 13M
8 870	R 5 6G 14 V VNAT	C004/6G
8 873	R 4 6G 9C 9D 12E 12F 13I	CC 9C 9D CC 12E 12F
8 876	R 2A 10A 12D 14G	
8 879	M INO NAT R 3B	
8 862	R 2C 6D	
8 885	R 5 6B 11B 13G 14C	
8 888	R 2 6G 7	C009/6G
8 891	M NAT R 6A 14E	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
8 894	M AFI R 3C 12F 14A	
8 906	M NAT R 6A 6E 7B 9B 13H	CC 6A 6E
8 897	M EA	
8 900	R 3A 10D 13G 14B	
8 903	M AFI CWP R 10B 13M	
8 906	M NAT R 6A 6E 7B 9B 13H	CC 6A 6E
8 909	R 2A 6E	
8 912	R 5B 6G 11B 13D 14C	C004/6G
8 915	R 3C 5A	
8 918	M CAR MID R 6C	
8 921	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
8 924	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
8 927	W MONDIALE WORLDWIDE MUNDIAL	C100/III V
8 930	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
8 933	W MONDIALE WORLDWIDE MUNDIAL	C100/II IV
8 936	W MONDIALE WORLDWIDE MUNDIAL	C100/I V
8 939	R 2A 2C 6F 10F 13C	CC 2A 2C
8 942	M SEA R 3A	
8 945	R 10F 13K 14E V VMID	
8 948	R 6A 12C	
8 951	M MID	
8 954	R 3 10E 12J 14B	
8 957	R 3B 6D 12C 13D 14G V VEUR	
8 960	R 6G 7F	

27/204　　**Faixa de 10 005-10 100 kHz**　　**10 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
10 006	R 6A 10 13G	
10 009	R 2B 2C 7B 9B 13K	CC 2B 2C
10 012	R 5 10 13J	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
10 015	R 2 6C 12D	
10 018	M MID R 6G 9 13J 13K	CC 13J 13K C003/6G
10 021	R 1 6B 12C 13G	
10 024	M SAM R 2B 2C 3B 9B	CC 2B 2C 3B
10 027	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
10 030	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
10 033	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
10 036	R 1E 6E 13G 13H	CC 13G 13H
10 039	R 3B 3C 4A 9B 12C	CC 3B 3C
10 042	M EA R 9C 10F 13C 13J 13K	CC 13C 13J 13K
10 045	R 2 3A 11B 13H 14	CC 2 3A
10 048	M NP R 2A 5D 13A 13B	CC 13A 13B
10 051	R 6A 6E 13I V VNAT	CC 6A 6E
10 054	R 2A 2C 6G 12	CC 2A 2C C004/6G
10 057	M CEP R 3A V VAFI	
10 060	R 1D 6F 13K	
10 063	R 4B 6G 12E	C004/6G
10 066	M SEA R 1B 10A 13M	
10 069	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
10 072	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
10 075	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
10 078	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
10 081	M CWP R 4A 6A 7C 13F	C006/6A
10 084	M EUR SP R 6E 13D	
10 087	R 3 14 V VSAM	
10 090	R 12E 12F V VNCA	CC 12E 12F

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
10 093	R 5B 6B 11B 13N	
10 096	M NCA SAM R 7D	

27/205

Faixa de 11 275-11 400 kHz **11,3 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
11 276	R 2A 2C 6G 10E 13J	CC 2A 2C C002/6G
11 279	M NAT R 2B 6F 9C	
11 282	M CEP R 4A 6G 13H	C003/6G
11 285	R 2A 3B 7	CC 2A 3B
11 288	R 5A 6G 11B	
11 291	M SAT R 3B 3C	CC 3B 3C
11 294	R 2A 6G 7C	C002/6G
11 297	R 2 12F	
11 300	M AFI R 6G 13H	C002/6G
11 303	R 3C 13E	
11 306	R 6G 7E 11B	
11 309	M NAT R 3A 6D	
11 312	R 5 9C 9D	CC 9C 9D
11 315	R 6G V VCAR	
11 318	R 3 4A 13D	
11 321	R 6A 13F	
11 324	R 3A 3C 4B 12C	CC 3A 3C
11 327	M SP R 3B 5 13C	
11 330	M AFI NP R 3A 13F	
11 333	R 2B 2C 10	CC 2B 2C
11 336	M NAT R 3	
11 339	R 2B 6B 9 13K	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
11 342	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
11 345	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
11 348	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
11 351	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
11 354	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
11 357	R 6A 6E 10A	CC 6A 6E
11 360	M SAM R 2 3 14	CC 2 3
11 363	R 1 6E 10A	
11 366	R 1C 6B 6F 13K	CC 6B 6F
11 369	R 6G 13G	
11 372	R 2C 3B 6D	
11 375	M MID R 10A 13C	
11 378	R 3C 13M V VEUR	
11 381	R 6 12E 12J	CC 12E 12J
11 384	M CWP R 1D 12J	
11 387	M CAR V VSEA	
11 390	R 2 10	
11 393	R 9B 12E V VMID	
11 396	M CAR EA SEA	CC EA SEA

27/206

Faixa de 13 260-13 360 kHz **13,3 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
13 261	V VAFI	
13 264	R 14 V VEUR	
13 267	R 3 13H	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
13 270	R 6G V VNAT	
13 273	M AFI	
13 276	R 6G V VNAT	
13 279	V VNCA VSAM	
13 282	V VPAC	
13 285	R 10 V VSEA	
13 288	M AFI EUR MID	CC AFI EUR MID
13 291	M NAT R 6	
13 294	M AFI	
13 297	M CAR EA SAM	CC CAR SAM
13 300	M CEP CWP NP SP R 4	CC CEP CWP NP SP
13 303	M EA NCA	CC EA NCA
13 306	M INO NAT	
13 309	M EA SEA R 13C 13K	CC EA SEA CC 13C 13K
13 312	M MID R 11B	
13 315	M NCA SAT	
13 318	M SEA R 13	
13 321	R 2 3	CC 2 3
13 324	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 327	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
13 330	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 333	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 336	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
13 339	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 342	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 345	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
13 348	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 351	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 354	R 5 7	CC 5 7
13 357	M SAT R 2	

27/207

Faixa de 17 900-17 970 kHz **18 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
17 901	R 12	
17 904	M CEP CWP NP SP R 4	CC CEP CWP NP SP
17 907	M CAR EA SAM SEA	CC CAR SAM CC EA SEA
17 910	R 10	
17 913	R 6G 13	
17 916	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
17 919	W MONDIALE WORLDWIDE MUNDIAL	C100/II IV
17 922	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
17 925	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
17 928	W MONDIALE WORLDWIDE MUNDIAL	C100/III IV
17 931	W MONDIALE WORLDWIDE MUNDIAL	C100/I V
17 934	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
17 937	W MONDIALE WORLDWIDE MUNDIAL	C100/IV V
17 940	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
17 943	R 6	
17 946	M NAT R 14	
17 949	R 5	
17 952	R 3	
17 955	M SAT R 6B	
17 958	M NCA	

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
17 961	M AFI EUR INO MID	CC AFI EUR INO MID
17 964	R 2 11B	
17 967	R 5 13A 13B 13E 13F	CC 13A 13B 13E 13F

27/207-A

Faixa de 21 924-22 000 kHz **22 MHz**

Frequência (kHz) 1	Zona de utilização autorizada 2	Observações 3
21 940	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 943	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 946	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 949	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 952	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 955	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 958	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 961	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 964	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 967	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 970	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 973	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 976	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 979	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 982	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 985	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 988	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 991	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 994	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 997	W MONDIALE WORLDWIDE MUNDIAL	C100/I

Explicação dos símbolos e abreviaturas

Coluna 2 M = ZLAMP.
R = ZLARN.
V = VOLMET.
W = MUNDIAL.

Coluna 3 CC = via comum a.
C001/... Na zona indicada a seguir à barra oblíqua, utilização diurna.
C002/6G Na zona 6G, utilização apenas a leste de 95° E.
C003/6G Na zona 6G, utilização apenas a oeste de 95° E.
C004/6G Utilização limitada a leste de 110° E.
C005/2A Utilização limitada a norte de 60° N.
C006/6A Utilização limitada a leste de 75° E.
C007 Não utilizada.
C008 Não utilizada.
C009/6G Na zona 6G, utilização apenas a leste de 110° E. e a sul de 25° N.
C010/6G Na zona 6G, utilização apenas a leste de 118° E. e a norte de 40° N.
C011/6E Na zona 6E, utilização limitada a sul de 20° N.
C100/... A zona de adjudicação para utilização mundial é indicada a seguir ao símbolo. No que respeita a procedimento para consignação das frequências, v. o n.º **27/194-A.**

ARTIGO 3

Frequências para utilização comum

27/208 1. As frequências portadoras (frequências de referência) de 3023 kHz e 5680 kHz são destinadas à utilização comum em todo o Mundo.

27/209 2. A utilização destas frequências em todo o Mundo é autorizada:

2.1. Nas estações de aeronave, para:

a) Controle de aproximação e de aeródromo;
b) Comunicações com as estações aeronáuticas, quando as outras frequências dessas estações não estejam disponíveis ou sejam desconhecidas.

2.2. Nas estações aeronáuticas, para controle de aproximação e de aeródromo, com as seguintes reservas:

a) Com uma potência média limitada a um valor não superior a 20 W no circuito de antena;
b) Em cada caso é necessário estudar com particular atenção o tipo de antena a utilizar, a fim de evitar interferências prejudiciais;
c) A potência das estações aeronáuticas que utilizam estas frequências nas condições acima referidas poderá ser aumentada até ao valor necessário para satisfazer determinados requisitos de exploração, sob reserva de coordenação entre as administrações directamente interessadas e aquelas cujos serviços possam ser desfavoravelmente influenciados.

27/210 3. Não obstante as disposições acima referidas, a frequência de 5680 kHz pode também ser utilizada nas estações aeronáuticas para comunicações com estações de aeronave, quando as outras frequências das estações aeronáuticas não estejam disponíveis ou sejam desconhecidas. Esta utilização é, porém, limitada a determinadas zonas, e está sujeita a determinadas condições, a fim de não causar interferências prejudiciais à outras comunicações autorizadas do serviço móvel aeronáutico.

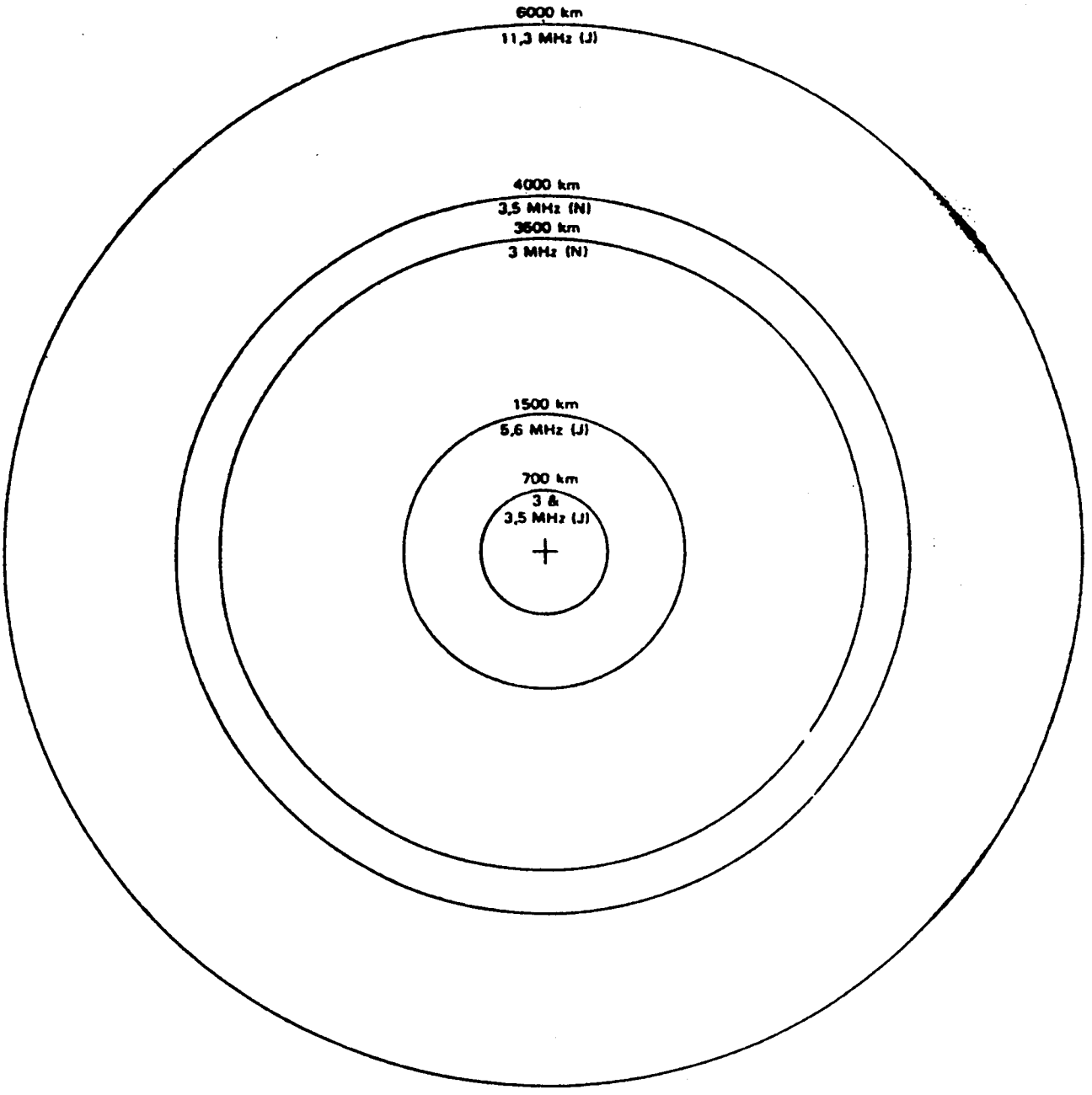
27/211 4. As reuniões da ICAO podem recomendar pormenores suplementares relativos à utilização destas vias para os fins acima mencionados.

27/212 5. As frequências de 3023 kHz e 5680 kHz podem igualmente ser utilizadas por estações de outros serviços móveis que participem em operações de busca e salvamento coordenadas, aéreas e de superfície, e também para as comunicações entre essas estações e as estações terrestres participantes. As estações aeronáuticas estão autorizadas a utilizar estas frequências para estabelecer comunicações com as estações acima referidas.

27/213 6. Estas vias podem ser utilizadas para as emissões das classes A1 ou A3, segundo acordos especiais. Não devem ser subdivididas.

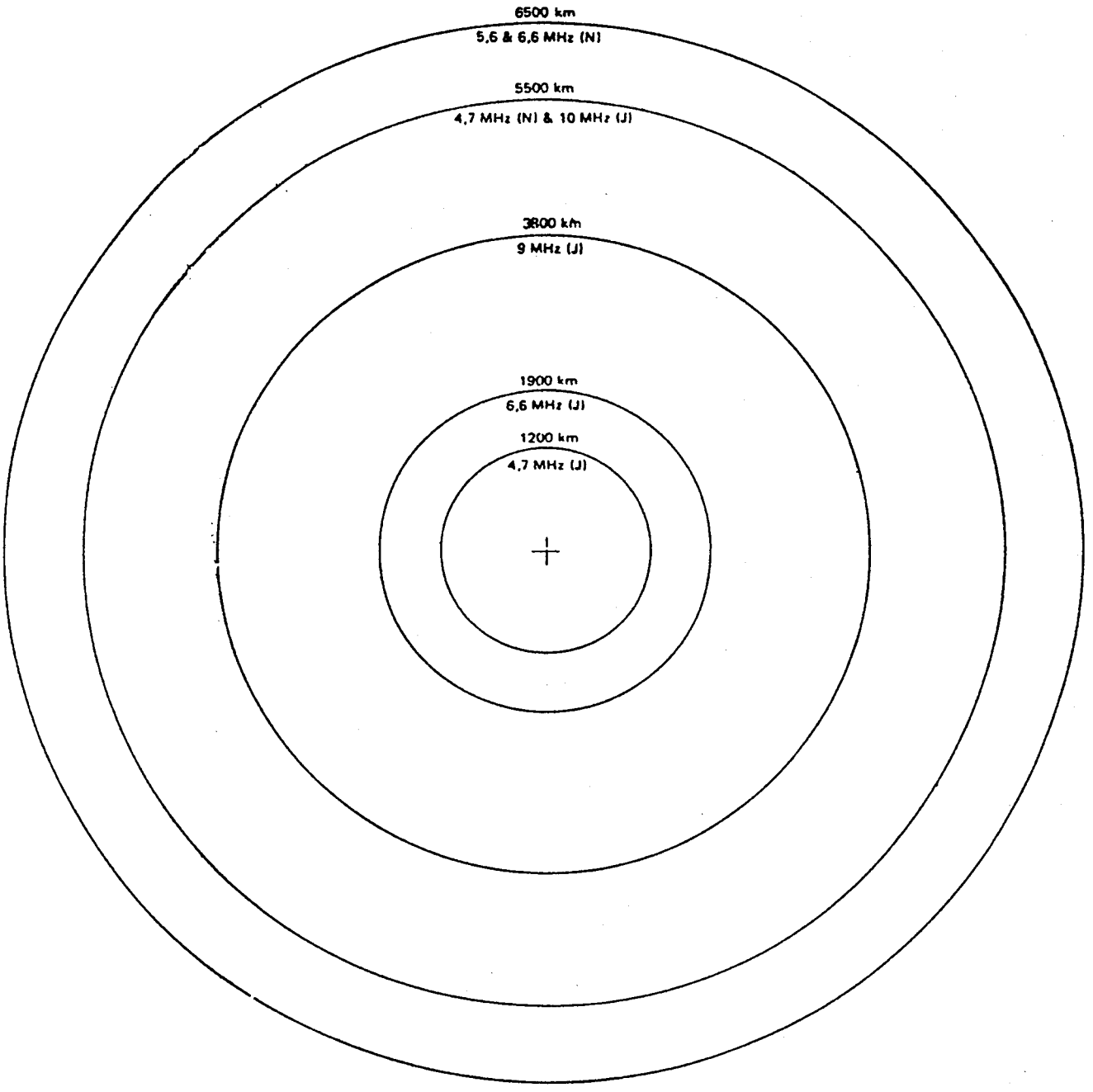
27/214 7. Todas as estações que participem directamente em operações de busca e salvamento coordenadas e que utilizem as frequências de 3023 kHz e 5680 kHz devem emitir unicamente na faixa lateral superior, com excepção dos casos previstos no n.º **27/50.**

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT — COURBES INDIQUANT LES PORTEES DE BROUILLAGE
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION — INTERFERENCE RANGE CONTOURS
PROYECCIÓN ACIMUTAL EQUIVALENT DE LAMBERT — CURVAS DE ALCANCES DE INTERFERÊNCIA

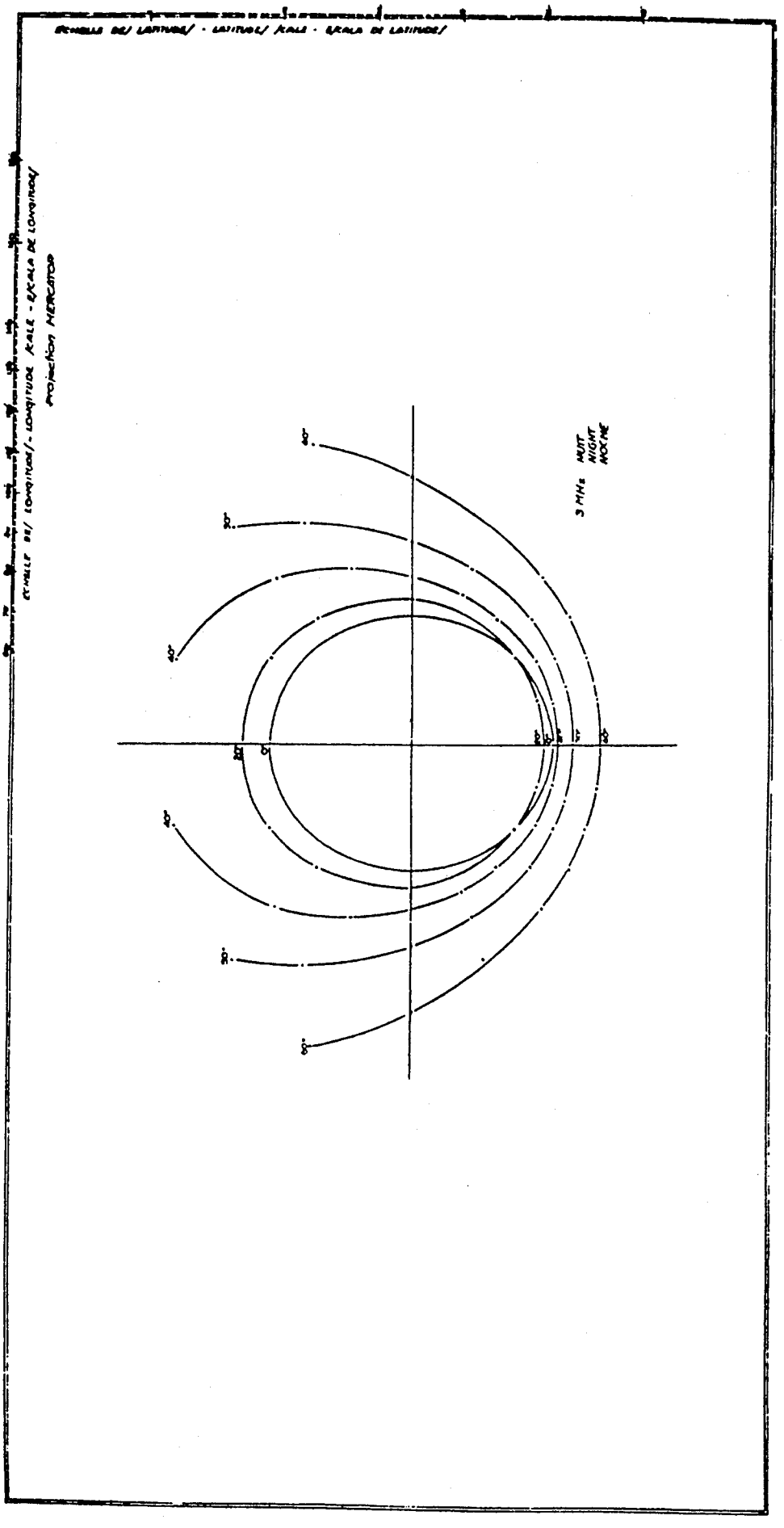


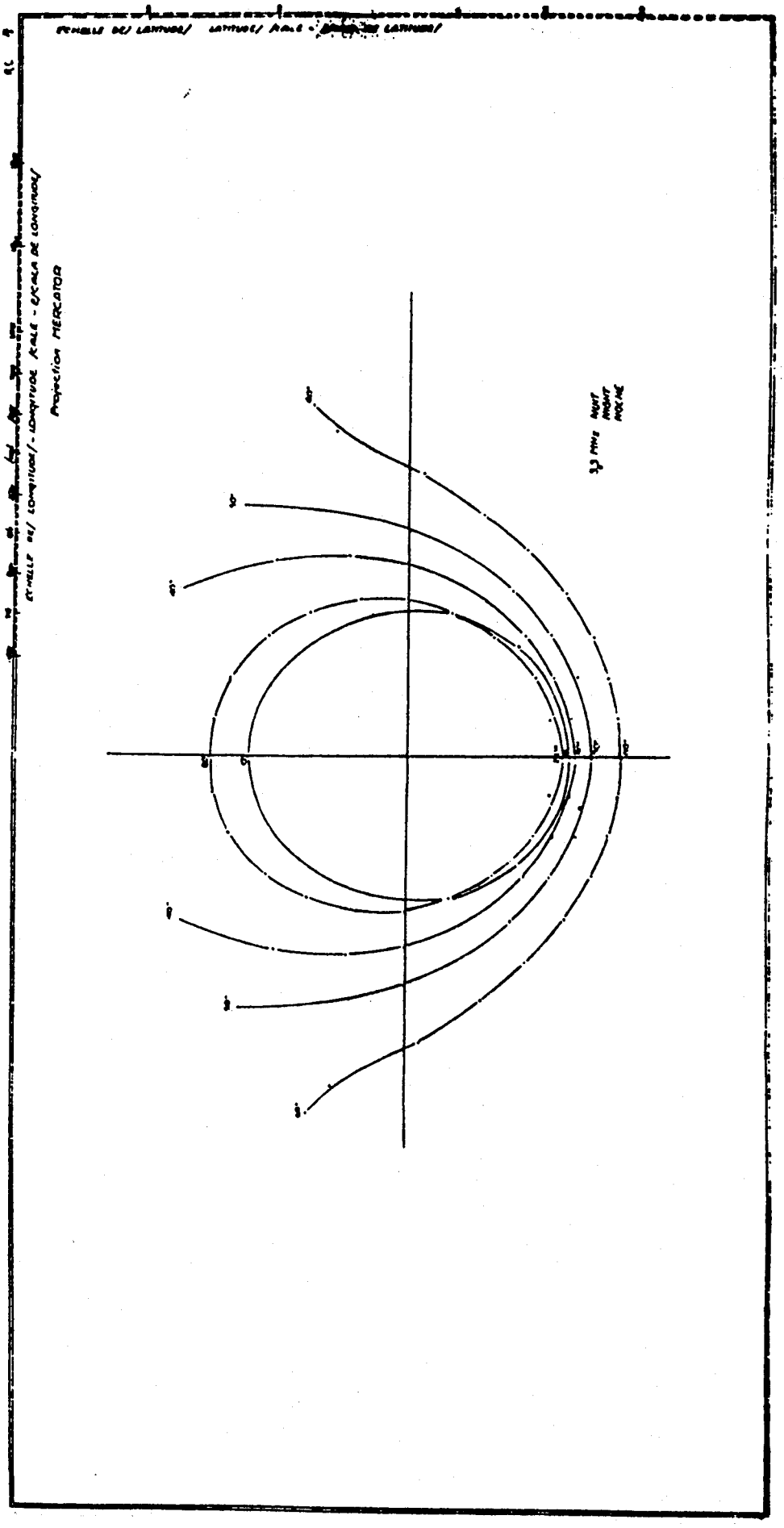
3 & 3,5 MHZ	JOUR DAY DIA	700 km	3,5 MHZ	NUIT NIGHT NOCHE	4000 km
5,6 MHz	JOUR DAY DIA	1500 km	11,3 MHz	JOUR DAY DIA	6000 km
3 MHz	NUIT NIGHT NOCHE	3500 km			

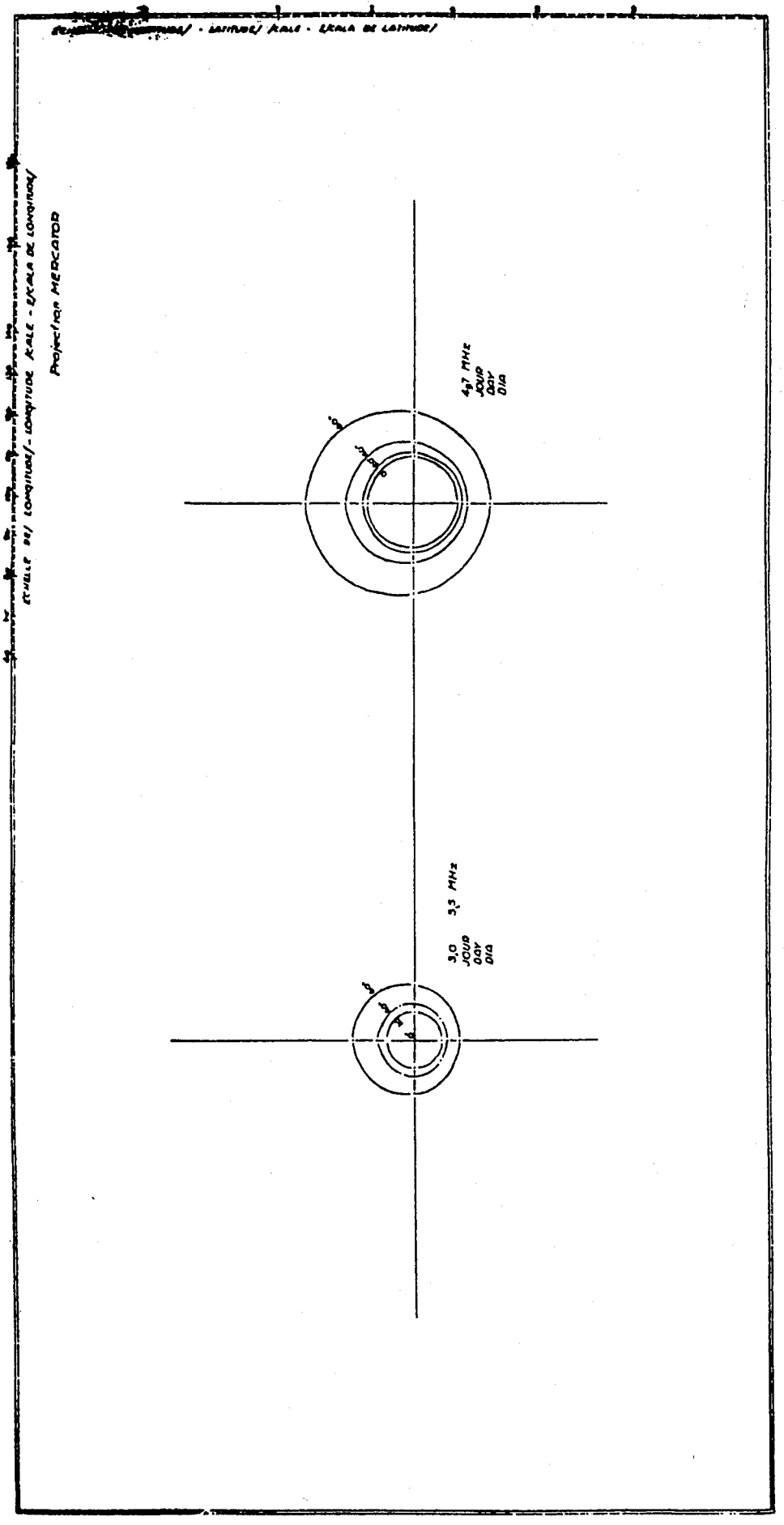
PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT — COURBES INDIQUANT LES PORTEES DE BROUILLAGE
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION — INTERFERENCE RANGE CONTOURS
PROYECCIÓN ACIMUTAL EQUIVALENT DE LAMBERT — CURVAS DE ALCANCES DE INTERFERÊNCIA

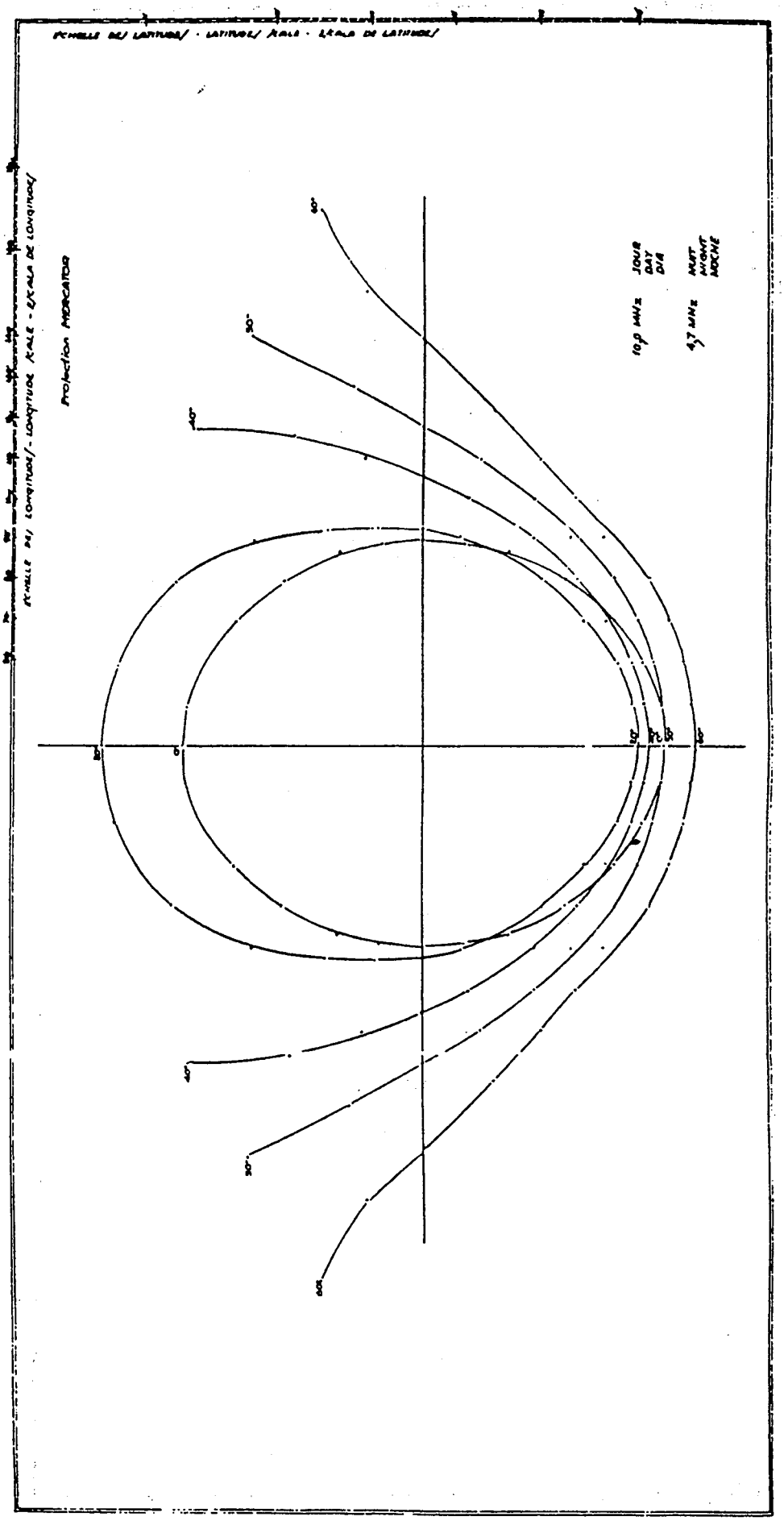


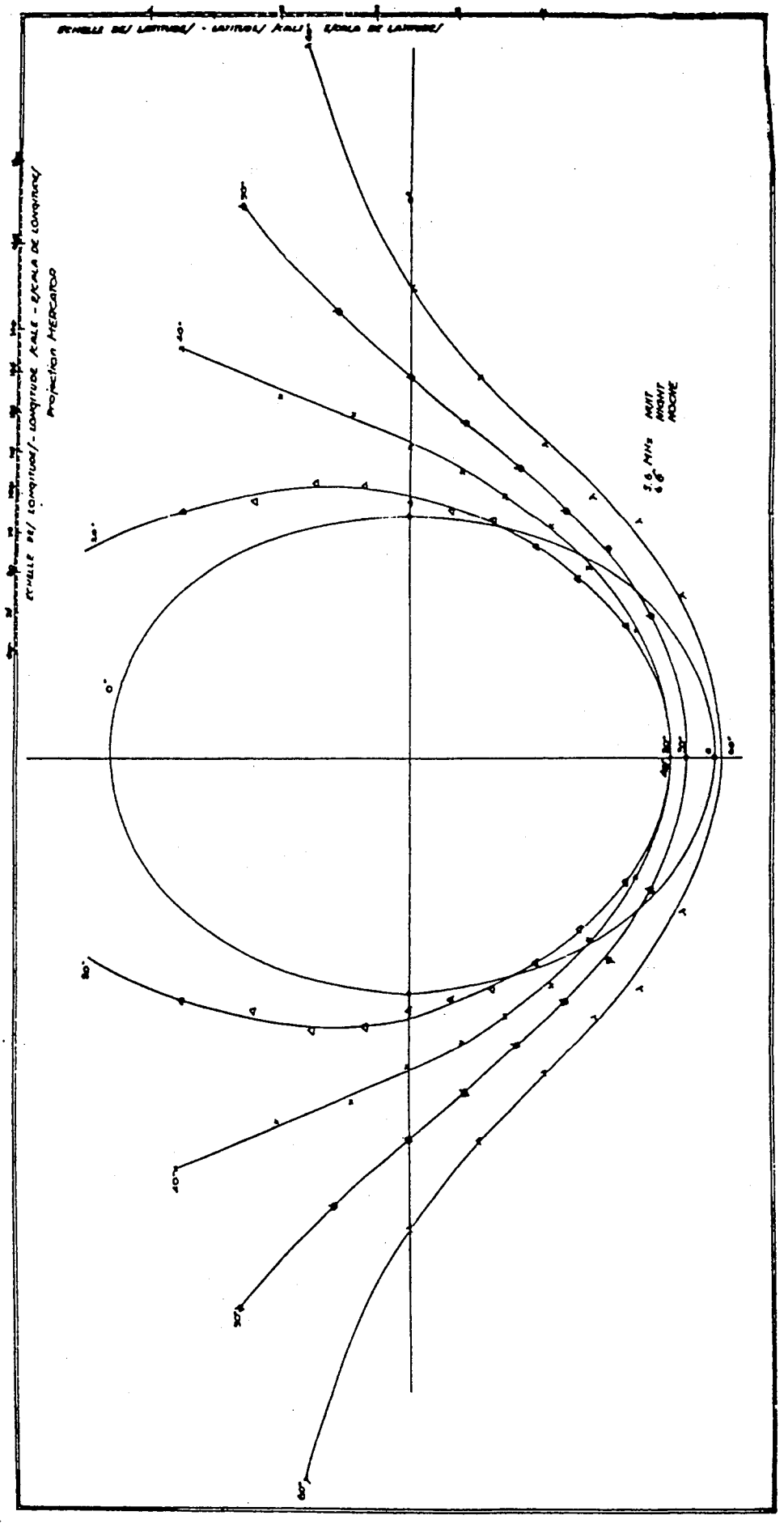
4,7 MHz	JOUR DAY DIA	1200 km	10 MHz	JOUR DAY DIA	5500 km
6,6 MHz	JOUR DAY DIA	1900 km	4,7 MHz	NUIT NIGHT NOCHE	6500 km
9,0 MHz	JOUR DAY DIA	3800 km	5,6 & 6,6 MHz	NUIT NIGHT NOCHE	6500 km

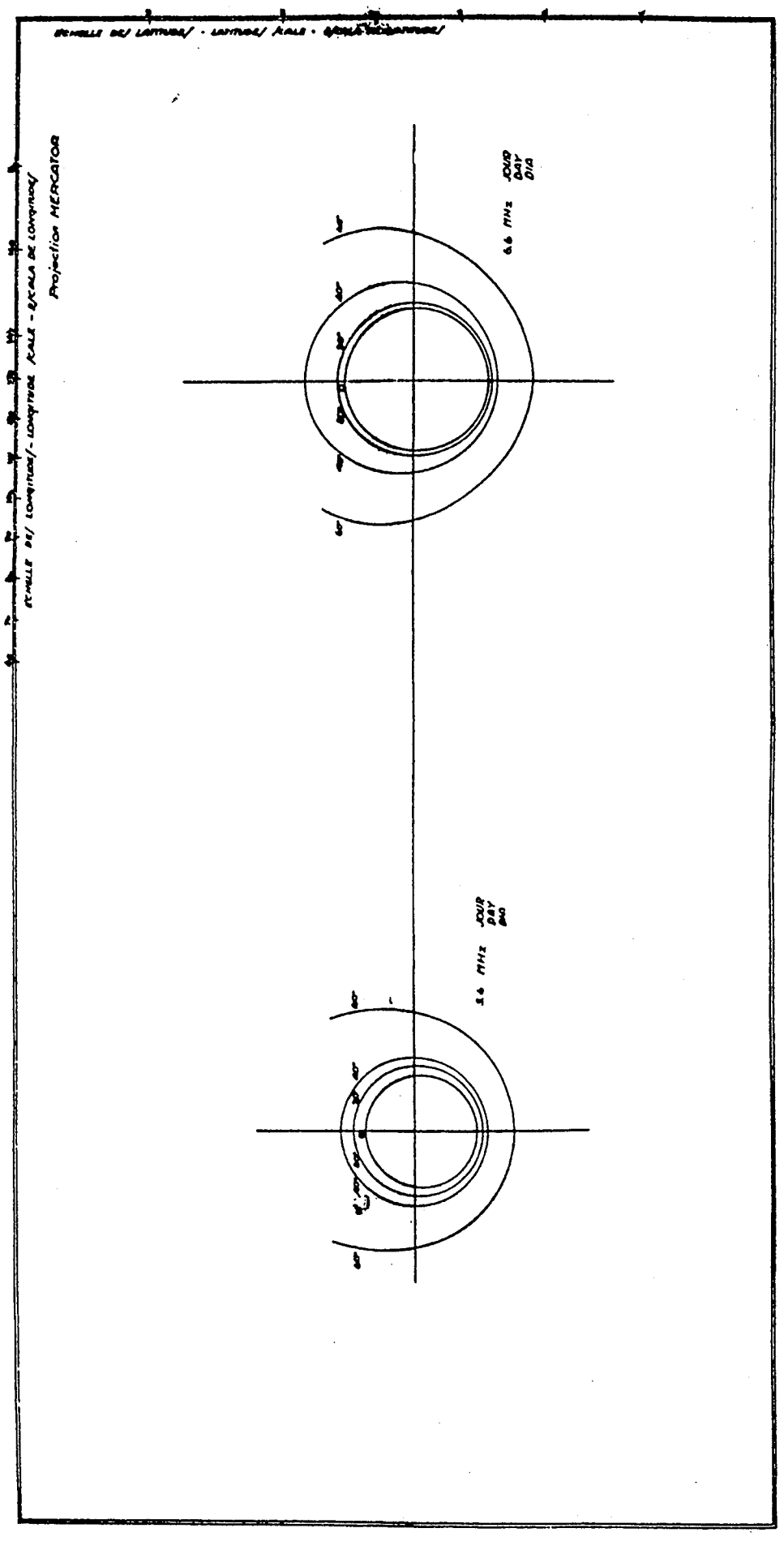

ÉCHELLE DE/ LATITUDE/ · LATITUDE/ SCALE · ESCALA DE LATITUDE/
ÉCHELLE DE/ LONGITUDE/ · LONGITUDE SCALE · ESCALA DE LONGITUDE/
PROJECTION MERCATOR
3 MHz NUIT NIGHT NOCHE

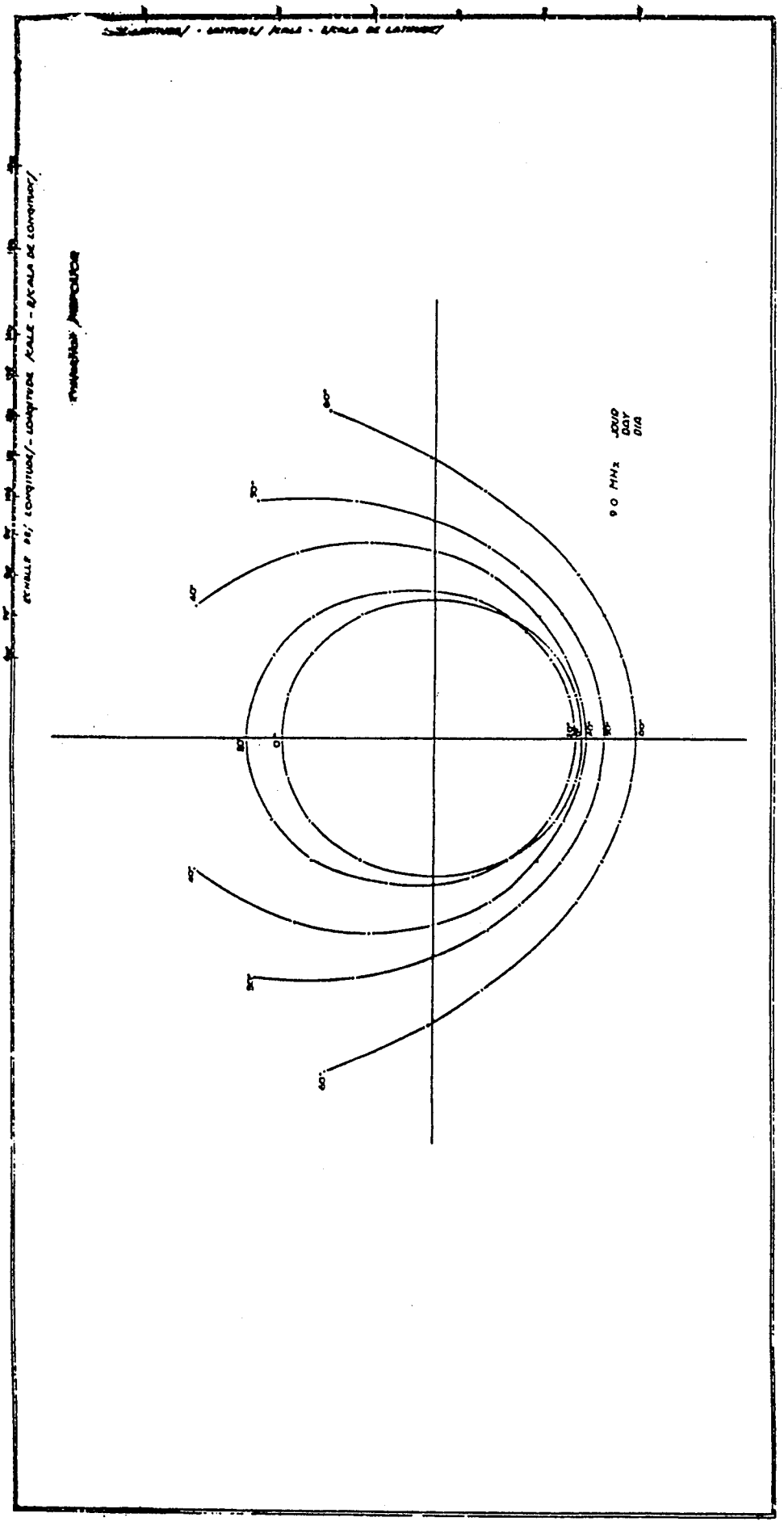

Projection MERCATOR

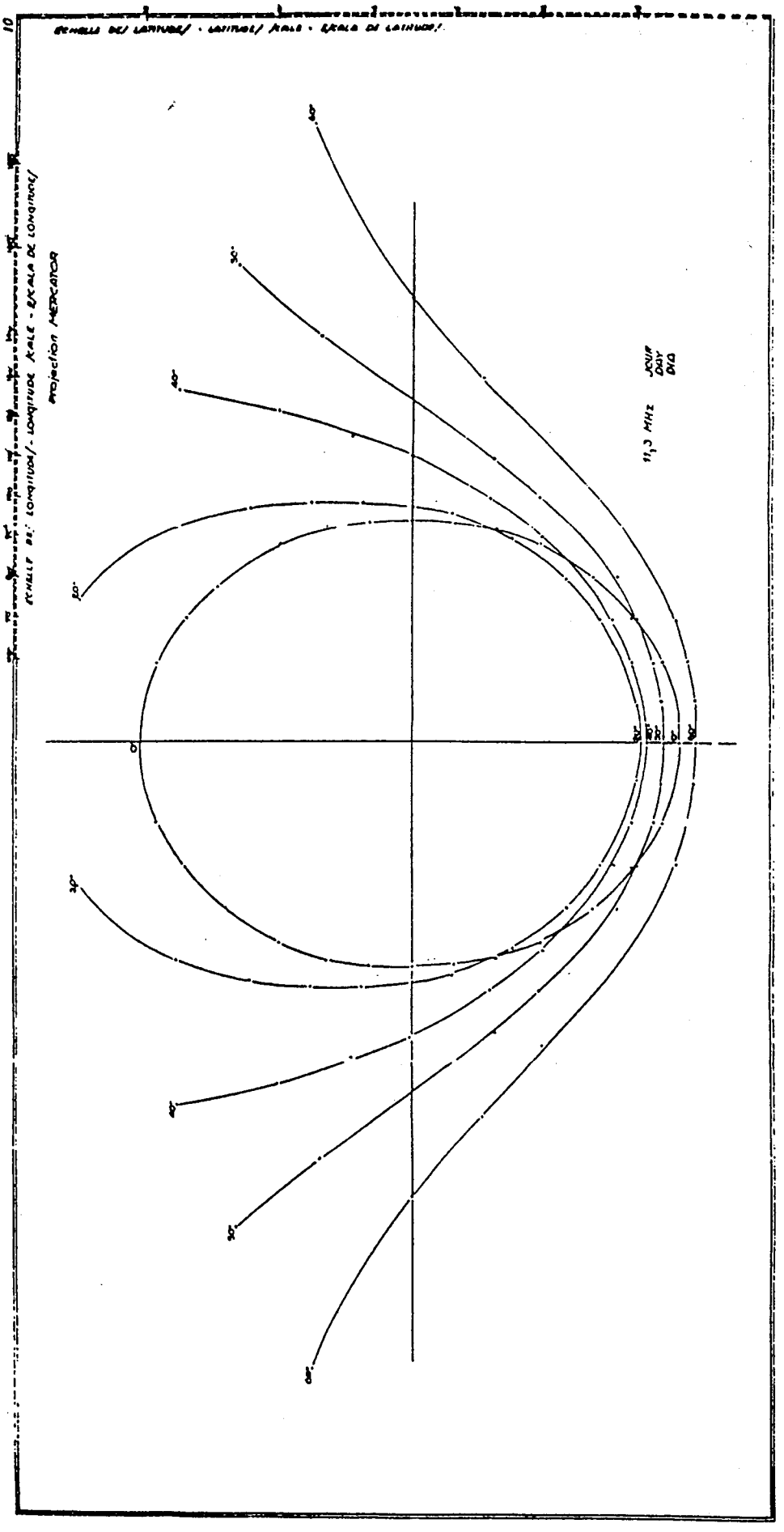

Projection MERCATOR
4,7 MHz
JOUR
DAY
DIA
3,3 MHz
3,0
JOUR
DAY
DIA

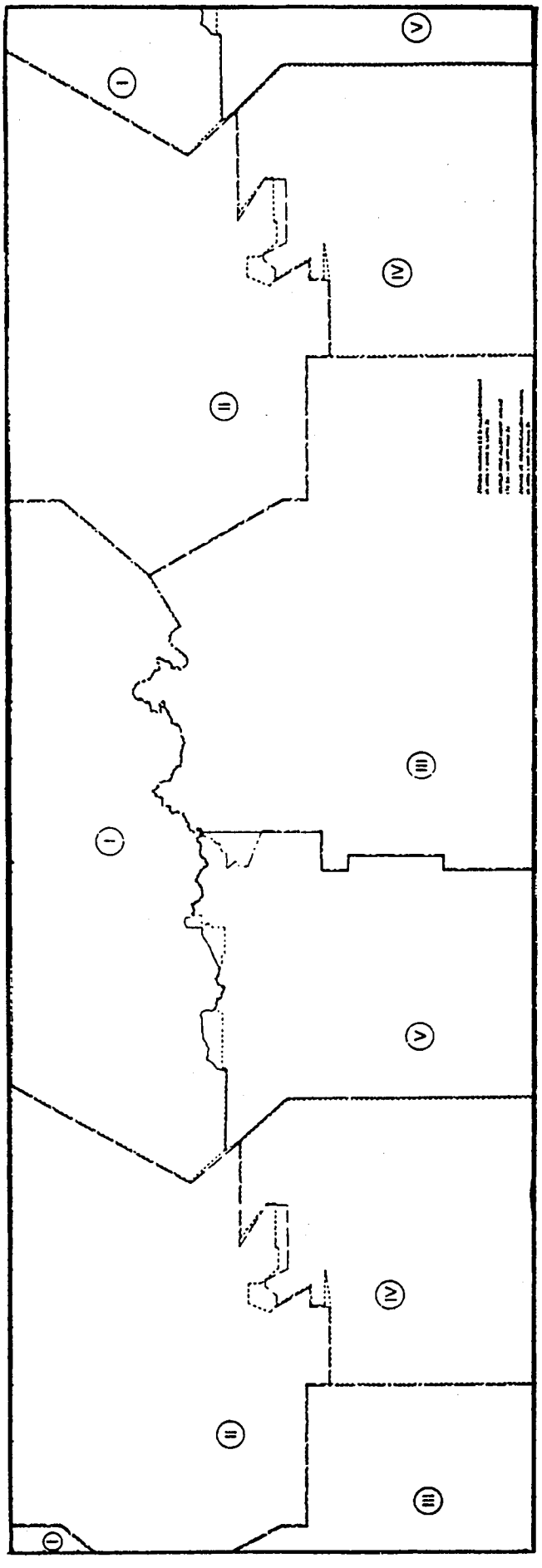

ECHELLE DES LATITUDES / LATITUDE SCALE / ESCALA DE LATITUDES
ECHELLE DES LONGITUDES / LONGITUDE SCALE / ESCALA DE LONGITUDES
Projection MERCATOR
10,0 MHz
JOUR
DAY
DIA
4,7 MHz
NUIT
NIGHT
NOCHE
50°
40°
30°
0°

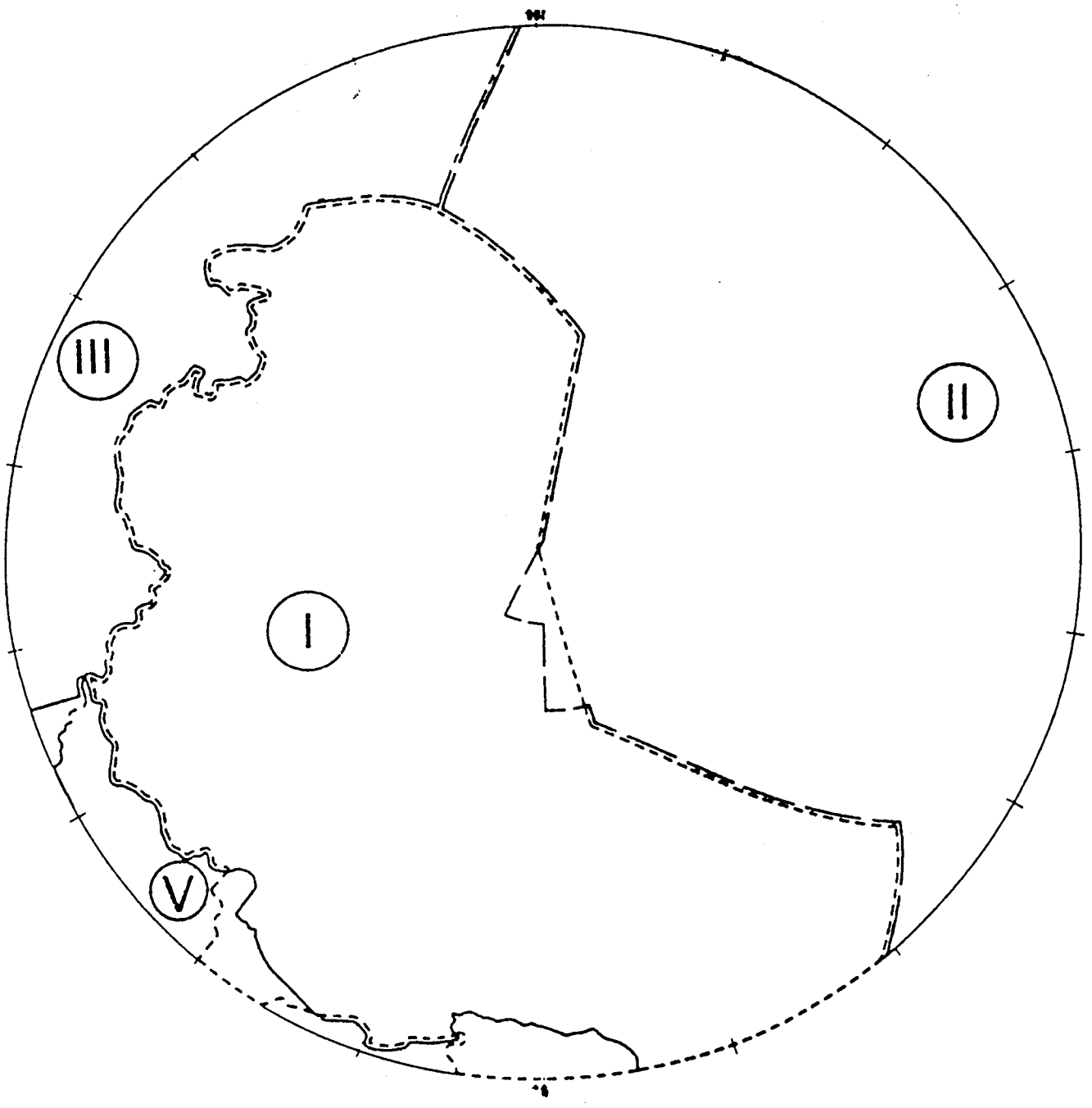



JOUR
DAY
DIA
6.6 MHz
JOUR
DAY
DIA
16 MHz

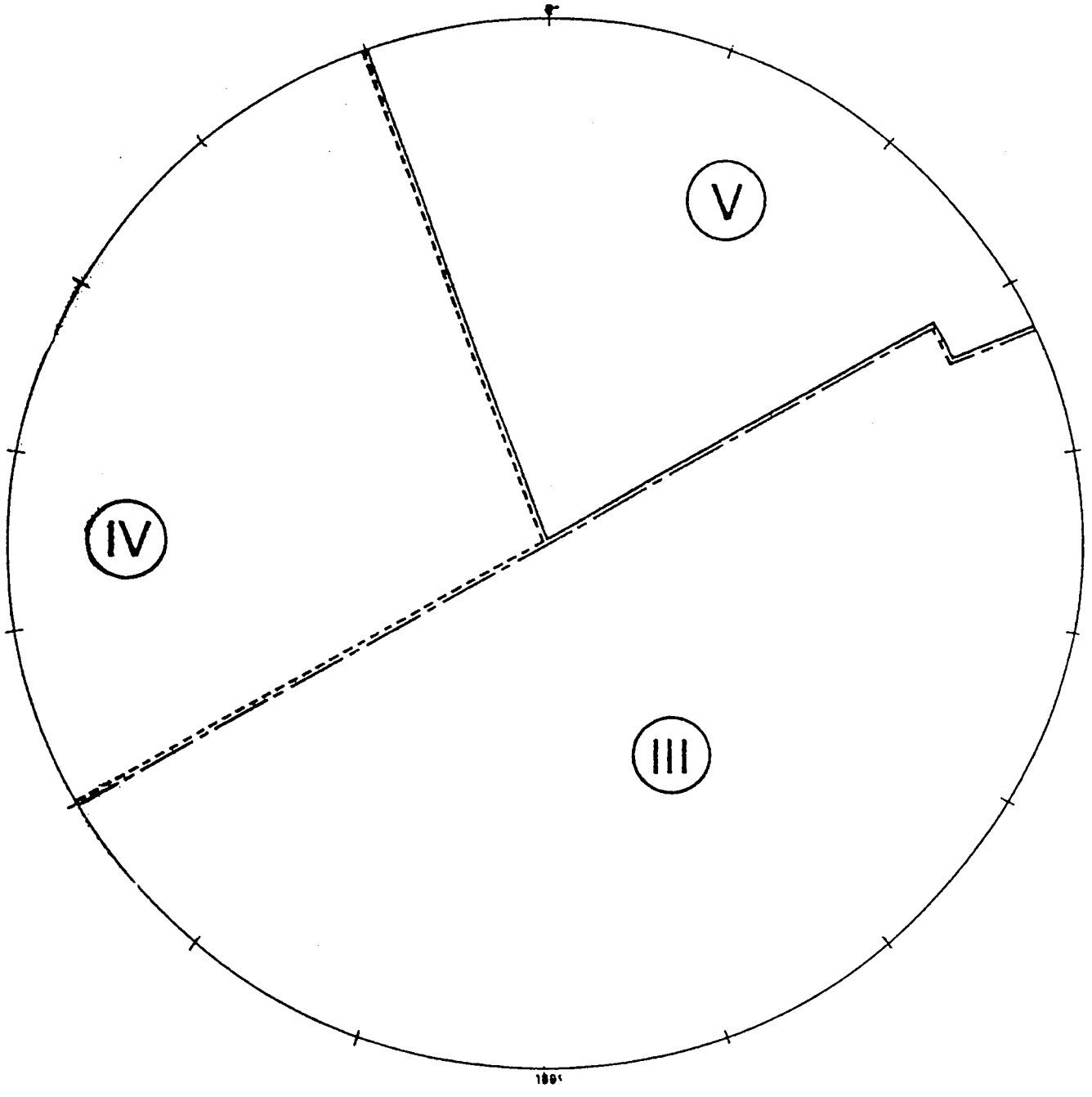



ECHELLE DES LATITUDES - LATITUDE SCALE - ESCALA DE LATITUDES
ECHELLE DES LONGITUDES - LONGITUDE SCALE - ESCALA DE LONGITUDES
Projection MERCATOR
11,3 MHz
JOUR
DAY
DIA
40°
30°
20°
0°

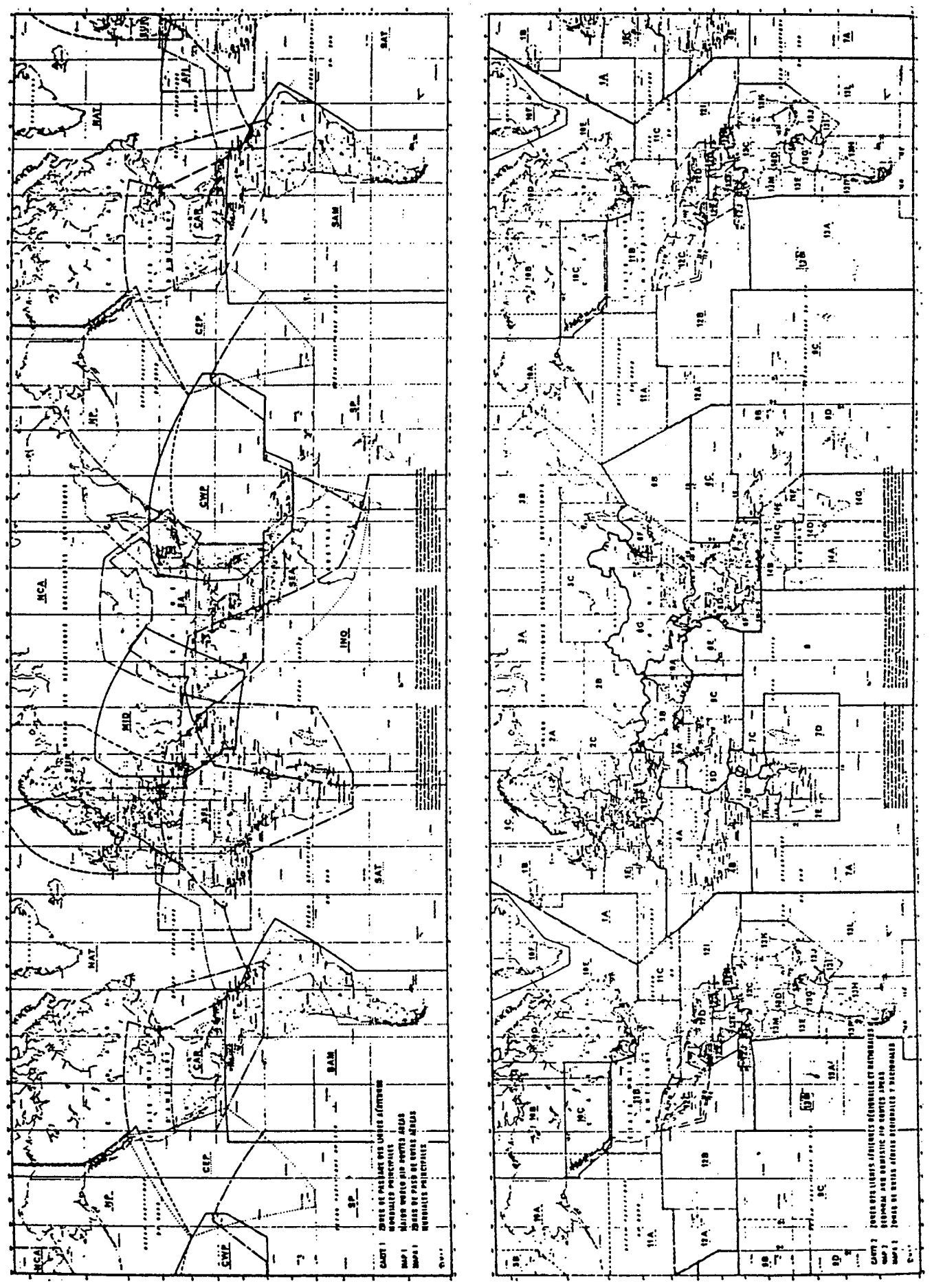


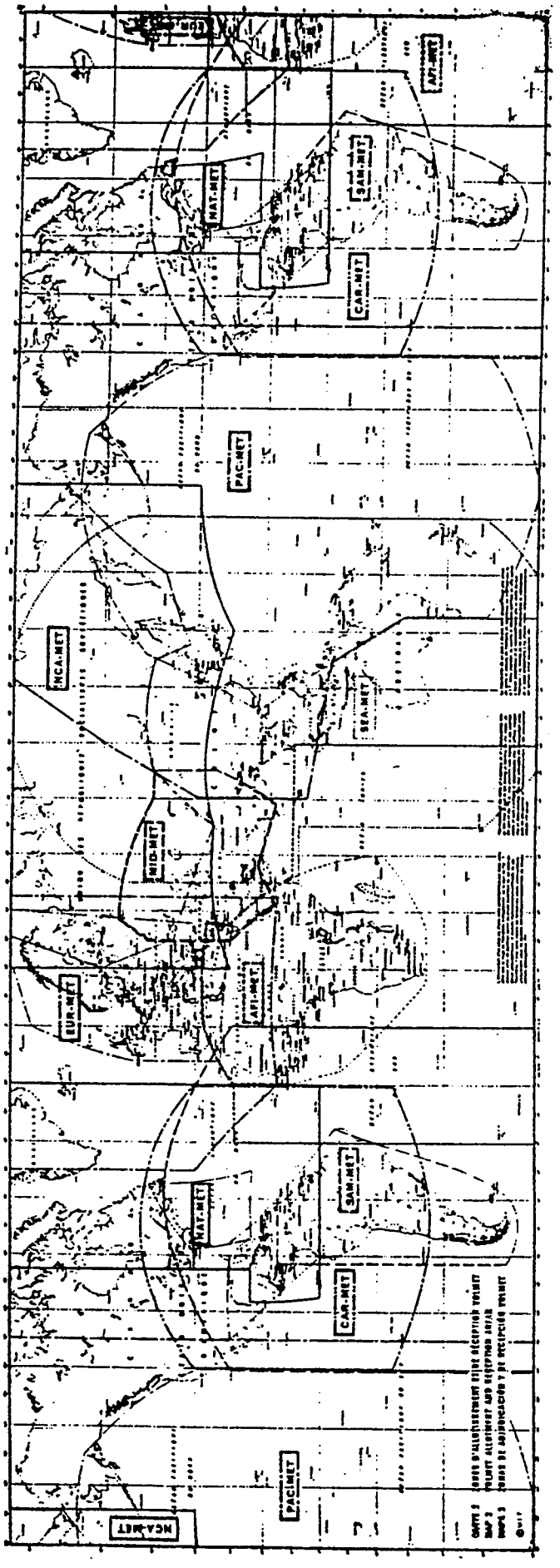


ZONES MONDIALES D'ALLOTISSEMENT
(A utiliser avec la carte 5)
WORKD-WIDE ALLOTMENT AREAS
(To be used witt map 5)
ZONAS DE ADJUDICACIÓN MUNDIAL
(A utilisar con el mapa 5)



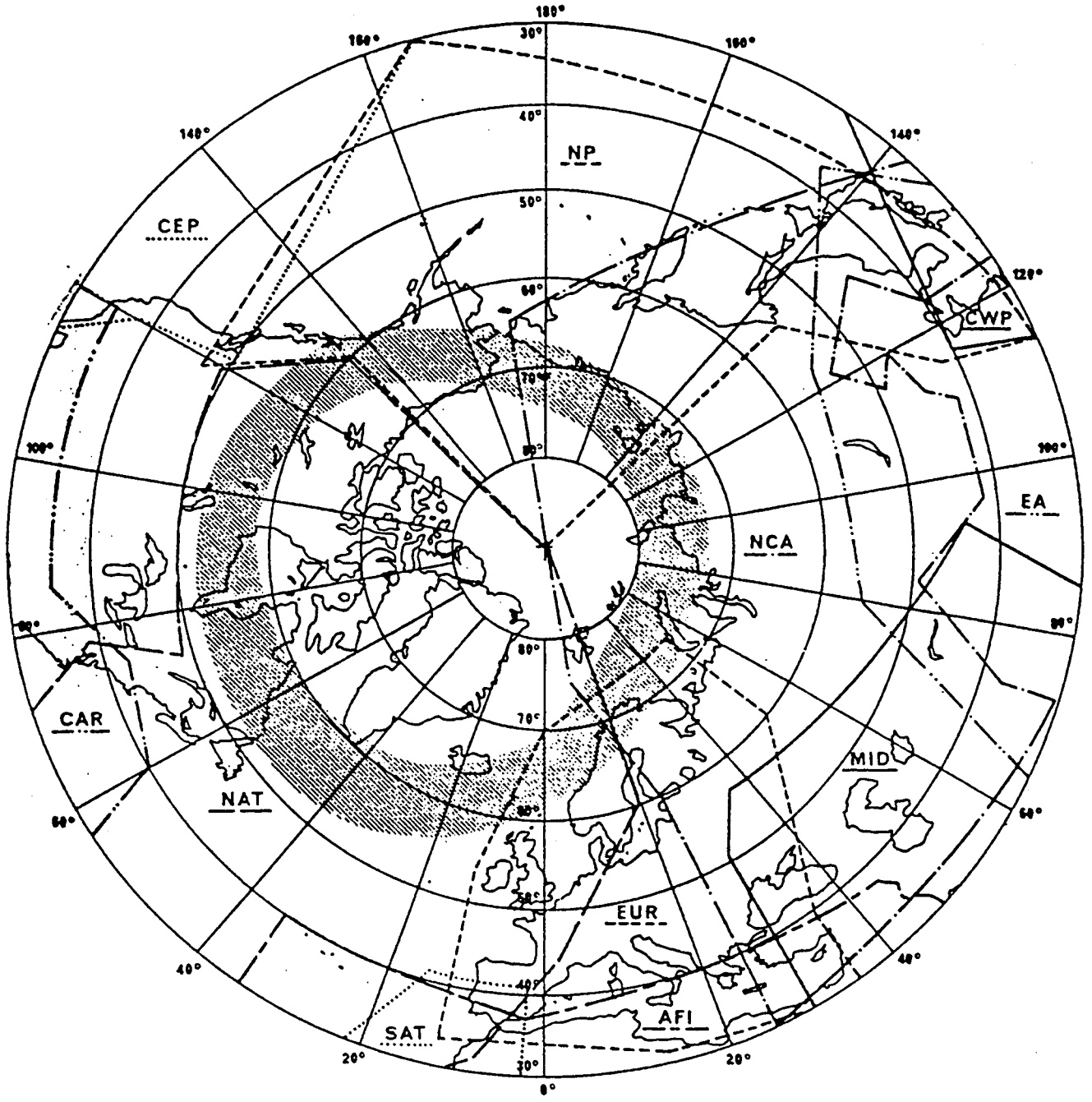
ZONES MONDIALES D'ALLOTISSEMENT
(A utiliser avec la carte 7)
WORKD-WIDE ALLOTMENT AREAS
(To be used witt map 7)
ZONAS DE ADJUDICACIÓN MUNDIAL
(A utilisar con el mapa 7)




AFI-NET
NAT-NET
SAM-NET
CAR-NET
PAC-NET
NCA-NET
SEA-NET
MID-NET
EUR-NET
AFI-NET
NAT-NET
SAM-NET
CAR-NET
PAC-NET
NCA-NET

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 4 ZONES DE PASSAGE DES LIGNES AÉRIENNES MONDIALES PRINCIPALES

MAP 4 *MAJOR WORLD AIR ROUTE AREAS*

MAPA 4 ZONAS DE PASO DE RUTAS AÉREAS MUNDIALES PRINCIPALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

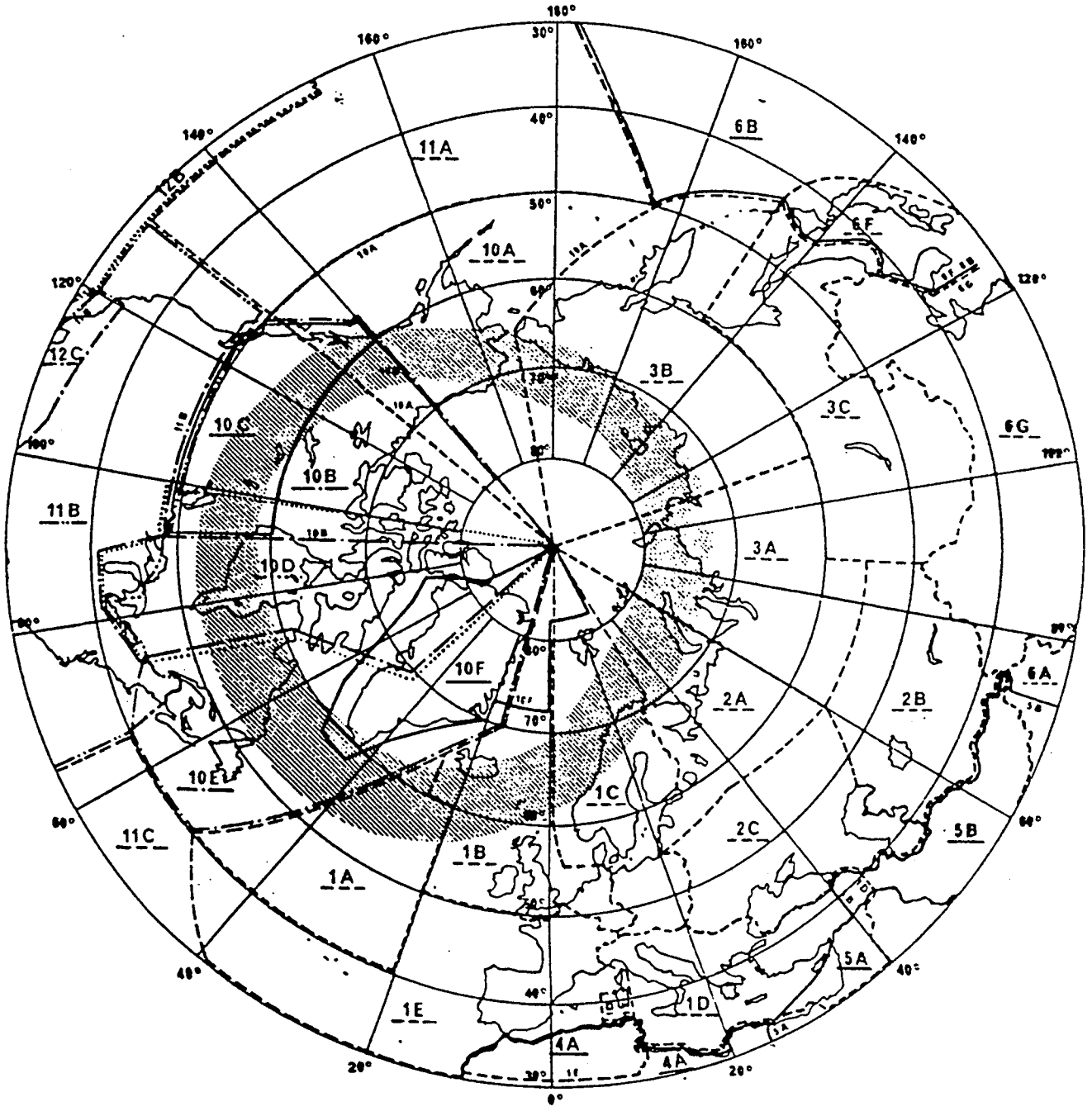
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los límites de las zonas aeronáuticas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 5 — ZONES DES LIGNES AÉRIENNES RÉGIONALES ET NATIONALES

MAP 5 — *REGIONAL AND DOMESTIC AIR ROUTE AREAS*

MAPA 5 — ZONAS DE RUTAS AÉREAS REGIONALES Y NACIONALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

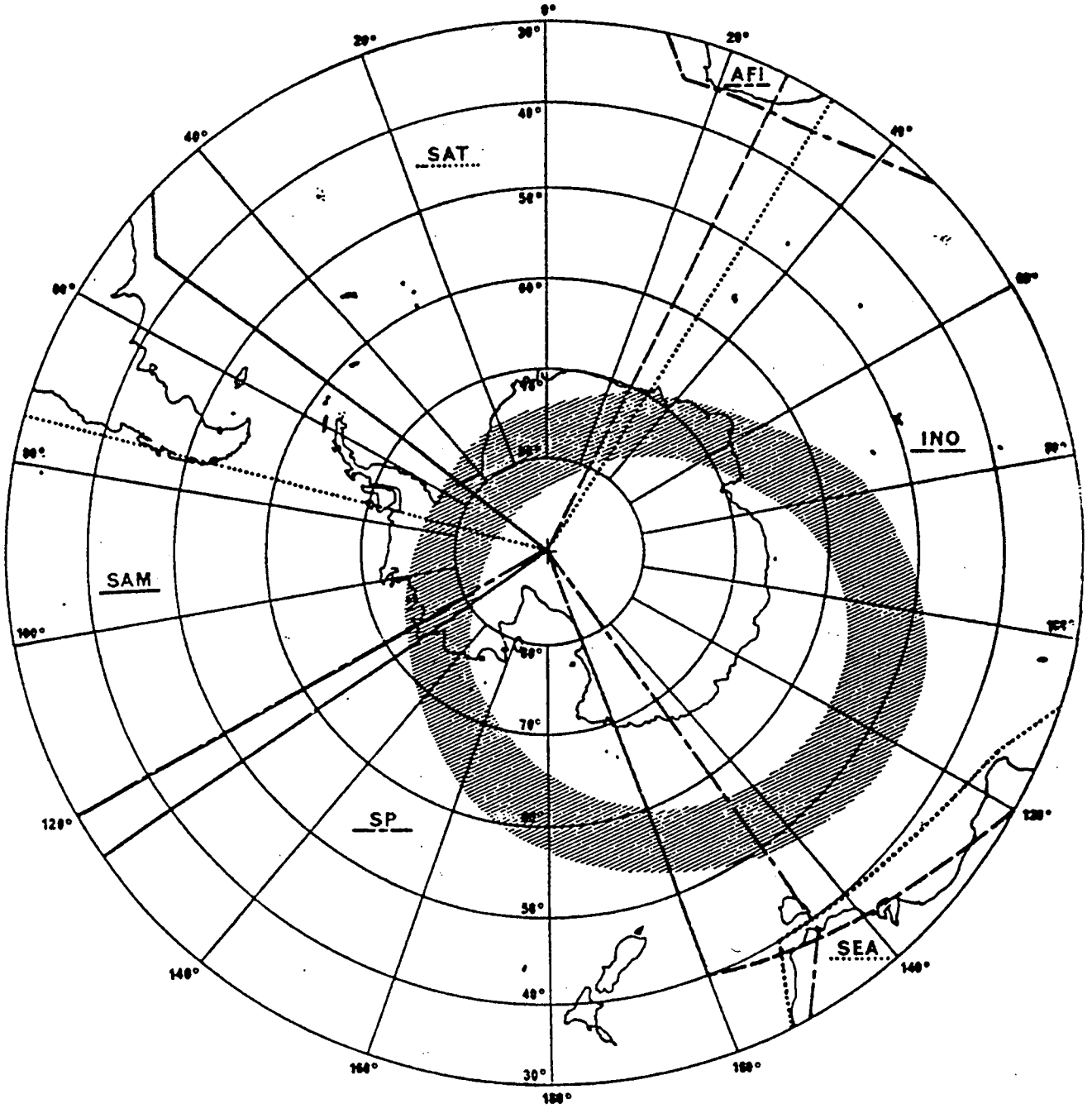
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 6 ZONES DE PASSAGE DES LIGNES AÉRIENNES MUNDIALS PRINCIPALES

MAP 6 *MAJOR WORLD AIR ROUTE AREAS*

MAPA 6 ZONAS DE PASO DE RUTAS AÉREAS MUNDIALES PRINCIPALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

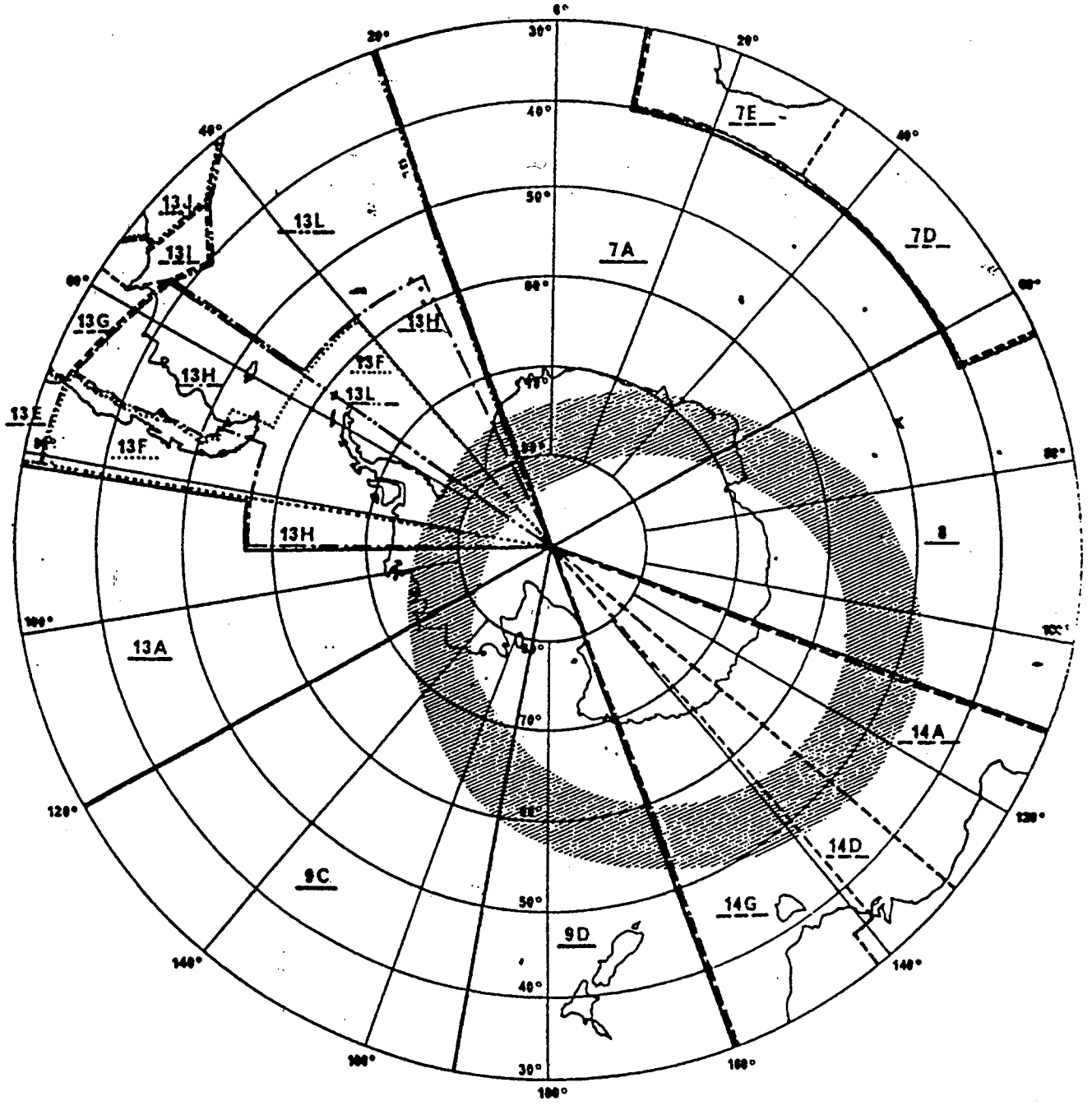
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 7 — ZONES DE LIGNES AÉRIENNES RÉGIONALES ET NATIONALES

MAP 7 — REGIONAL AND DOMESTIC AIR ROUTE AREAS

MAPA 7 — ZONAS DE RUTAS AÉREAS RÉGIONALES Y NACIONALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

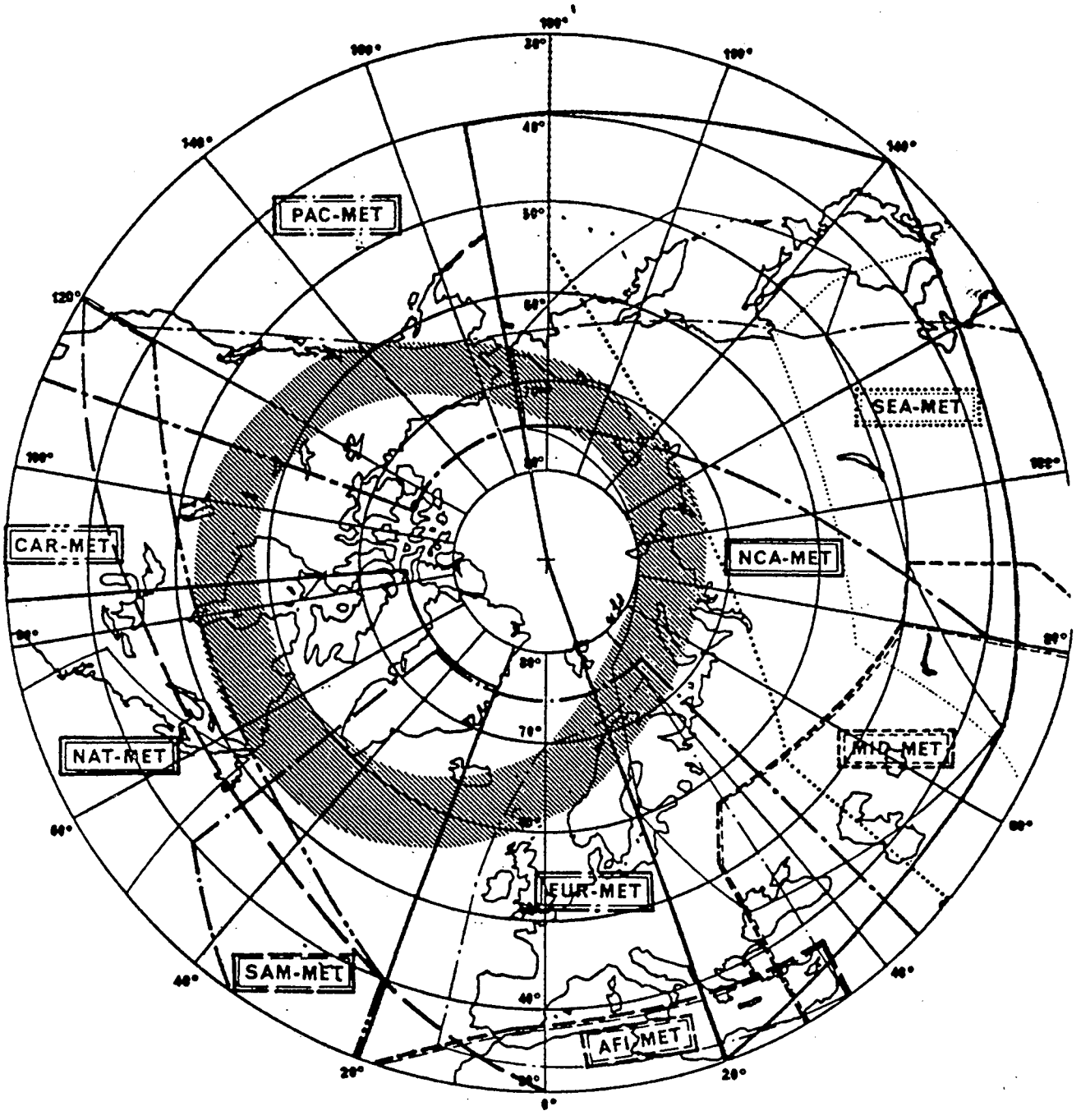
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 8 ZONES D'ALLOTISSEMENT ET DE RÉCEPTION VOLMET

MAP 8 VOLMET ALLOTMENT AND RECEPTION AREAS

MAPA 8 ZONAS DE ADJUDICACIÓN Y DE RECEPCIÓN VOLMET

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°

Escala válida para latitudes > 60°

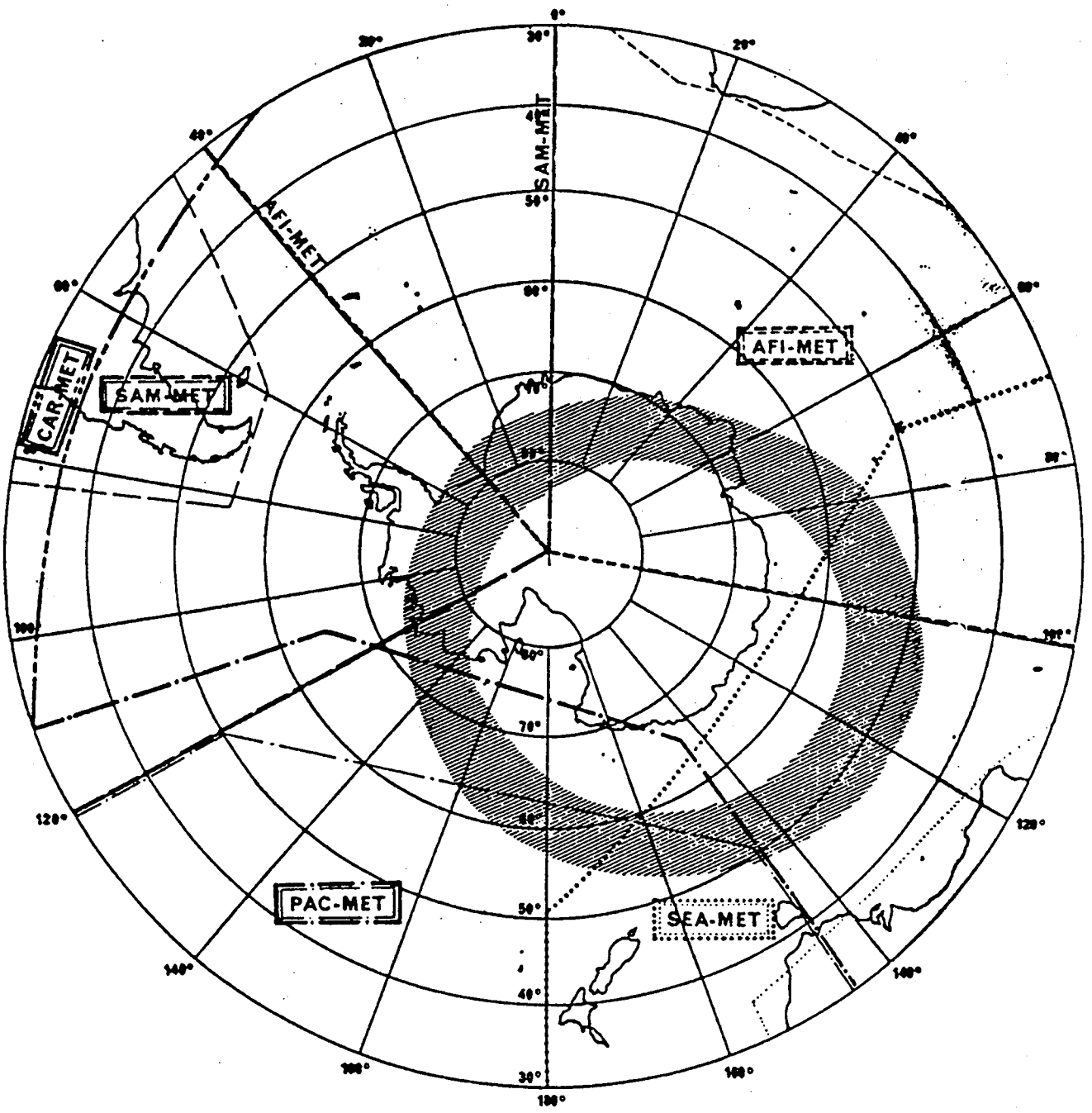
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 9 ZONES D'ALLOTISSEMENT ET DE RÉCEPTION VOLMET

MAP 9 VOLMET ALLOTMENT AND RECEPTION AREAS

MAPA 9 ZONAS DE ADJUDICACIÓN Y DE RECEPCIÓN VOLMET

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°

Escala válida para latitudes > 60°

0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

ÍNDICE

Preâmbulo.

PARTE A

Capítulo I — Terminologia:

Artigo 1 — Termos e definições.
Introdução:

Secção I — Termos gerais.
Secção II — Termos específicos ligados à gestão das frequências.
Secção III — Serviços radioeléctricos.
Secção IV — Estações e sistemas radioeléctricos.
Secção V — Termos relativos à exploração.
Secção VI — Características das emissões e dos materiais.
Secção VII — Partilha das frequências.
Secção VIII — Termos técnicos relativos ao espaço.

Artigo 2 — Nomenclatura das faixas de frequências e dos comprimentos de onda empregados em radiocomunicações.
Artigo 3 — Nomenclatura das datas e das horas empregadas em radiocomunicações.
Artigo 4 — Designação das emissões:

Secção I — Largura de faixa necessária.
Secção II — Classes.

Capítulo II:

Artigo 5 — Características técnicas das estações.

Capítulo III — Frequências:

Artigo 6 — Regras gerais de consignação e emprego das frequências.
Artigo 7 — Acordos especiais.
Artigo 8 — Atribuição das faixas de frequências.
Introdução:

Secção I — Regiões e zonas.
Secção II — Categorias de serviços e de atribuições.
Secção III — Disposição do quadro de atribuição das faixas de frequências.
Secção IV — Quadro de atribuição das faixas de frequências.

Artigo 9 — Disposições especiais relativas à consignação e ao emprego das frequências.

Capítulo IV — Coordenação, notificação e registo de frequências. Comissão Internacional do Registo de Frequência:

Artigo 10 — Comissão Internacional do Registo de Frequências:

Secção I — Funções da Comissão.
Secção II — Métodos de trabalho da Comissão.

Artigo 11 — Coordenação das consignações de frequência às estações de um serviço de radiocomunicação espacial, com excepção das estações do serviço de radiodifusão por satélite e às estações de Terra apropriadas:

Secção I — Procedimento para a publicação antecipada de informações relativas às redes de satélite em projecto.
Secção II — Coordenação das consignações de frequência a uma estação espacial a bordo de um satélite geostacionário ou a uma estação terrena que comunique com tal estação espacial, em relação às estações que pertencem a outras redes de satélite geostacionário.
Secção III — Coordenação das consignações de frequência a uma estação terrena, em relação às estações de terra.
Secção IV — Coordenação das consignações de frequência a uma estação de Terra emissora, em relação a uma estação terrena.
Secção V — Assistência especial dispensada pela IFRB.

Artigo 12 — Notificação e inscrição no Ficheiro de Referência Internacional das Frequências das consignações de frequência às estações de radiocomunicação de Terra:

Secção I — Notificação das consignações de frequência.
Secção II — Procedimento para o exame das fichas de notificação e inscrição das consignações de frequência no ficheiro de referência:

Subsecção II-A — Procedimento a seguir nos casos não tratados nas subsecções II-B a II-E do presente artigo.
Subsecção II-B — Procedimento a seguir pelas estações costeiras radiofónicas que funcionam nas faixas atribuídas em exclusivo ao serviço móvel marítimo entre 4000 kHz e 23 000 kHz.
Subsecção II-C — Procedimento a seguir pelas estações aeronáuticas que funciona nas faixas atribuídas em exclusivo aos serviços móveis aeronáuticos entre 2850 kHz e 22 000 kHz.
Subsecção II-D — Procedimento a seguir pelas estações de radiodifusão que funcionam nas faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz.
Subsecção II-E — Procedimento a seguir nos casos em que estações de Terra funcionam na mesma faixa de frequências de uma estação terrena e se situam na zona de coordenação desta estação, quer se trate de uma estação terrena existente quer de uma estação terrena para a qual foi efectuada ou iniciada a coordenação.

Secção III — Inscrição de datas e das conclusões no ficheiro de referência.
Secção IV — Categoria das consignações de frequência.
Secção V — Reexame das conclusões.
Secção VI — Actualização do ficheiro de referência.
Secção VII — Estudos e recomendações.
Secção VIII — Disposições diversas.

Artigo 13 — Notificação e inscrição no Ficheiro de Referência Internacional das Frequências das consignações de frequência às estações de radioastronomia e às estações de radiocomunicação espacial, com excepção das estações do serviço de radiodifusão por satélite:

Secção I — Notificação das consignações de frequência.
Secção II — Procedimento para o exame das fichas de notificação e inscrição das consignações de frequência no ficheiro de referência.
Secção III — Inscrição das conclusões no ficheiro de referência.
Secção IV — Categorias de consignações de frequência.
Secção V — Reexame das conclusões.
Secção VI — Modificação, anulação e revisão das inscrições do ficheiro de referência.
Secção VII — Estudos e recomendações.
Secção VIII — Disposições diversas.

Artigo 14 — Procedimento suplementar a aplicar nos casos em que uma nota ao quadro de atribuição das faixas de frequência exija um acordo com uma administração.
Artigo 15 — Coordenação, notificação e inscrição de consignações de frequência às estações do serviço de radiodifusão por satélite nas faixas de frequências de 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região 1) e aos outros serviços a que estas faixas estão atribuídas, na medida em que esteja implicada a relação destes com o serviço de radiodifusão por satélite nestas faixas.
Artigo 16 — Procedimento para actualização do plano de adjudicação de frequências às estações costeiras radiotelefónicas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 kHz e 23 000 kHz.
Artigo 17 — Procedimento relativo às faixas atribuídas em exclusivo ao serviço de radiodifusão entre 5950 kHz e 26 100 kHz:

Secção I — Apresentação dos horários periódicos de radiodifusão em ondas decamétricas.
Secção II — Exame preliminar e elaboração do horário provisório de radiodifusão em ondas decamétricas.
Secção III — Exame técnico e revisão do horário provisório.
Secção IV — Publicação do horário de radiodifusão em ondas decamétricas.
Secção V — Lista anual das frequências de radiodifusão em ondas decamétricas.
Secção VI — Disposições diversas.

Capítulo V — Medidas contra as interferências. Ensaios:

Artigo 18 — Interferências:

Secção I — Interferências.
Secção II — Interferências causadas por aparelhos e instalações eléctricas de qualquer espécie, com excepção dos aparelhos destinados às utilizações industriais, científicas e médicas.
Secção III — Interferências causadas pelos aparelhos destinados às utilizações industriais, científicas e médicas.
Secção IV — Casos especiais de interferência.

Artigo 19 — Ensaios.
Artigo 20 — Fiscalização internacional das emissões.
Artigo 21 — Relatórios sobre infracções.
Artigo 22 — Procedimento contra as interferências prejudiciais.

Capítulo VI — Disposições administrativas relativas às estações:

Artigo 23 — Sigilo.
Artigo 24 — Licenças.
Artigo 25 — Identificação das estações:

Secção I — Disposições gerais.
Secção II — Atribuição das séries internacionais e consignação dos indicativos de chamada.
Secção III — Formação dos indicativos de chamada.
Secção IV — Identificação das estações que utilizam a radiotelefonia.
Secção V — Números de chamada selectiva no serviço móvel marítimo.
Secção VI — Identidades do serviço móvel marítimo no serviço móvel marítimo e no serviço móvel marítimo por satélite.
Secção VII — Disposições especiais.

Capítulo VII:

Artigo 26 — Documentos de serviço:

Secção I — Títulos, conteúdo e publicação dos documentos de serviço.
Secção II — Preparação e modificação dos documentos de serviço.

Capítulo VIII — Disposições relativas a grupos de serviços, assim como a estações e a serviços particulares:

Artigo 27 — Serviços de radiocomunicação de Terra que partilham faixas de frequências com os serviços de radiocomunicação espacial de 1 GHz:

Secção I — Escolha das localizações e das frequências.
Secção II — Limites de potência.

Artigo 28 — Serviços de radiocomunicação espacial que partilham faixas de frequências com os serviços de radiocomunicação de Terra acima de 1 GHz:

Secção I — Escolha das localizações e das frequências.
Secção II — Limites de potência.
Secção III — Ângulo mínimo de elevação.
Secção IV — Limites da densidade de fluxo de potência produzida pelas estações espaciais.

Artigo 29 — Disposições especiais relativas aos serviços de radiocomunicação espacial:

Secção I — Cessação das emissões.
Secção II — Medidas contra as interferências causadas aos sistemas de satélites geostacionários.
Secção III — Manutenção em posição das estações espaciais.
Secção IV — Precisão da orientação das antenas dos satélites geostacionários.
Secção V — Densidade de fluxo de potência na órbita dos satélites geostacionários.
Secção VI — Radioastrononia na zona tranquila da Lua.
Secção VII — Limitações da potência das estações terrenas fora do eixo do feixe principal.

Artigo 30 — Serviço de radiodifusão e serviço de radiodifusão por satélite:

Secção I — Serviço de radiodifusão.
Secção II — Serviço de radiodifusão por satélite.

Artigo 31 — Serviço fixo:

Secção I — Generalidades.
Secção II — Frequências para a permuta internacional de informações da polícia.
Secção III — Frequências para a permuta internacional de informações meteorológicas sinópticas.

Artigo 32 — Serviço de amador e serviço de amador por satélite:

Secção I — Serviço de amador.
Secção II — Serviço de amador por satélite.

Artigo 33 — Serviço de frequências padrão e de sinais horários.
Artigo 34 — Estações experimentais.
Artigo 35 — Serviço de radiodeterminação e serviço de radiodeterminação por satélite:

Secção I — Disposições gerais.
Secção II — Disposições relativas ao serviço de radiodeterminação por satélite.
Secção III — Estações radiogoniométricas.
Secção IV — Estações de radiofarol.

Artigo 36 — Serviço de radioastronomia:

Secção I — Disposições gerais.
Secção II — Medidas a tomar no serviço de radioastronomia.
Secção III — Protecção do serviço de radioastronomia.

Capítulo IX — Comunicações de perigo e de segurança:

Artigo 37 — Disposições gerais.
Artigo 38 — Frequências para o perigo e a segurança:

Secção I — Frequências disponíveis.
Secção II — Protecção das frequências de perigo.
Secção III — Vigília nas frequências de perigo.

Artigo 39 — Comunicações de perigo:

Secção I — Generalidades.
Secção II — Sinal de perigo.
Secção III — Chamada de perigo.
Secção IV — Mensagens de perigo.
Secção V — Procedimentos.
Secção VI — Entendido de uma mensagem de perigo.
Secção VII — Tráfego de perigo.
Secção VIII — Transmissão de uma mensagem de perigo por uma estação que não se encontra em perigo.

Artigo 40 — Transmissões de urgência e de segurança e transportes sanitários:

Secção I — Sinal e mensagens de urgência.
Secção II — Transportes sanitários.
Secção III — Sinal e mensagens de segurança.

Artigo 41 — Sinais de alarme e de prevenção:

Secção I — Sinais de radiobalizas de localização de sinistros.
Secção II — Sinais de alarme radiotelegráfico e radiotelefónico.
Secção III — Chamada selectiva a todos os navios.
Secção IV — Sinal de aviso à navegação.

Artigo 42 — Serviços especiais relativos à segurança:

Secção I — Mensagens meteorológicas.
Secção II — Avisos à navegação marítima.
Secção III — Pareceres médicos.

Capítulo X — Serviço móvel aeronáutico:

Artigo 43 — Autoridade da pessoa responsável pelas estações móveis no serviço móvel aeronáutico.
Artigo 44 — Certificados dos operadores das estações de aeronave:

Secção I — Disposições gerais.
Secção II — Classes e categorias de certificados.
Secção III — Condições de obtenção de certificados de operador.

Artigo 45 — Pessoal das estações aeronáuticas.
Artigo 46 — Inspecção das estações de aeronave.
Artigo 47 — Horários das estações do serviço móvel aeronáutico:

Secção I — Generalidades.
Secção II — Estações aeronáuticas.
Secção III — Estações de aeronave.

Artigo 48 — Condições de funcionamento do serviço móvel aeronáutico:

Secção I — Generalidades.
Secção II — Comunicações com estações do serviço móvel marítimo e do serviço móvel marítimo por satélite.

Artigo 49 — Condições a que devem satisfazer as estações móveis do serviço móvel aeronáutico.
Artigo 50 — Disposições especiais relativas à utilização das frequências no serviço móvel aeronáutico.
Artigo 51 — Ordem de prioridade das comunicações no serviço móvel aeronáutico.
Artigo 52 — Procedimento geral radiotelegráfico no serviço móvel aeronáutico:

Secção I — Disposições gerais.
Secção II — Chamadas.
Secção III — Operações preliminares.
Secção IV — Fórmula da chamada, resposta à chamada e sinais preparatórios do tráfego.
Secção V — Escoamento do tráfego.
Secção VI — Fim do tráfego e do trabalho.
Secção VII — Orientação do trabalho.
Secção VIII — Ensaios.

Artigo 53 — Procedimento radiotelefónico no serviço móvel aeronaútico — Chamadas.

Capítulo XI — Serviço móvel marítimo e móvel marítimo por satélite:

Artigo 54 — Autoridade do comandante.
Artigo 55 — Certificados dos operadores das estações de navio e das estações terrenas de navio:

Secção I — Disposições gerais.
Secção II — Categorias de certificados para os operadores de estações de navio.
Secção III — Condições de obtenção de certificados de operador.
Secção IV — Estágios profissionais.

Artigo 56 — Pessoal das estações do serviço móvel marítimo:

Secção I — Pessoal das estações costeiras.
Secção II — Classe e número mínimo de operadores nas estações a bordo de navios.

Artigo 57 — Inspecção das estações de navio e das estações terrenas de navio.
Artigo 58 — Horário das estações do serviço móvel marítimo:

Secção I — Generalidades.
Secção II — Estações costeiras.
Secção III — Estações de navio.

Artigo 59 — Condições a satisfazer no serviço móvel marítimo e no serviço móvel marítimo por satélite:

Secção I — Serviço móvel marítimo.
Secção II — Condições a satisfazer pelas estações terrenas de navio.
Secção III — Comunicações de aeronaves com estações do serviço móvel marítimo e do serviço móvel marítimo por satélite.

Artigo 60 — Disposições especiais relativas à utilização das frequências no serviço móvel marítimo.

Secção I — Disposições gerais.
Secção II — Emprego das frequências em radiotelegrafia.
Secção III — Utilização das frequências em telegrafia de faixa estreita com impressão directa.
Secção IV — Utilização das frequências em radiotelefonia.

Artigo 61 — Ordem de prioridade das comunicações no serviço móvel marítimo e no serviço móvel marítimo por satélite.
Artigo 62 — Procedimento relativo à chamada selectiva no serviço móvel marítimo:

Secção I — Generalidades.

Secção II — Sistema sequencial a uma frequência.
Secção III — Sistema de chamada selectiva numérica.

Artigo 63 — Procedimento geral radiotelegráfico no serviço marítimo:

Secção I — Disposições gerais.
Secção II — Operações preliminares
Secção III — Chamadas em radiotelegrafia.
Secção IV — Método de chamada, resposta à chamada e sinais preparatórios do tráfego.
Secção V — Escoamento do tráfego.
Secção VI — Fim do tráfego e do trabalho.
Secção VII — Direcção do trabalho.
Secção VIII — Ensaios.

Artigo 64 — Procedimentos gerais aplicáveis à telegrafia com impressão directa de faixa estreita no serviço móvel marítimo:

Secção I — Generalidades.
Secção II — Procedimentos aplicáveis à exploração manual.
Secção III — Procedimentos aplicáveis à exploração automática.
Secção IV — Forma das mensagens.
Secção V — Procedimentos aplicáveis à exploração com «correcção de erros sem circuito de retorno».

Artigo 65 — Procedimento geral radiotelefónico no serviço móvel marítimo:

Secção I — Disposições gerais.
Secção II — Operações preliminares.
Secção III — Chamadas em radiotelefonia.
Secção IV — Método de chamada, resposta à chamada e sinais prepatórios do tráfego.
Secção V — Escoamento do tráfego.
Secção VI — Duração e orientação do trabalho.
Secção VIII — Ensaios.

Artigo 66 — Correspondência pública no serviço móvel marítimo e no serviço móvel marítimo por satélite:

Secção I — Generalidades.
Secção II — Autoridade responsável pela contabilidade.
Secção III — Contabilidade.
Secção IV — Pagamento dos saldos.
Secção V — Arquivos.

Capítulo XII — Serviço móvel terrestere.

Artigo 67 — Condições a que devem satisfazer as estações móveis do serviço móvel terrestre.
Artigo 68 — Procedimentos gerais aplicáveis à radiotelefonia no serviço móvel terrestre — Chamadas.

Capítulo XIII:

Artigo 69 — Entrada em vigor do Regulamento das Radiocomunicações.

APÊNDICES

1 — (V. o artigo 12):

Secção A — Características fundamentais a fornecer no caso de uma notificação nos termos dos n.os **1214** a **1217** do Regulamento das Radiocomunicações.
Secção B — Características fundamentais a fornecer no caso de uma notificação nos termos do n.º **1219** do Regulamento das Radiocomunicações.
Secção C — Características fundamentais a fornecer no caso de uma notificação nos termos do n.os **1223** a **1227** do Regulamento das Radiocomunicações.
Secção D — Informações a comunicar para qualquer notificação nos termos do n.º **1218** do Regulamento das Radiocomunicações.
Secção E — Modelo de ficha de notificação.
Secção F — Instruções gerais.

2 — (V. o artigo 17).
3 — Fichas de notificação relativas às estações de radiocomunicação espacial e de radioastronomia:

Secção A — Instruções gerais.
Secção B — Características fundamentais a fornecer no caso da notificação de uma frequência de emissão de uma estação terrena.
Secção C — Características fundamentais a fornecer no caso da notificação de uma frequência de recepção de uma estação terrena.
Secção D — Características fundamentais a fornecer no caso da notificação de uma frequência de emissão de estações espaciais.
Secção E — Características fundamentais a fornecer no caso da notificação de uma frequência de recepção de estações espaciais.
Secção F — Características fundamentais a fornecer no caso da notificação de uma frequência de recepção de estações de radioastronomia.
Secção G — Modelos de ficha de notificação (estação terrena).
Secção H — Modelos de ficha de notificação (estação espacial).

4 — Informações a fornecer para a publicação antecipada relativa a uma rede de satélite:

Secção A — Instruções gerais.
Secção B — Características gerais a fornecer para uma rede de satélite.
Secção C — Características da rede de satélite para o sentido «Terra para espaço».

Secção D — Características da rede de satélite no sentido «espaço para Terra».
Secção E — Características a fornecer para as ligações espaço-espaço.
Secção F — Informações suplementares (se disponíveis).

5 — Informações a fornecer em conformidade com as disposições dos n.os **1682** a **1684**.
6 — Características adicionais para a classificação das emissões. Determinação das larguras de faixa necessárias, exemplos de cálculo da largura de faixa necessária e exemplos conexos de designações das emissões.
7 — Quadro das tolerâncias de frequência dos emissores.
8 — Quadro dos níveis de potência máximos tolerados das radiações não essenciais.
9 — Documentos de serviço.
10 — Notações utilizadas nos documentos de serviço.
11 — Documentos de que devem estar providas as estações de navio e as estações de aeronave.
12 — Horas de serviço das estações de navio classificadas na 2.ª ou na 3.ª categoria.
13 — Abreviaturas e sinais diversos a empregar nas comunicações radiotelegráficas, com excepção das do serviço móvel marítimo.
14 — Abreviaturas e sinais diversos a utilizar nas radiocomunicações do serviço móvel marítimo.
15 — Código SINPO e SINPFEMO.
16 — Vias radiotelefónicas, nas faixas do serviço móvel compreendidas entre 4000 kHz e 23 000 kHz.
17 — Características técnicas dos emissores de faixa lateral única utilizados no serviço móvel marítimo para a radiotelefonia nas faixas compreendidas entre 1606,5 kHz (1605 kHz Região 2) e 4000 kHz e 23 000 kHz.
18 — Quadro das frequências de emissão para as estações do serviço móvel marítimo na faixa de 156-174 MHz.
19 — Características técnicas dos emissores e dos receptores utilizados no serviço móvel marítimo na faixa de 156-174 MHz.
20 — Características dos aparelhos utilizados para as comunicações de bordo nas faixas de frequências compreendidas entre 450 e 470 MHz.
21 — Relatórios sobre as observações de fiscalização internacional das emissões.
22 — Relatório sobre uma irregularidade ou uma infracção à Convenção ou ao Regulamento das Radiocomunicações.
23 — Relatório de interferência prejudicial.
24 — Quadro de soletração das letras e dos algarismos.
25 Mar2 — Plano de adjudicação de frequências às estações costeiras radiotelefónicas que funcionam nas faixas exclusivas do serviço móvel marítimo entre 4000 kHz e 23 000 kHz.
26 — Plano de adjudicação de frequências para o serviço móvel aeronáutico e informações correspondentes.
27 — Plano de adjudicação de frequências para o serviço móvel aeronáutico (R) e informações correspondentes entre 2850 kHz e 17 970 kHz.
27 Aer2 — Plano de adjudicação de frequências para o serviço móvel aeronáutico (R) e informações correspondentes entre 2850 kHz e 22 000 kHz.
28 — Método de determinação da zona de coordenação de uma estação terrena nas faixas de frequências compreendidas entre 1 GHz e 40 GHz partilhadas entre serviços de radiocomunicação espacial e de radiocomunicação de Terra.
29 — Método de cálculo para determinar se é necessária coordenação entre redes de satélite geostacionário que partilham as mesmas faixas de frequências.
30 — Disposições aplicáveis a todos os serviços e plano associado relativo ao serviço de radiodifusão por satélite nas faixas de frequências de 11,7-12,2 GHz (nas Regiões 2 e 3) e 11,7-12,5 GHz (na Região).
31 — Quadro das frequências a utilizar nas faixas atribuídas exclusivamente ao serviço móvel marítimo entre 4MHz e 27,5 MHz.
32 — Disposição das vias a utilizar pelos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados nas faixas do serviço móvel marítimo compreendidas entre 4000 kHz e 23 000 kHz (frequências emparelhadas).
33 — Disposição das vias a utilizar pelos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados nas faixas do serviço móvel marítimo compreendidas entre 4000 kHz e 27 500 kHz (frequências não emparelhadas).
34 — Quadro das frequências de chamada a consignar às estações de navio para a telegrafia morse de classe A1A, com velocidades de modulação que não excedam 40 bauds.
35 — Quadro das frequências de trabalho, em kHz, a consignar às estações de navio para a telegrafia morse de classe A1A, com velocidades de modulação que não excedam 40 bauds.
36 — Aparelhos automáticos destinados à recepção dos sinais de alarme radiotelegráfico e radiotelefónico.
37 — Características técnicas das radiobalizas de localização de sinistros que funcionam na frequência portadora de 2182 kHz.
38 — Aparelhos de faixa estreita de telegrafia com impressão directa.
39 — Sistema de chamadas selectiva a utilizar no serviço móvel marítimo internacional.
40 — Sistemas de compressores e de expansores acoplados.
41 — Procedimento para obtenção dos azimutes radiogoniométricos e das posições.
42 — Quadro de atribuição das séries internacionais de indicativos de chamada.
43 — Identidades no serviço móvel marítimo.
44 — Números de chamada selectiva das estações de navio e números das estações costeiras.

PROTOCOLO FINAL (os algarismos entre parênteses indicam a ordem por que estão dispostas as declarações no Protocolo final):

Afeganistão (República Democrática do) (11).
Alto Volta (República do) (67).
Alemanha (República Federal da) (32, 35 e 75).
Angola (República Popular de) (44).
Arábia Saudita (Reino da) (4, 36 e 74).
Argélia (República Argelina Democrática e Popular) (4 e 74).
Argentina (República da) (45).
Austrália (75).
Áustria (33, 43 e 75).
Bahrein (Estado de) (4 e 74).
Bangladesh (República Popular do) (4).
Bélgica (5, 32, 73 e 75).
Benin (República Popular de) (6).
Bielorrússia (República Socialista Soviética da) (34).
Brasil (República Federativa do) (29).
Camarões (República Unida dos) (61).
Canadá (19 e 75).
Centro Africana (República) (56).
Chade (República do) (3).
Chile (7 e 21).

China (República Popular da) (20).
Chipre (República de) (36).
Cidade do Vaticano (Estado da) (27).
Colômbia (República da) (40, 41 e 79).
Congo (República Popular do) (40, 53 e 79).
Coreia (República da) (37).
Costa do Marfim (República da) (24).
Costa Rica (65).
Cuba (8, 9 e 83).
Dinamarca (32, 33 e 75).
Emiratos Árabes Unidos (4 e 74).
Equador (40, 66 e 79).
Espanha (33 e 66).
Estados Unidos da América (32, 36, 38, 39, 72 e 75).
Filipinas (República das) (64).
Finlândia (33 e 75).
França (28, 33, 73 e 75).
Gabonesa (República) (40 e 79).
Ghana (57).
Grécia (14, 32, 36 e 75).
Guatemala (República da) (2).
Guiné (República Popular Revolucionária da) (54).
Honduras (República das) (1).
Iémene (República Democrática Popular do) (4, 46 e 74).
Índia (República da) (22).
Indonésia (República da) (42).
Irão (República Islâmica do) (4, 10, 25 e 70).
Iraque (República do) (4, 47 e 74).
Irlanda (48 e 75).
Islândia (32).
Israel (Estado de) (30).
Itália (27, 32 e 75).
Japão (16, 75 e 81).
Jordânia (Reino Hachemita da) (4, 68 e 74).
Jugoslávia (República Socialista Federativa da) (14).
Koweit (Estado do) (4 e 74).
Líbano (4, 68 e 74).
Libéria (República da) (59).
Líbia (Jamahiriya Árabe Líbia Popular Socialista) (4 e 74).
Listenstaina (Principado de) (28, 33 e 75).
Luxemburgo (32, 73 e 75).
Mali (República do) (71).
Marrocos (Reino de) (4 e 74).
Maurícia (62).
Maurítania (República Islâmica da) (12).
México (23).
Moçambique (República Popular de) (50).
Níger (República do) (52).
Nigéria (República Federal da) (17).
Noruega (32, 33 e 75).
Nova Zelândia (75).
Oman (Sultanato de) (4 e 74).
Papuásia-Nova Guiné (75 e 80).
Países Baixos (Reino dos) (32, 73 e 75).
Paquistão (República Islâmica do) (4 e 13).
Portugal (27, 32, 33 e 75).
Qatar (Estado de) (4 e 74).
Quénia (República do) (40, 69 e 79).
Reino Unido da Grã-Bretanha e Irlanda do Norte (32, 36, 48, 75, 76, 77 e 78).
República Árabe Síria (4, 47, 68 e 74).
República Socialista Soviética da Ucrânia (34).
Roménia (República Socialista da) (58).
Singapura (República de) (63).
Somália (República Democrática da) (4, 40, 74, 79 e 82).
Sri Lanka (República Socialista Democrática de) (36 e 55).
Sudão (República Democrática do) (4 e 74).
Suécia (33 e 75).
Suíça (Confederação) (28, 33, 73 e 75).
Tailândia (60).
Tanzânia (República Unida da) (49).
Tunísia (4).
Turquia (27, 31 e 32).
Uganda (República da) (40 e 79).
União das Repúblicas Socialistas Soviéticas (34).
Uruguai (República Oriental do) (15).
Venezuela (República da) (26).
Zaire (República do) (18, 40 e 79).
Zâmbia (República da) (36 e 51).

RESOLUÇÕES (*)

N.º 1 — Notificação das consignações de frequências.
N.º 2 — Utilização equitativa por todos os países, com igualdade de direitos, da órbita dos satélites geostacionários e das faixas de frequência atribuídas aos serviços de radiocomunicação espacial.
N.º 3 — Utilização da órbita dos satélites geostacionários e planificação dos serviços espaciais que utilizam essa órbita.
N.º 4 — Prazo de validade das consignações de frequência às estações espaciais que utilizam a órbita dos satélites geostacionários.
N.º 5 — Cooperação técnica com países em desenvolvimento no domínio dos estudos de propagação nas regiões tropicais.
N.º 6 — Preparação de um manual destinado a explicar e ilustar os procedimentos do Regulamento das Radiocomunicações.
N.º 7 — Desenvolvimento de uma gestão nacional das frequências radioeléctricas.
N.º 8 — Aplicação das modificações de atribuições nas faixas compreendidas entre 4000 kHz e 27 500 kHz.
N.º 9 — Revisão de certas partes do Ficheiro de Referência Internacional das Frequências nas faixas de frequências atribuídas ao serviço fixo compreendidas entre 3000 kHz e 27 500 kHz.
N.º 10 — Utilização de ligações radiotelegráficas e radiotelefónicas pelas organizações da Cruz Vermelha, do Crescente Vermelho e do Leão e Sol Vermelho.
N.º 11 — Utilização das radiocomunicações para a segurança dos navios e das aeronaves dos Estados não envolvidos num conflito armado.
N.º 12 — Novas regras de formação dos indicativos de chamada.
N.º 13 — Formação dos indicativos de chamada e atribuição de novas séries internacionais.
N.º 14 — Transferência de tecnologia.
N.º 15 — Cooperação internacional e assistência técnica no domínio das radiocomunicações espaciais.
N.º 16 — Papel das telecomunicações no desenvolvimento rural integrado.
N.º 17 — Determinação da estrutura das comissões que uma conferência administrativa das radiocomunicações possa criar em função da sua agenda.
N.º 30 — Revisão de inscrições do Ficheiro de Referência Internacional das Frequências, a pedido de conferências anteriores.
N.º 31 — Aplicação de certas disposições dos Actos Finais da Conferência Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) para ter em conta as modificações introduzidas pela Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) no quadro de atribuição das faixas de frequências para a Região 2 na faixa 11,7-12,7 GHz.
N.º 32 — Utilização das consignações de frequência às estações de radiocomunicação de Terra e de radiocomunicação espacial nas faixas de 11,7--12,2 GHz na Região 3 e 11,7-12,5 GHz na Região 1.
N.º 33 — Entrada em serviço de estações espaciais do serviço de radiodifusão por satélite antes da entrada em vigor de acordos e de planos associados para o serviço de radiodifusão por satélite.
N.º 34 — Estabelecimento de serviços de radiodifusão por satélite na faixa de 12,5-12,75 GHz (Região 3) e à partilha com os serviços espaciais e de Terra (Regiões 1, 2 e 3).
N.º 35 — Procedimento a seguir para pôr termo a um desacordo acerca das normas técnicas ou das regras de procedimento da Comissão Internacional de Registo de Frequências.
N.º 36 — Estabelecimento, pela Comissão Internacional do Registo de Frequências, de documentação explicativa acerca da aplicação do novo método de designação das emissões nos procedimentos de notificação e à revisão, que daí resulta, do Ficheiro de Referência Internacional das Frequências.
N.º 37 — Introdução e desenvolvimento da utilização das técnicas informáticas para facilitar a gestão do espectro radioeléctrico pelas administrações.
N.º 38 — Reconsignação de frequências às estações dos serviços fixo e móvel que funcionam nas faixas atribuídas aos serviços de radiolocalização e de amador na Região 1.
N.º 60 — Informações sobre a propagação das ondas radioeléctricas utilizadas para determinar a zona de coordenação.
N.º 61 — Divisão do Mundo em zonas climáticas para o cálculo das características de propagação.
N.º 62 — Utilização experimental das ondas radioeléctricas pelos satélites de pesquisa ionosférica.
N.º 63 — Protecção dos serviços de radiocomunicação contra as interferências causadas pela radiação dos aparelhos industriais, científicos e médicos.
N.º 64 — Estudo pela CCIR da protecção dos equipamentos radioeléctricos contra o raio.
N.º 65 — Difusão de informações actualizadas sobre os pareceres da CCIR mencionados no Regulamento das Radiocomunicações.
N.º 66 — Divisão do Mundo em regiões, tendo em vista a atribuição das faixas de frequências.
N.º 67 — Aperfeiçoamento da concepção e da utilização dos materiais radioeléctricos.
N.º 68 — Nova definição de certos termos contidos no anexo 2 à Convenção Internacional das Telecomunicações (Málaga, Torremolinos, 1973) e aplicáveis ao Regulamento das Radiocomunicações.
N.º 100 — Coordenação, notificação e inscrição no Ficheiro de Referência Internacional das Frequências das consignações a estações do serviço fixo por satélite, em relação às estações do serviço de radiodifusão por satélite na Região 2.
N.º 101 — Conclusão de acordos e preparação de planos associados para ligações de conexão com estações espaciais do serviço de radiodifusão por satélite a funcionar na faixa dos 12 GHz, em conformidade com o plano adoptado pela Conferência Administrativa das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) para as Regiões 1 e 3.
N.º 102 — Coordenação entre administrações das características técnicas das ligações de conexão com as estações espaciais do serviço de radiodifusão por satélite da faixa de 11,7-12,5 GHz (Região 1) e 11,7-12,2 GHz (Região 3) para o período compreendido entre a entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979) e a entrada em vigor dos actos finais da futura conferência de planificação das ligações de conexão com tais estações espaciais.

(*) As resoluções e recomendações estão agrupadas como segue:

1-99: Generalidades:

Generalidades — 1-29;
Procedimentos — 30-59;
Questões técnicas — 60-99.

100-199: Serviço fixo e serviço fixo por satélite;
200-299: Serviço móvel, Serviço móvel terrestre e serviço móvel por satélite;
300-399: Serviço móvel marítimo e serviço móvel marítimo por satélite;
400-499: Serviço móvel aeronáutico e serviço móvel aeronáutico por satélite;
500-599: Serviço de radiodifusão e serviço de radiodifusão por satélite;
600-699: Outros serviços:

Serviço de radionavegação e serviço de radiolocalização — 600-619;
Serviço de meteorologia — 620-639;
Serviço de amador — 640-699.

700-799: Textos relativos a mais de um serviço.

N.º 103 — Melhoria da assistência aos países em desenvolvimento, com vista a facilitar o acesso do seu serviço fixo às faixas das ondas decamétricas e a assegurar a protecção das suas consignações contra as interferências prejudiciais.
N.º 200 — Utilização das classes de emissão R3E e J3E para fins de perigo e de segurança na frequência portadora de 2182 kHz.
N.º 201 — Disposições de exploração, taxação e contabilidade da correspondência pública nos serviços móveis.
N.º 202 — Convocação de uma conferência administrativa mundial das radiocomunicações para os serviços móveis.
N.º 300 — Utilização e notificação das frequências emparelhadas reservadas aos sistemas de telegrafia de faixas estreitas com impressão directa e de transmissão de dados que funcionam nas faixas de ondas decamétricas atribuídas ao serviço móvel marítimo.
N.º 301 — Notificação das frequências não emparelhadas utilizadas pelas estações de navio para os sistemas de telegrafia de faixa estreita com impressão directa e de transmissão de dados.
N.º 302 — Tratamento pela IFRB das fichas de notificação de consignação de frequência às estações oceanográficas.
N.º 303 — Frequências navio-navio nas faixas compreendidas entre 1605 kHz e 3600 kHz na Região 1.
N.º 304 — Adopção da nova disposição das vias utilizadas para a telegrafia Morse da classe A1A nas faixas atribuídas ao serviço móvel marítimo entre 4000 kHz e 27 500 kHz.
N.º 305 — Utilização das classes de emissão R3E e J3E nas frequências portadoras de 4125 kHz e 6215,5 kHz utilizadas além da frequência portadora de 2182 kHz para fins de perigo e de segurança.
N.º 306 — Emprego da técnica da faixa lateral única nas faixas do serviço móvel marítimo radiotelefónico compreendidas entre 1605 kHz e 4000 kHz.
N.º 307 — Passagem à técnica da faixa lateral única das estações radiotelefónicas do serviço móvel marítimo nas faixas compreendidas entre 1605 kHz e 4000 kHz.
N.º 308 — Espaçamento das frequências atribuídas ao serviço móvel marítimo na faixa de 156-174 MHz.
N.º 309 — Utilização não autorizada das frequências atribuídas ao serviço móvel marítimo.
N.º 310 — Frequências a prever com vista à instalação e à futura entrada em serviço de sistemas de telemedida, de telecomando e de permuta de dados para os movimentos dos navios.
N.º 311 — Introdução de um sistema de chamada selectiva numérica para fazer face às necessidades do serviço móvel marítimo.
N.º 312 — Introdução de novos procedimentos de chamada em telegrafia morse A1A em ondas decamétricas.
N.º 313 — Introdução de um novo sistema de identificação das estações do serviço móvel marítimo e do serviço móvel marítimo por satélite (identidades do serviço móvel marítimo).
N.º 314 — Estabelecimento de um sistema mundial coordenado para a reunião de dados relativos à oceanografia.
N.º 315 — Supressão eventual das taxas de estação móvel para a correspondência pública no serviço móvel marítimo.
N.º 316 — Cooperação técnica com os países em desenvolvimento no domínio das telecomunicações marítimas.
N.º 400 — Tratamento das fichas de notificação referentes às consignações de frequência a estações aeronáuticas nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz.
N.º 401 — Implementação do plano de adjudicação de frequências nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz.
N.º 402 — Implementação do novo arranjo aplicável às faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz.
N.º 403 — Utilização das frequências de 3023 kHz e 5680 kHz comuns aos serviços móveis aeronáuticos (R) e (OR).
N.º 404 — Implementação da nova disposição das faixas de frequências atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 21 924 kHz e 22 000 kHz.
N.º 405 — Utilização das frequências do serviço móvel aeronáutico (R).
N.º 406 — Utilização das faixas de frequências superiores às faixas de ondas decamétricas para as comunicações e a difusão de informações meteorológicas no serviço móvel aeronáutico (R) e no serviço móvel aeronáutico por satélite (R).
N.º 407 — Utilização não autorizada de frequências das faixas atribuídas ao serviço móvel aeronáutico (R).
N.º 500 — Modificação das frequências portadoras das estações de radiodifusão em ondas quilométricas na Região 1.
N.º 501 — Exame pela IFRB das fichas de notificação referentes a estações do serviço de radiodifusão na Região 2 que funcionam na faixa de 535-1605 kHz durante o período que precede a entrada em vigor dos Actos Finais da Conferência Administrativa Regional de Radiodifusão em Ondas Hectométricas (Região 2).
N.º 502 — Período compreendido entre a data de entrada em vigor dos Actos Finais da Conferência Administrativa Mundial de Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) e a data em que as disposições e o plano associado adoptados por essa Conferência serão incluídos, em anexo, no Regulamento das Radiocomunicações.
N.º 503 — Coordenação, notificação e inscrição no ficheiro de referência das consignações de frequência às estações do serviço de radiodifusão por satélite da Região 2.
N.º 504 — Actos Finais da Conferência Administrativa Mundial de Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) no que respeita à Região 2.
N.º 505 — Serviço de radiodifusão por satélite (radiodifusão sonora) na gama de frequências de 0,5 GHz a 2 GHz.
N.º 506 — Utilização da órbita dos satélites geostacionários, com exclusão de qualquer outra órbita, pelas estações espaciais que funcionam nas faixas de frequência dos 12 GHz atribuídas ao serviço de radiodifusão por satélite.
N.º 507 — Estabelecimento de acordos e de planos associados para o serviço de radiodifusão por satélite.
N.º 508 — Convocação de uma conferência administrativa mundial das radiocomunicações para a planificação das faixas de ondas decamétricas atribuídas ao serviço de radiodifusão.
N.º 509 — Convocação de uma conferência regional de radiodifusão encarregada de reexaminar e de rever as disposições dos Actos Finais da Conferência Africana de Radiodifusão em Ondas Métricas e Decamétricas (Genebra, 1963).
N.º 510 — Convocação de uma conferência de planificação de radiodifusão sonora na faixa 97,5-108 MHz para a Região 1 e certos países interessados da Região 3.
N.º 600 — Utilização, para o serviço de radionavegação, das faixas de frequências de 2900-3100 MHz, 5470-5650 MHz, 9200-9300 MHz, 9300-9500 MHz e 9500-9800 MHz.
N.º 601 — Normas e pareceres referentes às radiobalizas de localização de sinistros que funcionam nas frequências de 121,5 MHz e 243 MHz.
N.º 640 — Utilização internacional, em caso de catástrofe natural, das radiocomunicações nas faixas de frequências atribuídas ao serviço amador.
N.º 641 — Utilização das faixas de frequências de 7000-7100 kHz.
N.º 642 — Entrada em serviço das estações terrenas do serviço amador por satélite.
N.º 700 — Partilha entre o serviço fixo por satélite nas Regiões 1 e 3 e o serviço de radiodifusão por satélite na Região 2, na faixa de 12,2-12,7 GHz.
N.º 701 — Convocação de uma conferência administrativa regional das radiocomunicações encarregada de estabelecer um plano pormenorizado para o serviço de radiodifusão por satélite na faixa 12 GHz e as ligações de conexão associadas na Região 2.
N.º 702 — Convocação de uma conferência administrativa regional das radiocomunicações encarregada de definir critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas aos serviços fixo, de radiodifusão e móvel da Região 3.
N.º 703 — Métodos de cálculo e critérios de interferência recomendados pela CCIR no que respeita à partilha das faixas de frequências entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra ou entre serviços de radiocomunicação espacial.

RECOMENDAÇÕES

N.º 1 — Utilização de sistemas de radiocomunicações espaciais no caso de catástrofes naturais, de epidemias e de outras situações críticas análogas.
N.º 2 — Exame, pelas conferências administrativas mundiais das radiocomunicações, do estado de ocupação do espectro das frequências no domínio das radiocomunicações espaciais.
N.º 3 — Transmissão de energia eléctrica por meio de frequências radioeléctricas a partir de um engenho espacial.
N.º 4 — Forma de melhorar o agrupamento das ligações das redes nacionais e internacionais de radiocomunicação que funcionam nas faixas compreendidas entre 4000 kHz e 27 500 kHz.
N.º 5 — Relativa aos meios a adoptar para reduzir a saturação da faixa 7 (3-30 MHz).
N.º 6 — Necessidades práticas dos países que têm necessidade de assistência especial.
N.º 7 — Adopção de modelos normalizados de licenças concedidas às estações de navio e às estações de aeronave.
N.º 8 — Identificação automática das estações.
N.º 9 — Medidas a tomar para impedir o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves fora dos limites dos territórios nacionais.
N.º 10 — Apresentação de propostas de modificação dos textos do Regulamento das Radiocomunicações.
N.º 11 — Numeração que figura na margem do Regulamento das Radiocomunicações.
N.º 12 — Convocação de futuras conferências administrativas das radiocomunicações para tratar de serviços específicos.
N.º 13 — Conferência administrativa mundial das radiocomunicações para uma revisão geral ou parcial do Regulamento das Radiocomunicações.
N.º 30 — Fiscalização internacional das emissões.
N.º 31 — Manual sobre a aplicação das técnicas informáticas na gestão do espectro radioeléctrico.
N.º 60 — Normas técnicas da IFRB.
N.º 61 — Normas técnicas necessárias para a avaliação das interferências prejudiciais nas faixas de frequências superiores a 28 MHz.
N.º 62 — Características adicionais de classificação das emissões e novos exemplos de designações completas de emissões tais como figuram no apêndice 6
N.º 63 — Apresentação de fórmulas e de exemplos para o cálculo das larguras de faixa necessárias.
N.º 64 — Relações de protecção e campos mínimos necessários.
N.º 65 — Técnicas que permitam elaborar novos esquemas de partilha e de utilização das faixas de frequências.
N.º 66 — Estudos sobre os níveis máximos tolerados de radiações não essenciais.
N.º 67 — Definiçao dos termos «zona de serviço» e «zona de cobertura».
N.º 68 — Estudos e previsão da propagação dos ruídos radioeléctricos.
N.º 69 — Tolerância de frequência dos emissores.
N.º 70 — Estudo das características técnicas do material.
N.º 71 — Normalização das características técnicas e de exploração dos materiais radioeléctricos.
N.º 72 — Terminologia.
N.º 73 — Emprego do termo «canal» do Regulamento das Radiocomunicações.
N.º 74 — Emprego do sistema internacional de unidades (SI).
N.º 100 — Faixas de frequências preferenciais para os sistemas que utilizam a propagação por difusão troposférica.
N.º 101 — Ligações de conexão no serviço de radiodifusão por satélite.
N.º 102 — Estudo dos métodos de modulação para os feixes hertzianos sob o ponto de vista da partilha das faixas de frequências com os sistemas do serviço fixo por satélite.
N.º 103 — Dispersão da energia da portadora nos sistemas do serviço fixo por satélite.
N.º 200 — Data de entrada em vigor da faixa de guarda de 10 kHz para a frequência de 500 kHz no serviço móvel (perigo e chamada).
N.º 201 — Tráfego de perigo, de urgência e de segurança.
N.º 202 — Melhoria da protecção, contra interferências prejudiciais, das frequências de perigo e de segurança e das que têm relação com o perigo e a segurança.
N.º 203 — Utilização futura das faixas de 2170-2194 kHz.
N.º 204 — Relativa à aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações.
N.º 300 — Planificação da utilização das frequências pelo serviço móvel marítimo na faixa de 435-526,5 kHz na Região 1.
N.º 301 — Planificação da utilização das frequências nas faixas atribuídas ao serviço móvel marítimo entre 1606,5 kHz e 3400 kHz na Região 1.
N.º 302 — Melhor utilização das vias radiotelefónicas em ondas decamétricas pelas estações costeiras nas faixas de frequências atribuídas em exclusivo ao serviço móvel marítimo.
N.º 303 — Utilização das frequências portadoras de 4125 kHz e 6215,5 kHz além da frequência portadora de 2182 kHz, para fins de perigo e de segurança, bem como para a chamada e a resposta na zona das Regiões 1 e 2 situada ao sul do paralelo 15° N., incluindo o México, e na zona da Região 3 situada ao sul do paralelo 25° N.
N.º 304 — Frequências do apêndice 16 (secção B) ao Regulamento das Radiocomunicações destinadas a ser utilizadas em todo o Mundo pelos navios de todas as categorias assim como pelas estações costeiras.
N.º 305 — Utilização das vias 15 e 17 do apêndice 18 pelas estações de comunicações de bordo.
N.º 306 — Estabelecimento de uma escuta na frequência de 156,8 MHz pelas estações costeiras para fins de perigo..
N.º 307 — Escolha, nas faixas do serviço móvel marítimo compreendidas entre 1605 kHz e 3800 kHz, de uma frequência reservada às necessidades da segurança.
N.º 308 — Designação de frequências nas faixas de ondas hectométricas a utilizar em comum pelas estações costeiras radiotelefónicas para as comunicações com as estações de navio de nacionalidades diferentes das suas.
N.º 309 — Designação de uma frequências nas faixas de 435-495 kHz ou 505-526,5 kHz (525 kHz na Região 2) numa base mundial para a emissão pelas estações costeiras de boletins meteorológicos e de avisos à navegação, com destino aos navios, utilizando a telegrafia de faixa estreita com impressão directa.
N.º 310 — Sistema automático de radiocomunicações em ondas decimétricas para o serviço móvel marítimo.
N.º 311 — Utilização de um sinal de frequência acústica consecutivo ao sinal de alarme radiotelefónico emitido pelas estações costeiras.
N.º 312 — Estudos de interligação dos sistemas de radiocomunicações móveis marítimas com as redes telefónica e telegráfica internacionais.
N.º 313 — Disposições temporárias relativas aos aspectos técnicos e de exploração do serviço móvel marítimo por satélite.
N.º 400 — Passagem do plano actual ao novo plano de adjudicação de frequências nas faixas atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz.
N.º 401 — Emprego eficaz das frequências do serviço móvel aeronáutico (R) designadas para utilização mundial.
N.º 402 — Cooperação com vista ao emprego eficaz das frequências do serviço móvel aeronáutico (R) designadas para utilização mundial.
N.º 403 — Desenvolvimento de técnicas que contribuirão para reduzir a saturação das faixas de ondas decamétricas atribuídas ao serviço móvel aeronáutico (R).
N.º 404 — Utilização da faixa de 136-137 MHz pelo serviço móvel aeronáutico (R).

N.º 405 — Estudo da utilização do serviço móvel aeronáutico (R) por satélite.
N.º 406 — Revisão do plano de adjudicação das frequências para o serviço móvel aeronáutico (OR).
N.º 407 — N.º 27/123 do apêndice 27 Aer2 (subdivisão da zona 5B).
N.º 500 — Elaboração da documentação técnica necesssária para a conferência administrativa mundial das radiocomunicações para a radiodifusão em ondas decamétricas.
N.º 501 — Estudo da introdução da técnica da faixa lateral única nas faixas de ondas decamétricas atribuídas ao serviço de radiodifusão para a preparação da conferência administrativa mundial das radiocomunicações para a radiodifusão em ondas decamétricas.
N.º 502 — Especificações dos receptores de televisão de preço módico.
N.º 503 — Radiodifusão em ondas decamétricas.
N.º 504 — Preparação de um plano de radiodifusão na faixa de 1605-1705 kHz na Região 2.
N.º 505 — Estudos de propagação na faixa de 12 GHz para o serviço de radiodifusão por satélite.
N.º 506 — Harmónicas da frequência fundamental das estações de radiodifusão por satélite.
N.º 507 — Radiações não essenciais no serviço de radiodifusão por satélite.
N.º 508 — Antenas de emissão do serviço de radiodifusão por satélite.
N.º 600 — Utilização da faixa de frequência de 9300-9500 MHz.
N.º 601 — Frequências a utilizar no serviço de radionavegação aeronáutica para um sistema destinado a evitar as colisões entre aeronaves.
N.º 602 — Radiofaróis marítimos.
N.º 603 — Disposições técnicas relativas aos radiofaróis marítimos na zona africana.
N.º 604 — Utilização futura e características das radiobalizas de localização de sinistros.
N.º 605 — Características técnicas e frequências dos equipamentos de resposta a bordo dos navios.
N.º 620 — Serviço dos auxiliares da meteorologia da faixa de 28-27,7 MHz.
N.º 700 — Utilização e partilha das faixas de frequências atribuídas às radiocomunicações espaciais.
N.º 701 — Utilização da faixa de frequências de 1330-1400 MHz pelo serviço de radioastronomia.
N.º 702 — Utilização das faixas de frequências de 1400-1727 MHz, 101-120 GHz e 197-220 GHz para a pesquisa de emissões intencionais de origem extraterrestre.
N.º 703 — Necessidade de fazer cessar o funcionamento das estações dos serviços fixo e móvel nas faixas de frequências de 149,9-150,05 MHz e 399,9-400,05 MHz atribuídas ao serviço de radionavegação por satélite.
N.º 704 — Compatibilidade entre o serviço de radiodifusão na faixa de 100-108 MHz e o serviço de radionavegação aeronáutica na faixa 108-117,975 MHz.
N.º 705 — Critérios a aplicar à partilha das frequências entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra na faixa de 620-790 MHz.
N.º 706 — Partilha das frequências entre, por um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, por outro lado, os serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz.
N.º 707 — Utilização da faixa de frequências de 32-33 GHz, partilhada entre o serviço intersatélites e o serviço de radionavegação.
N.º 708 — Faixas de frequências partilhadas pelos serviços de radiocomunicação espacial entre si, bem como entre os serviços de radiocomunicação espacial e os serviços de radiocomunicação de Terra.
N.º 709 — Partilha das faixas de frequências entre o serviço móvel aeronáutico e o serviço intersatélites.
N.º 710 — Utilização de radiodetectores aerotransportados nas faixas de frequências pelo serviço intersatélites e o serviço de radiolocalização.
N.º 711 — Coordenação das estações terrenas.
N.º 712 — Interdependência entre a concepção dos receptores, o agrupamento dos canais e os critérios de partilha no serviço de radiodifusão por satélite.

ÍNDICE ANALÍTICO

Resoluções e recomendações

Este índice analítico compreende duas partes:

PARTE A — Resoluções;
PARTE B — Recomendações.

Cada parte contém duas secções:

Secção I — Lista das resoluções e recomendações por ordem numérica com indicação dos assuntos (palavras-chaves) enumerados na secção II. Os assuntos principais que figuram em tipo mais negro são os títulos sob os quais se encontrarão os textos explicativos das resoluções ou recomendações. Os que figuram em tipo normal remetem a um ou vários assuntos principais;
Secção II — Lista das resoluções/recomendações agrupadas por assuntos (palavras-chaves) por ordem alfabética.

PARTE A

Resoluções

Secção I

Assuntos do índice analítico (palavras-chave)

Resolução n.º 1 — **Notificação das consignações de frequência:**

Gestão das frequências;
Regulamento das Radiocomunicações.

Resolução n.º 2 — **Órbita dos satélites geostacionários — serviços espaciais:**

Ficheiro de Referência Internacional das Frequências (FRIF);
União Internacional das Telecomunicações (IFRB).

Resolução n.º 3 — **Órbita dos satélites geostacionários:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR, Conselho de Administração e IFRB).

Resolução n.º 4 — **Órbita dos satélites geostacionários:**

Conferências administrativas;
Ficheiro de Referência Internacional das Frequências (FRIF);
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 5 — **Propagação — cooperação técnica:**

Organizações internacionais (UAPT, UPAT e URTNA);
União Internacional das Telecomunicações (CCIR, conferências administrativas, conselho de administração e secretário-geral).

Resolução n.º 6 — **Regulamento das Radiocomunicações:**

Gestão das frequências;
União Internacional das Telecomunicações (IFRB, e secretário-geral).

Resolução n.º 7 — **Gestão das frequências — cooperação técnica:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR, conferência de plenipotenciários, conselho de administração, IFRB e secretário-geral).

Resolução n.º 8 — **Atribuição das faixas de frequência — serviço fixo:**

Regulamento das Radiocomunicações;
Serviços móveis;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 9 — **Serviço fixo:**

Ficheiro de Referência Internacional das Frequências (FRIF);
União Internacional das Telecomunicações (IFRB).

Resolução n.º 10 — **Operações/organizações de socorro:**

Atribuição de faixas de frequência.

Resolução n.º 11 — **Navios e aeronaves não participantes num conflito armado:**

Organizações internacionais (OACI e OMCI);
Serviço móvel aeronáutico (R);
Serviço móvel marítimo;
União Internacional das Telecomunicações (conferências administrativas, conselho de administração e secretário-geral).

Resolução n.º 12 — **Identificação das estações:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Resolução n.º 13 — **Identificação das estações:**

União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Resolução n.º 14 — **Cooperação técnica:**

Organizações internacionais (ONU);
União Internacional das Telecomunicações (conferências administrativas, conselho de administração e secretário-geral).

Resolução n.º 15 — **Serviços espaciais — cooperação técnica:**

União Internacional das Telecomunicações (conferências administrativas e conselho de administração).

Resolução n.º 16 — **Cooperação técnica:**

Organizações internacionais (ONU);
União Internacional das Telecomunicações (CCIR, CCITT, conferências administrativas, conselho de administração e secretário-geral).

Resolução n.º 17 — **Conferências administrativas:**

União Internacional das Telecomunicações (CCIR, conselho de administração, IFRB e secretário-geral).

Resolução n.º 30 — **Ficheiro de referência internacional das frequências (FRIF):**

União Internacional das Telecomunicações (IFRB).

Resolução n.º 31 — **Serviço de radiodifusão por satélite — serviço fixo por satélite:**

Ficheiro de referência internacional das frequências (FRIF);
Regulamento das Radiocomunicações;
Serviços de Terra;
Serviços móveis;
União Internacional das Telecomunicações (CCIR).

Resolução n.º 32 — **Serviços espaciais:**

Ficheiro de referência internacional das frequências (FRIF);
Serviços de Terra;
União Internacional das Telecomunicações (FRIF).

Resolução n.º 33 — **Serviço de radiodifusão por satélite:**

Ficheiro de referência internacional das frequências (FRIF);
Regulamento das Radiocomunicações;
Serviços de Terra;
Serviços espaciais;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 34 — **Serviço de radiodifusão por satélite:**

Regulamento das Radiocomunicações;
Serviços de Terra;
Serviços espaciais;
União Internacional das Telecomunicações (CCIR).

Resolução n.º 35 — **Gestão das frequências:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR e IFRB).

Resolução n.º 36 — **Emissões — Ficheiro de Referência Internacional das Frequências (FRIF):**

Gestão das frequências;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 37 — **Gestão das frequências — Cooperação técnica:**

União Internacional das Telecomunicações (conselho de administração e secretário-geral).
Utilização das técnicas informáticas.

Resolução n.º 38 — **Serviço fixo:**

Serviços móveis;
Serviços de radiolocalização;
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 60 — **Propagação:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR, conferências administrativas, conselho de administração e secretário-geral).

Resolução n.º 61 — **Divisão do mundo — propagação:**

União Internacional das Telecomunicações (CCIR).

Resolução n.º 62 — **Ionosfera.**

Resolução n.º 63 — **Equipamento:**

Conferências administrativas;
Organizações internacionais (CEI e CISPR);
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Resolução n.º 64 — **Equipamento:**

União Internacional das Telecomunicações (CCIR e CCITT).

Resolução n.º 65 — **Regulamento das Radiocomunicações:**

União Internacional das Telecomunicações (CCIR e secretário-geral).

Resolução n.º 66 — **Divisão do mundo — atribuição de faixas de frequências:**

União Internacional das Telecomunicações (CCIR e conselho de administração).

Resolução n.º 67 — **Equipamento:**

Resolução n.º 68 — **Conferências administrativas — terminologia;**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR, CCITT, conferências administrativas, conferências de plenipotenciários e secretário-geral).

Resolução n.º 100 — **Serviço fixo por satélite:**

Ficheiro de Referência Internacional das Frequências (FRIF);
Serviço de radiodifusão por satélite;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 101 — **Serviço fixo por satélite:**

Conferências administrativas;
Ligações de conexão;
Serviço de radiodifusão por satélite;
União Internacional das Telecomunicações (CCIR e conselho de administração).

Resolução n.º 102 — **Serviço fixo por satélite:**

Ligações de conexão;
Serviço de radiodifusão por satélite;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 103 — **Serviço fixo:**

Cooperação técnica;
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 200 — **Perigo e segurança:**

Organizações internacionais;
Serviço móvel marítimo;
Serviços móveis;
União Internacional das Telecomunicações (CCIR, conferências administrativas e secretário-geral).

Resolução n.º 201 — **Correspondência pública:**

Serviços móvel marítimo;
Serviços móveis;
União Internacional das Telecomunicações (CCITT e conferências administrativas).

Resolução n.º 202 — **Serviços móveis:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR, conselho de administração e IFRB).

Resolução n.º 300 — **Serviço móvel marítimo:**

Conferências administrativas;
Ficheiro de Referência Internacional das Frequências (FRIF);
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 301 — **Serviço móvel marítimo:**

Ficheiro de Referência Internacional das Frequências (FRIF);
Conferências administrativas;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 302 — **Serviço móvel marítimo:**

Ficheiro de Referência Internacional das Frequências (FRIF);
Oceanografia;
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 303 — **Serviço móvel marítimo:**

Frequências navio-navio;
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 304 — **Serviço móvel marítimo:**

Disposição das vias;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 305 — **Perigo e segurança:**

Conferências administrativas;
Organizações internacionais (OMCI);
Serviço móvel marítimo;
Serviços móveis;
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Resolução n.º 306 — **Serviço móvel marítimo:**

Emissões;
Técnicas de faixa lateral única;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 307 — **Serviço móvel marítimo:**

Emissões;
Técnicas da faixa lateral única;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 308 — **Serviço móvel marítimo:**

Disposições das vias;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 309 — **Perigo e segurança — Serviço móvel marítimo:**

União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 310 — **Serviço móvel marítimo:**

Conferências administrativas;
Organizações internacionais (OMCI);
União Internacional das Telecomunicações (CCIR, conferências administrativas e secretário-geral).

Resolução n.º 311 — **Serviço móvel marítimo:**

União Internacional das Telecomunicações (CCIR, conferências administrativas e secretário-geral).

Resolução n.º 312 — **Serviço móvel marítimo:**

União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Resolução n.º 313 — **Identificação das estações:**

Serviço móvel marítimo;
Serviço móvel marítimo por satélite;
União Internacional das Telecomunicações (CCIR, CCITT, conferências administrativas e secretário-geral).

Resolução n.º 314 — **Serviço móvel marítimo:**

Conferências administrativas;
Oceanografia;
Organizações internacionais (COI e OMM);
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 315 — **Serviço móvel marítimo:**

Correspondência pública;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 316 — **Cooperação técnica:**

Organizações internacionais (CNUCED, OMCI e PNUD);
Serviço móvel marítimo;
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Resolução n.º 400 — **Serviço móvel aeronáutico (R):**

Ficheiro de Referência Internacional das Frequências (FRIF);
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 401 — **Serviço móvel aeronáutico (R):**

União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 402 — **Serviço móvel aeronáutico (R):**

Emissões;
Regulamento das Radiocomunicações;
Técnicas da faixa lateral única;
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 403 — **Serviço móvel aeronáutico (R) — serviço móvel aeronáutico (OR):**

Busca e salvamento;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 404 — **Serviço móvel aeronáutico (R):**

Ficheiro de Referência Internacional das Frequências (FRIF);
União Internacional das Telecomunicações (conferências administrativas, IFRB e secretário-geral).

Resolução n.º 405 — **Serviço móvel aeronáutico (R):**

União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 406 — **Serviço móvel aeronáutico (R) — serviço móvel aeronáutico por satélite:**

Difusão de informações meteorológica;
União Internacional das Telecomunicações (conferências administrativas).

Resolução n.º 407 — **Serviço móvel aeronáutico (R):**

Perigo e segurança (fiscalização das emissões);
União Internacional das Telecomunicações (conferências administrativas e IFRB).

Resolução n.º 500 — **Serviço de radiodifusão:**

Organizações internacionais (OACI);
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (IFRB e secretário-geral).

Resolução n.º 501 — **Serviço de radiodifusão:**

União Internacional das Telecomunicações (IFRB).

Resolução n.º502 — **Serviço de radiodifusão por satélite:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (IFRB e secretário-geral).

Resolução n.º 503 — **Serviço de radiodifusão por satélite:**

Ficheiro de Referência Internacional das Frequências (FRIF);
Regulamento das Radiocomunicações;
Serviço fixo por satélite;
Serviços espaciais;
União Internacional das Telecomunicações (IFRB).

Resolução n.º 504 — **Serviço de radiodifusão por satélite:**

Conferências administrativas;
Regulamento das Radiocomunicações.

Resolução n.º 505 — **Serviço de radiodifusão por satélite:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR).

Resolução n.º 506 — **Serviço de radiodifusão por satélite — órbita dos satélites geostacionários:**

Serviços espaciais.

Resolução n.º 507 — **Serviço de radiodifusão por satélite:**

Conferências administrativas;
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conselho de administração e IFRB).

Resolução n.º 508 — **Serviço de radiodifusão:**

Conferências administrativas;
Regulamento das Radiocomunicações;
Técnicas de faixa lateral única;
União Internacional das Telecomunicações (CCIR, conselho de administração e IFRB).

Resolução n.º 509 — **Serviço de radiodifusão:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR, conselho de administração e IFRB).

Resolução n.º 510 — **Serviço de radiodifusão:**

Conferências administrativas;
União Internacional das Telecomunicações (CCIR e conselho de administração).

Resolução n.º 600 — **Serviços de radiodeterminação:**

Conferências administrativas;
Organizações internacionais (OACI e OMCI);
Serviço móvel aeronáutico (R);
Serviço móvel marítimo;
União Internacional das Telecomunicações (CCIR, conselho de administração e secretário-geral).

Resolução n.º 601 — **Radiobalizas de localização de sinistros:**

Organizações internacionais (OACI);
Busca e salvamento;
Serviço móvel aeronáutico (R);
Serviço móvel marítimo;
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Resolução n.º 640 — **Serviço de amador:**

Catástrofe natural;
Socorro.

Resolução n.º 641 — **Serviço de amador — serviço de radiodifusão.**

Resolução n.º 642 — **Serviços de amador por satélite:**

União Internacional das Telecomunicação (IFRB).

Resolução n.º 700 — **Serviços de radiodifusão por satélite — serviço fixo por satélite:**

Conferências administrativas;
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR).

Resolução n.º 701 — **Serviços de radiodifusão por satélite — serviço fixo por satélite:**

Conferências administrativas;
Ligações de conexão;
União Internacional das Telecomunicações (CCIR, conselho de administração, IFRB e secretário-geral).

Resolução n.º 702 — **Serviços de radiodifusão por satélite — serviço fixo por satélite — serviços móveis:**

União Internacional das Telecomunicações (CCIR e secretário-geral).

Resolução n.º 703 — **Serviços espaciais:**

Serviços de Terra,
União Internacional das Telecomunicaçõe (CCIR, IFRB e secretário-geral).

SECÇÃO II

Atribuição de faixas de frequências:

Eliminação dos serviços fixo e móvel de certas faixas de frequências compreendidas entre 4000 kHz e 27 500 kHz e procedimento de transição para a escolha e a aprovação de consignações de substituição (Resolução n.º 8);
Revisão da divisão do Mundo em regiões para fins da atribuição de faixas de frequências (Resolução n.º 66).

Comunicações em caso de catástrofe natural:

V. *Serviço de amador* (Resolução n.º 640).

Conferências administrativas:

Conferências de plenipotenciários, medidas a tomar pelas (Resoluções n.ºs 7 e 68).
Determinação da estrutura das comissões que poderão ser constituídas em função da agenda (Resolução n.º 17);
Outras resoluções referentes às conferências:

V. *Perigo e segurança* (Resolução n.º 305);
V. *Equipamento* (Resolução n.º 63);
V. *Órbita dos satélites geostacionários* (Resolução n.º 3 4);
V. *Propagação* (Resolução n.º 60);
V. *Serviço de radiodifusão* (Resoluções n.ºs 508, 509, 510 e 702);
V. *Serviço de radiodifusão por satélite* (Resoluções n.ºs 504, 505, 507, 700 e 701);
V. *Serviço fixo por satélite* (Resolução n.º 101);
V. *Serviço móvel marítimo* (Resoluções n.ºs 300, 301, 310 e 314);
V. *Serviços de radiodeterminação* (Resolução n.º 600);
V. *Serviços móveis* (Resolução n.º 202);

Cooperação e assistência técnica:

Assistência no domínio das radiocomunicações espaciais (Resolução n.º 15);
Assistência em matéria de utilização das técnicas informáticas para a gestão do espectro radioeléctrico (Resolução n.º 37);
Cooperação no domínio das telecomunicações marítimas (Resolução n.º 316);
Estudos de propagação em regiões tropicais (Resolução n.º 5);
Introdução de uma gestão nacional das frequências radioeléctricas (Resolução n.º 7);
Papel das telecomunicações no desenvolvimento rural integrado (Resolução n.º 16);
Transferência de tecnologia no domínio das telecomunicações (Resolução n.º 14);
V. também *Serviço fixo* (Resolução n.º 103).

Correspondência pública:

Disposições de exploração na taxação e na compatibilidade da correspondência pública no serviço móvel (Resolução n.º 201);
V. também *Serviço móvel marítimo* (Resolução n.º 315).

Perigo e segurança:

Fiscalização das emissões:

Utilização não autorizada das frequências das faixas atribuídas ao serviço móvel marítimo (Resolução n.º 309);
V. também *Serviço móvel aeronáutico (R)* (Resolução n.º 407).

Utilização das classes de emissão R3E e J3E (1):

Na frequência portadora de 2182 kHz (Resolução n.º 200);
Nas frequências portadoras de 4125 kHz e 6215,5 kHz (Resolução n.º 305);
V. também *Serviço móvel aeronáutico (R)* (Resolução n.º 403).

(1) Anteriormente A3A e A3J.

Difusão de informações meterológicas:

V. *Serviço móvel aeronáutico (R)* (Resolução n.º 406).

Disposições das vias:

V. *Serviço móvel marítimo* (Resoluções n.ºs 304 e 308).

Divisão do Mundo:

Em zonas climatéricas para o cálculo das características de propagação (Resolução n.º 61);
Revisão da divisão do Mundo em regiões para fins de atribuição da faixas de frequências (Resolução n.º 66).

Emissões:

Estabelecimento pela IFRB de documentação explicativa acerca da aplicação do novo método de designação das emissões (Resolução n.º 36);
V. também *Serviço móvel aeronaútico (R)* (Resolução n.º 402);
V. também *Serviço móvel marítimo* (Resolução n.º 306 e 307).

Equipamento:

ISM:

Protecção dos serviços de radiocomunicação contra as interferências causadas pelos aparelhos ISM (Resolução n.º 63).

Radioeléctricos:

Aperfeiçoamento da concepção dos (Resolução n.º 67);
Protecção contra o raio dos (Resolução n.º 64).

Ficheiro de Referência Internacional das Frequências (FRIF):

Estabelecimento pela IFRB de documentação explicativa sobre o novo método de designação das emissões (Resolução n.º 36);
Revisão de inscrição a solicitação de conferências anteriores (Resolução n.º 30);
V. também *Órbita dos satélites geostacionários* (Resoluções n.ºs 2 e 4);
V. também *Serviço de radiodifusão por satélite* (Resoluções n.ºs 31, 33 e 503);
V. também *Serviço fixo* (Resolução n.º 9);
V. também *Serviço fixo por satélite* (Resolução n.º 100);
V. também *Serviço móvel aeronáutico (R)* (Resoluções n.ºs 400, 401 e 404);
V. também *Serviço móvel marítimo* (Resoluções n.ºs 300, 301 e 302);
V. também *Serviços espaciais* (Resolução n.º 32).

Frequências navio-navio:

V. *Serviço móvel marítimo* (Resolução n.º 303);

Gestão das frequências:

Assistência relativa à utilização das técnicas informáticas para a (Resolução n.º 37);
Introdução de uma gestão nacional das frequências radioeléctricas (Resolução n.º 7);
Procedimento a seguir para acabar com um desacordo sobre normas técnicas ou regras de procedimento da IFRB (Resolução n.º 35);
V. também *Cooperação técnica* (Resolução n.º 7);
V. também *Emissões* (Resolução n.º 36);
V. também *Notificação das consignações de frequência* (Resolução n.º 1);
V. também *Regulamento das Radiocomunicações* (Resolução n.º 6).

Identificação das estações:

Indicativos de chamada:

Novas regras de formação dos (Resolução n.º 12);
Possibilidades de formar novas séries de indicativos de chamada (Resolução n.º 13);

Introdução de um novo sistema de identificação das estações do serviço móvel marítimo e do serviço móvel marítimo por satélite (identidades no serviço móvel marítimo) (Resolução n.º 313);
V. também *Serviço móvel marítimo* (Resolução n.º 311).

Ligação de conexão:

V. *Serviço fixo por satélite* (Resoluções n.ºs 101, 102 e 701);

Navios e aeronaves não participantes num conflito armado:

Utilização das radiocomunicações para a segurança, a identificação e a localização dos (Resolução n.º 11).

Notificação das consignações de frequência (generalidades):

A fazer pela Administração do país em cujo território a estação está situada (Resolução n.º 1).

Oceanografia:

V. *Serviço móvel marítimo* (Resoluções n.ºs 302 e 314).

Operações — organizações de socorro:

Consignações de frequência para as (Resoluções n.º 10).
V. também *Serviço de amador* (Resolução n.º 640).

Órbita dos satélites geostacionários:

Duração de validade das consignações de frequência às estações espaciais que utilizam a (Resolução n.º 4).
Utilização da órbita dos satélites geostacionários, com exclusão de qualquer outra órbita, pelas estações espaciais que funcionam nas faixas de frequências de 12 GHz atribuídas ao serviço de radiodifusão por satélite (Resolução n.º 506);
Utilização da órbita dos satélites geostacionários e planificação dos serviços espaciais que utilizam esta órbita (Resolução n.º 3);
Utilização equitativa por todos os países, com igualdade de direitos, da órbita dos satélites geostacionários, e das faixas de frequência atribuídas aos serviços de radiocomunicação espacial (Resolução n.º 2);

Organizações internacionais:

Resoluções com interesse para as seguintes organizações:

Comissão Electrónica Internacional (CEI):

V. *Equipamento* (Resolução n.º 63);

Comissão Oceanográfica Intergovernamental (COI):

V. *Serviço móvel marítimo* (Resolução n.º 314);

Comissão Internacional Especial das Perturbações Radioeléctricas (CISPR):

V. *Equipamento* (Resolução n.º 63);

Conferência das Nações Unidas para o Comércio e o Desenvolvimento (CNUCED):

V. *Cooperação técnica* (Resolução n.º 316);

Organização da Aviação Civil Internacional (OACI):

V. *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
V. *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. *Serviço de radiodifusão* (Resolução n.º 500);
V. *Serviços de radiodeterminação* (Resolução n.º 600);

Organização das Nações Unidas (ONU):

V. *Cooperação técnica* (Resoluções n.ºs 14 e 16).

Organização Intergovernamental Consultiva da Navegação Marítima (OMCI):

V. *Cooperação técnica* (Resolução n.º 316);
V. *Perigo e segurança* (Resoluções n.ºs 200 e 305);
V. *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
V. *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. *Serviço móvel marítimo* (Resolução n.º 310);
V. *Serviços de radiodeterminação* (Resolução n.º 600);

Organização Metereológica Mundial (OMM):

V. *Serviço móvel marítimo* (Resolução n.º 314);

Organizações regionais:

União Africana dos Correios e Telecomunicações (UATP), União das Radiodifusão e Televisão Nacionais de África (URTNA), União Panafricana das Telecomunicações (UPAT) e outras:

V. *Cooperação técnica* (Resolução n.º 5);

Programa das Nações Unidas para o Desenvolvimento (PNUD):

V. *Cooperação técnica* (Resolução n.º 316).

Propagação:

Cooperação técnica com os países em desenvolvimento no domínio dos estudos de propagação em regiões tropicais (Resolução n.º 5);
Divisão do mundo em zonas climatéricas para o cálculo das características de propagação (Resolução n.º 61);
Informações sobre a propagação das ondas radioeléctricas utilizadas para determinar a zona de coordenação (Resolução n.º 60);

Radiobalizas de localização de sinistros:

As radiobalizas de localização de sinistros que funcionam na frequência de 121,5 MHz ou na frequência de 243 MHz, ou nestas duas frequências, devem estar em conformidade com as normas e os paraceres da OACI e da CCIR (Resolução n.º 601);

Busca e salvamento:

V. *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. *Serviços móveis aeronáuticos (R) e (OR)* (Resolução n.º 403);

Pesquisa ionosférica:

Utilização experimental das ondas radioeléctricas pelos satélites de pesquisa ionosférica (Resolução n.º 62).

Regulamento das Radiocomunicações:

Identificação das disposições que contêm uma referência a pareceres da CCIR (Resolução n.º 65).
Manual destinado a explicar e a ilustrar os procedimentos do capítulo IV do Regulamento das Radiocomunicações (Resolução n.º 6);
V. também *Atribuição das faixas de frequências* (Resolução n.º 8);
V. também *Gestão das frequências* (Resolução n.º 35);
V. também *Identificação das estações* (Resolução n.º 12);

V. também *Notificação das consignações de frequência* (Resolução n.º 1);
V. também *Órbita dos satélites geostacionários* (Resolução n.º 4);
V. também *Serviço de radiodifusão* (Resoluções n.ºs 500 e 508);
V. também *Serviço de radiodifusão por satélite* (Resoluções n.ºs 31, 33, 34, 502, 503, 504, 507 e 700).
V. também *Serviço fixo* (Resolução n.º 103);
V. também *Serviço móvel aeronáutico (R)* (Resoluções n.ºs 402 e 403);
V. também *Terminologia* (Resolução n.º 68).

Serviço de amador:

Interdição às estações de radiodifusão de emitirem em frequências da faixa de 7000-7100 kHz reservada ao serviço de amador (Resolução n.º 641);
Utilização das faixas atribuídas ao serviço de amador para fins de comunicações internacionais em caso de catástrofes naturais (Resolução n.º 640).

Serviço de amador por satélite:

Comunicação à IFRB das informações relativas à entrada em serviço das estações terrestres do serviço amador por satélite (Resolução n.º 642).

Serviço de radiodifusão:

Convocação de conferências:

Definição dos critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas aos serviços fixo, de radiodifusão e móvel na Região 3 (Resolução n.º 702);
Planificação da radiodifusão sonora na faixa de 87,5-108 MHz para a Região 1 e certos países interessados da Região 3 (Resolução n.º 510);
Planificação das faixas de ondas decamétricas (Resolução n.º 508);
Reexame e revisão das disposições dos Actos Finais da Conferência Africana de Radiodifusão em Ondas Métricas e Decimétricas (Genebra, 1963) (Resolução n.º 509);

Exame pela IFRB das fichas de notificação referentes às estações do serviço de radiodifusão da Região 2 que funcionam na faixa de 535-1605 kHz (Resolução n.º 501);
Interdição de utilizar a faixa de 7000-7100 kHz reservada ao serviço de amador (Resolução n.º 641);
Modificação das frequências portadoras das estações de radiodifusão em ondas quilométricas na Região 1 (Resolução n.º 500).

Serviço de radiodifusão por satélite:

Convocação de conferências:

Estabelecimento de acordos e de planos associados (Resolução n.º 507);
Planificação na faixa de 12 GHz e as ligações de conexão associadas na Região 2 (Resolução n.º 701);

Procedimentos a aplicar antes da entrada em vigor dos acordos e dos planos:

Aplicação de certas disposições dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) para ter em conta as modificações introduzidas pela CAMR-1959 no quadro de atribuição das faixas de frequência para a Região 2, na faixa de 11,7-12,7 GHz (Resolução n.º 31);
Coordenação, notificação e inscrição no Ficheiro de Referência Internacional das Frequências das consignações de frequência as estações da Região 2 (Resolução n.º 503);
Estabelecimento de serviços de radiodifusão por satélite na faixa de 12,5-12,75 GHz e partilhá com os serviços espaciais e de Terra nas Regiões 1, 2 e 3 (Resolução n.º 34);
Experiências e estudos relativos ao serviço de radiodifusão por satélite (radiodifusão sonora) na faixa de frequências de 0,5 GHz a 2 GHz (Resolução n.º 505);
Colocação em serviço de estações espaciais do serviço de radiodifusão por satélite; procedimentos de coordenação entre as estações espaciais deste serviço e as estações de Terra e sistemas espaciais dependentes de outras administrações; notificação, exame e inscrição na FRIP das consignações às estações espaciais do serviço de radiodifusão por satélite (Resolução n.º 33);
Procedimentos provisórios a aplicar até à inserção em anexo ao Regulamento das Radiocomunicações do Plano e das disposições adoptadas pela Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão por Satélite (Genebra, 1977) (Resolução n.º 502);
Procedimento provisório relativo à faixa de 11,7-12,2 GHz na Região 2 (Resolução n.º 504);
Partilha entre o serviço fixo por satélite nas Regiões 1 e 3 e o serviço de radiodifusão por satélite na Região 2, na faixa de 12,2-12-7 GHz (Resolução n.º 700);

Utilização da órbitas dos satélites geostacionários, com exclusão de qualquer outra órbita, pelas estações espaciais que funcionam nas faixas de frequências de 12 GHz atribuídas ao serviço de radiodifusão por satélite (Resolução n.º 506);
V. também *Serviço fixo por satélite* (Resoluções n.ºs 100, 101 e 102).

Serviço fixo:

Assistência aos países em desenvolvimento para assegurar o acesso dos seus serviços fixos às faixas das ondas decamétricas (Resolução n.º 103);
Convocação de conferências para definir critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas ao serviço fixo (e aos serviços de radiodifusão e móvel) na Região 3 (Resolução n.º 702);
Reconsignação das frequências às estações dos serviços fixo e móvel que funcionam em certas faixas atribuídas aos serviços de radiolocalização e de amador na Região 1 (Resolução n.º 38);
Remoção dos serviços fixo e móvel de certas faixas compreendidas entre 4000 kHz e 27 500 kHz e procedimento de transição relativo à escolha e à aprovação das consignações de substituição (Resolução n.º 8);
Revisão das inscrições no FRIP nas faixas atribuídas ao serviço fixo entre 3000 kHz e 27 500 kHz (Resolução n.º 9); V. também *Serviço fixo por satélite* (Resolução n.º 31).

Serviço fixo por satélite:

Aplicação de certas disposições dos Actos Finais da Conferência Mundial para a Radiodifusão por Satélite, 1977, para ter em conta as modificações introduzidas pela CAMR-79 no quadro de atribuição das faixas de frequências para a Região 2, na faixa de 11,7-12,7 GHz (Resolução n.º 31);

Conclusão de acordos e estabelecimento dos planos associados para ligações de conexão às estações do serviço de radiodifusão por satélite que funcionam na faixa de 12 GHz (Resolução n.º 101);

Convocação de uma conferência encarregada de estabelecer um plano para o serviço de radiodifusão por satélite na faixa de 12 GHz e as ligações de conexão associadas na Região 2 (Resolução n.º 701);

Coordenação das características técnicas das ligações de conexão às estações espaciais do serviço de radiodifusão por satélite da faixa de 11,7-12,5 GHz (Região 1) e de 11,7-12,2 GHz (Região 3) para o período de transição (Resolução n.º 102);

Coordenação, notificação e inscrição na FRIP das consignações a estações do serviço fixo por satélite, relativamente às estações do serviço de radiodifusão por satélite na Região 2 (Resolução n.º 100);

Partilha entre o serviço fixo por satélite nas Regiões 1 e 3 e o serviço de radiodifusão por satélite na Região 2, na faixa de 12,2-12,7 GHz (Resolução n.º 700);

V. também *Serviço de radiodifusão por satélite* (Resolução n.º 503).

Serviço móvel aeronáutico (OR):

Utilização das frequências de 34023 kHz e 5680 kHz:

Em comum pelos serviços móvel aeronáutico (R) e (OR) (Resolução n.º 403);

Serviço móvel aeronáutico por satélite:

Faixas de frequências superiores às faixas de ondas decamétricas:

Utilização para as comunicações e a difusão de informações meteorológicas no serviço móvel aeronáutico (R) e no serviço móvel aeronáutico por satélite (Resolução n.º 406).

Serviço móvel aeronáutico (R):

Faixas de frequências atribuídas em exclusivo ao serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz:

Tratamento das fichas de notificação relativas às consignações de frequência (Resolução n.º 400);
Introdução do plano de adjudicação de frequências do apêndice 27 Aer2 (Resolução n.º 401);
Introdução do novo arranjo aplicável a essas faixas e passagem da exploração em DFL à exploração em FLU (Resolução n.º 402);

Faixas de frequências atribuídas em exclusivo ao serviço móvel aeronaútico (R) entre 21 924 kHz e 22 000 kHz:

Introdução da nova disposição (aditamento ao apêndice 27Aer2) (Resolução n.º 404);

Faixas de frequências superiores às faixas de ondas decamétricas:

Utilização para as comunicações e a difusão de informações meteorológicas no serviço móvel aeronaútico (R) e no serviço móvel aeronaútico por satélite (Resolução n.º 406);

Utilização das frequências de 3023 kHz e 5680 kHz:

Em comum pelos serviços móvel aeronáutico (R) e (OR) (Resolução n.º 403);

Utilização (emprego melhorado) das frequências do serviço móvel aeronáutico (R) (Resolução n.º 405);
Utilização não autorizada por outros serviços das frequências das faixas atribuídas ao serviço móvel aeronáutico (R) (Resolução n.º 407);
V. também *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
V. também *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. também *Serviços de radiodeterminação* (Resolução n.º 600).

Serviço móvel marítimo:

Emprego da técnica da FLU nas faixas do serviço radiotelefónico compreendidas entre 1605 kHz e 400 kHz (Resolução n.º 306);
Espaçamento das frequências na faixa de 156-174 MHz (Resolução n.º 308);
Estabelecimento de um sistema mundial coordenado para a recolha dos dados relativos à oceanografia (Resolução n.º 314);
Frequências a prever com vista ao estabelecimento e à introdução futura de sistemas de telemedida, de telecomando e de permuta de dados para os movimentos dos navios (Resolução n.º 310);
Frequências navio-navio nas faixas compreendidas entre 1605 kHz e 3600 kHz na Região 1, reexame das zonas de utilização das (Resolução n.º 303);
Identidades no serviço marítimo:

V. *Identificação das estações* (Resolução n.º 313);

Introdução de novos procedimentos de chamada em telegrafia Morse A1A em ondas decamétricas e plano associado de repartição das vias (Resolução n.º 312);
Introdução de um sistema de chamada selectiva numérica (Resolução n.º 311);
Introdução da nova disposição das vias utilizadas para a telegrafia Morse da classse A1A nas faixas compreendidas entre 4000 kHz e 27 500 kHz (Resolução n.º 304);
Notificação das frequências não emparelhadas utilizadas pelas estações de navio para os sistemas de faixas estreita de telegrafia com impressão directa e de transmissão de dados (Resolução n.º 301);
Passagem à técnica da FLU das estações radiotelefónicas nas faixas compreendidas entre 1605 kHz e 4000 kHz (Resolução n.º 307);
Supressão eventual das taxas de estação móvel pra a correspondência pública, data recomendada para a (Resolução n.º 315);
Tratamento pela IRFB das fichas de notificação de consignação de frequência às estações oceanográficas (Resolução n.º 302);
Utilização e notificação das frequências emparelhadas reservadas aos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados funcionado nas faixas de ondas decamétricas (Resolução n.º 300);

Utilização não autorizada das frequências das faixas atribuídas ao serviço móvel marítimo (Resolução n.º 309);
V. também *Correspondência pública* (Resolução n.º 201);
V. também *Perigo e segurança* (Resoluções n.ºs 200 e 305);
V. também *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
v. também *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. também *Serviço móvel marítimo* (Resolução n.º 316);
V. também *Serviços de radiodeterminação* (Resolução n.º 600);
V. também *Serviços móveis* (Resolução n.º 202).

Serviço móvel marítimo por satélite:

Identidades do serviço móvel marítimo:

V. *Identificação das estações* (Resolução n.º 313);
V. também *Correspondência pública* (Resolução n.º 20).

Serviços de radiodeterminação:

Utilização pelo serviço de radionavegação de certas faixas de frequências das ondas decimétricas e centimétricas (Resolução n.º 600);
V. também *Serviço fixo* (Resolução n.º 38).

Serviços de Terra:

V. *Serviço de radiodifusão por satélite* (Resoluções n.ºs 33 e 34);
V. *Serviço fixo por satélite* (Resolução n.º 31);
V. *Serviços espaciais* (Resoluções n.ºs 32 e 703).

Serviços móveis:

Convocação de conferências encarregadas de definir critérios de partilha para a utilização das faixas das ondas métricas e decimétricas atribuídas aos serviços fixo, de radiodifusão e móvel na Região 3 (Resolução n.º 702);
Convocação de uma Conferência Administrativa Mundial das Radiocomunicações para os Serviços Móveis (Resolução n.º 202);
Reconsignação das frequências às estações dos serviços fixo e móvel funcionando em certas faixas atribuídas aos serviços de radiolocalização e de amador na Região 1 (Resolução n.º 38);
V. também *Correspondência pública* (Resolução n.º 201);
V. também *Perigo e segurança* (Resoluções n.ºs 200 e 305);
V. também *Serviço de radiodifusão por satélite* (Resolução n.º 31);
V. também *Serviço fixo* (Resolução n.º 8).

Serviços espaciais:

Cooperação internacional e assistência técnica (Resolução n.º 15);
Métodos de cálculo e critérios de interferência no que respeita à partilha de frequências entre serviços de radiocomunicação espacial e serviços de radiocomunicação de Terra ou entre serviços de radiocomunicação espacial (Resolução n.º 703);
Utilização das consignações de frequência às estações de radiocomunicação de Terra e de radiocomunicação espacial nas faixas de 11,7-12,2 GHz na Região 3 e de 11,7-12,5 GHz na Região 1 (Resolução n.º 32);
Utilização equitativa por todos os países, com igualdade de direitos, das faixas de frequências atribuídas aos serviços de radiocomunicação espacial (Resolução n.º 2);
V. também *Serviço de radiodifusão por satélite* (Resoluções n.ºs 33, 34, 503 e 506).

Técnica da faixa lateral única (FLU):

V. *Serviço de radiodifusão* (Resolução n.º 508);
V. *Serviço móvel aeromáutico (R)* (Resolução n.º 402);
V. *Serviço móvel marítimo* (Resoluções n.ºs 306 e 307).

Terminologia:

Nova definição de certos termos contidos no anexo 2 à Convenção e aplicáveis ao Regulamento das Radiocomunicações (Resolução n.º 68).

União Internacional das Telecomunicações:

Exigindo uma intervenção directa de:

Comissão Consultiva Internacional das Radiocomunicações (CCIR):

V. *Conferências administrativas* (Resolução n.º 17);
V. *Cooperação técnica* (Resolução n.º 16);
V. *Perigo e segurança* (Resolução n.º 200);
V. *Divisão do Mundo* (Resoluções n.ºs 61 e 66);
V. *Equipamento* (Resoluções n.ºs 63 e 64);
V. *Gestão das frequências* (Resoluções n.ºs 7 e 35);
V. *Identificação das estações* (Resolução n.º 313);
V. *Propagação* (Resoluções n.ºs 5 e 60);
V. *Órbita dos satélites geostacionários* (Resolução n.º 3);
V. *Regulamento das Radiocomunicações* (Resolução n.º 65);
V. *Serviço de radiodifusão* (Resoluções n.ºs 508, 509, 510 e 702);
V. *Serviço de radiodifusão por satélite* (Resoluções n.ºs 31, 34, 505, 700 e 701);
V. *Serviço fixo por satélite* (Resolução n.º 101);
V. *Serviço móvel marítimo* (Resoluções n.ºs 310 e 311);
V. *Serviços de radiodeterminação* (Resolução n.º 600);
V. *Serviços móveis* (Resolução n.º 202);
V. *Serviços espaciais* (Resolução n.º 703);
V. *Terminologia* (Resolução n.º 68);

Comissão Consultiva Internacional Telegráfica e Telefónica (CCIT):

V. *Cooperação técnica* (Resolução n.º 16);
V. *Correspondência pública* (Resolução n.º 201);
V. *Equipamento* (Resolução n.º 64);
V. *Identificação das estações* (Resolução n.º 313);
V. *Terminologia* (Resolução n.º 68);

Comissão Internacional de Registo de Frequências (IFRB):

V. *Conferências administrativas* (Resolução n.º 17);
V. *Emissões* (Resolução n.º 36);
V. *Ficheiro de Referência Internacional das Frequências (FRIP)* (Resolução n.º 30);
V. *Gestão das frequências* (Resoluções n.ºs 7 e 35);
V. *Órbita dos satélites geostacionários* (Resoluções n.ºs 2, 3 e 4);
V. *Regulamento das Radiocomunicações* (Resolução n.º 6);
V. *Serviço móvel aeronáutico (R)* (Resoluções n.ºs 400, 401, 402, 404 e 407);
V. *Serviço de amador por satélite* (Resolução n.º 642);
V. *Serviço de radiodifusão* (Resoluções n.ºs 500, 501, 508 e 509);
V. *Serviço de radiodifusão por satélite* (Resoluções n.ºs 33, 502, 503, 507 e 701);
V. *Serviço fixo* (Resoluções n.ºs 8, 9, 38 e 102);
V. *Serviço fixo por satélite* (Resoluções n.ºs 100 e 102);
V. *Serviço móvel marítimo* (Resoluções n.ºs 300, 301, 302, 309 e 314);
V. *Serviços móveis* (Resolução n.º 202);
V. *Serviços espaciais* (Resoluções n.ºs 32 e 703);

Conferências administrativas:

V. *Perigo e segurança* (Resolução n.º 305);
V. *Equipamento* (Resolução n.º 63);
V. *Órbita dos satélites geostacionários* (Resolução n.º 4);
V. *Propagação* (Resolução n.º 60);
V. *Serviço de radiodifusão* (Resoluções n.ºs 508 e 702);
V. *Serviço de radiodifusão por satélite* (Resoluções n.ºs 505 e 701);
V. *Serviço móvel marítimo* (Resoluções n.ºs 300, 310 e 314);
V. *Serviços de radiodeterminação* (Resolução n.º 600);
V. *Terminologia* (Resolução n.º 68);

Além disso, as resoluções seguintes relacionam-se de uma maneira ou de outra com as futuras conferências:

V. também *Cooperação técnica* (Resoluções n.ºs 14, 16 e 316);
V. também *Correspondência pública* (Resolução n.º 201);
V. também *Perigo e segurança* (Resoluções n.ºs 200 e 309);
V. também *Identificação das estações* (Resoluções n.ºs 12, 13 e 313);
V. também *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
V. também *Propagação* (Resolução n.º 5);
V. também *Radiobalizas de localização de sinistros* (Resolução n.º 601);
V. também *Serviço fixo* (Resolução n.º 38);
V. também *Serviço móvel aeronáutico (R)* (Resoluções n.ºs 400, 401, 402, 403, 404, 405 e 407);
V. também *Serviço móvel marítimo* (Resoluções n.ºs 302, 303, 304, 306, 307, 308, 311, 312 e 315);
V. também *Serviços espaciais* (Resolução n.º 15);

Conferência de plenipotenciários:

V. também *Cooperação técnica* (Resolução n.º 7);
V. também *Terminologia* (Resolução n.º 68);

Conselho de administração:

V. também *Conferências administrativas* (Resolução n.º 17);
V. também *Cooperação técnica* (Resoluções n.ºs 5, 14, 15 e 16);
V. também *Divisão do Mundo* (Resolução n.º 66);
V. também *Gestão das frequências* (Resoluções n.ºs 7 e 37);
V. também *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);
V. também *Órbita dos satelites geostacionários* (Resolução n.º 3);
V. também *Propagação* (Resolução n.º 60);
V. também *Serviço de radiodifusão* (Resoluções n.ºs 508, 509, 510 e 702);
V. também *Serviço de radiodifusão por satélite* (Resoluções n.ºs 507 e 701);
V. também *Serviço fixo por satélite* (Resolução n.º 101);
V. também *Serviços de radiodeterminação* (Resolução n.º 600);
V. também *Serviços móveis* (Resolução n.º 202);

Secretário-geral:

V. também *Conferências administrativas* (Resolução n.º 17);
V. também *Cooperação técnica* (Resoluções n.ºs 5, 14, 16 e 316);
V. também *Perigo e segurança* (Resoluções n.ºs 200 e 305);
V. também *Gestão das frequências* (Resoluções n.ºs 7 e 37);
V. também *Identificação das estações* (Resoluções n.ºs 12, 13 e 313);
V. também *Navios e aeronaves não participantes num conflito armado* (Resolução n.º 11);

V. também *Propagação* (Resolução n.º 60);
V. também *Regulamento das Radiocomunicações* (Resoluções n.ºs 6 e 65);
V. também Serviço de *radiodifusão* (Resoluções n.ºs 502 e 701);
V. também *Serviço de radiodifusão por satélite* (Resoluções n.ºs 500 e 508);
V. também *Serviço móvel aeronáutico (R)* (Resolução n.º 404);
V. também *Serviço móvel marítimo* (Resoluções n.ºs 310, 311 e 312);
V. também *Serviços de radiodeterminação* (Resolução n.º 600);
V. também *Serviços espaciais* (Resolução n.º 703);
V. também *Terminologia* (Resolução n.º 68).

Utilização das técnicas informáticas:

V. *Gestão das frequências* (Resolução n.º 37).

PARTE B

Recomendações

SECÇÃO I

Assuntos do índice analítico (palavras-chaves)

Recomendação n.º 1 — **Comunicações em caso de catástrofes — serviços espaciais:**

Operações de socorro;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 2 — **Conferências administrativas — serviços espaciais:**

Ficheiro de Referência Internacional das Frequências (FRIP);
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conselho de administração).

Recomendação n.º 3 — **Transmissão de energia eléctrica:**

Organizações internacionais (ONU);
União Internacional das Telecomunicações (CCIR e secretário-geral).

Recomendação n.º 4 — **Redes de radiocomunicação (4000-27 500 kHz):**

Gestão das frequências.

Recomendação n.º 5 — **Gestão das frequências:**

Cooperação e assistência técnicas.

Recomendação n.º 6 — **Cooperação e assitência técnicas:**

União Internacional das Telecomunicações (IFRB).

Recomendação n.º 7 — **Serviço móvel aeronáutico (R) — serviço móvel marítimo:**

Licenças.

Recomendação n.º 8 — **Identificação das estações:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 9 — **Serviço de radiodifusão — serviço móvel aeronáutico (R) — serviço móvel marítimo:**

União Internacional das Telecomunicações (secretário-geral).

Recomendação n.º 10 — **Conferências administrativas:**

União Internacional das Telecomunicações (secretário-geral).

Recomendação n.º 11 — **Conferências administrativas — Regulamento das Radiocomunicações.**

Recomendação n.º 12 — **Conferências administrativas — União Internacional das Telecomunicações (conferências de plenipotenciários):**

Ligações de conexão;
Órbita dos satélites geostacionários;
Serviço de radiodifusão por satélite;
Serviço fixo;
Serviços de radiodeterminação;
Serviços móveis;
Serviços espaciais;
União Internacional das Telecomunicações (conselho de administração).

Recomendação n.º 13 — **Regulamento das Radiocomunicações — União Internacional das Telecomunicações (conselho de administração):**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 30 — **Fiscalização das emissões:**

Organizações internacionais (ONU);
União Internacional das Telecomunicações (CCIR e IFRB).

Recomendação n.º 31 — **Aplicação das técnicas informáticas — gestão das frequências:**

União Internacional das Telecomunicações (CCIR e IFRB e secretário-geral).

Recomendação n.º 60 — **Normas técnicas:**

União Internacional das Telecomunicações (CCIR e IFRB).

Recomendação n.º 61 — **Normas técnicas:**

Gestão das frequências;
União Internacional das Telecomunicações (CCIR e IFRB).

Recomendação n.º 62 — **Emissões:**

União Internacional das Telecomunicações (CCIR e IFRB).

Recomendação n.º 63 — **Larguras de faixa:**

União Internacional das Telecomunicações (CCIR e IFRB).

Recomendação n.º 64 — **Gestão das frequências:**

Normas técnicas;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 65 — **Gestão das frequências:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 66 — **Emissões:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 67 — **Terminologia:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 68 — **Propagação:**

Normas técnicas;
Organizações internacionais (União Radiocientífica Internacional);
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 69 — **Equipamento:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 70 — **Equipamento:**

Normas técnicas;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 71 — **Equipamento.**

Recomendação n.º 72 — **Terminologia:**

União Internacional das Telecomunicações (CCIR, CCITT, conferências administrativas e secretário-geral).

Recomendação n.º 73 — **Terminologia:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 74 — **Unidades SI.**

Recomendação n.º 100 — **Difusão troposférica:**

União Internacional das Telecomunicações (CCIR, conferências administrativas e conselho de administração).

Recomendação n.º 101 — **Ligações de conexão — serviço de radiodifusão por satélite — serviço fixo por satélite:**

Serviços espaciais;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 102 — **Feixes hertzianos:**

Serviço fixo por satélite;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 103 — **Serviço fixo por satélite.**

Recomendação n.º 200 — **Perigo e segurança:**

Organizações internacionais (OMCI);
Serviço móvel marítimo;
Serviços móveis;
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Recomendação n.º 201 — **Perigo e segurança:**

Organizações internacionais (OMCI);
Serviço móvel marítimo;
Serviço móvel marítimo por satélite;
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 202 — **Perigo e segurança:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 203 — **Perigo e segurança — serviço móvel marítimo:**

Organizações internacionais (OMCI);
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Recomendação n.º 204 — **Regulamento das Radiocomunicações — serviço móvel aeronáutico (R) — serviço móvel marítimo — serviços móveis:**

Organizações internacionais (OACI e OMCI);
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Recomendação n.º 300 — **Serviço móvel marítimo — serviços móveis:**

Organizações internacionais (OMCI);
União Internacional das Telecomunicações (CCIR, conferências administrativas, conselho de administração e secretário-geral).

Recomendação n.º 301 — **Serviço móvel marítimo — serviços móveis:**

Organizações internacionais (OMCI);
União Internacional das Telecomunicações (CCIR, conferências administrativas, conselho de administração e secretário-geral).

Recomendação n.º 302 — **Serviço móvel marítimo:**

Gestão das frequências;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 303 — **Perigo e segurança:**

Serviço móvel marítimo.

Recomendação n.º 304 — **Serviço móvel marítimo:**

União Internacional das Telecomunicações (secretário-geral).

Recomendação n.º 305 — **Regulamento das Radiocomunicações — serviço móvel marítimo:**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 306 — **Perigo e segurança — serviço móvel marítimo.**

Recomendação n.º 307 — **Perigo e segurança — serviço móvel marítimo:**

União Internacional das Telecomunicações (conferências administrativas e CCIR).

Recomendação n.º 308 — **Serviço móvel marítimo:**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 309 — **Perigo e segurança — serviço móvel marítimo.**

Organizações internacionais (OMCI);
União Internacional das Telecomunicações (conferências administrativas e secretário-geral).

Recomendação n.º 310 — **Serviço móvel marítimo:**

Organizações Internacionais (OMCI);
União Internacional das Telecomunicações (CCIR, CCITT, conferências administrativas e secretário-geral).

Recomendação n.º 311 — **Perigo e segurança — serviço móvel marítimo.**

Recomendação n.º 312 — **Serviço móvel marítimo:**

União Internacional das Telecomunicações (CCIR e CCITT).

Recomendação n.º 313 — **Serviço móvel marítimo por satélite:**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 400 — **Serviço móvel aeronáutico (R):**

Organizações internacionais (OACI);
União Internacional das Telecomunicações (IFRB e secretário-geral).

Recomendação n.º 401 — **Serviço móvel aeronáutico (R).**

Recomendação n.º 402 — **Serviço móvel aeronáutico (R):**

Gestão das frequências;
Organizações internacionais (OACI);
União Internacional das Telecomunicações (IRFB e secretário-geral).

Recomendação n.º 403 — **Serviço móvel aeronáutico (R):**

Organizações internacionais (OACI);
União Internacional das Telecomunicações (IFRB).

Recomendação n.º 404 — **Serviço móvel aeronáutico (R):**

Gestão das frequências;
União Internacional das Telecomunicações (IRFB).

Recomendação n.º 405 — **Serviço móvel aeronáutico (R):**

Organizações internacionais (OACI);
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 406 — **Serviço móvel aeronáutico (OR):**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas e conselho de administração).

Recomendação n.º 407 — **Serviço móvel aeronáutico (R):**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 500 — **Conferências administrativas — serviço de radiodifusão:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 501 — **Conferências administrativas — serviço de radiodifusão:**

Técnicas de faixa lateral única;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 502 — **Serviço de radiodifusão:**

Organizações internacionais (ONU, ONUDI e UNESCO);
União Internacional das Telecomunicações (CCIR e secretário-gera).

Recomendação n.º 503 — **Serviço de radiodifusão:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 504 — **Serviço de radiodifusão:**

União Internacional das Telecomunicações (CCIR, conferências administrativas e conselho de administração).

Recomendação n.º 505 — **Serviço de radiodifusão por satélite:**

Propagação;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 506 — **Serviço de radiodifusão por satélite.**

Recomendação n.º 507 — **Emissões — serviço de radiodifusão por satélite:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 508 — **Serviço de radiodifusão por satélite:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 600 — **Serviços de radiodeterminação:**

Organizações internacionais (OACI e OMCI).

Recomendação n.º 601 — **Serviços de radiodeterminação:**

Organizações internacionais (OACI).

Recomendação n.º 602 — **Serviços de radiodeterminação:**

Organizações internacionais (AISM e OMCI);
União Internacional das Telecomunicações (CCIR, conferências administrativas, conselho de administração e secretário-geral).

Recomendação n.º 603 — **Serviços de radiodeterminação.**

Recomendação n.º 604 — **Perigo e segurança — radiobalizas de localização de sinistros:**

Organizações internacionais (OACI e OMCI);
Serviço móvel aeronáutico (R);
Serviço móvel marítimo;
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 605 — **Serviços de radiodeterminação:**

Organizações internacionais (OMCI);
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 620 — **Meteorologia:**

Organizações internacionais (OMM).

Recomendação n.º 700 — **Serviços espaciais.**

Recomendação n.º 701 — **Serviços de radioastronomia:**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 702 — **Emissões:**

União Internacional das Telecomunicações (conferências administrativas).

Recomendação n.º 703 — **Serviços de radiodeterminação — serviços móveis:**

Serviço fixo.

Recomendação n.º 704 — **Serviço de radiodifusão — serviços de radiodeterminação:**

Gestão das frequências;
Organizações internacionais (OACI);
União Internacional das Telecomunicações (CCIR).

Recomendação n.º 705 — **Serviço de radiodifusão — serviço de radiodifusão por satélite:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 706 — **Serviço fixo — serviço fixo por satélite — serviços móveis — serviços espaciais:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 707 — **Serviço intersatélites — serviços de radiodeterminação:**

Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 708 — **Serviços de terra — serviços espaciais:**

União Internacional das Telecomunicações (CCIR).

Recomendação n.º 709 — **Serviço intersatélites — serviço móvel aeronáutico (R):**

União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 710 — **Serviço intersatélites — serviço de radiodeterminação:**

União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 711 — **Serviços espaciais:**

Gestão de frequências;
Regulamento das Radiocomunicações;
União Internacional das Telecomunicações (CCIR e conferências administrativas).

Recomendação n.º 712 — **Serviço de radiodifusão por satélite:**

União Internacional das Telecomunicações (CCIR).

Secção II

Aplicação das técnicas informáticas:

Manual sobre a aplicação das técnicas informáticas à gestão do espectro radioeléctrico (Recomendação n.º 31).

Comunicações em caso de catástrofes:

Utilização de sistemas de radiocomunicações espaciais em caso de catástrofes naturais, etc. (Recomendação n.º 1).

Conferências administrativas:

Convocação de futuras conferências administrativas das radiocomunicações para tratarem de assuntos determinados (Recomendação n.º 12);
Elaboração da documentação técnica necessária para a Conferência Administrativa Mundial das Radiocomunicações para radiodifusão em Ondas Decamétricas (Recomendação n.º 500);
Estudo da técnica da faixa lateral única para a Conferência Adiministrativa Mundial das Radiocomunicações para a Radiodifusão em Ondas Decamétricas (Recomendação n.º 501);
Exame, pelas conferências administrativas mundiais das radiocomunicações, do estado de ocupação do espectro das frequências no domínio das radiocomunicações espaciais (Recomendação n.º 2);
Numeração que figura na margem do Regulamento das Radiocomunicações (Recomendação n.º 11);
Apresentação de propostas de modificação aos textos do Regulamento das Radiocomunicações (Recomendação n.º 10);
Outras recomendações relativas às conferências:

V. Perigo e segurança (Recomendações n.ºs 200 e 201);
V. Difusão troposférica (Recomendação n.º 100);
V. Emissões (Recomendação n.º 702);
V. Regulamento das Radiocomunicações (Recomendações n.ºs 13 e 204);
V. Serviço de radioastronomia (Recomendação n.º 701);
V. Serviço de radiodifusão (Recomendação n.º 504);
V. serviço intersatélites (Recomendações n.ºs 707, 709 e 710);
V. Serviço móvel aeronáutico (OR) (Recomendação n.º 406);
V. Serviço móvel aeronáutico (R) (Recomendação n.º 407);
V. Serviço móvel marítimo (Recomendações n.ºs 203, 300, 301, 305, 308, 309 e 310);
V. Serviço móvel marítimo por satélite (Recomendação n.º 313);
V. Serviços de radiodeterminação (Recomendações n.ºs 602 e 605);
V. Serviços de Terra (Recomendação n.º 711);
V. Terminologia (Recomendação n.º 72).

Fiscalização das emissões:

Fiscalização internacional das emissões (Recomendação n.º 30);

Cooperação e assistência técnicas:

Necessidades práticas dos países que têm necessidade de assistência especial (Recomendação n.º 6);
V. *Gestão das frequências* (Recomendação n.º 5);

Perigo e segurança:

Data de entrada em vigor da faixa de guarda de 10 kHz para a frequência de 500 kHz no serviço móvel (perigo e chamada) (Recomendação n.º 200);
Designação de uma frequência nas faixas de 435-495 kHz ou 505-526,5 kHz para a emissão, pelas estações costeiras, dos boletins meteorológicos e dos avisos à navegação, utilizando a telegrafia de faixa estreita com impressão directa (Recomendação n.º 309);
Frequência reservada para as necessidades de segurança nas faixas do serviço móvel marítimo compreendidas entre 1605 kHz e 3800 kHz (Recomendação n.º 307);
Protecção das frequências de perigo e de segurança contra as interferências prejudiciais (Recomendação n.º 202);
Sinal de frequência acústica consecutivo ao nível de alarme radiotelefónico emitido pelas estações costeiras (Recomendação n.º 311);
Tráfego de perigo, de urgência e de segurança (Recomendação n.º 201);
Utilização de frequências suplementares além da frequência portadora de 2182 kHz para fins de perigo e de segurança (Recomendação n.º 303);
Utilização futura da faixa de 2170-2194 kHz (Recomendação n.º 203);
Utilização futura e características das radiobalizas de localização de sinistros (Recomendação n.º 604);
Escuta na frequência de 156,8 MHz pelas estações costeiras para fins de perigo (Recomendação n.º 306).

Difusão troposférica:

Faixas de frequências preferenciais para os sistemas que utilizam a propagação por difusão troposférica (Recomendação n.º 100).

Emissões:

Radiações não essenciais:

No serviço de radiodifusão por satélite (Recomendação n.º 507);
Estudos sobre os níveis máximos tolerados de radiações não essenciais (Recomendação n.º 66);

Pesquisa de emissões intencionais de origem extraterrestre (Recomendação n.º 702);
Suplemento às características adicionais de classificação das emissões — apêndice 6 (Recomendação n.º 62).

Equipamento:

Estudo das características técnicas do (Recomendação n.º 70);
Normalização das características técnicas e de exploração dos materiais radioeléctricos (Recomendação n.º 71);
Tolerância de frequência dos emissores (Recomendação n.º 69).

Feixes hertzianos:

Métodos de modulação para os feixes hertzianos sob o ponto de vista da partilha das faixas de frequências com os sistemas do serviço fixo por satélite (Recomendação n.º 102).

Ficheiro de referência internacional das frequências (FRIF):

V. *Serviços espaciais* (Recomendação n.º 2).

Gestão das frequências:

Manual sobre a aplicação das técnicas informáticas à gestão do espectro radioeléctrico (Recomendação n.º 31);
Meios a aplicar para reduzir a saturação da faixa de 3-30 MHz (Recomendação n.º 5);
Partilha do espectro e utilização das faixas de frequências (Recomendação n.º 65);
Relações de protecção e campos mínimos necessários (Recomendação n.º 64);
V. Normas técnicas (Recomendação n.º 61);
V. Redes de radiocomunicação (400-27 500 kHz) (Recomendação n.º 4);
V. Serviço de radiodifusão (Recomendação n.º 104);
V. Serviço móvel aeronáutico (R) (Recomendações n.ºs 402 e 404);
V. Serviço móvel marítimo (Recomendação n.º 302);
V. Serviços espaciais (Recomendação n.º 711).

Identificação das estações:

Identificação automática das estações (Recomendação n.º 8).

Larguras de faixa:

Cálculo das larguras de faixa (Recomendação n.º 63).

Ligações de conexão:

Ligações de conexão no serviço de radiodifusão por satélite (Recomendação n.º 101);
V. também *Conferências administrativas* (Recomendação n.º 101).

Licenças:

V. *Serviço móvel aeronáutico (R)* (Recomendação n.º 7);
V. *Serviço móvel marítimo* (Recomendação n.º 7).

Meteorologia:

Serviço dos auxiliares da meteorologia (Recomendação n.º 620).

Normas técnicas:

Normas técnicas da IFRB (Recomendação n.º 60);
Normas técnicas necessárias à avaliação das interferências prejudiciais nas faixas de frequências superiores a 28 MHz (Recomendação n.º 61);
V. *Equipamento* (Recomendação n.º 70);
V. *Gestão das frequências* (Recomendação n.º 64);
V. *Propagação* (Recomendação n.º 68).

Operações de socorro:

V. *Comunicações em caso de catástrofes* (Recomendação n.º 1).

Órbita dos satélites geostacionários:

V. *Conferências administrativas* (Recomendação n.º 12).

Organizações internacionais:

Recomendações que apresentam interesse para as seguintes organizações:

Associação Internacional de Sinalização Marítima (AISM):

V. *Serviços de radiodeterminação* (Recomendação n.º 602);

Organização das Nações Unidas (ONU):

V. *Fiscalização das emissões* (Recomendação n.º 30);
V. *Equipamento* (Recomendação n.º 502);
V. *Serviço de radiodifusão* (Recomendação n.º 502)
V. *Transmissão da energia eléctrica* (Recomendação n.º 3);

Organização das Nações Unidas para o Desenvolvimento Industrial (ONUDI):

V. *Equipament* (Recomendação n.º 502);
V. *Serviço de radiodifusão* (Recomendação n.º 502);

Organização das Nações Unidas para a Educação, a Ciência e a Cultura (UNESCO):

V. *Serviço de radiodifusão* (Recomendação n.º 502);

Organização Intergovernamental Consultiva da Navegação Marítima (OMCI):

V. *Perigo e segurança* (Recomendações n.ºs 200, 201 e 203);
V. *Radiobalizas de localização de sinistros* (Recomendação n.º 604);
V. *Regulamento das radiocomunicações* (Recomendação n.º 204);
V. *Serviço móvel marítimo* (Recomendações n.ºs 300, 301, 309 e 310);
V. *Serviços de radiodeterminação* (Recomendações n.ºs 600, 602 e 605);

Organização Internacional das Aviação Civil (OACI):

V. *Radiobalizas de localização de sinistros* (Recomendação n.º 604);
V. *Regulamento das radiocomunicações* (Recomendação n.º 204);
V. *Serviço móvel aeronáutico por satélite* (Recomendação n.º 405);
V. *Serviço móvel aeronáutico (R)* (Recomendações n.ºs 400, 402 e 403);
V. *Serviço de radiodeterminação* (Recomendações n.ºs 600, 601 e 704).

Organização Meteorológica Mundial (OMM):

V. *Meteorologia* (Recomendação n.º 620).

União Internacional Radiocientífica:

V. *Propagação* (Recomendação n.º 68).

Propagação:

Estudos e previsões da propagação e dos ruídos radioeléctricos (Recomendação n.º 68);
V. também *Serviço de radiodifusão por satélite* (Recomendação n.º 505).

Radiobalizas de localização de sinistros:

Utilização futura e características das radiobalizas de localização de sinistros (Recomendação n.º 604).

Regulamento das Radiocomunicações:

Aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações (Recomendação n.º 204);
Conferência administrativa mundial das radiocomunicações para uma revisão geral ou parcial do Regulamento das Radiocomunicações (Recomendação n.º 13);
Numeração que figura na margem do Regulamento das Radiocomunicações (Recomendação n.º 11);
Utilização das vias 15 e 17 do apêndice 18 pelas estações de comunicações de bordo (Recomendação n.º 305);
V. *Perigo e segurança* (Recomendações n.ºs 202 e 203);
V. *Serviço móvel aeronáutico (OR)* (Recomendação n.º 406);
V. *Serviços de radiodeterminação* (Recomendação n.º 707);
V. *Serviços espaciais* (Recomendações n.ºs 2 e 711);
V. *Terminologia* (Recomendação n.º 73).

Redes de radiocomunicação (4000-27 500 kHz):

Melhoria do grupo das ligações das redes nacionais e internacionais de radiocomunicações que funcionam nas faixas compreendidas entre 4000 kHz e 27 500 kHz (Recomendação n.º 4).

Serviço de radioastronomia:

Utilização da faixa de frequências de 1330-1400 MHz pelo serviço de radioastronomia (Recomendação n.º 701).

Serviço de radiodifusão:

Compatibilidade entre o serviço da radiodifusão na faixa de 100-108 MHz e o serviço de radionavegação aeronáutica na faixa de 108-117,975 MHz (Recomendação n.º 705);
Critérios a aplicar à partilha das frequências entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra na faixa de 620-790 MHz (Recomendação n.º 705);
Elaboração da documentação técnica para a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão em Ondas Decamétricas (Recomendação n.º 500);
Estudo da técnica da faixa lateral única para a Conferência Administrativa Mundial das Radiocomunicações para a Radiodifusão em Ondas Decamétricas (Recomendação n.º 501);
Medidas a tomar para impedir o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves fora dos limites dos territórios nacionais (Recomendação n.º 9);
Plano de radiodifusão na faixa de 1605-1705 kHz na Região 2 (Recomendação n.º 504);
Radiodifusão em ondas decamétricas (Recomendação n.º 503);
Especificações dos receptores de televisão a preço módico (Recomendação n.º 502).

Serviço de radiodifusão por satélite:

Antenas de emissão (Recomendação n.º 508);
Critérios a aplicar a partilha das frequências entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra na faixa de 620-790 MHz (Recomendação n.º 705);
Harmónicas da frequência fundamental (Recomendação n.º 506);
Interdependência entre a concepção dos receptores, o agrupamento dos canais e os critérios de partilha (Recomendação n.º 712);
Ligações de conexão no serviço de radiodifusão por satélite (Recomendação n.º 101);
Propagação na faixa de 12 GHz (Recomendação n.º 505);
Radiações não essenciais (Recomendação n.º 507);
V. também *Conferências administrativas* (Recomendação n.º 12).

Serviços de radiodeterminação:

Compatibilidade entre o serviço de radiodifusão na faixa de 100-108 MHz e o serviço de radionavegação aeronáutica na faixa de 108-117,975 MHz (Recomendação n.º 704);

Disposições técnicas relativas aos radiofaróis marítimos na zona africana (Recomendação n.º 603);
Necessidade de fazer cessar o funcionamento das estações dos serviços fixo e móvel nas faixas de frequências de 149,9-150,05 MHz e de 399,9-400,05 MHz atribuídas ao serviço de radionavegação por satélite (Recomendação n.º 703);
Radionavegação aeronáutica — sistema destinado a evitar as colisões (Recomendação n.º 601);
Radiofaróis marítimos (Recomendação n.º 602);
Equipamentos de resposta (Recomendação n.º 605);
Utilização da faixa de frequências de 32-33 GHz, partilhada entre o serviço intersatélites e o serviço de radionavegação (Recomendação n.º 707);
Utilização da faixa de frequências de 9300-9500 MHz (Recomendação n.º 600);
Utilização de radiodetectores aerotransportados nas faixas de frequências partilhadas pelo serviço intersatélites e o serviço de radiolocalização (Recomendação n.º 710);
V. também *Conferências administrativas* (Recomendação n.º 12).

Serviço de Terra:

Faixas de frequência partilhadas pelos serviços de radiocomunicação espacial e os serviços de radiocomunicação de Terra (Recomendação n.º 708).

Serviço fixo:

Partilha das frequências entre, de um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, do outro, os serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz (Recomendação n.º 706);
V. *Conferências administrativas* (Recomendação n.º 12);
V. *Serviços de radiodeterminação* (Recomendação n.º 703).

Serviço fixo por satélite:

Dispersão da energia da portadora no serviço fixo por satélite (Recomendação n.º 103);
Ligações de conexão no serviço de radiodifusão por satélite (Recomendação n.º 101);
Partilha das frequências entre, de um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, do outro, os serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz (Recomendação n.º 706);
V. *Feixes hertzianos* (Recomendação n.º 102).

Serviço intersatélites:

Partilha das faixas de frequências entre o serviço móvel aeronáutico e o serviço intersatélites (Recomendação n.º 709);
Utilização da faixa de frequências de 32-33 GHz, partilhada entre o serviço intersatélites e o serviço de radionavegação (Recomendação n.º 707);
Utilização de radiodetectores aerotransportados nas faixas de frequências partilhadas pelo serviço intersatélites e o serviço de radiolocalização (Recomendação n.º 710).

Serviço móvel aeronáutico (OR):

Revisão do plano de adjudicação das frequências — apêndice 26 (Recomendação n.º 406).

Serviço móvel aeronáutico por satélite (R):

Estudo da utilização deste serviço (Recomendação n.º 405).

Serviço móvel aeronáutico (R):

Aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações (Recomendação n.º 204);
Cooperação com vista ao emprego eficaz das frequências designadas para utilização mundial (Recomendação n.º 402);
Utilização eficaz das frequências designadas para utilização mundial ((Recomendação n.º 401);
Medidas a tomar para impedir o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves fora dos limites dos territórios nacionais (Recomendação n.º 9);
Introdução de técnicas que contribuirão para reduzir a saturação das faixas de ondas decamétricas (Recomendação n.º 403);
Modelos normalizados de licenças a conceder às estações de navio de aeronave (Recomendação n.º 7);
N.º 27/123 do apêndice 27 Aer2 (subdivisão de zona 5B) (Recomendação n.º 407);
Partilha das faixas de frequências entre o serviço móvel aeronáutico e o serviço intersatélites (Recomendação n.º 709);
Passagem ao novo plano de adjudicação de frequências entre 2850 kHz e 22 000 kHz (Recomendação n.º 400);
Utilização da faixa de 136-137 MHz (Recomendação n.º 404);
V. também *Perigo e segurança* (Recomendação n.º 604).

Serviços móveis:

Aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações (Recomendação n.º 204);
Necessidade de fazer cessar o funcionamento das estações dos serviços fixo e móvel nas faixas de frequências de 149,9-150,05 MHz e de 399,9-400,05 MHz atribuídas ao serviço de radionavegação por satélite (Recomendação n.º 703);
Planificação da utilização das frequências na faixa de 435-526,5 kHz na Região 1 (Recomendação n.º 300);
Planificação da utilização das frequências nas faixas entre 1606,5 kHz e 3400 kHz na Região 1 (Recomendação n.º 301);
V. *Conferências administrativas* (Recomendação n.º 12);
V. *Perigo e segurança* (Recomendação n.º 200).

Serviço móvel marítimo:

Aplicação dos capítulos NX, NXI e NXII da Reestruturação do Regulamento das Radiocomunicações (Recomendação n.º 204);
Designação de frequências das faixas de ondas hectométricas utilizar em comum pelas estações costeiras radiotelefónicas para as comunicações com as estações de navio de nacionalidades diferentes das suas (Recomendação n.º 308);

Designação de uma frequência nas faixas de 435-495 kHz ou de 505-526,5 kHz para a emissão pelas estações costeiras dos boletins meteorológicos e dos avisos à navegação, por meio de telegrafia de faixa estreita com impressão directa (Recomendação n.º 309);
Estudos de interligação dos sistemas de radiocomunicações móveis marítimas com as redes telefónicas e telegráfica internacionais (Recomendação n.º 312);
Frequência reservada ás necessidades da segurança nas faixas compreendidas entre 1605 kHz e 3800 kHz (Recomendação n.º 307);
Frequências destinadas a serem utilizadas em todo o Mundo pelos navios de todas as categorias, assim como pelas estações costeiras — apêndice 16, secção B (Recomendação n.º 304);
Melhor utilização das vias radiotelefónicas em ondas decamétricas para estações costeiras (Recomendação n.º 302);
Medidas a tomar para impedir o funcionamento de estações de radiodifusão a bordo de navios ou de aeronaves fora dos limites dos territórios nacionais (Recomendação n.º 9);
Modelos normalizados de licenças a conceder às estações de navio e às estações de aeronave (Recomendação n.º 7);
Partilha das frequências entre, de um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, de outro, os serviço fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz (Recomendação n.º 706);
Planificação da utilização das frequências na faixa de 435-526,5 kHz na Região 1 (Recomendação n.º 300);
Planificação da utilização das frequências nas faixas compreendidas entre 1606,5 kHz e 3400 kHz na Região 1 (Recomendação n.º 301);
Sistema automático de radiocomunicações em ondas decimétricas para o serviço móvel marítimo (Recomendação n.º 310);
Utilização das vias 15 e 17 do apêndice 18 pelas estações de comunicações de bordo (Recomendação n.º 305);
Utilização de um sinal de frequência acústica consecutivo ao sinal de alarme radiotelefónico emitido pelas estações costeiras (Recomendação n.º 311);
Utilização futura da faixa de 2170-2194 kHz (Recomendação n.º 203);
Escuta na frequência de 156,8 MHz pelas estações costeiras para fins de perigo (Recomendação n.º 306);
V. *Perigo e Segurança* (Recomendações n.ºs 200, 201, 303 e 604);
V. Serviços de radiodeterminação (Recomendação n.º 604).

Serviço móvel marítimo por satélite:

Disposições temporárias relativas aos aspectos técnicos e de exploração (Recomendação n.º 313);
V. também *Perigo e segurança* (Recomendação n.º 201).

Serviços espaciais:

Faixas de frequências partilhadas pelos serviços de radiocomunicação espacial entre si, assim como entre os serviços de radiocomunicação espacial e os serviços de radiocomunicação de Terra (Recomendação n.º 708);
Coordenação das estações terrenas (Recomendação n.º 711);
Exame, pelas conferências administrativas mundiais das radiocomunicações, do estado de ocupação do espectro das frequências no domínio das radiocomunicações espaciais (Recomendação n.º 2);
Partilha das frequências entre, de um lado, o serviço de exploração da Terra por satélite (detectores passivos) e o serviço de pesquisa espacial (detectores passivos) e, do outro, os serviços fixo, móvel, excepto móvel aeronáutico, e fixo por satélite na faixa de 18,6-18,8 GHz (Recomendação n.º 706);
Utilização de sistemas de radiocomunicações espaciais em caso de catástrofes naturais, de epidemias e de outras situações críticas análogas (Recomendação n.º 1);
Utilização e partilha das faixas de frequências atribuídas às radiocomunicações espaciais (Recomendação n.º 700);
V. *Conferências administrativas* (Recomendação n.º 12);
V. *Ligações de conexão* (Recomendação n.º 101).

Técnicas da faixa lateral única:

V. *Serviço de radiodifusão* (Recomendação n.º 501).

Terminologia:

Definição dos termos «zona de serviço» e «zona de cobertura» (Recomendação n.º 67);
Emprego do termo «canal» no Regulamento das Radiocomunicações (Recomendação n.º 73);
Generalidades (Recomendação n.º 72).

Transmissão de energia eléctrica:

Transmissão de energia eléctrica por meio de frequências radioeléctricas a partir de um engenho espacial (Recomendação n.º 3).

União Internacional das Telecomunicações:

Exigindo uma intervenção directa da União:

Comissão Consultiva Internacional das Radiocomunicações (CCIR):

V. *Aplicação das técnicas informáticas* (Recomendação n.º 31);
V. *Fiscalização das emissões* (Recomendação n.º 30);
V. *Perigo e segurança* (Recomendação n.º 201);
V. *Difusão troposférica* (Recomendação n.º 100);
V. *Emissões* (Recomendações n.ºs 62 e 66);
V. *Equipamento* (Recomendações n.ºs 69, 70 e 605);
V. *Feixes hertzianos* (Recomendação n.º 102);
V. *Gestão de frequências* (Recomendações n.ºs 60, 64 e 605);
V. *Identificação das estações* (Recomendação n.º 8);
V. *Larguras de faixa* (Recomendação n.º 63);
V. *Normas técnicas* (Recomendações n.ºs 60 e 61);
V. *Propagação* (Recomendação n.º 68);
V. *Radiobalizas de localização de sinistros* (Recomendação n.º 604);
V. *Radiocomunicações em caso de catástrofes* (Recomendação n.º 1);

V. *Serviço de radiodifusão* (Recomendações n.os 500, 501, 502, 503 e 504);
V. *Serviço de radiodifusão por satélite* (Recomendações n.os 101, 505, 507, 508, 705 e 712);
V. *Serviço fixo* (Recomendação n.º 706);
V. *Serviço intersatélites* (Recomendações n.os 707, 709 e 710);
V. *Serviço móvel aeronáutico por satélite* (Recomendação n.º 405);
V. *Serviço aeronáutico (R)* (Recomendação n.º 709);
V. *Serviço móvel marítimo* (Recomendações n.os 300, 301, 302, 307, 310 e 312);
V. *Serviços de radiodeterminação* (Recomendações n.os 602, 704 e 707);
V. *Serviços espaciais* (Recomendações n.os 708 e 711);
V. *Terminologia* (Recomendações n.os 67, 72 e 73);
V. *Transmissão de energia eléctrica* (Recomendações n.º 3).

Comissão Consultiva Internacional Telegráfica e Telefónica (CCITT):

V. *Serviço móvel marítimo* (Recomendações n.os 310 e 312);
V. *Terminologia* (Recomendação n.º 72);

Comissão Internacional de Registo das Frequências (IFRB):

V. *Aplicação das técnicas informáticas* (Recomendação n.º 31);
V. *Fiscalização das emissões* (Recomendação n.º 30);
V. *Cooperação e assistência técnicas* (Recomendação n.º 6);
V. *Emissão* (Recomendação n.º 62);
V. *Gestão das frequências* (Recomendação n.º 60);
V. *Larguras de faixa* (Recomendação n.º 63);
V. *Normas técnicas* (Recomendações n.os 60 e 61);
V. *Serviço móvel aeronáutico (R)* (Recomendações n.os 400, 402, 403 e 404);

Conferências administrativas:

V. *Perigo e segurança* (Recomendações n.os 200, 201, 202 e 203);
V. *Difusão troposférica* (Recomendação n.º 100);
V. *Emissões* (Recomendação n.º 702);
V. *Equipamento* (Recomendação n.º 605);
V. *Regulamento das Radiocomunicações* (Recomendações n.os 13 e 204);
V. *Serviço de radioastronomia* (Recomendação n.º 701);
V. *Serviço de radiodifusão* (Recomendações n.os 500 e 504);
V. *Serviço intersatélites* (Recomendações n.os 707, 709 e 710);
V. *Serviço móvel aeronáutico (OR)* (Recomendação n.º 406);
V. *Serviço móvel aeronáutico (R)* (Recomendações n.os 204 e 407);
V. *Serviço móvel marítimo* (Recomendações n.os 204, 300, 301, 305, 307, 308, 309 e 310);
V. *Serviço móvel marítimo por satélite* (Recomendação n.º 313);
V. *Serviços de radiodeterminação* (Recomendações n.os 602 e 605);
V. *Serviços espaciais* (Recomendação n.º 711);
V. *Terminologia* (Recomendação n.º 72);
V. *União Internacional das Telecomunicações (conselho de administração)* (Recomendação n.º 13);

Conferências de plenipotenciários:

Convocação de futuras conferências administrativas das radiocomunicações tratando de serviços determinados (Recomendação n.º 12);

Conselho de administração:

Conferência administrativa mundial das radiocomunicações para uma revisão geral ou parcial do Regulamento das Radiocomunicações (Recomendação n.º 13);
V. *Conferências administrativas* (Recomendação n.º 12);
V. *Difusão troposférica* (Recomendação n.º 100);
V. *Serviço de radiodifusão* (Recomendação n.º 504);
V. *Serviço móvel aeronáutico (OR)* (Recomendação n.º 406);
V. *Serviço móvel marítimo* (Recomendações n.os 300 e 301);
V. *Serviços de radiodeterminação* (Recomendação n.º 602);
V. *Serviços espaciais* (Recomendação n.º 2);

Secretário-geral:

V. *Aplicação das técnicas informáticas* (Recomendação n.º 31);
V. *Conferências administrativas* (Recomendação n.º 10);
V. *Perigo e segurança* (Recomendações n.os 200 e 203);
V. *Regulamento das Radiocomunicações* (Recomendação n.º 204);
V. *Serviço de radiodifusão* (Recomendações n.os 9 e 502);
V. *Serviço móvel aeronáutico (R)* (Recomendações n.os 400 e 402);
V. *Serviço móvel marítimo* (Recomendações n.os 300, 301, 304, 309 e 310);
V. *Serviços de radiodeterminação* (Recomendação n.º 602);
V. *Terminologia* (Recomendação n.º 72);
V. *Transmissão de energia eléctrica* (Recomendação n.º 3).

Unidades SI:

Emprego do Sistema Internacional de Unidades (SI) (Recomendação n.º 74).

Índice ideográfico do Regulamento das Radiocomunicações (1979)

Assunto	Art., núm., ap., dec., res., rec.
Abreviaturas:	
—— e sinais diversos a empregar nas comunicações radiotelegráficas	Ap. 13
—— e sinais diversos a utilizar nas radiocomunicações de serviço móvel marítimo	Ap. 14
—— para indicação das frequências de trabalho	RR 4308
—— utilizadas em serviços que empregam a faixa de 12 GHz	Ap. 30 (anexo 9)
—— utilizadas nos documentos de serviço	Ap. 10
Outras abreviaturas:	
A — faixa lateral dupla	RR 271
A — telegrafia/recepção auditiva	RR 271
A — utilização regular no serviço fixo	RR 1222 Res. 9
Ap — apêndice do RR.	
ARQ — correcção de erros com circuito de retorno	RR 4844
Art. — artigo do RR.	
AS — espere	RR 5025
B — consignação de reserva no serviço fixo	RR 1222
B — faixas laterais independentes	RR 271
B — símbolo de consignação do serviço fixo	RES. 9
B — telegrafia/recepção automática	RR 273
BIH — Comissão Internacional da Hora	RR 15
C — consignação para utilização ocasional	RR 1222
C — Fac-símile	RR 273
C — Faixa lateral residual	RR 273
C — símbolo de consignação do serviço fixo	Res. 9
CCIR — Comissão Consultiva Internacional das Radiocomunicações	RR 15
COI — Comissão Oceanográfica Intergovernamental	Res. 314
CONV — Convenção Internacional das Telecomunicações	RR 2
CP — chamada a certas estações	RR 4753 RR 3701
CQ — chamada a todos	RR 4748 RR 4752 RR 3698 RR 3700
CQ — Transmissão repetida de —	RR 4724 RR 4726
CQK — chamada a todos	RR 3697
D — modulação de amplitude e angular	RR 271
D — transmissão de dados	RR 273
DEC — declaração do protocolo final do RR.	
DIRTLX$_{yz}$ — formato de mensagem	RR 4874
DP — dipolo	Ap. 2
E — telefonia	RR 273
EHF — ondas milimétricas	RR 208
F — modulação de frequência	RR 271
F — televisão (vídeo)	RR 271
F. cm — ondas centimétricas	RR 208
F. dam — ondas decamétricas	RR 208
F. dm — ondas decimétricas	RR 208
F. hm — ondas hectométricas	RR 208
F. km — ondas quilométricas	RR 208
F. Mam — ondas miriamétricas	RR 208
F. m — ondas métricas	RR 208
F. mm — ondas milimétricas	RR 208
G — GHz	RR 267
G — modulação de fase	RR 271
G_d — ganho em relação a um dipolo de meia onda	RR 154, *b*)
GHz — gigahertz	RR 208
G_i — ganho isotrópico ou absoluto	RR 154, *a*)
G_v — ganho em relação a uma antena vertical curta	RR 154, *c*)
H — faixa lateral única — portadora completa	RR 271
H — Hz	RR 267
H — radiobalizas tipo H	RR 3264
HF — ondas decamétricas	RR 208
HOR — antena horizontal não direccional	Ap. 2
Hz — hertz	RR 208
ICAO — Organização da Aviação Civil Internacional	Ap. 27 Aer 2
IFRB — Comissão Internacional do Registo de Frequências	Art. 10
ILS — Sistema de aterragem por instrumentos	RR 98
ISM — Utilizações industriais, científicas e médicas	RR 16
J — faixa lateral única — portadora suprimida	RR 271
K — impulsos modulados em amplitude	RR 271
K — kHz	RR 267
K — utilização depois de CQ	RR 4750
K — estação apta a receber tráfego	RR 4776
K — recepção correcta de radiotelegrama	RR 4799
K — fim de radiotelegrama	RR 4803
K — fim de transmissão de série	RR 4804
kHz — quilohertz	RR 208
L — impulsos modulados em largura/duração	RR 271
LF — ondas quilométricas	RR 208
M — impulsos modulados posição/fase	RR 271
M — MHz	RR 267
MF — ondas hectométricas	RR 208
MHz — megahertz	RR 208
N — emissão de onda não modulada	RR 271
N — nenhuma informação	RR 273
NEUTRAL — em radiotelefonia indica um transporte de país neutro	Res. 11
NID — algarismos de identificação de nacionalidade	Ap. 43
NNN — em radiotelegrafia indica um transporte de país neutro	Res. 11
NUM — número do RR.	
OMCI — Organização Intergovernamental Consultiva da Navegação Marítima	Res. 310
OMM — Organização Meteorológica Mundial	Res. 314
P — sequência de impulsos não modulados	RR 271
P. A. R. — potência aparente radiada	RR 156
P. A. R. V. — potência aparente radiada em relação a uma antena vertical curta	RR 157
P. I. R. E. — potência isotrópica radiada equivalente	RR 155
PX — potência de ponta (em dB)	RR 150
pX — potência de ponta (em W)	RR 150
PY — potência média (em dB)	RR 150
pY — potência média (em W)	RR 150
PZ — potência da portadora (em dB)	RR 150
pZ — potência da portadora (em W)	RR 150
Q — código	Ap. 13 e 14
Q — em modulação angular	RR 271
QRT — silêncio	RR 3138 e 3141
R — faixa lateral única — portadora reduzida	RR 271 RR 4806 e 5052
Racon — baliza-radar	RR 97
RCT — Red Cross Telegrams	RR 3651.2 RR 4441.2
Rec — Recomendação do RR.	
Res — Resolução do RR.	
RF — relação de protecção	RR 164
RHO — antena rômbica	Ap. 2

Assunto	Art., núm., ap., dec., res., rec.
RR — Regulamento das Radiocomunicações.	
RRR — recepção de mensagem de perigo	RR 3130
SHF — ondas centimétricas	RR 208
SI — Sistema Internacional de Unidades	Rec. 74
SOS — sinal de perigo	RR 3088
SSR — sistema de radar secundário de vigilância	Res. 11
THz — terahertz	RR 208
TLX_{yz} — formato de mensagem	RR 4875
TMG — tempo médio de Greenwhich	RR 15
TR — pedido de informação	RR 4741
	RR 3691
	RR 3802
TRO — antena para radiodifusão na zona tropical	Ap. 2
TTT — sinal de segurança	RR 3221
UAPT — União Africana dos Correios e Telecomunicações	Res. 5
UHF — ondas decimétricas	RR 208
UPAT — União Pan-Africana das Telecomunicações	Res. 5
URTNA — União das Radiodifusões e Televisões Nacionais de África	Res. 5
UTC — tempo universal coordenado	RR 15
	RR 237
	RR 238
V — impulsos modulados por outros meios	RR 271
VA — fim de trabalho	RR 5054
ER — antena vertical não direccional	Ap. 2
VHF — ondas métricas	RR 208
VLF — ondas miriamétricas	RR 208
VOLMET — zona de adjudicação ou de recepção	Ap. 27 Aer2
VVV — ensaios	RR 3767
	RR 4815
W — combinações várias	RR 273
W — modulações de impulsos (vários)	RR 271
X — modulações de impulsos (vários)	RR 271
X — outros casos	RR 272
XXX — sinal de urgência	RR 3196
YYY — transportes sanitários	RR 3210
ZLAMP — zona de passagem das linhas aéreas mundiais principais	Ap. 27 Aer2
ZLARN — zona das linhas aéreas regionais e nacionais	Ap. 27 Aer2
Acordo(s):	
Comunicação à IFRB da conclusão de um —— regional ou de serviço	RR 1233
—— especiais	Art. 7
—— especiais para Serviço Móvel Aeronáutico	RR 3569 e 3793
Adjudicação:	
—— (definição)	RR 2 e 18
Plano de —— de frequências	Ap. 27 Aer2
Uso do termo ——	RR 391
Administração(ões):	
—— (definição)	RR 3
Obrigação de as —— responderem à IFRB no caso de recomendações desta entidade	RR 1444-1450
Aeradio:	
Uso do termo ——	RR 2242
Aeronave(s):	
Comunicação de —— com navios	RR 4143
Condições de utilização da faixa 156-174 MHz por ——	RR 4148
—— em perigo — modo de proceder	RR 3000

Assunto	Art., núm., ap., dec., res., rec.
Estação de —— — definição	RR 2 e 78
Estação terrena de —— — definição	RR 2 e 79
Frequências a utilizar para evitar colisões entre ——	Rec. 601
Frequências que não devem ser usadas por ——	RR 4148
Proibição de radiodifusão a bordo de ——	Rec. 9
—— que convém equipar com instalações radioeléctricas	RR 2940
Segurança de —— de Estados neutros	Res. 11
Aerophare:	
Uso do termo ——	RR 2245
Águas interiores:	
Comunicações nas vias de ——	RR 613
Ajudas:	
——à navegação com utilização do efeito Doppler — frequências	RR 821
	RR 851
—— electrónicas à navegação aeronáutica — frequências	RR 709
	RR 732
Alarme:	
Aparelhos automáticos para sinais de ——	Ap. 36
Interferências às comunicações de ——	RR 964
	RR 3010
Sinal de ——	RR 2977
	Art. 41
Alcance:	
—— de interferência	Ap. 27 Aer2
—— de radiofaróis aeronáuticos	RR 2856
—— de radiofaróis marítimos	RR 2861
—— útil	Ap. 27 Aer2
Altitude:	
—— do apogeu ou do perigeu — (definição)	RR 2 e 179
Amador:	
—— (definição)	RR 2 e 53
Estação de ——	RR 2 e 90
Por satélite (serviço de ——)	RR 54
Serviço de ——	RR 53
	Art. 32
Utilização das faixas de —— aquando de catástrofes naturais	RR 510
Anéis:	
Sinais de identificação produzidos por ——	RR 4326
Antenas:	
—— de emissão de serviço de radiodifusão por satélite	Rec. 508
—— dos satélites geostacionários (Precisão da orientação das ——)	RR 2628 e 2630
Ganho de —— na direcção do horizonte da estação terrena para os satélites geostacionarios	Ap. 28 (anexo II)
Ganho de uma ——	RR 2 e 154
Símbolos de ——	Ap. 2
Utilização de —— direccionais para evitar interferências	RR 1807
Aparelhos:	
—— a utilizar nas estações — sua escolha, funcionalmente e emissões	RR 299-302
—— automáticos de telecomunicações	RR 3394.1
—— automáticos para recepção de sinais de alarme	Ap. 36
—— de correcção auditiva (frequências para——)	RR 506

Assunto	Art., núm., ap., dec., res., rec.
—— de faixa estreita de telegrafia com impressão directa	Ap. 38
—— receptores (energia radiada pelos ——)	RR 4099 RR 4140
Apogeu:	
Altitude do ——	RR 2 e 179
Assistência:	
—— aos países em desenvolvimento com vista a facilitar o acesso do seu serviço fixo às faixas das ondas decamétricas e assegurar protecção contra interferências	Res. 103
—— especial da IFRB a prestar às administrações	RR 1452 RR 1457
Necessidades práticas dos países que têm necessidade de —— especial	Rec. 6
—— técnica no domínio das radiocomunicações espaciais	Rec. 15
Aterragem:	
Sistema de —— por hiperfrequências	RR 796
Sistema de —— por instrumentos	RR 2 e 98
Sistema de —— por instrumentos (frequências)	RR 645
Atribuição(ões):	
—— adicionais	RR 426-429
Categorias de ——	Art. 8 (secção II)
—— das faixas de frequências	Art. 8
Definição de ——	RR 2 e 17
—— de substituição	RR 430-433
—— mundial	RR 437
—— regional	RR 437
Uso do termo ——	RR 391
Auditiva:	
Aparelhos de correcção —— (frequências)	RR 506
Aviso(s):	
—— à navegação marítima	Art. 42 (secção II)
Frequência para —— à navegação marítima	Rec. 309
Sinal de —— à navegação	RR 2978
Azimute(s):	
Classificação dos ——	Ap. 41
Procedimento para a obtenção dos ——	Ap. 41
Balizas-radar:	
—— (definição)	RR 2 e 97
—— funcionamento não autorizado	RR 775
—— frequências	RR 776 RR 825
Bóias:	
—— oceanográficas — frequências	RR 496
Busca:	
—— e salvamento de veículos espaciais habitados — frequências	RR 501
—— e salvamento:	
3023 kHz	RR 505
5680 kHz	RR 505 RR 2983
8364 kHz	RR 2987
243 MHz	RR 642
Calendário:	
—— gregoriano (Datas conforme com o ——)	RR 235

Assunto	Art., núm., ap., dec., res., rec.
Canal(ais):	
Definição do termo ——	Rec. 73
Interdependência entre a concepção de receptores, o agrupamento de —— e os critérios de partilha no serviço de radiodifusão por satélite	Rec. 712
Características:	
—— das emissões e dos materiais — definições	Art. 1 (secção VI)
—— dos aparelhos utilizados para as comunicações de bordo nas faixas 450-470 MHz	Ap. 20
—— do sistema de chamada selectiva no serviço móvel marítimo	Ap. 39
—— fundamentais a fornecer no caso de uma notificação nos termos dos n.os 1214 a 1217, 1219 e 1223 a 1227 do RR (1979)	Ap. 1
—— fundamentais das emissões	RR 270
—— técnicas das estações	Art. V
—— técnicas de radiobalizas	Ap. 37
—— técnicas dos emissores de faixa lateral única utilizados no serviço móvel marítimo	Ap. 17 e 40
—— técnicas dos emissores e dos receptores utilizados no serviço móvel marítimo entre 156 e 174 MHz	Ap. 19
—— técnicas dos equipamentos das estações de recepção	RR 310 e 311
—— técnicas dos materiais	Rec. 70 Rec. 71
Categoria(s):	
—— das consignações de frequência	Art. 12 (secção IV)
—— de serviços e de atribuições	Art. 8 (secção II)
Certificados:	
—— dos operadores das estações de aeronave	Art. 44 RR 3512 RR 3513
—— dos operadores das estações de navio e das estações terrenas de navio	Art. 55 RR 4015 RR 4016
Chamada:	
—— a várias estações	RR 4745
—— de perigo	Art. 39 (secção III)
(156,8 MHz)	RR 4386 RR 613
—— de perigo em radiotelefonia — 2182 kHz	RR 500
—— de perigo em radiotelegrafia — 500 kHz	RR 472 RR 4218
—— de perigo (prioridade da ——)	RR 3086
—— em radiotelegrafia no serviço móvel marítimo	RR 4718
—— em A1A — ondas decamétricas	Res. 312
—— e resposta	RR 4757
—— em 500 kHz	RR 4218 a 4231
—— em 1605-4000 kHz	RR 4347
—— em 2182 kHz	RR 4345 RR 4959 RR 500
—— em 4000-27 500 kHz	RR 4259-4271
—— em 4125 kHz	RR 2982
—— em 4125 kHz e 6215,5 kHz	RR 4379
—— em 156,8 MHz	RR 4387 RR 613
—— em frequências do Ap. 18	RR 4391
—— feita por estações costeiras	RR 4376 RR 4970
—— feitas por estações de navio	RR 4375
Forma da —— geral a todas as estações	RR 4727

Assunto	Art., núm., ap., dec., res., rec.
Fórmula da —— no serviço móvel aeronáutico	RR 3707
Frequência de —— suplementar a utilizar por navios (512 kHz)	RR 4239
Intervalo entre ——	RR 4756
Método de ——	Art. 63 (secção IV)
Utilização das frequências de trabalho para ——	RR 4392
Chamada selectiva:	
—— a todos os navios	RR 3283
Consignação do mesmo número de —— mais de uma vez	RR 2091
—— em H2B	RR 4342
	RR 4376.1
—— em 500 kHz	RR 4231
—— em 2182 kHz	RR 2976
—— em 1605-4000 kHz	RR 4665
Frequências a utilizar na ——	RR 4666
	RR 4679
Frequências de estações costeiras em ——	RR 4265
	Art. 60
Frequências de estações de navio em ——	RR 4286
	Art. 60
Método de ——	RR 4669
—— no serviço móvel marítimo	Art. 62
	Res. 311
—— no serviço móvel marítimo (características do sistema de ——)	Ap. 39
—— numérica (frequências de estações costeiras)	RR 4684
—— numérica (frequências de navio para ——)	RR 4683
—— numérica (uso de 156,8 MHz)	RR 4390
Números de ——	RR 2088 e 2084
	Art. 25 (secção V)
	Ap.44
Ciclones:	
Transmissão de mensagens sobre ——	RR 3331
Circular:	
A —— semanal da IFRB é meio de comunicação com as Administrações	RR 1456
Informações contidas na —— semanal da IFRB	RR 1236
	RR 1455
Classe(s) de emissão:	
—— a utilizar em 1605-4000 kHz	RR 4126
	RR 4332
	Res. 200
—— a utilizar em 2170,5 kHz	RR 4342
—— a utilizar em 2182 kHz	RR 2973
	RR 4127
	RR 4343
	Res. 200
—— a utilizar em 2191 kHz	RR 4342
—— a utilizar em radiotelefonia entre 4000 kHz e 23 000 kHz	RR 4371
—— a utilizar em 4125 kHz	RR 2982
—— a utilizar em 6215,5 kHz	RR 2986
—— a utilizar em 156,8 Mhz	RR 2994
	RR 4386
—— a utilizar para evitar interferências	RR 1811
—— a utilizar pelas estações costeiras e pelas estações de navios nas regiões de tráfego intenso	RR 4235
—— a utilizar pelas estações de navios em radiotelegrafia de 4000 kHz a 27 500 kHz	RR 4253
	RR 4254
—— a utilizar por navios em 405-535 kHz	RR 4111-3113
—— a utilizar por navios em 500 kHz	RR 4111
—— a utilizar por navios entre 156 Mhz e 174 MHz	RR 4134

Assunto	Art., núm., ap., dec., res., rec.
—— A1A	RR 4235
	RR 4253
	RR 4254
	Res. 304
	Res. 312
—— A2A (utilização por engenhos de salvamento da ——)	RR 4253
—— A2A e A2B (tipo de transmissão utilizada em ——)	RR 4216
—— A3E	RR 2991
	RR 4127
	RR 4333
	RR 4336
	RR 4337
	RR 4353
	RR 4354
	RR 4361
	RR 4364
	RR 4127
	Res. 306
—— A3E (abandono da ——)	RR 2700
Características adicionais da ——	Ap. 6
—— (definição)	RR 2 e 133
	RR 268
—— F1B	RR 4315
	RR 4318
	RR 4321
—— F3E ou G3E abaixo de 30 MHz em serviço fixo	RR 2701
—— F3E (156,8 MHz)	RR 4386
	RR 4134
—— H2A (utilização por engenhos de salvamento da ——)	RR 4253
—— H2A e A2B:	
(Frequência portadora) ——	RR 4181
(Tipo de transmissão em ——)	RR 4216
	Res. 306
	Res. 402
—— H3E	RR 4334
	RR 4337
	RR 4353
	RR 4354
	RR 4361
	RR 4364
	RR 4371
	Res. 306
	Res. 307
	Res. 402
—— J2B	Res. 306
	Res. 402
—— J2D	Res. 402
—— J3E	RR 4334
	RR 4343.1
	RR 4353
	RR 4360
	RR 4363
	RR 4371
	Res. 200
	Res. 305
	Res. 306
	Res. 402
—— J9X	Res. 402
—— R2B	Res. 306
—— R3E	RR 4334
	RR 4343
	RR 4353
	RR 4360
	RR 4363
	RR 4371
	Res. 200
	Res. 305
	Res. 306
—— nas faixas 2170-2173,5 kHz e 2190,5-2194 kHz	RR 4342
Código:	
Código Q	Ap. 13
	Ap. 14

Assunto	Art., núm., ap., dec., res., rec.
Códigos SINPO e SINPREMO	Ap. 15
Comissão(ões):	
Estrutura das —— que uma Conferência Administrativa das Radiocomunicações possa criar em função da sua Agenda	Res. 17
—— Internacional da Hora	RR 15
—— Internacional do Registo de Frequências	Art. 10
Compressores:	
Sistemas de ——	RR 4329-4330 Ap. 40
Comprimentos de onda:	
Nomenclatura dos ——	Art. 2
Comunicação(ões):	
—— a grande distância (reserva de frequências para ——)	RR 954 RR 955
—— de bordo (características técnicas dos aparelhos utilizados em —— entre 450 MHz e 470 MHz)	Ap. 20
—— de bordo (estação de ——)	RR 2 e 74
—— de bordo (frequências de estações de ——)	RR 669
—— de bordo (utilização das vias 15 e 17 do Ap. 18 pelas estações de ——)	Rec. 305
Definição específica de ——	RR 3651.1
—— de perigo	Art. 39
—— de perigo e segurança	Art. 37
—— entre estações de aeronave e estações de serviço móvel marítimo ou do serviço móvel marítimo por satélite	RR 3571 RR 2942 a 2943 RR 4142 a 4154 RR 2990 RR 593
—— nas vias de águas interiores (frequências)	RR 613
—— no serviço móvel aeronáutico: (ordem de prioridade das ——)	Art. 51
—— no serviço móvel marítimo e no serviço móvel marítimo por satélite (Prioridade das ——)	Art. 61
—— radiotelex	RR 2 e 144
Conclusões:	
—— da IFRB a inscrever no Ficheiro de referência	Art. 12 (secção III)
—— da IFRB — seu reexame	Art. 12 (secção V)
Conexão:	
Ligações de ——	RR 2 e 109 RR 835 RR 858 RR 869 RR 901
Conferência(s):	
Convocação de futuras —— de radiocomunicações	Rec. 12
Convocação de uma —— para garantir a todos os países o acesso equitativo à órbita dos satélites geostacionários e às faixas de frequências atribuídas aos serviços espaciais	Res. 3
Consignação(ões):	
Classe de funcionamento da ——	RR 1222
—— (definição)	RR 2 e 19
—— de frequência a estações costeiras (4000-23 000 kHz) não mencionadas no Ap. 25 MAR2	RR 1682 a 1722
—— de frequência a estações de radiodifusão entre 5950 e 26 100 kHz	RR 1350
—— de frequência às estações de radiodifusão por satélite (11,7 a 12,5 GHz)	Art. 15
—— de frequência a transferir (consignação de serviço fixo — modo de proceder)	Res. 8
—— de frequência de acordo com uma nota ao Quadro que se refira ao artigo 14	RR 1610
—— de frequência (direitos quanto a interferências das ——)	RR 1416-1420
—— de frequência (disposições especiais)	Art. 9
—— de frequências (Notificações de ——)	Art. 12 Res. 1
—— de frequência que figuram nos Ap. 25 MAR2, 26 e 27 Aer2 (disposições que não se lhe aplicam)	RR 1451
—— e emprego de frequências	Art. 6 RR 340 RR 341
—— em derrogação ao Quadro de atribuição das faixas de frequências	RR 342
Tratamento a dar às —— de frequência a estações de radiocomunicação espacial	Res. 4
Uso do termo ——	RR 391
Contorno:	
—— de coordenação	RR 2 e 166
Conversação:	
—— radiotelefónica	RR 2 e 118
Cooperação:	
—— internacional no domínio das radiocomunicações espaciais	Res. 15
—— técnica com os países em desenvolvimento no domínio dos estudos de propagação nas regiões tropicais	Res. 5
—— Idem no domínio das telecomunicações marítimas	Res. 316
Coordenação:	
Contorno de —— (definição)	RR 2 e 166
—— de estações terrenas	Rec. 711
—— das consignações de frequência a uma estação de Terra emissora em relação a uma estação terrena	RR 1147 e 1188
—— das consignações de frequência a uma estação espacial a bordo de um satélite geostacionário ou a uma estação terrena	RR 1059 a 1105
—— das consignações de frequência a uma estação terrena em relação às estações de Terra	RR 1106 a 1146
—— das consignações de frequência às estações de um serviço de radiocomunicação espacial	Art. 11
Distância de ——	RR 2 e 167
—— entre estações espaciais do serviço de radiodifusão por satélite e estações de Terra	Res. 33
—— entre estações espaciais e sistemas espaciais	Res. 33
—— entre redes de satélites geostacionário (método de cálculo)	Ap. 29
—— método de determinação da zona de —— de uma estação terrena	Ap. 28
Zona de —— (definição)	RR 2 e 165
Correcção auditiva:	
Aparelhos de —— (frequências a utilizar ——)	RR 506
Correspondência:	
Exploração, taxação e contabilidade da —— pública nos serviços móveis	Res. 201
—— pública (categorias das estações de navio para o serviço de ——)	RR 4052
—— pública — definição	RR 2 e 110

Assunto	Art., núm., ap., dec., res., rec.
—— pública — disposições aplicáveis ao serviço móvel aeronáutico	RR **3570**
—— pública (em frequência do serviço móvel aeronáutico)	RR **3633**
—— pública (no serviço móvel marítimo e no serviço móvel marítimo por satélite)	Art. 66
Supressão das taxas de estação móvel para a —— pública	Res. 315
Crescente Vermelho:	
Frequências a consignar	Res. 10
Cruz Vermelha:	
Frequências a consignar	Res. 10
Dados	
Transmissão de dados (frequências)	Ap. 32 Ap. 33 Res. 310
Datas:	
—— a inscrever no Ficheiro de referência	Art. 12 (secção III) Res. 9
As —— devem estar em conformidade com o calendário gregoriano	RR **235**
—— de entrada em vigor do RR (1979)	Art. 69
Modo de representar as ——	RR **236**
Nomenclatura das ——	Art. 3
—— para alterar o espaçamento na faixa 156-174 MHz no serviço móvel marítimo	Res. 308
1-4-53 — data na coluna 2d	Res. 30
29-4-66 — data na coluna 2a	Res. 400
1-1-70 — potência de estações de navio montadas a partir de —— entre 156-174 MHz	RR **4416**
1-1-76 —— as frequências devem estar de acordo com o Ap. 35	Res. 304
5-3-78 —— data na coluna 2a ou 2b	Res. 400
6-3-78 — data na coluna 2b	Res. 400
1-1-79 — entrada em vigor dos Actos Finais da Conferência Administrativa Mundial das Radiocomunicações para o Serviço de Radiodifusão por Satélite (Genebra, 1977)	Ap. 30 (anexo 1)
Início do prazo de 15 anos do plano para a radiodifusão por satélite	Ap. 30 Art. 16
1-9-79 — entrada em vigor dos Actos Finais da CAMR do Serviço Móvel Aeronáutico (R)	Res. 402
24-9-79 — início da Conferência Administrativa Mundial das Radiocomunicações (Genebra, 1979)	P. 1
1-1-81 — entrada em vigor de alguns artigos e apêndices do RR (1979)	RR **5188**
1-1-82 — os navios deixam de ser obrigados a receber em A3E e H3E	RR **4129**
Classes R3E e J3E	Res. 306
Classes de emissão A3E e H3E	RR **4337** RR **4361** RR **4364** RR **4353** RR **4127**
Entrada em vigor do RR (1979)	RR **5187**
Data a inscrever na coluna 2d para consignações da classe A	Res. 8
1-1-82 a 30-6-84 — suspensão das disposições do artigo 12 e do n.º **1242**	Res. 8
2-1-82 — data a inscrever na coluna 2d para consignação da classe B	Res. 8
1-1-83 — a faixa 156,725-156,875 MHz é substituída por 156,7625-156,8375 MHz	RR **4393.1** RR **3033.1**
Espaçamento de 25 kHz na faixa 156-174 MHz	Res. 308
Entrada em vigor de alguns artigos e apêndices do RR (1979)	RR **5189**
Proibição de transmitir entre 156,7625 MHz e 156,8375 MHz	RR **4393.1**
1-2-83 — fim do período de aplicação do procedimento de transferência às consignações do serviço fixo aeronáutico entre 21 924 kHz e 22 000 kHz	Res. 8
Entrada em vigor do Plano contido no Ap. 27 Aer2	Res. 400 Res. 401
1-7-83 — a IFRB envia listas do serviço fixo às administrações e começa o exame às respostas	Res. 8
2-2-83 — data da coluna 2b	Res. 400
1-1-84 — fim da utilização de H3E em 4125 kHz e 6215,5 kHz	RR **2982** e **2986**
1-7-84 — a IFRB termina o exame das respostas das administrações quanto a serviço fixo	Res. 8
Começam a aplicar-se as disposições do artigo 12 às faixas do serviço fixo entre 4000 kHz e 27 500 kHz	Res. 8
Data a inscrever na coluna 2d nas consignações notificadas nos termos do n.º **1218**	Res. 8
1-7-85 — data de substituição das inscrições provisórias na IFRB	Res. 8
1-2-86 — mudança no limite de faixa de 150 kHz para 148,5 kHz	RR **458** Res. 500
1-2-87 — data limite para a utilização de faixa lateral dupla no serviço móvel aeronáutico (R)	Res. 402
31-12-87 — abolição das taxas de estação móvel para correspondência pública	Res. 315
1-2-88 — mudança de portadora de estações de radiodifusão	Res. 500
1-7-89 — data limite para substituir consignações do serviço fixo superiores a 10 MHz	Res. 8
1-1-90 — protecção ao serviço móvel aeronáutico (R)	Rec. 404
Utilização da faixa 136-137 MHz pelo serviço móvel aeronáutico e outros	RR **595**
1-2-90 — mudança no limite de faixa de 285 kHz para 283,5 kHz	RR **458**
1-7-94 — data limite para substituir consignações do serviço fixo inferiores a 10 MHz	Res. 8
Declarações:	
Afeganistão	Dec. n.º 11
Alemanha (República Federal da)	Dec. n.º 32 Dec. n.º 35 Dec. n.º 75
Alto Volta	Dec. n.º 67
Angola	Dec. n.º 44
Arábia Saudita	Dec. n.º 4 Dec. n.º 36 Dec. n.º 74
Argélia	Dec. n.º 4 Dec. n.º 74
Argentina	Dec. n.º 45
Austrália	Dec. n.º 75
Áustria	Dec. n.º 33 Dec. n.º 43 Dec. n.º 75

Assunto	Art., núm., ap., dec., res., rec.
Bahrein	Dec. n.º 4
	Dec. n.º 74
Bangladesh	Dec. n.º 4
Bélgica	Dec. n.º 5
	Dec. n.º 32
	Dec. n.º 73
	Dec. n.º 75
Benin	Dec. n.º 6
Bielo Rússia	Dec. n.º 34
Brasil	Dec. n.º 29
Camarões	Dec. n.º 61
Canadá	Dec. n.º 19
	Dec. n.º 75
Centro-Africana (República ——)	Dec. n.º 56
Chade	Dec. n.º 3
Chile	Dec. n.º 7
	Dec. n.º 21
China	Dec. n.º 20
Chipre	Dec. n.º 36
Colômbia	Dec. n.º 40
	Dec. n.º 41
	Dec. n.º 79
Congo	Dec. n.º 40
	Dec. n.º 53
	Dec. n.º 79
Coreia (República da)	Dec. n.º 37
Costa do Marfim	Dec. n.º 24
Costa Rica	Dec. n.º 65
Cuba	Dec. n.º 8
	Dec. n.º 9
	Dec. n.º 83
Dinamarca	Dec. n.º 32
	Dec. n.º 33
	Dec. n.º 75
Emirados Árabes Unidos	Decs. n.ºs 4 e 74
Equador	Dec. n.º 40
	Dec. n.º 66
	Dec. n.º 79
Espanha	Dec. n.º 33
	Dec. n.º 36
Estados Unidos da América	Dec. n.º 32
	Dec. n.º 36
	Dec. n.º 38
	Dec. n.º 39
	Dec. n.º 72
	Dec. n.º 75
Filipinas	Dec. n.º 64
Finlândia	Dec. n.º 33
	Dec. n.º 75
França	Dec. n.º 28
	Dec. n.º 33
	Dec. n.º 73
	Dec. n.º 75
Gabonesa (República ——)	Dec. n.º 40
	Dec. n.º 79
Ghana	Dec. n.º 57
Grã-Bretanha	Dec. n.º 32
	Dec. n.º 36
	Dec. n.º 48
	Dec. n.º 75
	Dec. n.º 76
	Dec. n.º 77
	Dec. n.º 78
Grécia	Dec. n.º 32
	Dec. n.º 36
	Dec. n.º 75
Guatemala	Dec. n.º 2
Guiné (República Popular e Revolucionária da)	Dec. n.º 54
Honduras	Dec. n.º 1
Iémen	Dec. n.º 4
	Dec. n.º 46
	Dec. n.º 74
Índia	Dec. n.º 22
Indonésia	Dec. n.º 42
Irão	Dec. n.º 4
	Dec. n.º 10
	Dec. n.º 25
	Dec. n.º 70

Assunto	Art., núm., ap., dec., res., rec.
Iraque	Dec. n.º 4
	Dec. n.º 47
	Dec. n.º 74
Irlanda	Dec. n.º 75
Islândia	Dec. n.º 32
Israel	Dec. n.º 30
Itália	Dec. n.º 27
	Dec. n.º 32
	Dec. n.º 75
Japão	Dec. n.º 16
	Dec. n.º 75
	Dec. n.º 81
Jordânia	Dec. n.º 4
	Dec. n.º 68
	Dec. n.º 74
Jugoslávia	Dec. n.º 14
Koweit	Dec. n.º 4
	Dec. n.º 74
Líbano	Dec. n.º 4
	Dec. n.º 68
	Dec. n.º 74
Libéria	Dec. n.º 59
Líbia	Dec. n.º 4
	Dec. n.º 74
Listenstaina	Dec. n.º 28
	Dec. n.º 33
	Dec. n.º 75
Luxemburgo	Dec. n.º 32
	Dec. n.º 73
	Dec. n.º 75
Mali	Dec. n.º 71
Marrocos	Decs. n.ºs 4 e 74
Maurícia	Dec. n.º 62
Mauritânia	Dec. n.º 12
México	Dec. n.º 23
Moçambique	Dec. n.º 50
Níger	Dec. n.º 52
Nigéria	Dec. n.º 17
Noruega	Dec. n.º 32
	Dec. n.º 33
	Dec. n.º 75
Nova Zelândia	Dec. n.º 75
Óman (Sultanato de)	Dec. n.º 4
	Dec. n.º 74
Países Baixos	Dec. n.º 32
	Dec. n.º 73
	Dec. n.º 75
Papuásia — Nova Guiné	Dec. n.º 75
	Dec. n.º 80
Paquistão	Dec. n.º 4
	Dec. n.º 13
Portugal	Dec. n.º 27
	Dec. n.º 32
	Dec. n.º 33
	Dec. n.º 75
Qatar	Dec. n.º 4
	Dec. n.º 74
Quénia	Dec. n.º 40
	Dec. n.º 69
	Dec. n.º 79
Roménia	Dec. n.º 58
Singapura	Dec. n.º 63
Síria	Dec. n.º 4
	Dec. n.º 47
	Dec. n.º 68
	Dec. n.º 74
Somália	Dec. n.º 4
	Dec. n.º 40
	Dec. n.º 74
	Dec. n.º 79
	Dec. n.º 82
Sri Lanka	Dec. n.º 36
	Dec. n.º 55
Sudão	Dec. n.º 4
	Dec. n.º 74
Suécia	Dec. n.º 33
	Dec. n.º 75

Assunto	Art., núm., ap., dec., res., rec.
Suíça	Dec. n.º 28
	Dec. n.º 33
	Dec. n.º 73
	Dec. n.º 75
Sultanato de Óman	Dec. n.º 4
	Dec. n.º 74
Tailândia	Dec. n.º 60
Tanzânia	Dec. n.º 49
Turquia	Dec. n.º 27
	Dec. n.º 31
	Dec. n.º 32
Ucrânia	Dec. n.º 34
Uganda	Dec. n.º 40
	Dec. n.º 79
URSS	Dec. n.º 34
Uruguai	Dec. n.º 15
Vaticano	Dec. n.º 27
Venezuela	Dec. n.º 26
Zaire	Dec. n.º 18
	Dec. n.º 40
	Dec. n.º 79
Zâmbia	Dec. n.º 36
	Dec. n.º 51
Definição(ões):	
Definições	RR **1-182**
	Rec. 72
Densidade:	
—— de fluxo da potência (cálculo da —— na faixa 11,7-12,5 GHz)	Ap. 30 (anexos 3 e 11)
—— de fluxo de potência (limites da —— entre 11,7 GHz e 12,2 GHz para protecção dos serviços de Terra nas Regiões 1 e 3)	Ap. 30 Art. 9
—— de fluxo de potência (limites da —— entre 11,7 GHz e 12,2 GHz para protecção dos serviços espaciais da Região 2 contra as interferências provenientes de estações espaciais do serviço de radiodifusão por satélite das Regiões 1 e 3)	Ap. 30 Art. 10
—— de fluxo de potência na órbita dos satélites geostacionários	RR **2631**
—— de fluxo de potência (valores limites da —— para protecção dos serviços de Terra)	Ap. 30 (anexo 5)
—— espectral de potência	RR **308**
Desacordos:	
—— internacionais (solução de ——)	RR **1458**
Descida:	
Radioalinhamento de ——	RR **2** e **100**
Desenvolvimento:	
Papel das telecomunicações no —— rural integrado	Res. 16
Designação:	
—— das emissões	Art. 4
Detector(es):	
Activo — definição	RR **2** e **174**
Passivo — definição	RR **2** e **175**
—— passivos (25 550-25 670 kHz)	RR **545**
—— passivos (6425-7250 MHz)	RR **809**
Difusão:	
—— ionosférica — definição	RR **2** e **159**
—— ionosférica (o serviço fixo não inclui a ——)	RR **436**
—— troposférica — definição	RR **2** e **158**
—— troposférica (faixas de frequências preferenciais)	Rec. 100
—— troposférica — 2500-2690 MHz	RR **762**
	RR **763**
	RR **764**
Dispersão:	
—— ver Expansão.	
Distância:	
—— de repetição	Ap. 27 Aer2 (27/24, *c*)
Documentos:	
—— de que devem estar providas as estações de navio e as estações de aeronave	Ap. 11
—— de serviço	Art. 26
	Ap. 9
	Ap. 10
Doppler:	
Efeito —— (8750-8850 MHz e 13,25-13,4 GHz)	RR **141**
	RR **309**
	RR **821**
	RR **851**
Duplex:	
—— exploração	RR **2** e **120**
(Funcionamento das estações costeiras em ——)	RR **4404**
	RR **4409**
Duração:	
—— das emissões em 500 kHz	RR **4222**
Emissão(ões)	
Características adicionais das classes de ——	Ap. 6
Classe de ——	RR **2** e **133**
	RR **268**
Classe de —— em 2182 kHz	RR **2973**
Estabelecimento pela IFRB de documentação explicativa da aplicação do novo método de designação das emissões	Res. 36
Classificação e designação de ——	Rec. 62
—— de estações espaciais (cessação das ——)	RR **2612**
—— de faixa lateral única	RR **2** e **134**
—— de faixa lateral única com portadora completa	RR **2** e **135**
—— de faixa lateral única com portadora reduzida	RR **2** e **136**
—— de faixa lateral única com portadora suprimida	RR **2** e **137**
—— (definição)	RR **2** e **132**
Designação das ——	RR **264-265**
	Ap. 6
—— [devem satisfazer ao RR (1979)]	RR **299**
—— fora de faixa	RR **2** e **138-140**
—— fora de faixa (interferências)	RR **1812**
—— fora de faixa (obrigatoriedade de as estações satisfazerem às especificações sobre níveis de potência para ——)	RR **305**
—— intencionais de origem extraterrestre	Rec. 702
Obrigatoriedade de utilização das novas designações de emissões	Res. 36
—— radiotelefónicas de faixa lateral única (as frequências de —— devem ser designadas pela frequência portadora)	RR **4325**
—— radiotelegráficas de faixa lateral única (f. l. superior)	RR **4180**
Emissor:	
Características técnicas de ——	Ap. 17
	Ap. 19
—— de socorro de navio	RR **2** e **93**
—— devem satisfazer o artigo 5	RR **1808**

Assunto	Art., núm., ap., dec., res., rec.
Energia:	
Dispersão de energia da portadora	Rec. 103
Energia eléctrica (transmissão de —— por meio de frequências radioeléctricas a partir de um engenho espacial)	Rec. 3
Engenho:	
—— de salvamento (estação de)	RR 2 e 62
—— de salvamento (frequências a utilizar por estações)	RR 3002 RR 2987 RR 642
—— de salvamento que devem ser equipados com aparelhos radioeléctricos	RR 2939
—— espacial	RR 2 e 170
Ensaios:	
—— e ajuste (os sinais de —— não devem confundir-se com abreviaturas, etc.)	RR 1845
—— em estações de serviço móvel	RR 1846 RR 4818-4815 RR 5058 RR 3766 e 3767
—— em estações (interferências)	RR 1842 e 1846
Emissões de —— em:	
2182 kHz e 4125 kHz	RR 3011
6215.5 kHz e 156,8 MHz	RR 3027-3028
—— e experiências	RR 5059-5061 Art. 19
Entendido:	
—— de uma mensagem de perigo	RR 4805 Art. 39 (secção VI)
Equipamento(s):	
—— de resposta a bordo dos navios (características técnicas e frequências de ——)	Rec. 605 RR 772
—— de resposta aerotransportado	RR 717
—— de resposta associados a radioaltímetros	RR 789
Espaçamento:	
—— das frequências na faixa 156-174 MHz no serviço móvel marítimo	Rec. 308
—— de frequências em radiofaróis marítimos	RR 2865
—— entre frequências adjacentes na faixa 405-535 kHz utilizadas por estações costeiras e estações de navio	RR 4184
—— entre frequências adjacentes na faixa 1606,5-3800 kHz	RR 4189-4190
Espaço:	
—— (= arranque em telegrafia)	Ap. 38
—— longínquo — definição	RR 169
—— longínquo — frequências	RR 811 RR 816
Espectro:	
—— das frequências (utilização dos equipamentos para se obter o máximo de eficácia do ——)	RR 302
—— de frequências	RR 208 RR 307 RR 308 RR 309
Manual sobre aplicação da técnica informática na gestão do ——	Rec. 31
Utilização de técnicas informáticas na gestão do ——	Res. 37
Estação(ões):	
—— a que não é obrigatório consignar indicativos de chamada da série internacional	RR 2084
—— a que são consignadas identidades do serviço móvel marítimo	RR 2083
Características técnicas de ——	Art. 5
—— (definição)	RR 2 e 58
—— e sistemas radioeléctricos	Art. 1 (secção IV)
Identificação de ——	Art. 25
—— que devem ter indicativos de chamada	RR 2082
Localização de uma estação de emissão e de recepção	RR 1806
Medições de ——	RR 312
Potência radiada por uma —— (a mínima necessária)	RR 1804
Estação aeronáutica:	
—— (definição)	RR 2 e 76
Notificações de ——	RR 1333-1350
Pessoal de ——	Art. 45
Estação(ões) costeira(s):	
As —— da Região 1 não podem utilizar a faixa 405-415 kHz	RR 4185
—— (definição)	RR 2 e 70
Frequências a utilizar em comum pelas —— em ondas hectométricas para comunicações com navios de outras nacionalidades	Rec. 308
Frequências de ——	RR 4198-4199 RR 4207-4210 RR 4211-4212 Ap. 25 Mar2
Funcionamento das —— em dúplex	RR 4404 RR 4409
Indicativo da chamada de —— um por cada série de frequências	RR 2095
—— Informações a fornecer (à IFRB) em conformidade com as disposições dos n.ºs 1682 a 1684 do RR (1979)	Ap. 5
Melhor utilização das vias radiotelefónicas em ondas decamétricas das ——	Rec. 302
—— (número de identificação)	Ap. 44
—— radiotelefónicas (actualização do plano)	Art. 16
—— radiotelefónicas entre 1605 e 4000 kHz (potência de ——)	RR 4338
(4000-23 000 kHz. Potência — *simplex*)	RR 4382
—— radiotelefónicas (notificação de frequências de ——)	RR 1315-1332
—— radiotelegráficas — classes de emissão	RR 448
—— radiotelegráficas entre 4000 e 27 500 kHz em A1A ou F1B (potência)	RR 4256-4257
—— radiotelegráficas entre 4000 e 27 500 kHz (transmissões do tipo 2)	RR 4255
Sinal de frequência acústica consecutiva ao sinal de alarme radiotelefónico emitido pelas ——	Rec. 311
—— Vias de grupos — A1A ondas decamétricas	Rec. 312
—— Vigília em:	
4125 kHz	RR 3053
6215.5 kHz	RR 3053
Estação(ões) de aeronave:	
—— caso em que não possam utilizar 2182, 4125 ou 6215.5 kHz	RR 2975
—— certificados de operador de ——	Art. 44
—— comunicações com estações do serviço móvel marítimo	RR 3571
—— (definição)	RR 2 e 78
Documentos de que devem estar providas as ——	Ap. 11
Inspecção das ——	Art. 46
Modos de efectuar a identificação de uma ——	RR 2150
—— no mar ou por cima do mar não podem efectuar serviço de radiodifusão	RR 3603
—— utilizando frequências do serviço móvel marítimo	RR 962

Assunto	Art., núm., ap., dec., res., rec.
Estação de amador:	
—— (definição)	RR **2** e **90** RR **92**
Estação de base:	
—— (definição)	RR **2** e **68**
Estação de bóia:	
Frequência de ——	RR **4297**
Estação de comunicação de bordo:	
—— (definição)	RR **2** e **74**
—— utilização das vias 15 e 17 do ap. 18	Rec. 305
Estação de dados oceanográficos:	
Frequências de ——	RR **4297**
Tratamento a dar pela IFRB às fichas de ——	Res. 302
Estação de defesa nacional:	
Identificação de ——	RR **2081**
Estação de engenho de salvamento:	
—— (definição)	RR **2** e **62**
Frequência para ——	RR **3001**
Estação(ões) de fiscalização internacional:	
Casos de interferências tratados pelas ——	RR **1956**
Estação de frequências padrão e sinais horários:	
—— (definição)	RR **2** e **89**
Estação(ões) de navio:	
Categoria de —— para o serviço de correspondência pública	RR **4052**
Classes de emissão de ——	RR **4125**
—— comunicando em frequências de estação costeira	RR **961**
—— (definição)	RR **2** e **72**
Documentos de que devem estar providas as ——	Ap. 11
Emissor de socorro de navio — definição	RR **93**
Frequências de ——	RR **4197** RR **4199-4206** RR **4211** RR **4183** RR **4132** RR **4375** RR **2975**
Horas de serviço das ——	Ap. 12
Inspecções das ——	Art. 57
—— no mar não podem efectuar serviço de radiodifusão	RR **4103**
Obrigatoriedade de as —— obedecerem às disposições dos capítulos III e XI	RR **4097**
—— entre 1605 e 2850 kHz (potência das ——)	RR **4357**
—— entre 156 e 174 MHz (potência das ——)	RR **4410**
—— que utilizam a radiotelefonia	RR **4124**
—— que utilizam a radiotelegrafia	RR **4106**
—— que utilizam a telegrafia com impressão directa de faixa estreita	RR **4123**
Estação de radioastronomia:	
—— (definição)	RR **2** e **91**
—— (notificação e inscrição no ficheiro de referência)	Art. 13
Estação de radiobaliza de localização de sinistros:	
—— (definição)	RR **2** e **88**

Assunto	Art., núm., ap., dec., res., rec.
Estação de radiodeterminação:	
—— (definição)	RR **2** e **81**
Estação de radiodifusão:	
—— (definição)	RR **2** e **80**
Modo de identificar uma ——	RR **2093**
—— por satélite na faixa 11,7-12,5 GHz (coordenação, notificação e inscrição de consignações a ——)	Art. 15
Estação de radiofarol	Art. 35 (secção IV)
—— (definição)	RR **2** e **87**
Estação(ões) de radiogoniometria	RR **2841-2845**
—— (definição)	RR **2** e **86**
Estação de recepção:	
Características técnicas de equipamento de ——	RR **310** e **311**
Estação de terra:	
—— acima de 1 GHz (potência, frequências, radiação máxima)	Art. 27
Consignação de frequências na faixa 11,7-12,5 GHz	Res. 32
—— (definição)	RR **2** e **59**
Estação(ões) espacial(ais):	
Cessação das emissões de uma ——	RR **2612**
—— consignação de frequências na faixa 11,7-12,5 GHz	Res. 32
Coordenação das consignações de frequência a uma ——	RR **1059-1105**
—— (definição)	RR **2** e **61**
Densidade de fluxo de potência de ——	Art. 28 (secção IV)
Entrada em serviço de —— antes da entrada em vigor de acordos e planos	Res. 33
Manutenção em posição de ——	RR **2615-2627**
Notificação de inscrição no ficheiro de referência de ——	Art. 13
Notificação e inscrição no ficheiro de referência de —— que entram em serviço antes da entrada em vigor de acordos e planos	Res. 33
Estação experimental	Art. 34
—— (definição)	RR **2** e **92**
Estação fixa:	
—— (definição)	RR **2** e **63**
Estação fixa aeronáutica:	
—— (definição)	RR **2** e **64**
Estação(ões) móvel(eis):	
—— comunicando em frequências da estação costeira	RR **961**
—— (definição)	RR **2** e **65**
—— de radiolocalização	RR **2** e **84**
—— de radionavegação	RR **2** e **82**
—— do serviço móvel aeronáutico (condições a que devem satisfazer as ——)	Art. 49
—— do serviço móvel aeronáutico (horário das ——)	Art. 47
—— do serviço móvel marítimo (comunicações de —— com aeronaves)	RR **3571**
—— do serviço móvel marítimo (horário das ——)	Art. 58
—— terrestre — definição	RR **2** e **69**
Estação portuária:	
—— (definição)	RR **2** e **75**

Assunto	Art., núm., ap., dec., res., rec.
Estação(ões) terrenas:	
—— (definição)	RR 2 e 60
—— acima de 15 GHz (potência isotrópica de ——)	RR 2542-2548
—— aeronáutica — definição	RR 2 e 77
Ângulo de elevação de ——	RR 2550-2551
Coordenação das consignações de frequência a uma —— em relação às estações de Terra	RR 1106-1146
Coordenação de ——	Rec. 711
—— costeira — definição	RR 2 e 71
—— de aeronave — definição	RR 2 e 79
—— de aeronave utilizando frequências do serviço móvel marítimo por satélite	RR 963
—— de navio (condições a satisfazer pelas ——)	RR 4138-4141
—— de navio — definição	RR 2 e 73
—— de navio (Inspecção das ——)	Art. 57
—— terrenas entre 1 GHz e 15 GHz (potência isotrópica de ——)	RR 2541-2547
Limitações da potência das —— fora do eixo do feixe principal	Art. 29 (secção VII)
Método de determinação da zona de coordenação de uma ——	Ap. 28
—— que funcionam em faixas de frequências acima de 1 GHz (localização e frequências das ——)	RR 2539
—— móvel	RR 2 e 66
Estação terrestre:	
—— comunicação com estações fixas ou terrenas do serviço fixo ou com outras estações terrestres	RR 958-959
—— (definição)	RR 2 e 67
—— de radiolocalização — definição	RR 2 e 85
—— de radionavegação — definição	RR 2 e 83
Estudo:	
—— de problemas de utilização de frequências a fazer pela IFRB a pedido de qualquer administração	RR 1438-1450
État prioritè	RR 3651 RR 4441
Exame:	
—— de fichas de notificação	Art. 12 Art. 13
Expansão:	
—— de largura de faixa	RR 308
Expansores:	
Sistema de ——	RR 4329-4330 Ap. 40
Experiências:	
—— em estações	RR 1842-1846
Exploração:	
—— da terra por satélite:	
(Serviço de —— definição)	RR 2 e 48
(Interferências)	RR 345
—— dúplex — definição	RR 2 e 120
—— espacial — frequência e largura de faixa	RR 608
—— espacial (serviço de ——) definição	RR 2 e 25
—— semidúplex — definição	RR 2 e 121
—— *simplex* — definição	RR 2 e 119
Fac-símile:	
Definição	RR 2 e 116
Frequências (serviço móvel marítimo)	RR 4200 RR 4209

Assunto	Art., núm., ap., dec., res., rec.
Faixa:	
—— de frequências consignadas — definição	RR 2 e 141
—— de frequências (designações a não usar)	RR 209
—— de frequências (nomenclatura das ——)	Art. 2
—— de frequências (quadro das ——)	Art. 8 (secção III)
—— de frequências (técnicas que permitam elaborar novos esquemas de partilha e de utilização das ——)	Rec. 65
—— de guarda de 500 kHz	Rec. 200
—— de guarda de 2182 kHz	RR 4188
Emissão fora de ——	RR 2 e 138-140 RR 305 RR 1812
Emprego da —— lateral única no serviço móvel marítimo entre 1605 kHz e 4000 kHz	Res. 306
—— estreita de telegrafia com impressão directa e transmissão de dados no serviço móvel marítimo	Ap. 32 Ap. 33 Ap. 38
—— lateral dupla (abandono da —— no serviço fixo)	RR 2700
—— lateral dupla — não autorização de FLD no serviço móvel marítimo entre 1605 kHz e 4000 kHz	Res. 306
—— lateral dupla [utilização da FLD no serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz]	Res. 402
—— lateral única (características dos aparelhos de ——)	RR 4328 RR 4330 Ap. 17 Ap. 40
—— lateral única com portadora completa	RR 2 e 135
—— lateral única com portadora reduzida	RR 2 e 136
—— lateral única com portadora suprimida	RR 2 e 137
—— lateral única	RR 2 e 134
—— lateral única (frequência consignada no serviço móvel marítimo)	RR 4194
—— lateral única no serviço de radiodifusão em ondas decamétricas	Rec. 501
—— lateral única (portadora a utilizar por estações costeiras em ——)	RR 4191 Res. 307
—— lateral única (portadora a utilizar por estações de navio em ——)	RR 4192 Res. 307
—— lateral única (utilização da faixa lateral superior)	RR 4181 RR 4191-4192 Ap. 17
—— lateral única [utilização da FLU no serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz]	Res. 402
—— N	RR 208
—— necessária (cálculo da largura de ——)	Ap. 6
—— necessária (largura de ——)	RR 2 e 146
—— necessária — modo de a designar	RR 266-267
Número da ——)	RR 208
—— ocupada (largura de ——)	RR 2 e 147 RR 307
Técnicas de expansão de largura de ——	RR 308
Feixes hertzianos:	
Métodos de modulação	Rec. 102
Ficha(s)	
—— de notificação relativas às estações de radiocomunicação espacial e de radioastronomia	Ap. 3
—— de notificação à IFRB	RR 1221-1222 Ap. 2
—— de notificação à IFRB (menção na circular semanal da IFRB)	RR 1235

Assunto	Art., núm., ap., dec., res., rec.
—— de notificação à IFRB (seu exame)	Art. 12 (secção II)
—— de notificação à IFRB (sua devolução)	RR 1234
Ficheiro	
—— de referência (actualização)	RR 1429-1437
—— de referência (colaboração a dar pelas administrações para a sua melhoria)	RR 1436
—— de referência (comunicação às administrações de alterações no ——)	RR 1455
—— de referência (revisão de inscrições no —— a pedido de conferências anteriores)	Res. 30
Fiscalização:	
Ajuda de outros organismos centralizadores para fins de fiscalização	RR 1884
—— de estações	RR 312
—— de estações [relatório sobre uma irregularidade ou uma infracção à Convenção ou ao RR (1979)]	Ap. 22
—— internacional das emissões	Art. 20 Rec. 30
—— internacional das emissões (nomenclatura das estações de ——)	Ap. 9
—— internacional das emissões (pedido de —— feito pela IFRB e pelas administrações)	RR 1874
—— internacional das emissões (publicações dos resultados das observações da ——)	RR 1000
—— internacional das emissões (relatório sobre as observações de ——)	Ap. 21
—— internacional das emissões	Rec. 30
Fitas:	
—— de chamada (sinais de identificação produzidos por ——)	RR 4326
Frequência(s):	
Frequências	Cap. III
—— acima de 30 MHz (proibição de utilizar —— por aeronave)	RR 4148
—— a consignar à Cruz Vermelha, ao Crescente Vermelho e ao Leão-e-Sol Vermelho	Res. 10
—— acústica (sinal de —— consecutivo ao sinal de alarme radiotelefónico emitido pelas estações costeiras)	Rec. 311
—— acústica superior a utilizar em faixa lateral única com dispositivo de segredo	Ap. 40
—— acústicas transmitidas em f. l. única — no serviço móvel marítimo	Ap. 17
—— aeronáuticas de urgência (121,5 MHz e 123,5 MHz)	RR 593
Afastamento dos limites de faixa	RR 343
As —— em faixa lateral única são designadas pela frequência portadora (excepto no que se refere às disposições do artigo 12)	RR 4325
—— a usar por transportes neutros	Res. 11
—— a utilizar para a chamada (serviço móvel marítimo)	RR 4757
—— a utilizar para evitar colisões entre aeronaves	Rec. 601
—— a utilizar pelos sistemas de faixa estreita de telegrafia com impressão directa e de transmissão de dados na faixa 4 MHz a 23 MHz e 4 MHz a 27,5 MHz	Ap. 32 Ap. 33
—— Característica — definição	RR 2 e 143
Consignação de —— ao serviço móvel aeronáutico	RR 3632
Consignação e emprego de ——	Art. 6 Art. 9

Assunto	Art., núm., ap., dec., res., rec.
—— consignada — definição	RR 2 e 142
—— consignada em faixa lateral única no serviço móvel marítimo (1400 Hz acima da portadora)	RR 4194 RR 4325 RR 501
—— da busca e salvamento	
—— de chamada a consignar a estações de navio para A1A	Ap. 34
—— de emissão de faixa lateral única para exploração dúplex — serviço móvel marítimo	Ap. 16 RR 4383
—— de emissão de faixa lateral única para exploração *simplex*	Ap. 16 RR 4383
—— de estações costeiras:	
405-535 kHz	RR 4232
1605-4000 kHz	RR 4356
4000-27 500 kHz	RR 4198-4199 RR 4207-4212 RR 4382 Ap. 16
156-174 MHz	RR 4405 Ap. 18
—— de estações costeiras — chamada:	
405-535 kHz	RR 4217 RR 4241 RR 4243
1605-4000 kHz	RR 4343
4000-23 000 kHz	RR 4376
156-174 MHz	RR 4386-4387
Chamada selectiva:	
156-174 MHz	RR 4385 RR 4684 RR 4390
—— de estações de bóia	RR 4297
—— de estações de dados oceanográficos	RR 4297
—— de estações de navio — chamada	Ap. 34
405-535 kHz	RR 4217 RR 4729 RR 4239 e 4243
1605-3600 kHz	Res. 303
1605-4000 kHz	RR 4956-4965
4000-23 000 kHz	RR 4375 RR 4968-4972
156-174 MHz	RR 4385 RR 4973-4980
—— de estações de navio — chamada selectiva:	
(1605-4000 kHz)	RR 4665
Outras	RR 4680
(4000-23 000 kHz)	RR 4683
156,8 MHz	RR 4390
—— de estações de navio:	
Consignação a estações de navio	RR 4276
405-535 kHz	RR 4183 RR 4237
1605-4000 kHz	RR 4359-4368 Res. 303
4000-27 500 kHz	RR 541 RR 517 RR 4197-4211 RR 4287-4311 RR 4383
—— de perigo e segurança	Arts. 37 e 38
—— de perigo, segurança e chamada	Art. 38
(500 kHz)	RR 472 RR 2970 RR 4218 RR 4225
(2182 kHz)	RR 500 RR 4343
156,8 MHz	RR 613 RR 4386

Assunto	Art., núm., ap., dec., res., rec.
—— de radiogoniometria (410 kHz)	RR **2841**
—— de referência — definição	RR **2** e **144**
—— de resposta	RR **4266**
	RR **4768**
—— de resposta a uma chamada em 500 kHz	RR **4229**
Derrogações ao Quadro de Atribuição de Faixas de ——	RR **342**
—— de trabalho de estações de navio para A1A	Ap. 35
Disposições especiais relativas ao emprego de —— no serviço móvel marítimo	Art. 60
—— do ap. 16 (secção B, *simplex*) — utilização das —— no serviço móvel marítimo (costeiras e navios)	Rec. 304
	RR **4383**
—— do serviço móvel aeronáutico (R) designadas para utilização mundial	Rec. 401
	Rec. 402
—— do serviço móvel aeronáutico (R) (para que se usam)	RR **3630-3631**
—— em ondas hectométricas a utilizar em comum pelas estações costeiras para comunicações com navios de outras nacionalidades	Rec. 308
Estabilidade de —— das estações de amador	RR **2738**
Evitar interferências a —— utilizadas em conformidade com o quadro do artigo 8	RR **341**
Limitação do número de —— a utilizar	RR **339**
—— navio-navio entre 1605 kHz e 3600 kHz	Res. 303
Nomenclatura das faixas de ——	Art. 2
—— no serviço móvel aeronáutico (disposições especiais relativas à utilização de ——)	Art. 50
—— no serviço móvel marítimo (disposições especiais relativas à utilização de ——)	Art. 60
(obrigação de utilizar os últimos aperfeiçoamentos da técnica)	RR **339**
[obrigatoriedade de seguir prescrições do RR (1979)]	RR **340**
Ocupação do espectro de —— no domínio das radiocomunicações espaciais	Rec. 2
—— padrão e de sinais horários	RR **447**
	RR **791**
—— padrão e de sinais horários (estação de ——)	RR **2** e **89**
—— padrão e de sinais horários (serviço de ——)	RR **2** e **50**
—— padrão e de sinais horários por satélite (serviço de ——)	RR **2** e **51**
—— para a permuta internacional de informações meteorológicas sinópticas	RR **2704-2705**
—— para a polícia internacional	RR **2702-2703**
—— para estações de serviço móvel marítimo entre 4 MHz e 27,5 MHz	Ap. 31
—— para estações de serviço móvel marítimo entre 156 MHz e 174 MHz	Ap. 18
—— partilhadas entre o serviço móvel aeronáutico e o serviço intersatélites	Rec. 709
—— partilhadas pelos serviços de radiocomunicação espacial entre si, bem como entre os serviços de radiocomunicação espacial e os serviços de radiocomunicação de Terra	Rec. 708
Partilha de ——	Art. 1 (secção VII)
—— portadora a utilizar em faixa lateral única	RR **4191** e **4192**
Quadro das faixas de ——	Art. 8 (secção III)
—— que não devem ser notificadas à IFRB	RR **1220**
—— que não devem ser usadas por aeronaves	RR **4148**
—— reservadas às necessidades da segurança entre 1605 kHz e 3800 kHz	Rec. 307
Telegrafia por variação de ——	RR **2** e **115**
Tolerância de ——	RR **2** e **145**
	RR **303**
	Ap. 7
Unidades em que se exprimem as ——	RR **208**
Utilização da faixa 1606,5-3800 kHz escolha de ——	RR **4188**
Utilização de —— em radiotelefonia	RR **4324**
Utilização de equipamentos para se obter o máximo de eficácia do espectro de ——	RR **302**
Utilização de —— no serviço móvel marítimo	Art. 60
—— utilizadas pela radiolifusão na zona tropical	RR **2669**
2380 Hz — Frequência acústica superior a utilizar com inversores ou qualquer outro dispositivo de segredo	Ap. 40
148,5-283,5 kHz — Nova faixa de radiolifusão	Res. 500
405-415 kHz — A faixa —— não deve ser usada pelas estações costeiras da Região 1	RR **4185**
Utilização da faixa —— pelo serviço móvel marítimo	RR **4233**
405-535 kHz — Espaçamento entre frequências adjacentes na faixa ——	RR **4184**
Classes de emissão de estações de navio na faixa ——	RR **4110**
	RR **4315**
405-535 kHz — Radiotelegrafia na faixa ——	RR **4217-4243**
410 kHz:	
É frequência portadora em H2A e H2B	RR **4181**
Protecção de ——	RR **4185**
415-535 kHz — Frequências de estações de navio	RR **4183**
425 kHz — É frequência portadora em H2A e H2B — é frequência de trabalho de estação de navio	RR **4181**
	RR **4237**
435-495 kHz — Designação de uma frequência em base mundial para emissão de boletins meteorológicos e avisos à navegação	Rec. 309
435-526,5 kHz — Planificação da utilização das frequências pelo serviço móvel marítimo na faixa ——	Rec. 300
454 kHz — É frequência portadora em H2A e H2B — é frequência de trabalho de estação de navio	RR **4181**
	RR **4237**
468 kHz:	
É frequência portadora em H2A e H2B	RR **4181**
É frequência de trabalho de estação de navio	RR **4237**
480 kHz:	
É frequência de trabalho de estação de navio	RR **4237**
É frequência portadora em H2A e H2B	RR **4181**
490-510 kHz — Proibição de telegrafia da faixa estreita com impressão directa	RR **4316**
500 kHz:	
Chamada selectiva	RR **4680**
Chamada e resposta	RR **4218**
Utilização em radiogoniometria	RR **4236**

Assunto	Art., núm., ap., dec., res., rec.
500 kHz:	
Listas de chamadas	RR **4729**
Classes de emissão de estações de navio	RR **4111**
Vigília na frequência de ——	RR **3037**
Protecção à frequência de ——	RR **3017**
É frequência portadora em H2A e H2B	RR **4181**
Faixa de guarda	Rec. 200
505-526,5 kHz — Designação de uma frequência em base mundial para a emissão de boletins meteorológicos e de avisos à navegação	Rec. 309
512 kHz:	
Frequência de chamada suplementar	RR **4239** RR **4241** RR **4243**
É frequência portadora em H2A e H2B	RR **4181**
É frequência de trabalho de estação de navio	RR **4237** RR **4243**
1605-1705 kHz — Radiodifusão na Região 2	Rec. 504
1605-2850 kHz — Potência de estação de navio	RR **4357**
1605-3600 kHz — Navio-navio	Res. 303
1605-3800 kHz — Escolha de uma frequência reservada à segurança	Rec. 307
1605-4000 kHz:	
Características técnicas de emissores de faixa lateral única	Ap. 17
Chamada selectiva	RR **4665**
Classes de emissão de estações de navio e outras condições	RR **4125**
Utilização da FIB por estações de navio	RR **4318**
Radiotelefonia — classes de emissão, potências	RR **4331-4369**
1605-4000 kHz:	
Serviço móvel marítimo	RR **4956**
Utilização de FLU no serviço móvel marítimo	Res. 306 Res. 307
1606,5-2850 kHz — Novo plano para o serviço móvel marítimo	Res. 38
1606,5-3400 kHz — Planificação da utilização das frequências pelo serviço móvel marítimo	Rec. 301
1606,5-3800 kHz:	
Frequências a utilizar no serviço móvel marítimo	RR **4188**
Espaçamentos a utilizar	RR **4189-4190**
1625-2170 kHz — Reconsignação de frequências para os serviços fixo e móvel	Res. 38
2046 kHz — Utilização por navios	RR **4360**
2047,4 kHz — Utilização por navios	RR **4360**
2049 kHz — Utilização por navios	RR **4360** RR **4361**
2050,4 kHz — Utilização por navios	RR **4360**
2053 kHz — Utilização por navios	RR **4363**
2054,4 kHz — Utilização por navios	RR **4363**
2056 kHz — Utilização por navios	RR **4363** RR **4364**
2057,4 kHz — Utilização por navios	RR **4363**
2170-2173,5 kHz — Classes de emissão e potência	RR **4342**
2170-2194 kHz:	
Proibição de telegrafia de faixa estreita com impressão directa	RR **4319**
Utilização futura da faixa	Rec. 203
Utilização não autorizada	Res. 309
2170,5 kHz:	
Frequência portadora	RR **4342**
Chamada selectiva	RR **4680**
Classes de emissão	Res. 306
2173,5-2190,5 kHz — Faixa de guarda de 2182 kHz	RR **4188**
2182 kHz:	
Frequência de chamada de estação de navio	RR **4959**
Vigília em ——	RR **3047**
Classes de emissão em ——	RR **4127**
Ensaios em ——	RR **5060**
Faixa de guarda de ——	RR **4188**
Frequência de perigo	RR **2972**
Perigo, chamada e resposta	RR **4962-4966**
Classes de emissão	RR **4343-4356**
Protecção à frequência de ——	RR **3022**
Radiobalizas de localização de sinistros	RR **3256** Ap. 37
Utilização de R3E e J3E	Res. 200
Utilização de A3E e H3E	Res. 306
2190,5-2194 kHz — Classes de emissão e potência	RR **4342**
2191 kHz:	
Chamada	RR **4960**
Frequência portadora	RR **4342**
2192,4 kHz — Chamada	RR **4960**
2505-23 350 kHz	Ap. 26
2850-22 000 kHz — Serviço móvel aeronáutico (R) — passagem do plano actual ao novo plano	Ap. 27 Aer2 Rec. 400 Res. 400 Res. 401 Res. 402
2850-22 000 kHz — Utilização não autorizada de frequências	Res. 407
3000-27 500 kHz — Revisão do ficheiro de referência — Serviço fixo	Res. 9
3000-30 000 kHz — Redução da saturação da faixa	Rec. 5
3023 kHz:	
Busca e salvamento	RR **2979**
Serviço móvel marítimo	RR **505**
Serviço móvel aeronáutico (R) e (OR)	Res. 403
4000-23 000kHz:	
Serviço móvel marítimo — classes de emissão	RR **4371**
Potência — estações costeiras	RR **4373**
Potência — estações de navio	RR **4374**
Chamada — estações de navio	RR **4968**
Vias telefónicas	Ap. 16
Características técnicas de emissores de faixa lateral única	Ap. 17
4000-23 000 kHz:	
Serviço móvel marítimo — telegrafia com impressão directa e transmissão de dados faixa estreita	Ap. 32
Estações costeiras radiotelefónicas	Ap. 25 Aer Mar2
4000-27 500 kHz — Transferência de consignações do serviço fixo para outros serviços	Res. 8
4000-27 500 kHz — Utilização de A1A por navios	Res. 304
4000-27 500 kHz:	
Serviço móvel marítimo — utilização de frequências	RR **4252-4311** Ap. 31

Assunto	Art., núm., ap., dec., res., rec.
Intervalos de tempo entre listas de chamadas	RR 4723
Forma de anunciar listas de chamadas	RR 4730
Frequências de chamadas a utilizar por uma estação de navio	RR 4759
Condições a que devem satisfazer as estações de navio que trabalham em A1A	RR 4118
Frequências a utilizar	RR 4196
Utilização de FIB por navios	RR 4321
Agrupamento de redes nacionais e internacionais — redução da saturação da faixa ——	Rec. 4
Serviço móvel marítimo — telegrafia com impressão directa e transmissão de dados — faixa estreita	Ap. 33
4063-25 110 kHz — Utilização não autorizada	Res. 309
4125 kHz:	
Chamada de navio por estação costeira	RR 4970
Serviço móvel marítimo — chamada selectiva	RR 4680
Frequência de chamada feita por estação de navio (precauções a tomar)	RR 4379
Estações de navio devem poder emitir em ——	RR 4132
Estações costeiras — vigília em ——	RR 3053
Escuta a fazer antes de emitir em ——	RR 3029
Perigo, segurança, chamada e resposta, classe de emissão	RR 2982 Res. 305
4125 kHz:	
Utilização de ——	Rec. 303
Estação de navio — frequência de chamada	RR 4375
Estações de navio ou de aeronave caso em que não possam utilizar ——	RR 2975
Utilização da R3E e J3E	Res. 305
4187,6 kHz — Chamada selectiva numérica (navios)	RR 4683
4357 kHz — Chamada selectiva numérica (costeiras)	RR 4684
4419,4 kHz:	
Chamada selectiva	RR 4680
Chamada em radiotelefonia — estações costeiras	RR 4376
5000-30 000 kHz — Comunicações a grande distância	RR 954 RR 955
5680 kHz:	
Busca e salvamento	RR 505 RR 2983
Serviço móvel aeronáutico (R) e (OR)	Res. 403
6215,5 kHz:	
Estações costeiras — chamada em radiotelefonia	RR 4970
Tráfego de perigo — escuta antes de emitir em ——	RR 4379
Estações de navio devem poder emitir em ——	RR 4132
Utilização da R3E e J3E	Res. 305
6215,5 kHz:	
Estação costeira — vigília em ——	RR 3053
Escuta a fazer antes de emitir em ——	RR 3029
Utilização de ——	Rec. 303
Estações de navio — frequência de chamada	RR 4375
Estação de navio ou de aeronave — caso em que não possam utilizar ——	RR 2975
6281,4 kHz — Chamada selectiva (navios) ——	RR 4683
6506 kHz — Chamada selectiva (costeiras)	RR 4684
6521,9 kHz:	
Chamada selectiva	RR 4680
Estações costeiras — chamada em radiotelefonia	RR 4376
7000-7100 kHz — A radiodifusão não deve usar esta faixa	Res. 641
8257 kHz — Estações de navio — frequência de chamada	RR 4375
8364 kHz	
Busca e salvamento — engenho de salvamento	RR 2987
É frequência portadora em H2A e H2B	RR 4181
8375,2 kHz — Chamada selectiva — navios	RR 4683
8718,5 kHz — Chamada selectiva — costeiras	RR 4684
8780,9 kHz	
Chamada selectiva	RR 4680
Estações costeiras — chamada em radiotelefonia	RR 4376
12 392 kHz — Estações de navio — chamada	RR 4375
12 562,3 kHz — Chamada selectiva — navios	RR 4683
12 562,8 kHz — Chamada selectiva — navios	RR 4683
13 100 kHz — Chamada selectiva — costeiras	RR 4684
13 100,5 kHz — Chamada selectiva — costeiras	RR 4684
13 162,8 kHz:	
Chamada selectiva	RR 4680
Estações costeiras — chamada em radiotelefonia	RR 4376
16 522 kHz — Estações de navio — chamada	RR 4375
16 749,9 kHz — Chamada selectiva — navios	RR 4683
16 750,4 kHz — Chamada selectiva — navios	RR 4683
17 232 kHz — Chamada selectiva — costeiras	RR 4684
17 232,5 kHz — Chamada selectiva — costeiras	RR 4684
17 294,9 kHz:	
Chamada selectiva	RR 4680
Costeiras — chamada em radiotelefonia	RR 4376
21 924-22 000 kHz — Transferência de consignações do serviço fixo aeronáutico (R)	Res. 8
21 924-22 000 kHz — Utilização pelo serviço móvel aeronáutico (R)	Res. 404
22 062 kHz — Estações de navio — chamada	RR 4375
22 248 kHz — Chamada selectiva — navios	RR 4683
22 248,5 kHz — Chamada selectiva — navios	RR 4863
22 595 kHz — Chamada selectiva — costeiras	RR 4684

Assunto	Art., núm., ap., dec., res., rec.
22 595,5 kHz — Chamada selectiva — costeiras	RR **4684**
22 658 kHz:	
Chamada selectiva	RR **4680**
Costeiras — chamada em radiotelefonia	RR **4376**
27 500-28 000 kHz — Serviço dos auxiliares da meteorologia	Rec. 620
> 30 MHz — Frequências do serviço móvel marítimo que não devem ser utilizadas por aeronaves	RR **4148**
87,5-108 MHz — Radiodifusão sonora (conferência)	Res. 510
100-108 MHz — Compatibilidade do serviço de radiodifusão com o serviço de radiodifusão aeronáutica	Rec. 704
108-117,975 MHz — Compatibilidade do serviço de radiodifusão com o serviço de radionavegação aeronáutica	Rec. 704
121,5 MHz:	
Radiobalizas de localização de sinistros	RR **3259** Res. 601
Comunicações para fins de segurança entre estações móveis do serviço móvel marítimo e estações do serviço móvel aeronáutico	RR **2990** RR **593**
121,5 MHz — Utilização em A3E	RR **2991**
123,1 MHz:	
Comunicações para fins de segurança entre estações móveis do serviço móvel marítimo e estações do serviço móvel aeronáutico	RR **2990** RR **593**
Utilização em A3E	RR **2991**
136-137 MHz:	
Serviço móvel aeronáutico (R)	Rec. 404
Serviços de exploração espacial, meteorologia por satélite e pesquisa espacial	RR **595**
149,9-150,05 MHz — Cessação do serviço fixo e móvel na faixa	Rec. 703
156-174 MHz:	
Classes de emissão de estações de navio e outras condições	RR **4134**
Serviços de movimento de navios	RR **4214**
Estações de navio com telegrafia de impressão directa	RR **4323**
Quadro das frequências de emissão para as estações de serviço móvel marítimo	Ap. 18
Espaçamento	Res. 308
156-174 MHz:	
Características técnicas dos emissores e dos receptores utilizados no serviço móvel marítimo	Ap. 19
Frequências de chamada	RR **4973**
Utilização por aeronaves	RR **4148**
156,3 MHz:	
Utilização por aeronaves para fins de segurança	RR **2992**
Classes de emissão em estações de navio	RR **4136**
156,6 MHz — Serviço de operações portuárias	RR **4975** RR **4402**

Assunto	Art., núm., ap., dec., res., rec.
156,725-156,875 MHz — Proibição de emissões	RR **4393**
156,7625-156,8375 MHz — Proibição de emissões	RR **4393.1** RR **3033.1**
156,8 MHz:	
Perigo, segurança e chamada	RR **613**
Chamada	RR **4974**
Ensaios	RR **5060**
Chamada selectiva	RR **4680**
Perigo, segurança, chamada, classe de emissão	RR **4386-4390**
156,8 MHz:	
Classe de emissão em estações de navio	RR **4135**
Vigília na frequência de ——	RR **3056**
Utilização por aeronaves para fins de segurança	RR **2992**
Escuta por estações costeiras	Rec. 306
Duração das chamadas	RR **4394**
Precauções a tomar em ——	RR **4395**
Escuta na frequência	RR **4399-4403**
Protecção à frequência de ——	RR **3032**
243 MHz:	
Busca e salvamento	RR **501**
Radiobalizas de localização de sinistros	Res. 601
Engenhos de salvamento	RR **642**
Radiobalizas	RR **3259**
399,9-400,05 MHz — Cessação do serviço fixo e móvel na faixa ——	Rec. 703
450-470 MHz — Características dos aparelhos utilizados nas comunicações de bordo	Ap. 20
620-790 MHz:	
Partilha entre radiodifusão de Terra e radiodifusão por satélite	Rec. 705
Televisão com modulação de frequência	RR **693**
1330-1400 MHz — Utilização pela radioastronomia	RR **918** Rec. 701
1400-1427 MHz — Proibidas todas as emissões	RR **721**
1400-1727 MHz — Emissões intencionais de origem extraterrestre	Rec. 702
2690-2700 MHz — Proibidas todas as emissões	RR **768**
2900-3100 MHz — Serviço de radionavegação	Res. 600
5470-5650 MHz — Serviço de radionavegação	Res. 600
9200-9300 MHz — Serviço de radionavegação	Res. 600
9300-9500 MHz — Serviço de radionavegação	Res. 600
9300-9500 MHz — Utilização da faixa	Rec. 600
9500-9800 MHz — Serviço de radionavegação	Res. 600
0,5-2 GHz — Radiodifusão por satélite	Res. 505
10,68-10,70 GHz — Proibidas todas as emissões	RR **833**
11,7-12,2 GHz — Limites de densidade de fluxo de potência	Ap. 30 Art. 9 Art. 10
11,7-12,5 GHz:	
Plano para o serviço de radiodifusão por satélite	Ap. 30
Cálculo da densidade de fluxo de potência	Art. 11 (anexo 3)

Assunto	Art., núm., ap., dec., res., rec.
Notificação de consignações	Art. 15
Estações de Terra que afectam estações do serviço de radiodifusão por satélite	Ap. 30 Art. 6
11,7-12,5 GHz — Consignação de frequências a estações de radiocomunicação de Terra e de radiocomunicação espacial	Res. 32
11,7-12,7 GHz — Radiodifusão por satélite na Região 2 (disposições do ap. 30 a aplicar)	Res. 31
11,8-12 GHz — Harmónicas na faixa	Rec. 506
12 GHz:	
Propagação na faixa de —— para o serviço de radiodifusão por satélite	Rec. 505
Utilização da órbita dos satélites geostacionários	Res. 506
12,2-12,7 GHz — Partilha entre os serviços fixo por satélite e de radiodifusão por satélite	Res. 700
12,5-12,75 GHz — Na Região 3 — partilha com serviços especiais e de Terra das Regiões 1, 2 e 3	Res. 34
15,35-15,4 GHz — Proibidas todas as emissões	RR **864**
18,6-18,8 GHz — Partilha de frequências na faixa ——	Rec 706
23,6-24 GHz — Proibidas todas as emissões	RR **880**
31,3-31,5 GHz — Proibidas todas as emissões	RR **887**
32-33 GHz — Partilha de frequências	Rec. 707
101-120 GHz — Emissões intencionais de origem extraterrestre	Rec. 702
197-220 GHz — Emissões intencionais de origem extraterrestre	Rec. 702
Ganho:	
—— de uma antena — definição	RR **2** e **154**
—— em relação a uma antena vertical curta — definição	RR **2** e **154**, *c*)
—— em relação a um dipolo de meia onda — definição	RR **2** e **154**, *b*)
—— isotrópico ou absoluto — definição	RR **2** e **154**, *a*)
Gestão:	
—— nacional de frequências (desenvolvimento da ——)	Res. 7
Gigahertz	RR **208**
Gónio	RR **2243**
Gráfico:	
—— a cores, indicando a repartição das faixas de frequência	RR **2229**
—— das horas de serviço das estações de navio	Ap. 12
Hertz	RR **208**
Horário(s):	
—— das estações de navio classificadas na 2.ª ou na 3.ª categoria	Ap. 12
—— das estações do serviço móvel aeronáutico	Art. 47
—— das estações do serviço móvel marítimo	Art. 58
—— periódicos de radiodifusão em ondas decamétricas	RR **1748**
Horas:	
—— de serviço das estações de navio	Ap. 12
—— modo de representar as ——)	RR **238**
—— (nomenclatura das ——)	Art. 3

Assunto	Art., núm., ap., dec., res., rec.
H2A e H2B:	
—— frequências portadoras que se utilizam nestas classes de emissão	RR **4181**
—— tipo de transmissão utilizado em ——	RR **4216**
H2B:	
—— ver *H2A*.	
Frequências em ——	RR **4376.1**
—— Utilização em 2170,5 kHz	RR **4342**
H3B:	
1605-2850 kHz — Costeiras	RR **4353-4354**
1605-4000 kHz — Navios	RR **4128**
1605-4000 kHz — Navios	RR **4129** RR **4334** RR **4337**
2170,5 kHz e 2182 kHz	RR **4342-4343**
2049 kHz — Navios	RR **4361**
2056 kHz — Navios	RR **4364**
4000-23 000 kHz	RR **4371**
4000-23 000 kHz — Costeiras — potência	RR **4373**
4000-23 000 kHz — Navios — potência	RR **4374**
Identidade(s):	
Consignação da mesma —— mais de uma vez	RR **2091**
—— do serviço móvel marítimo	Art. 25 (secção VI) Ap. 43 Res. 313
—— do serviço móvel marítimo (escolha de ——)	RR **2090** RR **2087**
—— do serviço móvel marítimo (estações a que são consignadas ——)	RR **2083**
—— do serviço móvel marítimo por satélite	Art. 25 (secção VI)
Identificação:	
—— automática de estações	RR **2057** Rec. 8
Consignação do mesmo número de —— mais de uma vez	RR **2091**
—— da nacionalidade (números de ——)	RR **2087**
—— das emissões durante os ensaios	RR **1843**
—— de estações	Art. 25
—— de estações (casos em que não se aplica a obrigatoriedade de ——)	RR **2066**
—— de estações costeiras (números de ——)	RR **2135** RR **2142** RR **2139** Ap. 44
—— de estação de aeronave (modo de efectuar a ——)	RR **2150**
—— de estações de defesa nacional	RR **2081**
—— de estações do serviço móvel aeronáutico (durante ajustes de material)	RR **1844**
—— de estações (forma que deve ter a ——)	RR **2071**
—— de estações (frequência com que se deve transmitir a ——)	RR **2070**
—— de estações (modos de fazer a ——)	RR **2069**
—— de estações (providência a tomar no caso de não existir ——)	RR **2079**
—— de estações que trabalham simultaneamente na mesma ligação	RR **2078**
—— de estações que utilizam a radiotelefonia	Art. 25 (secção IV)
—— de estações (supressão deliberada da ——)	RR **2064**
—— de uma estação de radiodifusão (modos de fazer a ——)	RR **2093**
—— falsa ou enganosa de estações	RR **2056** RR **1802**
—— por sobreposição	RR **2077**

Assunto	Art., núm., ap., dec., res., rec.
IFRB	Art. 10
ILS:	
—— Sistemas de aterragem por instrumentos (frequências)	RR **98** RR **645**
Impulsos:	
Emissão de —— (designação de ——)	RR **271**
São proibidos sistemas de —— em certas faixas inferiores a 2170 kHz	RR **487**
Inclinação:	
—— de uma órbita — definição	RR **2** e **177**
Indicativo:	
—— de chamada (atribuição de novas séries de ——)	RR **2085** RR **2086**
—— de chamada (consignação do mesmo —— mais de uma vez)	RR **2091**
—— de chamada de série internacional (estações a que não é obrigatório consignar ——)	RR **2084**
—— de chamada de estação costeira (um por cada série de frequências)	RR **2095**
—— de chamada (escolha de ——)	RR **2089**
—— de chamada (estações que devem ter ——)	RR **2082**
—— de chamada (formação de ——)	Art. 25 (secção III)
—— de chamada (formação de —— e atribuição de novas séries)	Res. 13
—— de chamada (lista albabética dos ——)	RR **2215**
—— de chamada (quadro de atribuição das séries internacionais de ——)	Ap. 42
—— de chamada que se confunda com sinais de perigo	RR **2091**
—— de chamada (transmissão de —— pelas estações de amador)	RR **2739**
—— de chamada (utilização de mais de um —— pela mesma estação de radiodifusão)	RR **2093**
—— de chamada (utilização de mais de um —— pela mesma estação fixa)	RR **2092**
—— de chamada (utilização de mais de um —— pela mesma estação terrestre)	RR **2094**
—— de chamada (utilização de novas regras de formação de ——)	Res. 12
—— de chamada (utilização de —— por estações costeiras)	RR **4724-4725**
—— ou sinal de identificação abreviado (no serviço móvel aeronáutico)	RR **2150**
Informática:	
Manual sobre aplicação da técnica —— na gestão do espectro radioeléctrico	Rec. 31
Utilização de técnicas informáticas na gestão do espectro radioeléctrico	Res. 37
Infracções:	
Relatórios sobre ——	Art. 21 Ap. 22
Informações:	
—— marítimas importantes (frequência para ——)	RR **4389**
Inquérito:	
—— da IFRB nos termos dos n.^{os} **1264** ou **1431** (consequências se a administração não responder no prazo de 3 meses)	RR **1432**
Inscrição:	
—— de consignações antes de entrarem em serviço	RR **1381**

Assunto	Art., núm., ap., dec., res., rec.
Inspecção:	
—— das estações de aeronave	Art. 46
—— das estações de navio e das estações terrenas de navio	Art. 57
Intensidade:	
—— de campo mínima necessária	Art. 64
Interferência:	
—— aceite — definição	RR **162**
—— acima de 28 MHz (normas técnicas para avaliação de ——)	Rec. 61
—— admissível — definição	RR **2** e **161**
—— causadas ao serviço de pesquisa espacial	RR **345**
—— causadas a satélites geostacionários	RR **2613-2614**
—— causadas pelos aparelhos destinados às utilizações industriais científicas e médicas	RR **1815**
—— causadas pelos aparelhos eléctricos ou electrónicos de navios	RR **4100** RR **4141**
—— causadas por aparelhos e instalações eléctricas de qualquer espécie	RR **1814**
—— causadas por estações que utilizam frequências inferiores a 9 kHz	RR **444** RR **1816**
—— causadas por receptores de aeronaves	RR **3599**
—— causadas por receptores de navios	RR **4099** RR **4140**
—— causadas por serviços secundários ou a serviços secundários	RR **421** RR **423** RR **422**
Colaboração das administrações na resolução de ——	RR **1949**
Critérios de —— para partilha de faixas de frequências entre serviços espaciais e de Terra	Res. 703
—— (definição)	RR **2** e **160**
Direito das consignações de frequência quanto a ——	RR **1416-1420**
Direito de prioridade	RR **1419-1420** RR **4713-4717**
—— em faixas adjacentes	RR **343**
—— entre estações de navios e estações costeiras	RR **4915-4916**
—— entre serviços diferentes da mesma categoria em Regiões diferentes	RR **346**
Escolha das frequências de trabalho de estações costeiras de modo a evitar ——	RR **4356** e **4414** RR **4412** e **4415**
Medidas contra ——	Art. 18
—— no serviço móvel marítimo (modo de proceder quanto a ——)	RR **4714**
Novas consignações e modificações não devem causar ——	RR **341**
Obrigação de seguir as prescrições do Quadro para evitar ——	RR **340**
Obrigatoriedade de cooperar na pesquisa e eliminação de ——	RR **1798**
Os outros serviços de radionavegação não devem causar —— a 410 kHz	RR **468**
O serviço de radiodifusão não deve sofrer —— pelo serviço fixo entre 9775 kHz e 11 975 kHz	RR **530**
O serviço de radionavegação aeronáutica não deve causar —— ao serviço móvel marítimo entre 505 kHz e 526,5 kHz	RR **473**
—— prejudiciais às comunicações de perigo, urgência ou segurança em 500 kHz, 2182 kHz e 156,8 MHz	RR **3010** RR **964**

Assunto	Art., núm., ap., dec., res., rec.
—— prejudiciais (procedimenro contra ——)	Art. 22
—— prejudiciais (relatório de ——)	Ap. 23
—— prejudicial — definição	RR 163
Protecção contra —— causadas pelos aparelhos ISM	Res. 63
Protecção de frequências-padrão e sinais horários contra ——	RR 447
Protecção de serviços contra ——	RR 435
Protecção de 410 kHz na faixa 406,5-413,5 kHz contra ——	RR 468
Protecção do serviço de exploração da Terra por satélite contra ——	RR 345
Protecção do serviço de pesquisa espacial contra ——	RR 345
Protecção do serviço de radioastronomia contra ——	RR 344
Interferências provocadas em pesquisas coentíficas	RR 445
—— provocadas por ensaios e experiências em estações	RR 1842
—— provocadas por estações de aeronave	RR 3702-3706
—— provocadas por radiações não essenciais	RR 1813
Interligação:	
—— dos sistemas de radiocomunicações móveis marítimas com as redes telefónica e telegráfica internacionais	Rec. 312
ISM:	
Protecção dos serviços de radiocomunicações contra interferências causadas pelos aparelhos industriais, científicos e médicos	Res. 63
—— Utilizações industriais, científicas e médicas — definição	RR 2 e 16
—— 6765-6795 kHz	RR 524
—— 13 553-13 567 kHz	RR 534
—— 26 957-27 283 kHz	RR 546
—— 40,66-40,70 MHz	RR 548
—— 433,05-434,79 MHz	RR 662
—— 2400-2500 MHz	RR 752
—— 5725-5875 MHz	RR 806
—— 24-24,25 GHz	RR 881
—— 61-61,5 GHz	RR 911
—— 122-123 GHz	RR 916
—— 244-246 GHz	RR 922
J3E:	
1605-4000 kHz	RR 4334
1605-2850 kHz	RR 4353
2046 e 2049 kHz	RR 4363
2053 e 2056 kHz	RR 4360
2170,5 e 2191 kHz	RR 4342
2182 kHz	RR 4343.1
4000-23 000 kHz	RR 4371 RR 4373-4374
Largura de faixa:	
Cálculo da ——	Ap. 6 Rec. 63
—— (em faixa lateral única no serviço móvel marítimo)	RR 4194
—— necessária	RR 2 e 146 RR 266-267 RR 307
—— ocupada	RR 2 e 147 RR 307
Técnicas de expansão de ——	RR 308
Leão-e-Sol Vermelho:	
—— frequências a consignar	Res. 10
Licenças	Art. 24 Art. 46 Art. 57
—— de estações de navio e de aeronave (modelos normalizados de ——)	Rec. 7

Assunto	Art., núm., ap., dec., res., rec.
Ligação(ões):	
Características técnicas das ——	Res. 102
—— de conexão (acordos e planos associados)	Res. 101
—— de conexão (no serviço de radiodifusão por satélite)	Rec. 101
—— de conexão — definição	RR 2 e 109
(10,7-11,7 GHz)	RR 835
(14-14,5 GHz)	RR 858
(14,5-14,8 GHz)	RR 863
(17,3-18,1 GHz)	RR 869
(47,2-49,2 GHz)	RR 901
—— espaço para espaço — frequências	RR 882
—— multissatélite — definição	RR 2 e 108
—— por satélite	RR 2 e 107
Lista:	
—— albabética dos indicativos de chamada	RR 2215
—— de chamada (em radiotelefonia)	RR 4346 RR 4389
—— (em radiotelegrafia)	RR 4723
—— (transmissão de ——)	RR 4726
—— internacional das frequências	RR 2181 Ap. 9
Localização:	
—— das estações de emissão e de recepção	RR 1806
Manual:	
—— para explicar os procedimentos do RR 79	Res. 6
—— para uso dos serviços móvel marítimo e móvel marítimo por satélite	RR 2230
—— sobre aplicação da técnica informática na gestão do espectro radioeléctrico	Rec. 31
Mapa:	
—— das estações costeiras abertas à correspondência pública ou que participam no serviço das operações portuárias	RR 2228
—— das Regiões	RR 392
—— das zonas geográficas para a radiodifusão	Ap. 1
Marca:	
—— (= paragem em telegrafia)	Ap. 38
Materiais:	
—— radioeléctricos (aperfeiçoamento da concepção e da utilização dos ——)	Res. 67
Mayday	RR 3089 RR 3092 RR 3094
Mayday relay	RR 3165
Medical:	
—— (em transportes sanitários)	RR 3210
Medições:	
—— de estações	RR 312
Megahertz	RR 208
Mensagens:	
—— de perigo	Art. 39
—— de segurança	Art. 40 (secção III)
—— de transportes neutros	Res. 11
—— de urgência	Art. 40 (secção I)
—— meteorológicas	RR 3312
—— no serviço de movimento de navios	RR 4407
—— no serviço de operações portuárias	RR 4406

Assunto	Art., núm., ap., dec., res., rec.
Meridiano:	
—— de origem	RR **237**
Meteorologia	
Frequências para boletins meteorológicos nas faixas 435-495 kHz ou 505-526,5 kHz	Rec. 309
Frequências para informações meteorológicas no serviço móvel aeronáutico (R) e no serviço móvel aeronáutico por satélite (R)	Res. 406
Mensagens meteorológicas	RR **3312**
—— por satélite (serviço de ——)	RR **2** e **49**
—— (serviço dos auxiliares da ——)	RR **2** e **47**
—— serviço dos auxiliares da —— na faixa 27,5-28 MHz)	Rec. 620
—— sinóptica (frequência para ——)	RR **2704-2705**
Método:	
—— de cálculo para partilha de faixas de frequências entre serviços espaciais e de Terra	Res. 703
—— de chamada	RR **4754**
Modificação(ões):	
—— das características fundamentais de consignações de frequências (exame feito pela IFRB)	RR **1305** a **1307**
—— das características fundamentais não devem causar interferências	RR **341**
Modulação:	
Métodos de —— de feixes hertzianos	Rec. 102
Percentagem de —— em radiofaróis marítimos	RR **2866**
Movimento:	
—— de navios (mensagens no serviço de ——)	RR **4407**
—— de navios (serviço de ——)	RR **2** e **33**
Navio(s):	
—— Comunicando em frequência da estação costeira	RR **961**
Emissor de socorro de ——	RR **2** e **93**
Estação de ——	RR **2** e **72**
Estação terrena de ——	RR **2** e **73**
—— Estações oceânicas	Ap. 9
Frequências navio-navio entre 1605 kHz e 3600 kHz	Res. 303
—— (proibição de radiodifusão)	Rec. 9
—— que devem ser equipados com instalações radioeléctricas	RR **2939**
Segurança de —— de Estados neutros	Res. 11
Nomenclatura:	
—— das datas e das horas	Art. 3
—— das estações costeiras (frequências e outras informações que deve mencionar)	RR **2201** RR **4313** RR **4327** RR **4341** RR **4355** RR **4372** RR **4378** RR **4391** RR **4731** RR **4846** RR **4912** RR **4929** Ap. 9
—— das estações de fiscalização internacional das emissões	RR **2222** Ap. 9
—— das estações de navio	RR **2204** RR **4846** Ap. 9
—— das estações de radiodeterminação e das estações que efectuam serviços especiais	RR **2212** Ap. 9
—— das estações do serviço de radiocomunicação espacial e do serviço de radioastronomia	RR **2225** Ap. 9
—— das estações fixas que asseguram ligações internacionais	RR **2197** Ap. 9
—— das faixas de frequência	Art. 2
—— dos comprimentos de onda	Art. 2
Normas:	
Procedimento para pôr fim a um desacordo sobre as —— técnicas	Res. 35
—— técnicas para avaliação de interferências acima de 28 MHz	Rec. 61
—— técnicas da IFRB (em que se baseiam)	RR **1454** Rec. 60
Notações:	
—— utilizadas nos documentos de serviço	Ap. 10
Notificação(ões):	
—— de consignação de frequência devem ser feitas pelas administrações em cujo território se encontra a estação	Res. 1
—— de frequências acima de 28 MHz	RR **1223**
—— de frequências (actualização do plano das estações costeiras)	Art. 16
—— de frequências às estações de radiocomunicação de Terra	Art. 12
—— de frequências às estações do serviço de radiodifusão por satélite em 11,7-12,5 GHz	RR **1656**
—— de frequências às estações dos serviços que funcionam em 11,7-12,5 GHz	RR **1656**
—— de frequências [características fundamentais a fornecer no caso de uma —— nos termos dos n.os **1214** a **1217** do RR (1979)]	Ap. 1
—— de frequências [características fundamentais a fornecer no caso de uma —— nos termos dos n.º **1219** do RR (1979)]	Ap. 1
—— de frequências [características fundamentais a fornecer no caso de uma —— nos termos dos n.os **1223** a **1227** do RR (1979)]	Ap. 1
—— de frequências (de estações de radioastronomia)	Art. 13
—— de frequências (de estações de radiocomunicação espacial)	Art. 13
—— de frequências (devolução de ficha)	RR **1234**
—— de frequências [exame das fichas de notificação respeitantes às estações aeronáuticas do serviço móvel aeronáutico (R) entre 2850 kHz e 22 000 kHz]	RR **1333-1350**
—— de frequências [exame das fichas de notificação respeitantes às estações costeiras radiofónicas entre 4000 kHz e 23 000 kHz]	RR **1315-1332**
—— de frequências (exame das fichas pela IFRB)	Art. 12 (secção II)
—— de frequências (procedimento no caso de estações de Terra situadas na zona de coordenação de uma estação terrena)	RR **1351-1385**
—— de frequências (ficha completa)	RR**1232**
—— de frequências (fichas de —— relativas às estações de radiocomunicação espacial e de radioastronomia)	Ap. 3

Assunto	Art., núm., ap., dec., res., rec.
—— de frequências (fora do prazo regulamentar)	RR 1231
—— de frequências [informações a comunicar para qualquer —— nos termos do n.º 1218 do RR (1979)]	Ap. 1
—— de frequências (inscrição de datas e das conclusões do Ficheiro de referência)	RR 1386-1415
—— de frequências (menção na circular semanal)	RR 1235
—— de frequências (modelo de ficha de ——)	Ap. 2
—— de frequências (obrigatoriedade de ——)	RR 1214-1220
—— de frequências (prazo para o envio das fichas)	RR 1228-1230
—— de frequências (preenchimento de fichas)	RR 1221
—— de frequências (procedimento no caso de estações de Terra situadas na zona de coordenação de uma estação terrena)	RR 1351-1385
—— de frequências (quais as que não se devem notificar)	RR 1220
—— de frequências que estejam de acordo com uma nota ao Quadro de atribuição de faixas de frequências	RR 1610-1630
—— de frequências (reexame das conclusões)	RR 1421-1428
—— de consignação de frequências	Res. 1
Número(s):	
—— de chamada selectiva das estações de navio	Ap. 44
—— de faixa	RR 208
—— de identificação das estações costeiras	Ap. 44
—— que figuram na margem do Regulamento das Radiocomunicações	Rec. 11
Oceanografia:	
Sistema mundial de dados para ——	Res. 314
Onda(s):	
—— amortecidas (probição)	RR 313
—— centimétricas	RR 208
—— centimilimétricas	RR 208
Comprimentos de —— (nomenclatura)	Art. 2
—— decamétricas	RR 208 RR 1748
—— decimétricas	RR 208
—— decimétricas para o serviço móvel marítimo (sistema automático de radiocomunicações em ——)	Rec. 310
—— decimicrométricas	RR 208
—— decimilimétricas	RR 208
—— de polarização dextrogira	RR 2 e 148
—— de polarização levogira	RR 2 e 149
—— hectométricas	RR 208
—— hertzianas	RR 6
—— métricas	RR 208
—— micrométricas	RR 208
—— milimétricas	RR 208
—— miriamétricas	RR 208
—— portadora (não deve ser emitida por navios entre chamadas)	RR 4739
—— quilométricas	RR 308
—— radioeléctricas — definição	RR 2 e 6
Operações:	
—— portuárias (mensagens no serviço de ——)	RR 4406
—— portuárias (serviço de ——)	RR 2 e 32
Operador:	
—— de estação de aeronave	Art. 44
—— de estação de navio	Art. 55
Órbita:	
—— (definição)	RR 2 e 176
Satélites geostacionários	RR 2 e 182
(Inclinação de uma ——)	RR 2 e 177
(Utilização por estações espaciais em 12 GHz da —— dos satélites geostacionários)	Res. 506
País(es):	
Assistência aos —— em desenvolvimento com vista a facilitar o acesso do seu serviço às faixas de ondas decamétricas e assegurar protecção contra interferências	Res. 103
—— (definição)	RR 2246
Cooperação técnica com os —— em desenvolvimento	Res. 5 Res. 316
Pan	RR 3197
Pareceres:	
—— da CCIR [difusão de informações sobre —— mencionados no RR (1979)]	Res. 65
—— Médicos	Art. 42 (secção III)
Partilha:	
—— das faixas de frequências entre o serviço móvel aeronáutico e o serviço intersatélites	Rec. 709
—— de frequências	Art. 1 (secção VII)
—— de frequências (critérios a aplicar à —— entre o serviço de radiodifusão por satélite e o serviço de radiodifusão de Terra)	Rec. 705
—— de frequências na faixa de 18,6-18,8 GHz	Rec. 706
—— de frequências na faixa de 32-33 GHz	Rec. 707
—— de frequências (serviços de radiocomunicação espacial; serviços de radiocomunicação de Terra)	Rec. 708
—— interdependência entre a concepção de receptores, o agrupamento de canais e os critérios de —— no serviço de radiodifusão por satélite	Rec. 712
—— na faixa de 12,5-12,75 GHz entre estações espaciais e de Terra das Regiões 1, 2 e 3	Res. 34
Perigeu:	
Altitude do ——	RR 2 e 179
Perigo:	
Aeronave em ——	RR 3000
Comunicações de ——	Art. 37 Art. 39 RR 3763
Entendido de uma mensagem de ——	Art. 39 (secção VI) RR 3129
Frequências de ——	Art. 38
500 kHz	RR 472 RR 4218
2182 kHz	RR 500
4125 kHz	RR 2982
156,8 MHz	RR 613 RR 4386
1544-1545 MHz	RR 728
1645,5-1646,5 MHz	RR 728
Indicativo de chamada que se confunde com sinais de ——	RR 2091
Interferências às comunicações de ——	RR 3010 RR 964 RR 1810
Mensagens de ——	Art. 39 (secção IV) RR 3108 RR 3120

Assunto	Art., núm., ap., dec., res., rec.
Modo de proceder em caso de ——	RR 2935-2938 RR 4380 RR 4396
Prioridade da chamada de ——	RR 3086
Prioridade na resolução de interferências a frequências de ——	RR 1957
Procedimento radiofónico de ——	RR 3115 RR 2937
Procedimento radiotelegráfico de ——	RR 3099
Protecção das frequências de ——	RR 3009-3036 Rec. 202
Sinal de ——	RR 3088-3090
Tráfego de ——	Art. 39 (secção VII) Rec. 201
Transmissão de mensagens de —— por uma estação que não se encontra em perigo	Art. 39 (secção VIII)
Utilização de qualquer meio por parte de uma estação para socorrer outra em perigo	RR 348 RR 2934
Utilização de qualquer meio por parte de uma estação para pedir socorro em situações de perigo	RR 347 RR 2932-2934
Velocidade em radiotelegrafia nos casos de —— de urgência ou de segurança	RR 2936
Vigília nas frequências de ——	RR 3037-3060
Período:	
—— de um satélite — definição	RR 2 e 178
—— de silêncio	RR 3039 RR 3052 RR 3120
Perseguição:	
—— espacial — definição	RR 2 e 130
Pesquisa(s):	
—— científicas em frequênciass inferiores a 9 kHz	RR 445
—— espacial — frequências	RR 609 RR 811 RR 852
—— espacial (interferências ao serviço de ——)	RR 345
—— espacial (serviço de ——)	RR 2 e 52
—— ionosféricas (satélites de ——)	Res. 62
—— ionosféricas (utilização experimental das ondas radiofónicas pelos satélites)	Res. 62
—— passivas de emissões intencionais de origem extraterrestre ——	RR 722
Pessoal:	
—— das estações aeronáuticas	Art. 45
—— das estações do serviço móvel marítimo	Art. 56 Art. 55
PHARE	RR 2244
Pista:	
Radioalinhamento de ——	RR 2 e 99
Polarização:	
—— dextrogira (onda de ——)	RR 2 e 148
—— levogira (onda de ——)	RR 2 e 149
Polícia:	
Permuta internacional de informações da —— (frequências)	RR 2702-2703
Portadora:	
Dispersão de energia da ——	Rec. 103
Emissão da —— por navios	RR 4739
Emissão da —— por estações	RR 4910
Frequência —— em faixa lateral única (designação e determinação da ——)	RR 4325
Potência da ——	RR 2 e 153
Portugal:	
Utilização especial de frequências em —— (1810-1830 kHz)	RR 490
(2194-2300 kHz)	RR 502
(2502-2625 kHz)	RR 504
(223-230 MHz)	RR 622 RR 631
(223-235 MHz)	RR 633
(1215-1300 MHz)	RR 712
(12,5-12,75 GHz)	RR 849
(14,25-14,3 GHz)	RR 860
Posição:	
Manutenção em —— das estações espaciais	RR 2615-2627
Potência:	
—— aparente radiada	RR 2 e 156
—— aparente radiada em relação a uma antena vertical curta	RR 2 e 157
—— a utilizar em 2170,5 kHz e 2191 kHz	RR 4342
—— da portadora	RR 2 e 153
—— da portadora em R3E e J3E	Ap. 17
—— das estações costeiras radiotelefónica:	
(1605-4000 kHz)	RR 4338
(4000-23 000 kHz)	RR 4373
(4000-23 000 kHz — *simplex*)	RR 4382
—— das estações costeiras radiotelegráficas	RR 4256-4257
—— das estações de amador	RR 2737
—— das estações de navio:	
(1605-4000 kHz)	RR 4357
(4000-23 000 kHz)	RR 4374
(156-174 MHz)	RR 4416 Ap. 19
—— de estações de radiodeterminação inferior a 50 W em certas frequências (< 3800 kHz)	RR 484
—— de estações de radiolifusão em frequências inferiores a 5060 kHz ou superiores a 41 MHz	RR 2666
—— de estações de radiolocalização inferior a 50 W em certas frequências (< 2170 kHz)	RR 487
—— (definição)	RR 2 e 150
Densidade de fluxo de —— na órbita dos satélites geostacionários	RR 2631
—— de ponta — definição	RR 2 e 151
—— de radiofaróis aeronáuticos	RR 2855
—— de radiofaróis marítimos	RR 2860
—— isotrópica radiada equivalente	RR 2 e 155
Limitações da —— das estações terrenas fora do eixo do feixe principal	RR 2636
—— média	RR 2 e 152
—— radiada pelas estações (a mínima necessária)	RR 1804
Prazo(s):	
—— para acusar a recepção de um pedido de coordenação nos termos do n.º 1060 (estação espacial ou estação terrena)	RR 1082
—— para apresentar de novo à IFRB ficha devolvida	RR 1309
—— para apresentar de novo uma ficha que teve conclusão desfavorável relativamente ao n.º 1354	RR 1374
—— para comunicar à IFRB a anulação de uma consignação de frequência a uma estação do serviço de radiolifusão por satélite	Ap. 30, n.º 5.3.2

Assunto	Art., núm., ap., dec., res., rec.
—— para comunicar à IFRB as observações da fiscalização	RR **1883**
—— para comunicar à IFRB os nomes das administrações com as quais se chegou a acordo quanto à coordenação de estações espaciais ou terrenas	RR **1087**
—— para comunicar à IFRB que os serviços de uma administração podem ser afectados por consignações mencionadas na secção especial da circular semanal da IFRB	RR **1617-1618**
—— para comunicar à IFRB que uma consignação entrou em serviço	RR **1383-1384**
—— para comunicar à IFRB que uma consignação foi abandonada definitivamente	RR **1430**
—— para comunicar à IFRB se se recebeu ou não as observações referidas no n.º **1047**	RR **1056**
—— para comunicar o acordo a um pedido de coordenação de estação terrena ou espacial	RR **1084**
—— para comunicar que uma consignação de frequência entrou em serviço	Ap. 30, n.º 6.3.39
—— para confirmar que uma consignação entrou ao serviço	RR **1312**
—— para entrada em funcionamento de consignações de frequência	RR **1308** RR **1379** RR **1380**
—— para enviar à IFRB a ficha de notificação de frequência a uma estação espacial do serviço de radiodifusão por satélite	Ap. 30, n.º 5.1.3
—— para enviar à IFRB a notificação para o serviço de radiocomunicação espacial	RR **1496**
—— para enviar à IFRB as informações sobre coordenação de um novo sistema de satélites	RR **1042** RR **1058**
—— para enviar à IFRB a ficha de notificação de estação de radiocomunicação de Terra	RR **1228** RR **1229** RR **1230**
—— para enviar à IFRB informações suplementares (novo sistema de satélites)	RR **1056**
—— para enviar à IFRB uma notificação ao Plano do Serviço de Radiodifusão por Satélite	Ap. 30, n.º 4.3.2
—— para enviar de novo uma ficha devolvida pela IFRB	RR **1309**
—— para enviar observações à IFRB sobre uma notificação ao Plano do Serviço de Radiodifusão por Satélite	Ap. 30, n.º 4.3.9
—— para enviar uma ficha de notificação à IFRB de estação de Terra na faixa 11,7-12,5 GHz	Ap. 30, n.º 6.2.3
—— para notificação de consignações de frequência de estação terrena ou espacial no caso de desacordo persistente	RR **1105**
—— para pedir a colaboração da IFRB no caso de coordenação de estações espaciais ou terrenas	RR **1090** RR **1091**
—— para publicação de uma ficha de notificação de estação de radiocomunicação de Terra na circular semanal da IFRB	RR **1235**
—— para reclamar contra um novo sistema de satélites	RR **1047** RR **1045**
—— para responder à IFRB no caso de coordenação de estações espaciais ou terrenas	RR **1101**
—— para responder a um inquérito da IFRB nos termos dos n.ºs **1264** ou **1431**	RR **1432**
—— para responder a um pedido de coordenação de estação de Terra com estação de serviço de radiodifusão por satélite	Ap. 30, n.º 6.1.3
Precisão:	
—— das medidas feitas por estações de fiscalização	RR **1880**
Prescrições:	
—— Obrigatoriedade de cumprir as —— do RR (1979)	RR **340**
Prevenção:	
Sinais de ——	Art. 41
Prioridade:	
—— contra interferências	RR **1419-1420**
—— das comunicações no serviço móvel aeronáutico	Art. 51
—— de serviços (Quadro de atribuição)	RR **439**
—— das comunicações no serviço móvel marítimo e móvel marítimo por satélite	Art. 61
—— no serviço de radiocomunicação espacial	Res. 2 Res. 3
Procedimento:	
—— de perigo — radiotelefonia	RR **3114**
—— de perigo — radiotelegrafia	RR **3099**
—— (interferências prejudiciais)	Art. 22
—— no serviço móvel aeronáutico — radiotelegrafia	Art. 52
—— no serviço móvel marítimo — actualização do Plano de estações costeiras entre 4000 kHz e 23 000 kHz	Art. 16
—— no serviço móvel marítimo — radiotelefonia	Art. 65
—— no serviço móvel marítimo — radiotelegrafia	Art. 63
—— relativo às faixas de radiodifusão entre 5950 kHz e 26 100 kHz	Art. 17
—— suplementar a aplicar nos casos em que uma nota ao Quadro de atribuição das faixas de frequências exija um acordo com uma administração	Art. 14
Proibição:	
—— de aeronaves utilizarem frequências superiores a 30 MHz	RR **4148**
—— de efectuar serviço de radiodifusão por estações de aeronave	RR **3603**
—— de permitir onda portadora entre chamadas	RR **4739** RR **4910** RR **4940**
—— de emitir a onda portadora entre as chamadas pelas estações móveis terrestres	RR **5161**
—— de emitir mais uma vez o indicativo de chamada ou o sinal de identificação depois de estabelecido o contacto	RR **4950**
—— de estações costeiras utilizarem frequências de navio	RR **4238**
—— de utilizar A1A acima de 4000 kHz — navios	RR **4254**
—— de utilizar A3E — costeiras — 1605-4000 kHz	RR **4336**
—— de utilizar A3E — navio — 1605-4002 kHz	RR **4337**
—— de utilizar A3E em 2182 kHz — navios	RR **4127-4128**
—— de utilizar dispositivos que emitam sinais de chamada ou de identificação contínuos ou repetidos	RR **4908**
—— de utilização de H3E (1605-4000 kHz)	RR **4337**
—— de utilizar H3E em navios (1605-4000 kHz)	RR **4128-4129**

Assunto	Art., núm., ap., dec., res., rec.
—— de utilizar para o tráfego frequências reservadas para a chamada	RR 4790 • RR 5031
—— de utilizar transmissão do tipo 2 entre 4000 kHz e 27 500 kHz (estações costeiras)	RR 4255
—— de utilizar um sinal de identificação falso ou enganoso	RR 2056
—— de transmissões de duração superior a um minuto em 156,8 MHz	RR 4394
—— de transmitir na faixa 405-415 kHz (estações costeiras)	RR 4185
—— de transmitir na faixa 485-515 kHz	RR 3040
—— de transmitir na faixa 490-510 kHz	RR 3018 RR 4316
—— de transmitir na faixa 2170-2194 kHz telegrafia de faixa estreita)	RR 4319
—— de transmitir na faixa 2173,5-2190,5 kHz	RR 3023
—— de transmitir na faixa 156,725-156,875 MHz	RR 3033 RR 3033.1 RR 4393
—— de uma estação emitir informações idênticas simultaneamente em várias frequências quando estiver a comunicar com uma só estação	RR 4909
—— de utilizar 512 kHz	RR 4243
—— do emprego da chamada CQ seguida da letra K	RR 4751
Transmissões proibidas	RR 1799
Propagação:	
Cooperação técnica com os países em desenvolvimento no domínio dos estudos de —— nas regiões tropicais	Res. 5
Estudos e previsão de——	Rec. 68
Informações sobre a —— para determinar a zona de coordenação	Res. 60
Zonas climáticas para o cálculo de características de ——	Res. 61
Propostas:	
—— e recomendações da IFRB (caso em que a administração não responde no prazo de 30 dias)	RR 1450
Protecção:	
Relações de ——	Rec. 64
—— a dar às consignações de frequências (data na coluna 2a e classe de funcionamento A)	RR 1416-1420
—— contra interferências	RR 435
Relações de —— no caso de radiofaróis aeronáuticos	RR 2854
Relações de —— no caso de radiofaróis marítimos	RR 2860
Prudence	RR 3155
Publicação:	
—— antecipada de informações relativas às redes de satélite em projecto (procedimentos)	Art. 11 (secção I)
Quadro:	
—— de atribuição das faixas de frequências	Art. 8 (secção IV)
Quilohertz	RR 208
R3E:	
1605-4000 kHz	RR 4334
1605-2850 kHz	RR 4353
2046 kHz e 2049 kHz	RR 4363
2053 kHz e 2056 kHz — navio	RR 4360
2170,5 kHz e 2191 kHz — potência	RR 4342
2182 kHz — navios	RR 4343.1
4000-23 000 kHz	RR 4371
4000-23 000 kHz — potência	RR 4373-4374
Racon(s)	RR 775-776 RR 2 e 97
Radar:	
—— a bordo de engenho espacial	RR 897
—— a bordo de estações espaciais	RR 912
—— aerotransportados — frequências	RR 799 RR 910 RR 825
Baliza — definição	RR 2 e 97
—— de bordo	RR 774
—— de bordo (navios mercantes)	RR 776
—— costeiros — frequências	RR 823
—— (definição)	RR 2 e 94
—— meteorológicos	RR 825 RR 828
—— no solo — frequências	RR 717 RR 770 RR 773 RR 802 RR 825
—— primário — definição	RR 2 e 95
—— secundário — definição	RR 2 e 96
Radiação(ões)	RR 2 e 131
—— em direcções inúteis	RR 1807
—— não desejadas	RR 2 e 140
—— não desejadas (valores mais baixos permitidos pela técnica)	RR 306 (F)
—— não essencial	RR 2 e 139-140
—— não essenciais de estações de amador	RR 2738
—— não essenciais (interferências provocadas por ——)	RR 1813
—— não essenciais no serviço de radiodifusão por satélite	Rec. 507
—— não essenciais (obrigatoriedade de as estações satisfazerem as especificações sobre ——)	RR 304
—— não essenciais (níveis máximos tolerados)	Rec. 66
—— não essenciais (Quadro dos níveis de potência máximos tolerados)	Ap. 8 Ap. 17
Rádio	RR 5 RR 2241
Radioalinhamento:	
—— de descida	RR 2 e 100
—— de pista	RR 2 e 99
Radioaltímetro	RR 2 e 102
—— (4200-4400 MHz)	RR 789
Radioastronomia:	
Estação de ——	RR 2 e 91
—— (definição)	RR 2 e 14
—— (frequências)	RR 689 RR 718 RR 734 RR 744 RR 778 RR 874 RR 886 RR 898 RR 904 RR 906 RR 914 RR 918 RR 919 RR 923 RR 924 RR 927 Rec. 701

Assunto	Art., núm., ap., dec., res., rec.
—— na zona tranquila da Lua	Art. 29 (secção VI)
Notificação e inscrição no Ficheiro de referência de estações de ——	Art. 13
Protecção do serviço de —— contra interferências	RR **344**
Serviço de ——	Art. 36
	RR **2** e **55**
Utilização da faixa 1330-1400 MHz pelo serviço de ——	Rec. 701
Radiobaliza(s)	RR **2** e **101**
—— de bordo (5350-5470 MHz)	RR **799**
—— de localização de sinistros (características técnicas)	Ap. 37
—— de localização de sinistros (estação de ——)	RR **2** e **88**
—— de localização de sinistros (utilização futura e características)	Rec. 604
—— de localização de sinistros:	
(Utilização de 121,5 MHz)	RR **3259**
(Utilização de 243 MHz)	RR **3259**
	Res. 601
—— de localização de sinistros (utilização de 406-406,1 MHz)	RR **649**
Sinal de ——	RR **3255**
—— Tipo L	RR **3263**
—— Tipo H	RR **3264**
—— (utilização de 75 MHz)	RR **572**
Radiocomunicação(ões):	
—— espacial	RR **2** e **9**
Cooperação internacional e assistência técnica no domínio das —— espaciais	Res. 15
—— espaciais (exame pelas conferências administrativas mundiais do estado de ocupação do espectro de frequências no domínio das ——)	Rec. 2
—— espaciais no caso de catástrofes naturais, epidemias, fomes	Rec. 1
—— espaciais (utilização e partilha das faixas de frequências)	Rec. 700
—— (serviço de ——)	RR **2** e **7**
	RR **20**
Sigilo das ——	Art. 23
—— de Terra	RR **8**
Radiodetectores:	
Aerotransportados (utilização de ——)	Rec. 710
Radiodeterminação	RR **410**
Estações de ——	RR **2** e **81**
Serviço de ——	RR **38**
—— por satélite (serviço de ——)	RR **2** e **39**
—— (50 W abaixo de 3800 kHz em certos países da Região 1)	RR **484**
Radiodifusão:	
Estações de —— a bordo de navios ou de aeronaves fora do território nacional — medidas a tomar para impedir o seu funcionamento	Rec. 9
O serviço de —— não deve usar a faixa 7000-7100 kHz	Res. 641
—— sonora na faixa 87,5-108 MHz (convocação de uma conferência)	Res. 510
—— em ondas métricas e decimétricas (convocação de uma conferência regional para rever as disposições da Conferência Africana de Radiodifusão)	Res. 509
—— em ondas decamétricas (convocação de uma conferência administrativa mundial)	Res. 508
—— (atribuição de faixas sob reserva)	RR **531**
—— de Terra (critérios de partilha de frequências do serviço de —— com o serviço de radiodifusão por satélite na faixa 620-790 MHz)	Rec. 705
—— em ondas decamétricas	Rec. 503
—— em ondas decamétricas (Conferência Administrativa Mundial das Radiocomunicações para a ——)	Rec. 500
	Rec. 501
—— em ondas decamétricas (faixa lateral única no serviço de ——)	Rec. 501
—— em ondas quilométricas (alterações das portadoras)	Res. 500
—— na faixa 535-1605 kHz na Região 2	Res. 501
—— em 25 600-25 670 kHz	RR **545**
—— entre 5950 e 26 100 kHz	Art. 17
Estação de ——	RR **2** e **80**
—— na zona tropical	RR **2668-2669**
—— por satélite (actos finais)	Res. 504
—— por satélite (as estações devem ser estabelecidas e exploradas em conformidade com acordos e planos associados)	Res. 507
—— por satélite (antenas de emissão)	Rec. 508
—— por satélite [ap. 30 ao RR (1979)]	Res. 502
—— por satélite (harmónicas da frequência fundamental)	Rec. 506
—— por satélite na faixa 0,5-2 GHz	Res. 505
—— por satélite na faixa 12 GHz	Rec. 505
—— por satélite na Região 2 (coordenação, notificação e inscrição de consignações)	Res. 503
—— por satélite (protecção contra interferências em 11,7-12,5 GHz)	RR **838**
—— por satélite (radiações não essenciais)	Rec. 507
—— por satélite (serviço de ——)	RR **2** e **37**
Proibição de os navios no mar fazerem serviço de ——	RR **4103**
Proibição de efectuar serviço de —— por aeronaves	RR **3603**
Serviço de ——	Art. 30
	RR **2** e **36**
Tratamento a dar às consignações de frequência a estações de ——	RR **1350**
Zonas geográficas para a ——	Ap. 1
Radiofarol(óis):	
—— Aeronáuticos	RR **2853**
—— (espaçamento entre frequências)	RR **2865**
Estação de ——	RR **2** e **87**
	Art. 35 (secção IV)
—— limite de alcance	RR **2856**
	RR **2861**
—— marítimos	RR **2859**
—— marítimos (características técnicas)	Rec. 602
—— marítimos na zona africana (características técnicas)	Rec. 603
Potência dos ——	RR **2855**
—— (relação de protecção)	RR **2854**
	RR **2860**
Taxa e modulação de —— marítimos	RR **2866**
Radiogoniometria:	
—— (definição)	RR **2** e **13**
—— (em 410 kHz)	RR **468**
Estação de ——	RR **2** e **86**
Faixa atribuída à ——	RR **4233**
Utilização de 500 kHz em ——	RR **4236**
Radiolocalização:	
—— (abaixo de 2170 kHz-50 W	RR **487**
—— (definição)	RR **2** e **12**
Estação móvel de ——	RR **2** e **84**
Estação terrestre de ——	RR **2** e **85**
Serviço de ——	RR **2** e **46**

Assunto	Art., núm., ap., dec., res., rec.
Radiomedida:	
—— (definição)	RR **2** e **126**
Radionavegação:	
—— (definição)	RR **2** e **11**
—— aeronáutica	RR **2** e **44**
—— aeronáutica por satélite	RR **2** e **45**
Estação móvel de ——	RR **2** e **82**
Estação terrestre de ——	RR **2** e **83**
—— marítima	RR **2** e **42**
—— marítima por satélite	RR **2** e **43**
—— por satélite	RR **2** e **41**
Protecção do serviço de ——	RR **953**
Serviço de ——	RR **2** e **40**
Radiossonda:	
—— (definição)	RR **2** e **103**
Radiotelefonia:	
—— de pequena potência (frequências para —— 1625-1670 kHz)	RR **4188**
—— de frequência internacional de perigo em —— (2182 kHz)	RR **4343**
Utilização de frequências em ——	Art. 60 (secção IV)
Radiotelegrafia:	
Emprego das frequências em ——	Art. 60 (secção II)
Radiotelegrama:	
—— (definição)	RR **2** e **113**
	RR **2** e **112**
Radiotelex:	
Comunicação ——	RR **2** e **114**
Raio:	
Protecção dos equipamentos radioeléctricos contra o ——	Res. 64
Recepção:	
—— comunitária	RR **2** e **124**
Dificuldades de ——	RR **4785**
	RR **5025**
—— individual	RR **2** e **123**
Receptor(es):	
A energia radiada por —— de aeronaves não deve causar interferências	RR **3599**
A energia radiada por —— de navios não deve causar interferências	RR **4099**
	RR **4140**
Características técnicas de ——	RR **310**
	RR **311**
	RR **309**
	Ap. 19
—— de televisão (especificações)	Rec. 502
—— devem satisfazer o artigo 5)	RR **1808**
Interdependência entre a concepção de ——, o agrupamento de canais e os critérios de partilha no serviço de radiodifusão por satélite	Rec. 712
Sinais de ajuste de —— produzidos por estações costeiras	RR **4326**
Recomendações:	
Propostas e —— (caso em que a administração não responde no prazo de 30 dias)	RR **1450**
Estudos e ——	RR **1438-1450**
Reçu	RR **3131**
Red cross telegrams	RR **3651-2**

Assunto	Art., núm., ap., dec., res., rec.
Rede(s):	
—— de satélites	RR **2** e **106**
—— nacionais e internacionais de radiocomunicação entre 4000 kHz e 27 500 kHz (forma de melhorar o agrupamento de ——)	Rec. 4
—— telefónica e telegráfica internacionais (interligação dos sistemas de radiocomunicações móveis marítimas)	Rec. 312
Regiões:	
Divisão do Mundo em ——	Res. 66
—— e zonas	Art. 8 (secção I)
Região 1	RR **393**
Região 2	RR **394**
Região 3	RR **395**
Regras:	
—— de procedimento da IFRB (modo de pôr fim a um desacordo sobre as —— de procedimento da IFRB)	Res. 35
Regulamento:	
—— das Radiocomunicações (apresentação de propostas de modificação)	Rec. 10
Aprovação do Regulamento das Radiocomunicações (Genebra, 1979) pelos Membros da União	Pág. II
—— das Radiocomunicações (Conferência Administrativa Mundial das Radiocomunicações para uma revisão geral ou parcial do RR)	Rec. 13
—— das Radiocomunicações (entrada em vigor do ——)	Art. 69
—— das Radiocomunicações (numeração que figura na margem)	Rec. 11
—— das Radiocomunicações (revisão dos capítulos X, XI e XII)	Rec. 204
Relação:	
—— de protecção	RR **2** e **164**
—— (sinal/interferência)	Rec. 64
—— de protecção (radiofaróis aeronáuticos)	RR **2854**
—— de protecção (radiofaróis marítimos)	RR **2860**
Reservas:	
—— feitas pelos Membros	Pág. II
Ver *Declarações.*	
Resposta:	
—— a chamada	Art. 63 (secção IV)
	RR **4767**
	RR **4229**
Frequência de ——	RR **4266**
	RR **4344**
	RR **4375**
	RR **4385**
	RR **4768**
	RR **4983**
	RR **4994**
	RR **5000**
Ruído:	
—— radioeléctrico (estudo e previsão)	Rec. 68
Salvamento:	
Busca e —— (3023 kHz e 5680 kHz)	RR **505**
—— de veículos espaciais habitados (frequências que podem ser utilizadas adicionalmente)	RR **501**
Satélite(s):	
—— (definição)	RR **2** e **171**

Assunto	Art., núm., ap., dec., res., rec.
—— activo (definição)	RR **2** e **172**
—— (coordenação das consignações de frequência a uma estação de Terra emissora em relação a uma estação terrena)	RR **1147-1188**
—— (coordenação das consignações de frequência a uma estação terrena em relação às estações de Terra)	RR **1106-1146**
—— de pesquisa ionosférica (utilização experimental das ondas radioeléctricas)	Res. 62
—— geossíncrono	RR **2** e **180**
—— geostacionário	RR **2** e **181**
—— geostacionário (coordenação das consignações de frequência a uma estação espacial a bordo de um —— em relação às estações de outras redes de satélite geostacionário	RR **1054-1105**
—— geostacionário (coordenação de frequências de estação terrena em relação a estações de outras redes de ——	RR **1059-1105**
—— geostacionários (densidade de fluxo de potência na órbita dos ——)	RR **2631**
—— geostacionário (interferências causadas a um ——)	RR **2613-2614**
—— geostacionário (método de cálculo para determinar se é necessária coordenação entre redes de ——)	Ap. 29
—— geostacionário (órbita de ——)	RR **2** e **182**
—— geostacionários (precisão da orientação das antenas)	RR **2628-2630**
Ligação por ——	RR **2** e **107**
Período de um ——	RR **2** e **178**
Protecção da órbita dos ——	RR **764**
Rede de ——	RR **2** e **106**
Redes de —— em projecto (procedimentos para a publicação antecipada de informações relativas a ——)	RR **1041-1058**
	Ap. 4
—— reflector	RR **2** e **173**
Serviço de radiodifusão por —— na faixa 11,7-12,5 GHz	Ap. 30
Sistema de ——	RR **2** e **105**
Temperatura de ruído equivalente de uma ligação por ——	RR **2** e **168**
Saturação:	
—— da faixa 7 (3-30 MHz) (redução da ——)	Rec. 5
—— das faixas compreendidas entre 4000 kHz e 27 500 kHz (redução da ——)	Rec. 4
—— das faixas de ondas decamétricas atribuídas ao serviço móvel aeronáutico (R) (redução da ——)	Rec. 403
Securité	RR **3222**
Segurança:	
Comunicações de perigo e ——	Art. 37
	RR **3763**
Comunicações para fins de —— entre estações do serviço móvel marítimo e do serviço móvel aeronáutico em 121,5 MHz e 123,1 MHz	RR **593**
	RR **2942-2943**
	RR **2990-2991**
—— de navios e aeronaves de Estados neutros	Res. 11
Frequência de ——	RR **613**
(1605-3800 kHz)	Rec. **307**
(4125 kHz)	RR **2982**
(156,8 MHz)	RR **4386**
(1544-1545 MHz)	RR **728**
(1645,5-1646,5 MHz)	RR **728**
Frequências de —— (evitar interferências)	RR **1810**
Frequências para o perigo e a ——	Art. 37
	Art. 38
Interferências às comunicações de ——	RR **3010**
	RR **964**
	Rec. 202
Mensagens de —— em H3E	RR **4342**
	RR **3225**
Prioridade na resolução de interferências às frequências de ——	RR **1957**
Protecção do serviço de ——	RR **953**
	Rec. 202
Serviço de ——	RR **56**
Sinal de ——	RR **3221**
	RR **3227**
	RR **3229**
Tráfego de ——	Rec. 201
Transmissões de ——	Art. 40
	RR **3925**
Utilização por aeronaves de 156,3 MHz para fins de ——	RR **2992**
Selectiva:	
Chamada ——	RR **2088-2089**
	Art. 25 (secção v)
Semidúplex:	
Exploração ——	RR **2** e **121**
Funcionamento das estações costeiras em ——	RR **4404**
Serviço(s):	
Categorias de ——	RR **413**
Disposições aplicáveis a todos os —— na faixa 11,7-12,5 GHz	Ap. 30
—— permitidos	RR **416**
	RR **419**
	RR **425**
	RR **421**
	RR **422**
—— primários	RR **415**
	RR **419**
	RR **425**
	RR **421**
	RR **422**
—— que utilizam a faixa de 12 GHz (critérios de partilha entre ——)	Ap. 30 (anexo 9)
—— radioeléctricos (termos relativos a ——)	Art. 1 (secção III)
Restrições impostas a certos ——	RR **435**
—— secundários	RR **417**
	RR **420-424**
Serviço amador:	
—— de amador	Art. 32
—— de amador:	
(Definição)	RR **2** e **53**
(Frequências)	RR **915**
—— de amador por satélite	Art. 32
—— de amador por satélite:	
(Definição)	RR **2** e **54**
(Frequências)	RR **808**
—— de amador por satélite (entrada em serviço de estações terrenas)	Res. 642
—— de amador (utilização internacional, em caso de catástrofe natural, das frequências do serviço de amador)	Res. 640
Serviço de exploração:	
—— de exploração da Terra por satélite	
(Definição)	RR **2** e **48**

Assunto	Art., núm., ap., dec., res., rec.
(Frequências)	RR 671 RR 713 RR 720 RR 747 RR 750 RR 789 RR 882
—— de exploração da Terra por satélite (sua protecção)	RR 344
—— de exploração espacial (definição)	RR 2 e 25
—— (frequências)	RR 595 RR 608 RR 668 RR 747 RR 750
Serviço de frequências-padrão e de sinais horários:	
—— de frequências-padrão e de sinais horários	Art. 33 RR 2 e 50
—— de frequências-padrão e de sinais horários por satélite — definição	RR 2 e 51
—— frequências a utilizar	RR 791
Serviço de meteorologia por satélite:	
—— (definição)	RR 2 e 49
—— (frequências)	RR 595 RR 828 RR 870
Serviço de movimento de navios:	
—— (definição)	RR 2 e 33
Frequências a utilizar no ——	RR 4214
Mensagens no ——	RR 4407
Serviço de operações portuárias:	
—— (definição)	RR 2 e 32
—— (frequência — 156,6 MHz)	RR 4975 RR 4402
Mensagens no ——	RR 4406
Serviço de pesquisa espacial:	
—— (definição)	RR 2 e 52
—— (estações terrenas de recepção em 149-150,05 MHz e 399,9-400,05 MHz)	RR 609
—— (frequências)	RR 595 RR 668 RR 713 RR 720 RR 747 RR 748 RR 750 RR 789 RR 811 RR 852
Protecção do ——	RR 345
Serviço de pilotagem:	
Procedimento para chamar uma estação do ——	RR 4976
Serviço de radioastronomia:	
—— (definição)	RR 2 e 55
Protecção do ——	RR 344
Serviço de radiocomunicação:	
—— (definição)	RR 2 e 20
Serviço de radiocomunicação de Terra:	
—— (frequências partilhadas com os serviços de radiocomunicação espacial)	Rec. 708
—— (método de cálculo e critérios de interferência para partilha de faixas de frequências com serviços espaciais)	Res. 703
—— que partilham faixas de frequências com os serviços de radiocomunicação espacial acima de 1 GHz	Art. 27
Serviço de radiocomunicação espacial:	
—— (cessação das emissões)	RR 2 e 12 RR 2613
—— (convocação de uma conferência para garantir a todos os países o acesso equitativo à órbita dos satélites geostacionários e às faixas de frequências atribuídas aos serviços espaciais)	Res. 3
Coordenação das consignações de frequências às estações do ——	Art. 11
—— (densidade de fluxo de potência na órbita dos satélites geostacionários)	Art. 29 (secção v)
Disposições especiais relativas aos ——	Art. 29
—— (interferências a satélites geostacionários)	RR 2613-2614
—— (limitações da potência das estações terrenas fora do eixo do feixe principal)	Art. 29 (secção vii)
—— (manutenção em posição das estações espaciais)	Art. 29 (secção iii)
—— (método de cálculo e critério de interferência para partilha de faixas de frequências com serviços de Terra)	Res. 703
Partilha de frequências pelos —— entre si e com os serviços de radiocomunicação de Terra	Rec. 708
—— (precisão da orientação das antenas dos satélites geostacionários)	Art. 29 (secção iv)
Prioridade no ——	Res. 2 Res. 3
—— que partilham faixas de frequências com os serviços de radiocomunicação de Terra acima de 1 GHz	Art. 28
—— (radioastronomia na zona tranquila da Lua)	Art. 29 (secção vi)
Serviço de radiodeterminação	RR 2 e 38 Art. 35
—— por satélite	RR 2 e 39 Art. 35
Serviço de radiodifusão	Art. 30
Conferência Administrativa Mundial das Radiocomunicações para o —— em ondas decamétricas	Rec. 500 Rec. 501 Res. 508
—— (definição)	RR 2 e 36
—— (entre 5950 kHz e 26 100 kHz)	Art. 17
—— na faixa 100-108 MHz (compatibilidade com o serviço de radionavegação aeronáutica na faixa 108-117,975 KHz)	Rec. 704
—— na Região 3 (conferência para partilha com os serviços fixo e móvel nas ondas métricas e decimétricas	Res. 702
—— (na zona tropical)	RR 2668-2673
—— (potência de estações de radiodifusão que funcionam abaixo de 5060 kHz ou acima de 41 MHz)	RR 2666
—— (proibido a bordo de navios, aeronaves, objectos flutuantes ou aerotransportados)	RR 2665 RR 3603 RR 4103 Rec. 9
—— de Terra (critérios de partilha das frequências com o serviço de radiodifusão por satélite na faixa 620-790 MHz)	Rec. 705
Serviço de radiodifusão por satélite	Art. 30 Res. 33

Assunto	Art., núm., ap., dec., res., rec.
—— (cálculo da densidade de fluxo de potência)	Ap. 30 (anexo 1)
Características fundamentais a inscrever nas notificações relativas às estações espaciais do ——	Ap. 30 (anexo 2)
—— (coordenação, notificação e inscrição de consignações)	Art. 15
Coordenação, notificação e inscrição no Ficheiro de referência de estações de Terra que afectam estações do ——	Ap. 30 Art. 6
—— (critérios de partilha de frequências com o serviço de radiodifusão de Terra na faixa 620-790 MHz)	Rec. 705
—— dados técnicos utilizados para o estabelecimento do Plano)	Ap. 30 (anexo 8)
—— (definição)	RR 2 e 37
—— (determinação do valor limite de densidade do fluxo de potência na faixa 11,7-12,5 GHz	Ap. 30 (anexo 3)
—— em 11,7-12,5 GHz	Ap. 30 Art. 11
—— em 11,7-12,7 GHz na Região 2	Res. 31
—— em 12 GHz (coordenação de uma Conferência Administrativa Regional)	Res. 701
—— 12,5-12,75 GHz na Região 3 (partilha com serviços espaciais e de Terra das Regiões 1, 2 e 3)	Res. 34
—— (frequências 620-790 MHz)	RR 693
Interdependência entre a concepção de receptores, o agrupamento de canais e os critérios de partilha no ——	Rec. 712
—— (ligações de conexão)	Rec. 101
—— (limites a ter em consideração para determinar se um serviço é desfavoravelmente influenciado por um projecto de modificação ao Plano)	Ap. 30 (anexo 1)
Notificação, exame e inscrição no Ficheiro de referência das consignações de frequência às estações espaciais do ——	Ap. 30 Art. 5
—— (partilha da faixa 12,2-12,7 GHz com o serviço fixo por satélite)	Res. 700
Plano associado relativo ao ——	Ap. 30
—— (propagação na faixa de 12 GHz)	Rec. 505
—— (redução da radiação sobre o território de outro país)	RR 2674
—— (restrições aplicáveis às posições na órbita)	Ap. 30 (anexo 10)
—— (utilização de frequências não conformes com o Plano na faixa 11,7-12,5 GHz)	Res. 32
—— (valores limites de densidade do fluxo de potência para protecção dos serviços de Terra na faixa 11,7-12,2 GHz)	Ap. 30 (anexo 5)
Serviço de radiolocalização:	
—— (definição)	RR 2 e 46
Serviço de radionavegação:	
—— (definição)	RR 2 e 40
Protecção do ——	RR 953
—— (utilização de frequências entre 2900 MHz e 9800 MHz)	Res. 600
—— aeronáutica (definição)	RR 2 e 44
—— aeronáutica (223-235 MHz)	RR 633
—— aeronáutica (frequências a utilizar para evitar colisões entre aeronaves)	Rec. 601
—— aeronáutica por satélite (definição)	RR 2 e 45
—— marítima (definição)	RR 2 e 42
—— marítima por satélite (definição)	RR 2 e 43
—— por satélite (definição)	RR 2 e 41
—— por satélite (1215-1260 MHz)	RR 710

Assunto	Art., núm., ap., dec., res., rec.
Serviço de segurança:	
—— (definição)	RR 2 e 56
Protecção do ——	RR 953
Serviço dos auxiliares da meteorologia:	
—— (definição)	RR 2 e 47
—— na faixa 27,5-28 MHz	Rec. 620
Serviço(s) especial(ais):	
—— (definição)	RR 2 e 57
—— relativos à segurança	Art. 42
Avisos à navegação marítima	RR 3334
Mensagens meteorológicas	RR 3312
Pareceres médios	Art. 42 (secção III)
Serviço fixo:	
—— fixo	Art. 31
—— (reconsignação de frequências entre 1525 kHz e 2170 kHz)	Res. 38
—— (comunicação com estações móveis)	RR 957
—— (comunicação unilateral com um ou vários pontos fixos)	RR 960
—— (consignações a transferir, modo de proceder)	Res. 8
—— (definição)	RR 2 e 21
—— (frequências)	RR 490
50 W	RR 519 RR 522
24 dBW	RR 530
Res. 8	RR 531 RR 532 RR 537 RR 543 RR 544 RR 545
—— (frequências)	RR 583
—— F3E e G3E não são autorizadas abaixo de 30 MHz no ——	RR 2701
—— (meteorologia sinóptica — frequências)	RR 2704 RR 2705
—— (não inclui difusão ionosférica)	RR 436
—— na Região 3 (conferência para partilha com os serviços de radiodifusão e móvel nas ondas métricas e decimétricas)	Res. 702
—— (polícia internacional — frequências)	RR 2702 RR 2703
—— (revisão do Ficheiro de referência internacional das frequências entre 3000 kHz e 27 500 kHz)	Res. 9
—— (transmissão unilateral)	RR 960
Serviço fixo aeronáutico:	
—— (definição)	RR 2 e 23
—— (transferência de consignações entre 21 924 kHz e 22 000 kHz)	Res. 8
Serviço fixo por satélite:	
—— (comunicação com estações móveis)	RR 957
—— (comunicação com estações terrestres)	RR 958
—— (comunicação unilateral com um ou vários pontos fixos)	RR 960
—— (definição)	RR 2 e 22
—— (frequências a utilizar)	RR 797
—— na faixa 12,1-12,3 GHz	Res. 100
—— partilha da faixa 12,2-12,7 GHz com o serviço de radiodifusão por satélite)	Res. 700
Serviço intersatélites:	
—— (definição)	RR 2 e 24
—— (frequências)	RR 797
Partilha das faixas de frequências entre o serviço móvel aeronáutico e o ——	Rec. 709

Assunto	Art., núm., ap., dec., res., rec.
Serviço(s) móvel(eis):	
Convocação de uma Conferência Administrativa Mundial das Radiocomunicações para os ——	Res. 202
—— (definição)	RR **2** e **26**
—— na Região 3 (conferência para partilha com os serviços fixo e de radiodifusão nas ondas métricas e decimétricas)	Res. 702
—— (reconsignação de frequências entre 1625 kHz e 2170 kHz)	Res. 38
(25 550-25 600 kHz)	RR **545**
(100-104 MHz)	RR **583**
—— por satélite (definição)	RR **2** e **27**
(235-322 MHz e 335,4-399,9 MHz)	RR **641**
—— por satélite (perigo e segurança)	RR **728**
—— por satélite (frequências a utilizar)	RR **812**
Serviço móvel aeronáutico:	Cap. x
—— (acordos especiais)	RR **3569**
	RR **3793**
—— Condições a que devem satisfazer as estações móveis do	Art. 49
Condições de funcionamento do	Art. 48
—— (definição)	RR **2** e **34**
Disposições especiais relativas à utilização das frequências no ——	Art. 50
—— (frequências)	RR **909**
Frequência para a chamada no ——	RR **3634**
	RR **3635**
Horário das estações do ——	Art. 47
Partilha das faixas de frequências entre —— e o serviço intersatélites	Rec. 709
Prioridade das comunicações no ——	Art. 51
Procedimento geral radiotelegráfico no ——	Art. 52
Procedimento radiofónico no ——	Art. 53
(Proibição de utilizar para o tráfego frequências reservadas para a chamada)	RR **3742**
(Proibição às estações de aeronave emitirem a sua portadora entre as chamadas)	RR **3689**
	RR **3800**
(Utilizando frequências do serviço móvel marítimo)	RR **962-963**
Serviço móvel aeronáutico por satélite:	
—— (definição)	RR **2** e **35**
Serviço móvel aeronáutico (OR):	
Para que se usam as frequências no ——	RR **3631**
Plano de adjudicação de frequências ——	Ap. 26
Revisão do plano de frequências do ——	Rec. 406
Serviço móvel aeronáutico (R):	
Desenvolvimento de técnicas que contribuirão para reduzir a saturação das faixas de ondas decamétricas atribuídas ao ——	Rec. 403
—— entre 2850 kHz e 22 000 kHz (passagem do Plano actual para os novos planos no ——)	Rec. 400
	Res. 402
	Res. 401
Frequências do —— designadas para utilização mundial ——	Rec. 401
	Rec. 402
—— entre 2850 kHz e 22 000 kHz (tratamento a dar às fichas de notificação)	Res. 400
—— entre 2850 kHz e 22 000 kHz	Res. 401
—— (implementação do Plano de frequências)	Res. 402
—— (implementação da faixa 21 924-22 000 kHz)	Res. 404
—— (n.º 27/123 do ap. 27 Aer2)	Rec. 407
Para que se usam as frequências no ——	RR **3630**
—— (plano de adjudicação de frequências)	Ap. 27
—— (utilização da faixa 136-137 MHz)	Rec. 404
—— (utilização de FLU e FLD)	Rec. 402
—— (utilização de frequências — medidas a adoptar)	Res. 405
—— (utilização não autorizada de frequências nas faixas do serviço móvel aeronáutico)	Res. 407
—— (1545-1595 MHz)	RR **729**
—— (1646,5-1660,5 MHz)	RR **735**
—— por satélite	RR **733**
—— por satélite (estudo da utilização do ——)	Rec. 405
Serviço móvel marítimo	Cap. xi
Características técnicas dos emissores de faixa lateral única utilizados no ——	Ap. 17
Características técnicas dos emissores e dos receptores utilizados no —— entre 156 MHz e 174 MHz	Ap. 19
—— (certificados dos operadores das estações de navio)	Art. 55
Chamada selectiva no ——	Art. 62
Condições a satisfazer no ——	Art. 59
Correspondência pública no ——	Art. 66
—— (definição)	RR **2** e **30**
—— frequências a utilizar em telegrafia com impressão directa e transmissão de dados — faixa estreita)	Ap. 32
	Ap. 33
—— (frequências de chamada)	RR **4968**
—— (frequências de estações costeiras — actualização do plano)	Art. 16
—— (frequências — disposições especiais)	Art. 60
Horário das estações do ——	Art. 58
—— [informações a fornecer (à IFRB) no caso de notificação de estações costeiras]	Ap. 5
—— (interligação dos sistemas de radiocomunicações móveis marítimas com as redes telefónica e telegráfica internacionais)	Rec. 312
Manual para uso do ——	RR **2230**
—— (melhor utilização das vias radiotelefónicas pelas estações costeiras)	Rec. 302
—— (novo plano entre 1606,5 kHz e 2850 kHz)	Res. 38
Pessoal das estações do ——	Art. 56
Prioridade das comunicações no ——	Art. 61
Procedimento geral radiotelefónico no ——	Art. 65
Procedimento geral radiotelegráfico no ——	Art. 63
Procedimentos gerais aplicáveis à telegrafia com impressão directa de faixa estreita no ——	Art. 64
Procedimento quanto a interferências no ——	RR **4714**
Quadro das frequências de emissão para as estações do —— entre 156 MHz e 174 MHz	Ap. 18
—— (segurança 121,5-123,1 MHz)	RR **593**
Sistema automático de radiocomunicações em ondas decimétricas para ——	Rec. 310
—— (utilização das frequências do ap. 16 — secção B)	Rec. 304
Utilização e notificação de frequências emparelhadas reservadas a telegrafia de faixa estreita a utilizar no ——	Res. 300
	Res. 301
Utilização não autorizada de frequências atribuídas ao ——	Res. 309
Vias radiotelefónicas do —— entre 4000 kHz e 23 000 kHz	Ap. 16
—— em 435-526,5 kHz (planificação da utilização das frequências)	Rec. 300
—— em 1606,5-3400 kHz	Rec. 301
—— em 1605-4000 kHz	RR **4956**
—— em 4000-23 000 kHz	Ap. 25 Mar2
—— entre 4000 kHz e 23 000 kHz (classes de emissão e potência)	RR **4371**
	RR **4373**
	RR **4374**

Assunto	Art., núm., ap., dec., res., rec.
—— (4000-27 500 kHz)	Res. 8 Ap. 31
—— (156-174 MHz)	RR 4408 RR 4409
Serviço móvel marítimo por satélite	Cap. XI
Condições a satisfazer no ——	Art. 59
Correspondência pública no ——	Art. 66
—— (definição)	RR 2 e 31
Disposições temporárias relativas aos aspectos técnicos e da exploração do ——	Rec. 313
Manual para uso do ——	RR 2230
Ordem de prioridade no ——	Art. 61
Serviço móvel terrestre	Cap. XII
Condições que devem satisfazer as estações móveis do ——	Art. 67
—— (definição)	RR 2 e 28
—— (em comunicação com estações do serviço fixo ou do serviço fixo por satélite ou com estações terrestres)	RR 958-959
—— (frequências)	RR 543 RR 544 RR 622 RR 902
Procedimentos gerais aplicáveis à radiotelefonia no ——	Art. 68
—— por satélite (definição)	RR 2 e 29
—— por satélite (frequências)	RR 859
Sigilo:	
—— das correspondências	RR 3366 RR 3402 RR 3833 RR 3834
—— das radiocomunicações	RR 2023
Silence	RR 3142
Silence mayday	RR 3139 RR 3144
Silêncio:	
Os navios que possam interferir na recepção de mensagens meteorológicas devem guardar ——	RR 3327
Períodos de ——	RR 3039 RR 3052 RR 3120
Simplex:	
Exploração ——	RR 2 e 119
Sinal(ais):	
—— de ajuste de receptor produzidos por estações costeiras	RR 4326
—— de alarme	RR 3110 Art. 41
—— de alarme radiofónico	RR 3270
—— de alarme radiotelegráfico	RR 3268
—— de aviso à navegação	RR 3284
—— de identificação produzidos por anéis ou fichas de chamada	RR 4326
—— de perigo	RR 3088 RR 3093
—— de prevenção	Art. 41
—— de radiobalizas de localização de sinistros	RR 3255
—— de segurança	Art. 40 (secção III)
—— de urgência	RR 3196-3208
—— diversos a empregar nas comunicações radiotelegráficas (abreviaturas e ——)	Ap. 13
—— diversos a utilizar nas radiocomunicações do serviço móvel marítimo	Ap. 14
—— horários (estações de frequências-padrão e de —— horários)	RR 2 e 89 RR 50
—— horários por satélite (serviço de frequências-padrão e de —— horários por satélite)	RR 51
—— preparatórios do tráfego	Art. 63 (secção IV)
Sinalização:	
—— visual ou auditiva (navios)	RR 2154
Sistema:	
—— automático de radiocomunicações em ondas decimétricas para o serviço móvel marítimo	Rec. 310
—— de aterragem por hiperfrequências (sistema internacional normalizado — 5000-5250 MHz)	RR 796
—— de aterragem por instrumentos	RR 2 e 98
—— de satélites	RR 2 e 105
—— espacial	RR 2 e 104
—— Internacional de Unidades	Rec. 74
—— Internacional Normalizado (sistema de aterragem por hiperfrequências — 5000-5250 MHz)	RR 796
—— radioeléctricos	Art. 1 (secção IV)
—— sequencial a uma frequência (chamada selectiva)	Art. 62 (secção II)
Soberania:	
Tomada de posição da UIT quanto a ——	RR 1
Soletração:	
—— de letras e algarismos	Ap. 24
Sub-região	RR 412
Tecnologia:	
Transferência de ——	Res. 14
Telecomando	RR 2 e 128
—— espacial	RR 2 e 129
Frequência para ——	Res. 310
Telecomunicação	RR 4
Telefonia	RR 2 e 117
Telegrafia:	
—— com impressão directa (aparelhos de faixa estreita)	Ap. 38
—— de faixa estreita com impressão directa	RR 4123 Art. 60 Art. 64 Ap. 32 Ap. 33 Res. 300 Res. 301
—— (definição)	RR 2 e 111
Espaço em ——	Ap. 38
Marca em ——	Ap. 38
—— por variação de frequência	RR 2 e 115
Telegramas	RR 2 e 112
—— da Cruz Vermelha	RR 3651.2
Telemedida	RR 2 e 125
—— espacial	RR 2 e 127
—— frequências (267-272 MHz)	RR 643
Frequências para ——	Res. 310

Assunto	Art., núm., ap., dec., res., rec.
Televisão:	
—— (definição)	RR **2** e **122**
—— em modulação de frequência (620-790 MHz)	RR **693**
Especificações dos receptores de ——	Rec. 502
Temperatura:	
—— de ruído equivalente de uma ligação por satélite	RR **2** e **168**
Tempestades:	
—— de areia e poeira (efeitos sobre a propagação)	Res. 61
Tempo:	
—— Universal Coordenado	RR **15** RR **237-238**
Terahertz	RR **208**
Termos:	
—— contidos no Anexo 2 à Convenção Internacional das Telecomunicações (nova definição)	Res. 68
—— específicos ligados à gestão das frequências	Art. 1 (secção II)
—— gerais	Art. 1 (secção I)
—— relativos à exploração	Art. 1 (secção V)
—— relativos a serviços radioeléctricos	Art. 1 (secção III)
—— técnicos que figuram no artigo 1	Rec. 72
—— técnicos relativos ao espaço	Art. 1 (secção VIII)
Tipo:	
—— de informação a transmitir	RR **273**
—— de modulação de portadora principal	RR **270-271**
—— de transmissão utilizado em A2A, A2B, H2A ou H2B	RR **4216**
Tolerância(s):	
—— de desvanecimento	Rec. 64
—— de frequência	RR **2** e **145**
—— de frequências	Rec. 69
—— de frequências (as estações de emissão devem satisfazer às ——)	RR **303**
—— de frequência da portadora em f. l. única no serviço móvel marítimo	Ap. 17
—— de frequência de receptores	RR **309**
—— de frequência dos emissores (quadro das ——)	Ap. 7
—— de frequência no serviço móvel marítimo entre 156 MHz e 174 MHz	Ap. 19
—— de frequência (os valores mais baixos permitidos pela técnica)	RR **306**
Tráfego	RR **4272** RR **4352** RR **4381** RR **4404** RR **4754** Art. 63 Art. 64 Art. 65 Art. 52 Art. 60
—— de perigo	Art. 39 (secção VII)
—— de segurança	Rec. 201
—— de urgência	Rec. 201

Assunto	Art., núm., ap., dec., res., rec.
Transmissões:	
—— de dados (frequências)	Ap. 32 Ap. 33 Res. 300 Res. 301
—— de urgência e segurança	Art. 40
—— interditas a todas as estações	RR **1799**
—— mínima admissível (atenuação de ——)	Ap. 28, n.º 2.1
Velocidade de —— em radiotelegrafia de mensagens meteorológicas	RR **3326**
Transportes:	
—— neutros (segurança de ——)	Res. 11
—— sanitários	Art. 40 (secção II)
Unidades:	
—— em que se exprimem as frequências	RR **208**
Sistema internacional de ——	Rec. 74
Urgência:	
Frequência aeronáutica de —— (121,5 MHz e 123,1 MHz)	RR **593**
Interferências às comunicações de ——	RR **3010** RR **964**
Mensagens de ——	RR **3202**
Sinal de ——	RR **3196**
Sinais de —— a usar por transportes neutros	Res. 11
Tráfego de ——	Rec. 201
Transmissões de ——	Art. 40 RR **2935** RR **3763**
Utilização(ões):	
—— da via principal entre 4000 kHz e 27 500 kHz	RR **4275**
—— das frequências em telegrafia de faixa estreita com impressão directa	Art. 60 (secção III)
—— de frequências de acordo com o ap. 18	RR **4405** RR **4409-4411** RR **4413** RR **4415**
—— de todos os meios por uma estação em perigo	RR **2932-2934**
—— industriais, científicas e médicas	RR **2** e **16**
Variação:	
—— de frequência (telegrafia por —— de frequência)	RR **2** e **115**
Vigília	RR **4397-4403**
—— nas frequências de chamada	RR **4378**
—— nas frequências de perigo	Art. 38 (secção III)
Zona(s):	
—— africana de radiodifusão	RR **400**
—— climática para o cálculo de características de propagação	Res. 61
—— de cobertura	Rec. 67
—— de coordenação (definição)	RR **2** e **165**
—— de coordenação (informação sobre a propagação para determinar a —— de coordenação)	Res. 60
Método de determinação da —— de coordenação de uma estação terrena	Ap. 28
—— de serviço	Rec. 67
—— europeia de radiodifusão	RR **404**
—— europeia marítima	RR **405**
—— geográficas para a radiodifusão	Ap. 1
—— hidrometeorológicas	Ap. 28, n.º 4.2
Regiões e ——	Art. 8 (secção I)
—— radioclimáticas	Ap. 28, n.º 3.1
—— tropical	RR **406**

Règlement de Radiocommunications en 1979

Actes Finals de la Conférence Administrative Mondiale des Radiocommunications

(Genève, 1979)

Dans sa Résolution n° 28, la Conférence de Plénipotentiares de l'Union internationale des télécommunications (Malaga Torremolinos, 1973), considérant que diverses conférences administratives mondiales des radiocommunications réunies depuis 1959 ont apporté au Règlement des radiocommunications et au Règlement additionel des radiocommunications des amendements portant sur des points particuliers, mais n'ont pas été en mesure d'harmoniser leurs décisions en raison du caractère limité de l'ordre du jour de chacune d'elles, a décidé qu'une Conferènce administrative mondiale des radiocommunications serait convoquée en 1979 afin de réviser, en tant que de besoin, ces Règlements et elle a chargé le Conseil d'administration de prende les mesures préparatoires nécessaires pour la convocation de cette Conferénce.

A sa trentième session (1975), le Conseil d'administration a constitué, par sa Résolution n.º 768, un Groupe d'experts des administrations chargé d'ètudier le remaniement éventuel du Réglement des radiocommunications et du Règlement additionel des radiocommunications.

Le «Remaniement du Règlement des radiocommunications» proposé par le Groupe d'experts a été approuvé en principe par la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Genève, 1977) dans sa Résolution nº Sat-10, laquelle demande instamment aux pays Membres d'utiliser le Règlement des radiocommunications sous la forme remaniée et le Réglement additionel des radiocommunications sous sa forme actuelle pour présenter des propositions à la présent Conférence.

A sa trente-deuxième session (1977), le Conseil d'administration a décidé, par sa Résolution nº 801, que la Conférence administrative mondiale des radiocommunications de 1979 serait convoquée à Genève le 24 septembre 1979, pour une durée de 10 semaines, et a adopté l'ordre du jour de cette Conférence.

En conséquence, la Conférence administrative mondiale des radiocommunications (Genève, 1979) a été convoquée et, conformément à son ordre du jour et sur la base du «Remaniement du Règlement des radiocommunications » susmentionné que des propositions soumises par les administrations, elle a examiné, remanié et partiellement révisé, quant à leur contenu, les dispositions du Règlement des radiocommunications. A la suite de ces traveux, elle a adopté le Règlement des radiocommunications (Genève, 1979) dont le texte figure dans l'Annexe aux présents Acts finals.

La Conférence admininstrative mondiale des radiocommunications (Genève, 1979) autorise le Secrétaire général de l'Union internationale des télécommmunications à procéder à la numérotation finale appropriée des chapitres, articles, sections, sous-sections, paragraphes et sous-paragraphes et à la numérotation marginale, à la numérotation finale des appendices et á l'insertion des renvois nécessaires en ce qui concerne le Règlement des radiocommunications (Genève, 1979), dont il adressera une copie certifiée conforme aux Membres de l'Union.

Les Membres de l'Union informeront le Secrétaire général de leur approbation du Règlement des radiocommunications (Genève, 1979), tel qu'il a été adopté par la Conférence administrative mondiale des radiocommunications (Genève, 1979). Le Secrétaire général notifiera sans délai ces approbations aux Membres.

Les délégués des Membres de l'Union internationale des telécommunications représentés à la Conférence administrative mondiale des radiocommunications (Genève, 1979), avant signé les présents Actes finals, déclarent que, si une administration formule des réserves au sujet de l'application de l'une ou de plusieurs dispositions du Règlement des radiocommunications (Genève, 1979), aucune autre administration n'est obligée d'observer ladite ou lesdites dispositions dans ses relations avec l'administration qui a formulé de telles réserves.

En foi de quoi, les délégués des Membres de l'Union internacionale des télecommunications représentés à la Conférence administrative mondiale des radiocommunications (Genève, 1979), ont signé, au mon de leurs pays respectifs, les présents Actes final dont l'exemplaire unique restera dans les archives de l'Union internationale des télécommunications et dont une copie certifiée conforme sera remise á chacun des Membres de l'Union.

Fait à Genève, le 6 décembre 1979.

Pour la République Démocratique d'Afghanistan:

Eng. M. Z. Tahiry.
A. Satar Tokhy.
K. D. Kamran.

Pour l'Algérie (République Algériene Démocratique et Populaire):

N. Bouhired.
M. Ali Belhadj.
Ali Hamza.
M. Harbi.
M. Kadi.

Pour la République fédérale d'Allemagne:

Heinrich L. Venhaus.
K. Rudolf Binz.

Pour la République Populaire d'Angola:

J. G. de Matos.

Pour le Royaume de l'Arabie Saoudite:

Faisal Ahmed Zaidan.
Reda A. H. Jada'a.
A. M. Babtain.
Mohamed K. El Nahedh.
Abdullah M. Al-Sanie.

Pour la République Argentine:

Roberto J. P. Severini.
Ricardo Saidman.

Ruben Pascual.
Jorge A. Taboada.
José Guerra.
Marcelo Otero Mosteirin.
Osvaldo Martin Beunza.

Pour l'Australie:

E. J. Wilkinson.
P. D. Barnes.
E. R. Craig.

Pour l'Autriche:

Gerd Lettner.
Ernst Steiner.

Pour l'État de Bahrein:

Mohamed Redha Amin.

Pour la République Populaire du Bangladesh:

A. B. M. Taher.
M. Habibullah.
Md. Ruhul Quddus.
Md. Sobhan Gani Molla.

Pour la Belqique:

R. Tastenoy.
Gewillig M. R. V.

Pour la République Populaire du Bénin:

Taofiqui Bouraïma.
Amoussou C. Evariste.
H. Vignon.
Julien Lokossi.
Assavedo Zinsou Gilbert.

Pour la République Socialiste Soviétique de Biélorussie:

I. M. Gritsouk.

Pour la République de Botswana:

D. P. T. Disele.
P. Markgekgenene.

Por la République Fédérative du Brésil:

Romulo Villar Furtado.
Paulo Ricardo Hermano Balduino.

Pour la République Populaire de Bulgarie:

I. I. Ignatov.

Pour la République du Burundi:

Ruvuzakinono Bernard.

Pour la République Unie du Cameroun:

Jean Jipguep.
Lt. Cel. Sing. Joseph.
Kamdem-Kamga Emmanuel.
Yanze Emmanuel.
Essesse-Dikongue Jean.

Pour le Canada:

Gabriel I. Warren.
Edward D. Ducharme.

Pour la République du Cap-Vert:

António Pedro Borja Santos.
Benchimol de Sousa Lobo.
Hermano Marciano Almeida.

Pour la République Centrafricaine:

M. Bedan.
M. Mbaye.

Pour le Chili:

G. Echavarria M.
S. Angellotti C.
H. Hernandez L.
E. Claude F.

Pour la République Populaire de Chine:

Li Linchuan.
Liu Yuan.
J. Qian.
Zhang Cheng.
He Dazhong.

Pour la République de Chypre:

R. Michaelides.
A. Michaelides.

Pour l'État de la Cité du Vatican:

Sabino Maffeo.
Giudici Pier Vincenzo.
Pacifici Costantino.

Pour la République de Columbie:

Hector Charry Samper.
O. Gallo Suarez.
Alfredo Rey Córdoba.
G. Prado Bravo.
R. Tarazona Alvarado.
D. Bermudez Zafra.
J. A. Saavedra Triana.
O. Rodriguez Cadena.
H. E. Rodriguez Vega.
G. Rodriguez Barato.
J. Acosta Duran.
G. Mesias Benavides.
Juan Barrero Cuervo.

Pour la République Populaire du Congo:

J. P. Okouo.
A. Ondongo-Kogo.

Pour la République de Corée:

Shinyong Lho.

Pour Costa Rica:

Liliana Garcia de Davis.

Pour la République de Côte d'Ivoire:

Kone Bangali.
Bancouli Yapi.
Nogbou Christophe.
Aka bonny Léon.
Yao Ble Gaston.
Tiemele Kouande Charles.
Gnonsoa Komoangnan Jean.
Kouadio Koffi Théodore.
Yao Kouakou Jean-Baptiste.

Pour Cuba:

Salvador Gutierrez.
Carlos Martinez.

Pour le Danemark:

Borge Nielsen.
P. V. Larsen.
Arne H. Lindblad.
H. N. Eskesen.
J. A. Heegaard.

Pour la République Arabe d'Egypte:

H. S. Abou Aly.
Aly A. Abu-Kandeel.
Ibrahim Hassan Khattab.
Abd El Rahim.

Pour la République de El Salvador:

R. E. Santos Mendez.
O. E. Rodriguez Turcios.
S. Vasquez González.
J. A. Penate Salazar.

Pour les Emirats Arabés Unis:

Mohamed Redha Amin.

Pour l'Equateur:

Rodrigo Valdez Baquero.
Gonzalo Maldonado A.
José Ignacio Jijon Freile.
Marcelo Lasso G.
José Vivanco Arias.

Pour l'Espagne:

E. Dominguez Passier.
V. Quintas.
F. Molina-Negro.
N. Rey-Stolle.
S. Aguado Barbero.

Pour les États-Unis d'Amérique:

Clen. O. Robinson.
Samuel E. Probst.

Pour l'Ethiopie:

Girmaw L.
G. Abebe.
G. Abai.

Pour Fidji:

E. Naqova.
P. Singh.

Pour la Finlande:

K. Terätsvuo.
T. I. Hahkio.
J. K. Harjalainen.

Pour la France:

P. Dumas.
P. Bassole.
M. Thué.

Pour la République Gabonaise:

Hella-Ondo.
Ntougou Gabriel.
N'Koghe N'Dong L.

Pour le Ghana:

K. A. Buagbe.
J. B. Buah.

Pour la Gréce:

A. Chorafas.
G. Antoniou.
C. Hager.
A. Casmas.
E. Nicolaidis.
N. Bennayor.

Pour la République du Guatemala:

R. Lemus.
J. O. Vásquez.
J. Alvarez.
J. C. Recinos Barro.

Pour la République Populaire Révolutionnaire de Guinée:

Linseni Bangoura.
Maurice Saadi.
Sidiki Toure.
Mamadouba Keita.
Mamadou Saliou Diallo.

Pour la Guyane:

J. L. Philadelphia.
R. E. Case.
barton Scotland.

Pour la République d'Haïti:

Antonio Rimpel.
Fritz Joassin.

Pour la République de Haute-Volta:

D. Nikiema.
Yousouf Kaba.
P. Claver Songré.

Pour la République de Honduras:

A. Bustillo-Pon.

Pour la République Populaire Hongroise:

Horn Dezso.

Pour la République de l'Inde:

T. V. Srirangan.
R. G. Deodhar.
N. N. Hkanna.
O. P. Khushu.
P. R. Narasimhan.
P. N. Natarajan.
Dr. B. S. Rao.
Dr. M. K. Rao.
Dr. C. K. Sane.
S. Singh.
Brig Surjit Singh.

Pour la République d'Indonésie:

R. Wikanto.
P. A. Martono.

Pour la République Islamique d'Iran:

Noureddin Madani.

Pour la République d'Iraq:

Dr. Khidhir Alias Buni.
Sulman Ismail Issa.
A. M. H. Al-Shahwani.
Abdul-Wadhid Al-Saad.
Dr. Hafid Taha Alhafid.
Bassim K. Mohammed Albaghdad.
Hisham M. A. Al Shaibani.
Ali M. A. Shaban.
A. Al-Rahmani.
Dhafer Abdul Hameed.
Zuhair Al Yawer.

Pour l'Irland:

P. L. Ó. Réagáin.
T. É. Ó. Dálaigh.
D. A. Victor-Byrne.

Pour l'Islande:

Jón Skúlason.

Pour l'État d'Israël:

M. Shakkéd.
J. Nitsan.

Pour l'Italie:

A. Petti.

Pour la Jamaique:

K. G. Anthony Hill.
F. a. L. Subaran.
V. A. Panton.
P. D. Cross.
V. e. Betton.

Pour le Japon:

Akitane Kiuchi.
K. Kamo.
S. Tanaka.

Pour le Royaume Hachémite de Jordanie:

Mohammed Shahid Ismail.
Akef H. Nasser.
Abu Sham Yousef Hilmi.

Pour la République du Kenya:

Okudo Benjamin Otin.
Okindi Philip Okoth.
Odundo I. N.
Amira Charles Mbagaya.
Malumbe Stanley Akolo.
Arap Chemai S. K.
Thiong'o Kamau J. P.
Ngokonyo Francis W.
Jaling H. V. O.
Klarie Samuel Ngigi.
Kariithi HDuncan Ngunjiri.
Kilonzo William Musau.
Challo Stephen M.

Pour l'État du Kowaït:

A. M. Al-Sabej.
A. R. Al-Humaidah.
Saleh Al-Anbu'e.
Ali Z. Al-Dahmaly.
Abdullah Erhamah.

Pour le Royaume de Lesotho:

F. M. Ramokoae.
P. L. Moepi.
L. Letele.
T. Khabele.

Pour le Liban:

Maurice Habib Ghazal.
Elias Emile Eid.
Fouad Semaan Ibrahim.

Pour la République du Libéria:

Samuel H. Butler Sr.
Sewell T. Brewer.
George B. Cooper.
H. Walcott Benjamin.

Pour la Libye (Jamahiriya Arabe Libyenne Populaire Socialiste):

Mohammed Saleh Alsabey.

Pour la Pricipauté de Liechtenstein:

H. Blaser.
H. A. Kieffer.

Pour le Luxembourg:

Dondelinger Charles.

Pour la République Démocratique de Madagascar:

B. Rabenoro.
L. Rakotondrainibe.
Randrianjafisolo A.
Rakotoarivelo Benjamin.
Rasaminanana Victorien.
Razainalitera Emma Claudine.

Pour la Malasie:

Datuk Mohamed Nadzim.
K. P. Ramanatham Menon.
D. S. Variyan.
Tengku Ismail Mahmud.

Pour le Malawi:

F. V. V. Watson.
E. S. Hiwa.
S. J. F. S. Mijica.

Pour la République du Mali:

Idrissa Samake.
Mobido Konaté.
Cdt. Ousmane Dao.
Oumar Sidibe.
B. Coulibaly.

Pour la République de Malte:

E. V. Saliba.
J. F. Bartolo.

Pour le Royaume du Maroc:

Wakrim Mohamed.
Hassan A. Lebbadi.
Tanane M'Hamed Jamal Eddine.

Pour Maurice:

Rambert J. M. H. Noël.

Pour la République Islamique de Mauritanie:

Mangassouba.

Pour le Mexique:

José J. Hernández-G.
Luís Valencia P.

Pour Monaco:

Biancheri.
Solamito César C. R.
Auvray.

Pour la République Populaire de Mongolie:

D. Garam-Otchir.
D. Gombosuren.

Pour la République Populaire du Mozambique:

R. J. L. Fernandes.

Pour le Nepal:

Ishwari Man Shrestha.
Prabhaker Adhikari.

Pour le Nicaragua:

F. Zarrabe Iturraran.

Pour la République du Niger:

I. Ibrahim.
Zoudi Issouf.

Pour la République Fédérale de Nigeria:

Chief B. O. Oji.
R. C. O. Nwokedi.
A. H. A. Mebude.
A. B. Adebimpe.
N. A. Nze.
S. O. Ajani.
V. A. Kalejaiye.
F. A. Oaiya.
E. C. Nnama.
F. Ariwayo.
Commander M. P. Cocodia.
Flight Officer O. S. O. Ugya.
U. J. Odunide.
Capt. F. C. Kponu.
Major M. O. Odunlade.
Chief Supt. of Police M. S. A. Whyte.
Warrant Officer O. B. Ajayi.
C. O. Awani.

Pour la Norvége:

P. Mortensen.
L. Grimstveit.

Arne Boe.
Thormod Boe.

Pour la Nouvelle-Zélande:

P. L. Holloway.
A. Turpie.
J. P. Carter.
J. F. C. Johnson.
P. A. Lowe.

Pour le Sultanat d'Oman:

Nassir Issa Al-Kindy.
Hamed Yahya Al-Kindy.
Hasan Murtaza Khan Shirwani.

Pour la République de l'Ouganda:

C. K. L. Okot.
P. Sseggujja.

Pour la République Islamique du l'Akistan:

M. A. A. Chowdhri.
Colonel Syed Muhammad Aslam.
Irfan Ullah.
Mohammad Zubair.

Pour la République de Panama:

Nicolas D'Anello.
Embajador Octavio Ferrer Anguizola.

Pour Papua-Nouvelle-Guinée:

Exertius B. W. Romney.
G. H. Railton.
M. E. Edwards.
R. S. Hamlett.
G. T. A. Turapal.
D. J. F. Nickols.
S. Kulupi.

Pour la République du Paraguay:

Miguel Horacio Gini E.
Sabino Ernesto Montanaro.

Pour le Royaume des Pays-Bas:

B. J. Bakker.
H. K. de Zwart.

Pour le Pérou:

Felipe Valdivieso.
Alberto Galvez de Rivero.

Pour la République des Philippines:

C. S. Carreon.
Heraclio L. San Juan.
Sylvia I. Marcelo.
José Q. Borromeo.
Calixto V. Espejo.

Pour la République Populaire de Pologne:

K. Kozlowski.

Pour le Portugal:

Adriano de Carvalho.
Domingos Pires Franco.
Rogério Manuel Ferreira Simões Carneiro.
Maria Teresa Rodrigues Bandeira.
João Manuel Ortigão de Melo Sampaio.
Vito Ribeiro de Oliveira.
Frederico José de Figueiredo Serra.

Pour l'État du Qatar:

Abdullih Ali Al Mannai.

Pour la République Arabe Syrienne:

Ahmad M. Naffakh.
Abdul Halim Skati.

Pour la République Démocratique Allemande:

Dr. Calov.

Pour la République Populaire Démocratique de Corée:

Pak Yong-Chah.

Pour la République Socialist Soviétique d'Ukraine:

V. A. Savantshuk.

Pour la République Socialiste de Romanie:

G. Airinei.
I. Petraru.
A. Draghici.
A. Chirică.

Pour le Royaume-Unid de Grande-Bretagne et d'Irland du Nord:

J. L. Bantock.
D. E. Baptiste.
W. H. Bellchambers.
M. P. Davies.

Pour la République Rwandaise:

Gatabazi Hakizumwami Lievin.
Habiyambere Zacharie.
Barihima Jean Nepomucene.

Pour la République de Saint-Marin:

Thomas D. E.
Pietro Giacomini.
Roberto Muccioli.

Pour la République du Sénégal:

Alioune Sene.
Parsine Crespin.
Mamadou Cisse.
Assane Cueye.
Mame Moussa Soumare.
Malick M'Baye.

Pour la République de Singapour:

Lim Toon.
Ho Siaw Hong.
Sebastian Chiaw Hoch Tan.
Sim Choon Hin.
Lim Choon Sai.

Pour la République Démocratique de Somalie:

Omar Sheik Osman.
Yasin H. Ismail.
Eng. Ahmed Mohamed Aden.

Pour la République Démocratique du Soudan:

Dr. I. Y. Ahmed.

Pour la République Socialiste Démocratique de Sri Lanka:

L. H. R. Wijetunga.
A. Maniccavasagar.
Reginald Ernest Henry Perera.

Pour la Suéde:

Carl-Gösta Åsdal.
Gunnar Malmgren.
Krister Björnsjo.

Pour la Confédération Suisse:

Steffen.
E. Schwarz.

Pour le Royaume du Swaziland:

Cyprian S. Motsa.

Pour la République Unie de Tanzanie:

Rogati Anael Kayani.
S. Odunga.
Martan Ngalomba.

Pour la République du Tchad:

Hadjero Barkaye.

Pour la République Socialist Tchécoslovaque:

J. Jíra.

Pour la Thailande:

Police Major General Suchart P. Sakorn.
K. Pornsutee.
Kanes Schnarakkul.
Suwatt Jithavech.
Dr. Danai Lekhyananda.
Major Suwachit Pichitkul.
Pipope Chooncharoen.

Pour la République Togolaise:

Nenonene Kouma.
Andjo Tchamdja.
Gaba Agossou.
Mensah K. Kwessi.

Pour Trínité et Tobago:

Leo V. Mc Neill.

Pour la Tunisie:

B. Khouadja.
R. Chkir.

Pour la Turquie:

Uysal Kadri Berkan.

Pour l'Union des Républiques Socialistes Soviétiques:

A. L. Baladov.

Pour la République Orientale de l'Uruguay:

Gustavo Ferrand.
José R. Hegui.
Esau Pablo Prada.
Rosendo F. Hernández.
Benjamin Barreiro.
Pedro G. Retamoso.
Juan F. Romay.

Pour la République de Venezuela:

Gustavo Chacín.
Carlos J. Martinez.
Jesus Marval Mora.
Eduardo Nucete.

Pour la République Démocratique Populaire du Yémen:

Abdulwahab Algilani.
Omer Abdulla Yafai.

Pour la République Socialiste Fédérative de Yougoslavie:

Avdo Zvonic.
Ljubomir Dulović.

Pour la République du Zaire:

Numbi Muyumba.

Pour la République de Zambie:

S. W. Munthali.
C. F. Mutale.

Règlement des Radiocommunications

(Géneve, 1979)

ADD

Préambule

ADD 3000 1 L'application des dispositions du présent Règlement par les organismes permanents de l'Union internationale des télècommunications n'implique de la part de l'Union aucune prise de position quant à la souveraineté ou au statut juridique d'un pays, territoire, ao zone géographique quelconque.

PARTIE A

NI

CHAPITRE I

NOC

Terminologie

N1/1

ARTICLE 1

NOC

Termes et définitions

MOD

Introduction

MOD 3001 1 2 Aux fins du présent Règlement, les termes suivants ont le sens donné par les définitions qui les accompagnent. Toutefois, ces termes et définitions ne sont pas nécessairement applicables dans autres cas. Les définitions identifiques à celles figurant dans la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) sont signalées par l'indication «(Conv.)».

Remarque: Si, dans le texte d'une définition indiquée ci-dessous, un terme figure en italiques, cela signifie que ce terme est lui-même défini dans le présent article.

SECTION I

NOC

Termes généraux

ADD 3001A 3 1.1 — *Administration:* Tout service ou département gouvernemental responsable des mesurés à prendre pour exécuter les obligations de la Convention internationale des télécommunications et des Règlements (Conv.).

NOC 3002 2 4 1.2 — *Télécommunications:* Toute transmission, *émission* ou réception de signes, de signaux, d'écrits, d'images, de sons ou de renseignements de toute nature, par fil, radioélectricité, optique ou autres systèmes électromagnétiques (Conv.).

NOC 3006 8 5 1.3 — *Radio:* Préfixe s'appliquant à emploi des ondes radioélectriques (Conv.).

MOD 3005 7 6 1.4 — *Ondes radioélectriques* ou *ondes hertziennes:* ondes électromagnétiques dont la fréquence est par convention inférieure à 3000 GHz, se propageant dans l'espace sans guide artificiel.

NOC 3004 9 7 1.5 — *Radiocommunication: télécommunication* réalisée à l'aide des *ondes radioélectriques* (Conv.).

NOC 3025 21D 8 1.6 — *Radiocommunication de Terre:* toute *radiocommunication* autre que les *radiocommunications spatiales* ou la *radioastronomie.*

MOD 3024 21C 9 1.7 — *Radiocommunication spatiale:* toute *radiocommuniction* assurée au moyen d'une ou plusieurs *stations spatiales*, ou au moyen d'un ou plusieurs *satellites réflecteurs* ou autres objects spatiaux.

MOD 3026 45 10 1.8 — *Radiorepèrage:* détermination de la position, de la vitesse ou d'autres caractéristiques d'un object ou obtention de données relatives à ces paramètres, à l'aide des propriétés de propagation des onde *radioélectriques.*

NOC 3027 48 11 1.9 — *Radionavigation:* application du *radiorepérage* à la navigation, y compris le repérage d'objects gênants.

NOC 3028 54 12 1.10 — *Radiolocalisation:* application du *radiorepèrage* à d'autres fins que la *radionavigation.*

NOC **3068** 66 **13** 1.11 — *Radiogoniomètrie: radiorepèrage* utilisant la réception des *ondes radioélectriques* en vue de déterminer la direction d'une *station* ou d'un object.

3120 74 **14** 1.12 — *Radioastronomie:* astronomie fondée sur la réception des *ondes radioélectriques* d'origine cosmique.

ADD **3120A** **15** 1.13 — *Temps universel coordonné (UTC):* echelle de temps fondeé sur la seconde (SI), définie et recommandée par le CCIR (1) et maintenue par le Bureau Internacional de l'Heure (BIH).

Pour la plupart des applications pratique associées au Règlement des radiocommunications, le temps UTC est équivalent au temps solaire moyen au méridien d'origine (0° de longitude), exprimé antérieurement en TMG.

ADD **3023A** **16** 1.14 — *Utilizations industrielles, scientifiques et médicales* (de l'energie radioélectrique) *(ISM):* mise en œuvre d'appareils ou d'installations conçus pour produire et utiliser, dans un espace réduit, de l'énergie radioélectrique à des fins industrielles, scientifiques, médicales, domestiques ou analogues, à la l'exclusion de tout usage de *télécommunication.*

SECTION II

MOD

Termes spécifiques liés à la gestion des fréquences

ADD **3023B** **17** 2.1 — *Attribution* (d'une bande de fréquences): inscription dans de Tableau d'attribution des bandes de fréquences, d'une bande de fréquences déterminée, aux fins de son utilisation par un ou plusieurs *services de radiocommunication* de Terre ou spatiale, ou par le *service de radioastronomie,* dans des conditions spécifiées. Ce terme s'applique également à la bande de fréquences considérée.

ADD **3023C** **18** 2.2 — *Allotissement* (d'une fréquence ou d'un canal radioélectrique): inscription d'un canal donné dans un plan adopté par une conférence compétente, aux fins de son utilisation par une ou plusieurs administrations pour un *service de radiocommunication* de Terre ou spatiale, dans un ou plusieurs pays ou zones géographiques déterminés et selon des conditions spécifiées.

ADD **3023D** **19** 2.3 — *Assignation* (d'une fréquence ou d'un canal radioélectrique): autorisation donnée par une administration pour l'utilisation par une station radioélectrique d'une fréquence ou d'un canal radioélectrique déterminé selon des conditions spécifées.

SECTION III

MOD

Services radioélectriques

ADD **3023E** **20** 3.1 — *Service de radiocommunications:* service défini dans la présent section impliquant la transmission, l'émission ou la réception d'*ondes radioélectriques* à des fins spécifiques de *télécommunication.*

Dans de présent Règlement, sauf indication contraire, tout service de radiocommunication se rapporte aux radiocommunications de Terre.

NOC **3036** 22 **21** 3.2 — *Service fixe: service de radiocommunication* entre points fixes déterminés.

MOD **3102** 84AG **22** 3.3 — *Service fixe par satellite: service de radiocommunication* entre *stations terriennes* situées en des points fixes déterminés lorsqu'il est fait usage d'un ou plusieurs *satellites;* dans certains cas, ce service comprend des liaisons entre *satellites,* qui peuvent également être assurées au sein du *service inter-satellites;* le service fixe par satellite peut en outre comprendre des *liaisons de connexion* pour d'autres services de *radiocommunications spatiale.*

MOD **3038** 24 **23** 3.4 — *Service fixe aéronautique: service de radiocommunication* entre points fixes déterminés, prévu essentiellement pour la sécurité de la navigation aérienne et pour assurer la régularité, l'efficacité et l'economie d'exploitation des transports aériens.

NOC **3101** 84ATF **24** 3.5 — *Service inter-sattlites: service de radiocommunication* assurant des liaisons entre des *satellites* artificiels de la Terre.

MOD **3100** 84ATE **25** 3.6 — *Service d'exploitation spatiale: service de radiocommunication* destiné exclusivement à l'exploitation des *engins spatiaux,* en particulier la *poursuite spatiale,* la *télémesure spatiale* et la *télécommande spatiale.*

Ces fonctions seront normalement assurées au sein du servi-ce dans lequel fonctionne la *station spatiale.*

ADD **3120A.1** **15.1** (1) La définition complète figure dans l'Avis 460-2 du CCIR.

(MOD) **3072** 30 **26** 3.7 — *Services mobile: services de radiocommunications* entre *stations mobiles* et *station terrestres,* ou entre *stations mobiles* (Conv.).

MOD **3115** 84AGA **27** 3.8 — *Service mobile satellite: service de radicommunications:*

Entre des *stations terriennes mobiles* et une ou plusieurs *stations spatiales,* ou entre des *stations spatiales* utilisées par ce service; ou

Entre des *stations terriennes mobiles,* par l'intermédiaire d'une ou plusieurs *stations spatiales.*

Ce service peut en outre comprendere les *liaisons de connexion* nécessaires à son exploitation.

NOC **3087** 42 **28** 3.9 — *Service mobile terrestre: services mobile* entre *stations* de base et *stations mobiles terrestres,* ou entre *station mobiles terrestres.*

NOC **3119** 84AGD **29** 3.10 — *Service mobile terrestre par satellite: service mobile par satellite* dans lequel les *stations terriennes* mobiles sont situées à terre.

MOD **3079** 36 **30** 3.11 — *Service mobile maritime: service mobile* entre *stations côtières* et *stations de navire,* ou entre *stations de navire,* ou entre *stations de communications de bord* associées; les *stations d'engin de sauvetage* et les *stations de radiobalise de localisation des sinistres* peuvent également participer à ce service.

(MOD) **3117** 84AGC **31** 3.12 — *Service mobile maritime par satellite: service mobile par satellite* dans lequelles *stations terriennes mobiles* sont situées à bord de navires: les *stations d'engin de sauvetage* et les *stations de radiobalise de localisation des sinistres* peuvent également participer à ce service.

(MOD) **3084** 37 **32** 3.13 — *Service des opérations portuaires: service mobile maritime* dans un port ou au voisinage d'un port, entre *stations côtières* et *stations de navire,* ou entre *station de navire,* ayant pour object la transmission de messages traitant exclusivement de la manoeuvre, du mouvement et de la sécurité des navires et, en cas d'urgence, de la suavegarde des personnes.

Sont exclus de service les messages qui ont le caractère de *correspondance publique.*

(MOD) **3086** 37A **33** 3.14 — *Service du mouvement des navires: service de sécurité* au sein du *service mobile maritime,* au que le *service des opérations portuaires,* entre *stations côtières* et *stations de navire,* ou entre *stations de navire,* ayant pour le objet la transmission de messages traitant exclusivement du mouvement des navires.

Sont exclus de ce service les messages qui ont le caractère de *correspondance publique.*

MOD **3076** 33 **34** 3.15 — *Service mobile aéronautique: service mobile* entre *stations aéronautique* et *stations d'aéronef,* ou entre *station d'aéronef,* auquel les *stations d'engin de sauvetage* peuvent également participer; les *stations de radiobalise de localisation des sinistres* peuvent également participer à ce service sur des fréquences de détresse et d'urgence désignées.

NOC **3116** 84AGB **35** 3.16 — *Service mobile aéronautique par satellite: service mobile par satellite* dans lequel les *stations terriennes mobiles* sont situées à bord d'aéronefs; les *stations d'engin de sauvetage* et les *stations de radiobalise de localisation des sinistres* peuvent également participer à ce service.

NOC **3040** 28 **36** 3.17 — *Service de radiodifusion: service de radiocommunication* dont les *émissions* sont destinées à être reçues directement par le public en général. Ce service peut comprendre des *émissions* sonores, des *emissions de télèvision* ou d'autres genres d'*émissions* (Conv.).

(MOD) **3103** 84AP **37** 3.18 — *Service de radiodiffusion par satellite: service de radiocommunication* dans lequel des signaux émis ou retransmis par des *stations spatiales* sont destinés à être reçus directement par le public en général.

Dans le service de radiodifusion par satellite, l'expression «reçus directement» s'applique à la fois à la *réception individuelle* et à la *réception communautaire.*

(MOD) **3049** 46 **38** 3.19 — *Service de radiorepérage: service de radiocommunication* aux fins de *radiorepérage.*

MOD **3111** 84AP **39** 3.20 — *Service de radiorepérage par satellite: service de radiocommunication* aux fins de *radiorepérage* et impliquant l'utilisation d'une ou plusieurs *stations spatiales.*

(MOD) **3051** 49 **40** 3.21 — *Service de radionavigation: service de radiorepérage* aux fins de *radionavigation.*

MOD **3112** 84AQ **41** 3.22 — *Service de radionavigation par satellite: service de radiorepérage par satellite* aux fins de *radionavigation.*

Ce service peut aussi comprendre les *liaisons de connexion* nécessaires à son exploitation.

MOD 3055 42

3.23 — *Service de radionavigation maritime: service de radionavigation* pour les besoins des navires et la sécurité de leur exploitation.

MOD 3114 43
84AQB

3.24 — *Service de radionavagion maritime par satellite: service de radionavigation par satellite* dans lequel les *stations terriennes* sont situées à bord de navires.

MOD 3054 44

3.25 — *Service de radionavigation aéronautique: service de radionavigation* pour les besoins des aéronefs et la securité de leur exploitation.

MOD 3113 45
84AQA

3.26 — *Service de radionavigation aéronautique par satellite: service de radionavigation par satellite* dans lequel les *stations terriennes* sont situées à bord d'aéronefs.

MOD 3056 46
55

3.27 — *Service de radiolocalisation: service de radiorepérage* aux fins de la radiolocalisation.

NOC 3042 47
76

3.28 — *Service auxiliaires de la météorologie: service de radiocommunication* destiné aux observations et aux sondages utilisés pour la météorologie y compris l'hydrologie.

MOD 3106 48
84ASA

3.29 — *Service d'exploration de la Terre par satellite: service de radiocommunication* entre des *stations terriennes* et une ou plusieurs *stations spatiales*, que peut comprendre des liaisons entre *stations spatiales*, et dans lequel:

Des renseignements relatifs aux caractéristiques de la Terre et ses phénomènes naturels sont obtenus à partir de *détecteurs actifs* situés sur des *satellites* de la Terre;

Des renseignements analogues sont recueillis à partir de platesformes aéroportées ou situées sur la Terre;

Ces renseignements peuvent être distribues à des *stations terriennes* appartenant au méme systeme;

Les plates-formes peuvent egalement être interrogées.

Ce service peut aussi comprende les *haisons de connexion* nécessaires á son exploitation.

NOC 3107 49
84AT

3.30 — *Service de météorologie par satellite: service d'exploration de la Terre par satellite* pour les besoins de la météorologie.

MOD 3046 50
80

3.31 — *Service des fréquences étaion et des signaux horaires: service de radiocommunication* assurant, à des fins scientifiques, tecnhniques et diverses, l'émission de fréquences spécifiées, de signaux horaires ou des deux à la fois, de précision élevée et donnée, et destinée à la réception générale.

MOD 3109 51
84ATB

3.32 — *Service des fréquences étalon et des signaux horaires par satellite: service de radiocommunication* faisant usage de *stations spatiales* situées sur des *satellites* de la Terre pour les mêmes fins que le *service des fréquences étalon et des signaux horaires.*

Ce service peut aussi comprende les *liaisons de connexion* nécessaires à son exploitation.

NOC 3099 52
84ATD

3.33 — *Service de recherche spatiale: service de radiocommunication* dans lequel on utilise des *engins spatiaux* ou d'autres objects spatiaux aux fins de recherche scientifique ou technique.

MOD 3044 53
78

3.34 — *Service d'amateur: service de radiocommunication* ayant pour objet l'instruction individuelle, l'intercommunication et les études techniques, effectué par des amateurs, c'est-à-dire par des personnes dûment autorisées, s'intéressant à la technique de la radioélectricité à titre uniquement personnel et sans intérêt pécuniaire.

NOC 3108 54
84ATA

3.35 — *Service d'amateur par sattelite: service de radiocommunication* faisant usage de *stations spatiales* situées sur des *satellites* de la Terre pour les mêmes fins que le *service d'amateur.*

NOC 3121 55
75

3.36 — *Service de radioastronomie:* service comportant l'utilisation de la *radioastronomie.*

MOD 3029 56
69

3.37 — *Service de sécurité:* tout servivce radioélectrique exploité de façon permanente ou temporaire pour assurer la sécurité de la vie humaine et la sauvegarde des biens (Conv.).

(MOD) 3030 57
84

3.38 — *Service spécial: service de radiocommunication* non défini d'autre part dans la présent section, effectué exclusivement pour satisfaire des besoins déterminés d'intérêt général, et non ouvert à la *correspondance publique.*

SECTION IV

MOD

Stations et systèmes radioélectriques

NOC 3031 58
21

4.1 — *Station:* un ou plusiers émetteurs ou récepteurs, ou un ensemble d'émetteurs et de récepteurs, y compris les appareils accessoires, nécessaires pour assurer un *service de radiocommunication* ou pour le *service de radioastronomie*, en un emplacement donné.

Chaque station est classée d'aprés le service auquel elle participe d'une façon permanente ou temporaire.

MOD 3034 21E 59 4.2 — *Station de Terre: station* assurant une *radiocommunication de Terre.*

Dans le présent Règlement, sauf spécification contraire, toute *station* est une station de Terre.

MOD 3033 21B 60 4.3 — *Station terrienne: station* située soit sur la surface de la Terre, soit dans la partie principale de l'atmosphére terrestre, et destinée à communiquer:

Avec une ou plusieurs *stations spatiales;* ou

Avec une ou plusieurs *stations* de même nature, à l'aide d'un ou plusieurs *satellites réflecteurs* ou autres objects spatiaux.

NOC 3032 21A 61 4.4 — *Station spatiale: station* située sur un objet qui se trouve, est destiné à aller, ou est allé, au-delà de partie principale de l'atmosphére terrestre.

(MOD) 3075 41 62 4.5 — *Station d'engin de sauvetage: station mobile* du *service mobile maritime* ou du *service mobile aéronautique* destinée uniquement aux besoins des naufragés et placée sur une embarcation, un radeau ou tout autre équipement de sauvetage.

NOC 3037 23 63 4.6 — *Station fixe: station* du *service fixe.*

NOC 3039 25 64 4.7 — *Station fixe aéronautique: station* du *service fixe aéronautique.*

NOC 3074 32 65 4.8 — *Station mobile: station* du *service mobile* destinée à être utilisée lorsqu'elle est en mouvement, ou pendant des haltes en des points non déterminés.

ADD 3115A 66 4.9 — *Station terrienne mobile: station terrienne* du *service mobile par satellite* destinée à être utilisée lorqu'elle est en mouvemente ou pendant des haltes en des points non déterminés.

NOC 3073 31 67 4.10 — *Station terrestre: station* du *service mobile* non destinée à être utilisée lorqu'elle est en mouvement.

MOD 3088 43 68 4.11 — *Station de base: station terrestre* du *service mobile terrestre.*

NOC 3089 44 69 4.12 — *Station mobile terrestre: station mobile* du *service mobile terrestre* susceptible de se déplacer en surface, à l'intérieur des limites géographiques d'un pays ou d'un continent.

NOC 3080 38 70 4.13 — *Station côtière: station terrestre* du *service mobile maritime.*

ADD 3118A 71 4.14 — *Station terriene côtière: station terriene* du *service fixe par satellite* ou dans certains cas du *service mobile maritime par satellite,* située en un point déterminé du sol et destinée à assurer la *liaision de connexion* du *service mobile maritime par satellite.*

(MOD) 3081 39 72 4.15 — *Station de navire: station mobile* du *service mobile maritime* placée à bord d'un navire qui n'est pas amarré en permanence, autre qu'une *station d'engin de sauvetage.*

NOC 3118 84GCA 73 4.16 — *Station terrienne de navire: station terrienne mobile* du *service mobile maritime par satellite* installée à bord d'un navire.

NOC 3002 39A 74 4.17 — *Station de communications de bord: station mobile* de faible puissance du *service mobile maritime* destinée aux communications internes à bord d'un navire, ou aux communications entre un navire et ses embarcations et radeaux de sauvetage au cours d'exercices ou d'opérations de sauvetage, ou aux communications au sein d'un groupe de navires remorqués ou poussés, ainsi qu'aux communications concernant les instructions relatives à la manoeuvre des aussières et à l'amarrage.

NOC 3085 38A 75 4.18 — *Station portuaire: station côtière* du *service des opérations portuaires.*

MOD 3077 34 76 4.19 — *Stations aéronautique: station terrestre* du *service aéronautique.*

Dans certains cas, une station aéronautique peut par exemple, être placée à bord d'un navire ou d'une plate-forme en mer.

ADD 3077A 77 4.20 — *Station terriene aéronautique: station terriene* du *service fixe par satellite,* ou, dans certains cas, du *service mobile aéronautique par satellite,* située en un point déterminé du sol, et destinée à assurer la liaision de connexion du *service mobile aéronautique par satellite.*

MOD 3078 35 78 4.21 — *Station d'aéronef: station mobile* du *service mobile aéronautique* placée à bord d'un aéronef, autre qu'une *station d'engin* de sauvetage.

ADD 3116A 79 4.22 — *Station terrienne d'aéronef: station terrienne mobile* du *service mobile aéronautique par satellite* placée à bord d'un aéronef.

NOC 3041 29 80 4.23 — *Station de radiodiffusion: station* du *service de radiodiffusion.*

NOC 3050 47 81 4.24 — *Station de radiorepérage: station* du *service de radiorepérage.*

NOC	**3053** 57	**82**	4.25 — *Station mobile de radionavigation: station* du *service de radionavigation* destinée à être utilisée lorsque'elle est en mouvement ou pendant des haltes en des points non déterminés.
NOC	**3052** 50	**83**	4.26 — *Station terrestre de radionavigation: station* du *service de radionavigation* non destinée à être utilisée lorsqu'elle est en mouvement.
NOC	**3058** 57	**84**	4.27 — *Station mobile de radiolocalisation: station* du *service de radiolocalisation* destinée à être utililisée lorsqu'elle est en mouvement ou pendant des haltes en des points non déterminés.
NOC	**3057** 56	**85**	4.28 — *Station terrestre de radiolocalisation: station* du *service de radiolocalisation* non destinée à être utilisée lorsqu'elle est en mouvement.
(MOD)	**3069** 67	**86**	4.29 — *Station de radiogoniométrie: station de radiorepérage* utilisant la *radiogoniométrie.*
NOC	**3070** 68	**87**	4.30 — *Station de radiophare: station* du *service de radionavigation* dont les *émissions* sont destinées à permettre à une *station mobile* de déterminer son relèvement ou sa direction par rapport à la station de radiophare.
NOC	**3071** 68A	**88**	4.31 — *Station de radiobalise de localisation des sinistres: station* du *service mobile* dont les *émissions* sont destinées à faciliter les opérations de recherches et de sauvetage.
MOD	**3047** 81	**89**	4.32 — *Station de fréquences étalon et de signaux horaires: station* du *service des fréquences étalon et des signaux horaires.*
NOC	**3045** 79	**90**	4.33 — *Station d'amateur: station* du *service d'amateur.*
NOC	**3122** 75A	**91**	4.34 — *Station de radioastronomie: station* du *service de radioastronomie.*
NOC	**3035** 83	**92**	**4.35** — *Station expérimentale: station* utilisant les *ondes radioélectriques* pour des expériences intéressant les progrès de la science ou de la technique. Cette définition ne comprend pas les *stations d'amateur.*
NOC	**3083** 40	**93**	4.36 — *Emetteur de secours de navire:* emetteur de navire à utiliser exclusivement sur one fréquence de détresse pour les besoins de la détresse, de l'urgence ou de la sécurité.
NOC	**3059** 58	**94**	4.37 — *Radar: système de radiorepérage* fondé sur la comparaison entre des signaux de référence et des signaux radioélectriques réfléchis ou retransmis à partir de la position à déterminer.
NOC	**3060** 59	**95**	4.38 — *Radar primaire:* système de *radiorepérage* fondé sur la comparaison entre des signaux de référence et des signaux radioéletriques réfléchis à partir de la position à déterminer.
NOC	**3061** 60	**96**	4.39 — *Radar secondaire:* système de *radiorepérage* fondé sur la comparaison entre des signaux de référence et des signaux radioélectriques retransmis à partir de la position à déterminer.
MOD	**3062** 60A	**97**	4.40 — *Balise-radar (racon):* emetteur-récepteur associé à um repére fixe de navigation qui, lorsqu'il est excité par un *radar,* renvoie automatiquement un signal distinctif qui peut apparaître sur l'écran du *radar* et fournir des indications de distance, de relèvement et d'identification.
NOC	**3063** 61	**98**	4.41 — *Système d'atterrissage aux instruments (ILS):* système de *radionavigation,* qui fournit aux aéronefs un guidage horizontal et vertical immédiatement avant et pendant l'atterrissage et qui, en certains points fixes, fournit l'indication de la distance jusqu'au point d'atterrissage de référence.
NOC	**3064** 62	**99**	4.42 — *Radioalignement de piste:* système de guidage horizontal incorporé au *système d'atterissage aux instruments,* indiquant l'écart horizontal de l'aéronef par rapport à sa trajectorie de descente optimum suivant l'axe de la piste d'atterrissage.
NOC	**3065** 63	**100**	4.43 — *Radioalignement de descente:* système de guidage vertical incorporé au *système d'atterrissage aux instruments,* indiquant l'écart vertical de l'aéronef par rapport à sa trajectorie de descente optimum.
NOC	**3066** 64	**101**	4.44 — *Radioborne:* emetteur du *service de radionavigation aéronautique* qui rayonne un faisceau dans le sens vertical en vue de fournir à un aéronef une indication de position.
MOD	**3067** 65	**102**	4.45 — *Radioaltimètre*: appareil de *radionavigation* place à bord d'un aéronef ou d'un *engin spatial,* permettant de déterminer la hauteur de cet aéronef ou de cet *engin spatial* au-dessus de la surface de la Terre ou d'une autre surface.
NOC	**3043** 77	**103**	4.46 — *Radiosonde:* emetteur radioélectrique automatique du *service des auxiliaires de la météorologie,* habituellement porté par un aéronef, un ballon libre, un parachute ou un cerf-volant, et qui tansmet les données météorologiques.
NOC	**3090** 84AF	**104**	4.47 — *Système spatial*: tout ensemble de *stations terriennes* de *stations spatiales,* ou de *stations terriennes* et de *stations spatiales* coopérant pour assurer des *radiocommunications spatiales* à des fins déterminées.
(MOD)	**3091** 84AFA	**105**	4.48 — *Système à satellites: système spatial* comportant un ou plusieus *satellites* artificiels de la Terre.

NOC **3092** **106**
84AFB

4.49 — *Réseau à satellite: système à satellites* ou partie d'un *système à satellites* composé d'un seul *satellite* et des *stations terriennes* associées.

MOD **3093** **107**
84AFC

4.50 — *Liaison par satellite:* liaison radioélectrique entre une *station terrienne* émettrice et une *station terrienne* réceptrice par l'intermédiaire d'un *satellite.*

Une liaison par satellite comprend une liaison montante et une liaison descendante.

MOD **3094** **108**

4.51 — *Liaison multisatellite:* liaison radioélectrique entre une *station terrienne* émettrice et une station terrienne réceptrice par l'intermédiaire d'au moins deux *satellites,* sans aucune *station terrienne* intermédiaire.

Une liasion multisatellite comprend une liasion montante, une ou plusierus liaisons entre *satellites* et une liaison descendante.

ADD **3094A** **109**

4.52 — *Liaison de connexion:* liaison radioélectrique allant d'une *station terrienne,* située en un point fixe déterminé, à une *station spatiale,* ou vice versa, afin de transmettre des informations pour une *radiocommunication spatiale* d'un service autre que le *service fixe par satellite.*

Section V

MOD

Termes relatifs á l'exploitation

ADD **3094B** **110**

5.1 — *Correspondance publique:* toute *télécommunication* que les bureaux et *stations,* par le fait le leur mise à la disposition du public, doivent accepter aux fins de transmission (Conv.).

MOD **3007** **111**
10

5.2 — *Télégraphie* (1): forme de *télécommunication* qui intervient dans toute opération assurant la transmission et la reproduction à distance du contenu de tout document, tel qu'un écrit, un imprimé ou une image fixe, ou bien la reproduction à distance de tous genres d'informations sous cette forme. Aux fins du Réglement des radiocommunications, le terme télégraphie signifie, sauf indication contraire, une forme de *télécommunication* assurant la transmission des écrits par l'utilisation d'un code de signaux.

MOD **3010** **112**
13

5.3 — *Télégramme:* (1) ecrit destiné à être transmis par *télégraphie* en vue de sa remise au destinataire. Sauf indication contraire, ce terme comprend aussi le *radiotélégramme.*

Dans cette définition, le terme *télégraphie* a le sens général défini dans la Convention.

MOD **3011** **113**
14

5.4 — *Radiotélégramme: télégramme* originaire ou à destination d'une *station mobile* ou d'une *station terrienne mobile,* transmis, sur tout ou partie de son parcours, sur les voies de *radiocommunication* du *service mobile* ou du *service mobile par satellite.*

MOD **3012** **114**
14A

5.5 — *Communication radiotélex:* communication télex originaire ou à destination d'une *station mobile* ou d'une *station terrienne mobile,* transmise, sur tout ou partie de son parcours, sur les voies de *radiocommunication* du *service mobile* ou du *service mobile par satellite.*

MOD **3008** **115**
11

5.6 — *Télégraphie à déplacement de fréquence: télégraphie* à modulation de fréquence, dans laquelle le signal télégraphique déplace la fréquence de l'onde porteuse entre des valeurs prédéterminées.

MOD **3016** **116**
20

5.7 — *Fac-similé*: forme de *télégraphie* ayant pour le objet la transmission d'images fixes, avec ou sans demi-teintes, en vue de leur reproduction sous une forme permanente.

Dans cette définition, le terme *télégraphie* a le sens général défini dans la Convention.

MOD **3013** **117**
17

5.8 — *Téléphonie* (1): forme de *télécommunication* établie en vue de la transmis sion de la parole ou, dans certains cas, d'autres sons.

MOD **3014** **118**
18

5.9 — *Conversation radiotéléphonique*: conversation téléphonique originaire, ou à destination d'une *station mobile* ou d'une *station terrienne mobile,* transmise sur tout ou partie de son parcours, sur les voies de *radiocommunication* du *service mobile* ou du *service mobile par satellite.*

NOC **3019** **119**
4

5.10 — *Exploitation simplex:* mode d'exploitation suivant lequel la transmission estrendue possible alternativement dans les deux sensd la voie de *télécommunication,* par exemple, au moyen d'un système à commande manuelle (2).

---

(1) Voir Résolution **68.**

(MOD) **3019.1** **119.1**

(2) En général, les modes d'*exploitation duplex* et *exploitation semi-duplex* d'une voie de *radiocommunication* nécessitent l'usage de deux fréquences: le mode d'*exploitation simplex* peut être réalisé avec une ou deux fréquences.

NOC	**3020** 5	**120**	5.11 — *Exploitation duplex:* mode d'exploitation suivant lequel la transmission est possible simultanément dans le deux sens de la voie de *télécommunication* (1).
(MOD)	**3021** 6	**121**	5.12 — *Exploitation semi-duplex:* mode *d'exploitation simplex* à une extrémité de la voie de *télécommunication* et d'*exploitation duplex* a l'autre (1).
MOD	**3015** 19	**122**	5.13 — *Télévision*: forme de *télécommunication* assurant la transmission d'images non permanentes d'objects fixes ou mobiles.
(MOD)	**3104** 84APA	**123**	5.14 — *Réception individuelle* (dans le service de la radiodiffusion par satellite): réception des *émissions* d'une *station spatiale* du *service de radiodiffusion par satellite* au moyen d'installations domestiques simples et notamment d'installations munies d'antennes de faibles dimensions.
NOC	**3105** 84APB	**124**	5.15 — *Réception communautaire* (dans le service de radiodiffusion par satellite): réception des *émissions* d'une *station spatiale* du *service de radiodiffusion par satellite* au moyen d'installations réceptrices pouvant, dans certains cas, être complexes et avoir des antennes de plus grandes dimensions que celles utilisées pour la *réception individuelle*, et destinées à être utilisées: Par un groupe du public en général, en un même lieu; ou Au moyen d'un système de distribution desservant une zone limitée.
NOC	**3017** 15	**125**	5.16 — *Télémesure:* utilisation des *télécommunications* en vue d'indiquer ou d'enregistrer automatiquemente des mesures à une certaine distance de l'instrument de mesure.
NOC	**3018** 16	**126**	5.17 — *Radiomesure: télémesure* réalisé à l'aide des *ondes radioélectriques.*
NOC	**3095** 84AW	**127**	5.18 — *Télémesure spatiale: télémesure* utilisée pour la transmission, à partir d'une *station spatiale*, des résultats des mesures effectuées dans un *engin spatial* y compris celles qui concernent le fonctionnnement de l'*engin spatial.*
ADD	**3018A**	**128**	5.19 — *Télécomande:* utilisation des *télécommunications* pour la transmission de signaux pour mettre en fonctionement, modifier ou arrêter à distance le fonctionnement d'un appareil.
MOD	**3097** 84AY	**129**	5.20 — *Télécomande spatiale:* utilisation des *radiocommunications* pour les transmissions de signaux radioélectriques à une *station spatiale* pour mettre en fonctionnement, modifier ou arrêter le fonctionnement d'appareils situés sur l'objet spatial associé, y compris la *station spatiale.*
(MOD)	**3098** 84AZ	**130**	5.21 — *Poursuite spatiale:* détermination de l'*orbite*, de la vitesse ou de la position instantanée d'un object situé dans l'espace, par l'utilisation du *radiorepérage*, à la exclusion des *radars primaires*, en vue de suivre les déplacements de cet objet.

SECTION VI

MOD

Caractéristiques des émissions et des matériels

ADD	**3133B**	**131**	6.1 — *Rayonnement* (radioélectrique): flux d'energie produit sous forme d'*ondes radioélectriques* à partir d'une source quelconque, ou cette énergie elle même.
ADD	**3133C**	**132**	6.2 — *Emission: rayonnement* produit, ou production de *rayonnement*, à partir d'une *station* radioélectrique d'émission. Para exemple, l'énergie rayonnée par l'oscillateur local d'un récepteur radioélectrique ne constitue pas une émission mais un *rayonnement.*
Add	**3006A**	**133**	6.3 — *Classe de émission:* ensemble des caractéristiques d'une *émission*, telles que le type de modulation de la porteuse principale, la nature du signal de modulation, le genre d'information à transmettre, et éventuellement d'autres caractéristiques; chaque classe est designée par un ensemble de symboles normalisés.
ADD	**3021**	**134**	6.4 — *Emission à bande latérale unique:* emission en modulation d'amplitude ne comportant qu'une seule des deux bandes latérales.
ADD	**31021B**	**135**	6.5 — *Emission à bande latérale unique à porteuse complète: emission à bande latérale unique* sans affaiblissement de la porteuse.
ADD	**3021C**	**136**	6.6 — *Emission à bande latérale unique à porteuse réduite: emission à bande latérale unique* avec affaiblissement de la porteuse, mais permettant encore sa restitution pour la démodulation.

(MOD)	**3020.1** 5.1	**120.1**	(1) En général, les modes d'*exploitation duplex* et *exploitation semi-duplex* d'une voie de *radiocommunication* nécessitent l'usage de deux fréquences: le mode d'*exploitation simplex* peut être réalisé avec une ou deux fréquences.
(MOD)	**3021.1**	**121.1**	

ADD **3021D** **137** 6.7 — *Emission à bande latérale unique à porteuse supprimée: emission à bande latérale unique* dans laquelle la porteuse est virtuellement supprimée et n'est pas destinée à être utilisée pour la démodulation.

ADD **3133D** **138** 6.8 — *Emission hors bande* (*): *emission* sur une ou des fréquences situées en dehors de la *largeur de bande nécessaire* mais en son voisinage immédiat due au processus de la modulation, à l'exclusion des *rayonnements non essentiels.*

MOD **3141** **139** 6.9 — *Rayonnement non essentiel* (*): *rayonnement* sur une des fréquences situées
92 en dehors de la *largeur de bande nécessaire* et dont le niveau peut être réduit sans affecter la transmission de l'information correpondante. Ces rayonnements comprennent les rayonnements harmoniques, les rayonnements parasites, les produits d'intermodulation et de conversation de fréquence, à l'exclusion des *émissions hors bande.*

ADD **3133F** **140** 6.10 — *Rayonnements non désirés:* (*) ensemble des *rayonnements non essentiels* et des *rayonnements* provenant des *émissions hors bande.*

MOD **3138** **141** 6.11 — *Bande de fréquences assignée*: bande de fréquences à l'intérieur de laquelle
89 l'*emission* d'une *station* donnée est autorisée: la largeur de cette bande est égale à la *largeur de bande nécessaire*, augmentée du double de la valeur absolue de la *tolérance de fréquence.* Dans le cas des *stations spatiales,* la bande de fréquences assignée inclut le double du décalage maximum dû à l'effect Doppler pouvant se produire par rapport à un point queconque à la surface de la Terre.

NOC **3134** **142** 6.12 — *Fréquence assignée:* centre de la *bande de fréquences assignée* à une *station.*
85

MOD **3135** **143** 6.13 — *Fréquence caractéristique:* fréquence aisément identifiable et mesurable dans
86 une *émission* donnée.

Une fréquence portuese peut, par exemple, être désignée comme fréquence caractéristique.

NOC **3136** **144** 6.14 — *Fréquence de référence:* fréquence ayant une position fixe et bien déterminée
87 par rapport à la *fréquence assignée.* Le décalage de cette fréquence par rapport à la *fréquence assignée* est, en grandeur et en signe, le même que celui de la *fréquence caractéristique* para rapport au centre de la bande de fréquences occupée para l'*émission.*

MOD **3137** **145** 6.15 — *Tolérance de fréquence:* ecart maximal admissible entre la *fréquence assignée*
88 et la fréquence située au centre de la bande occupée par une *émission,* ou entre le *fréquence de référence* et la *fréquence caractéristique* d'une *émission.*

La tolérance de fréquences est exprimée en millionièmes ou en hertz.

MOD **3140** **146** 6.16 — *Largeur de bande nécessaire:* pour une *classe d'émission* donnée, largeur
91 de la bande de fréquences juste suffisante pour assurer la transmission de l'information à la vitesse et avec la qualité requises dans des conditions données.

MOD **3139** **147** 6.17 *Largeur de bande occupée:* largeur de la bande de fréquence telle que, au-
90 -dessous de sa fréquence limite inférieure et au-dessus de sa fréquence limite supérieure, soient émisses des *puissances moyennes* égales chacune à un pourcentage donnée ß/2 de la *puissance moyenne* totale d'une *émission* donnée.

En l'absence de spécifications du CCIR pour la *classe d'émission* considérée, la valeur ß/2 doit être prise égale à 0,5 %.

ADD **3153C** **148** 6.18 — *Onde à polarisation dextrogyre* (sens inverse des aiguilles d'une nontre): onde polarisée elliptiquement ou circulairement dont, pour un observateur regardant dans le sens de la propagation, le vecteur champ électrique tourne en fonction du temps, dans un plan fixe quelconque normal à la direction de propagation, dans le sens senestrorsum, c'est-à-dire dans le sens des aiguilles d'une montre.

ADD **3153D** **149** 6.19 — *Onde à polarisation lévogyre* (sens inverse des aiguilles d'une montre): onde polarisée elliptiquement ou circulairement dont, pour un observateur regardant dans le sens de la propagation, le vecteur champ électrique tourne en fonction du temps, dans un plan fixe quelconque normal à la direction de propagation, dans le sens senestrorsum, c'est-à-dire dans le sens contraire à celui des aiguilles d'une montre.

(*) Les termes associés aux définitions données dans les numéros **138, 139** et **140** doivent être exprimés dans les langues de travail de la façon suivante:

Numeros	En français	En englais	En espagnol
138 (6.8	Emission hors bande	Out-of-band emission	Emisión fuera de banda
139 (6.9)	Rayonnement non essentiel	Spurious emission	Emisión no esencial
140 (6.10)	Raynements non désirés	Unwantes emissions	Emisiones no deseadas

MOD 3143 150 94

6.20 — *Puissance:* chaque fois que la puissance d'un émetteur radioélectrique, etc., est mentionnée, elle doit être exprimée sous l'une des formes ci-dessous, selon la *classe d'émission*, en utilisant les symboles arbitraires indiqués:

Puissance en crête (*PX* ou *pX*);
Puissance moyenne (*PY* ou *pY*);
Puissance de la porteuse (*PZ* ou *pZ*).

Pour différentes *classes d'émission*, les rapports entre le *puissance en crête*, la *puissance moyenne* et la *puissance de la porteuse* dans les conditions de fonctionnement normal et en l'absence de modulation, sont indiqués dans des Avis du CCIR, qui peuvent être utilisés comme guides.

Dans les formules, le symbole *p* indique la puissance en watts et le symbole *P* la puissance en décibels relative à un niveau de référence.

MOD 3144 151 95

6.21 — *Puissance en crête* (d'un émetteur radioélectrique): moyenne de la puissance fournie à la ligne d'alimentation de l'antenne par un émetteur en fonctionnement normal, au cours d'un cycle de radiofréquence correspondant à l'amplitude maximale de l'enveloppe de modulation.

MOD 3145 152 96

6.22 — *Puissance moyenne* (d'un émetteur radioélectrique): moyenne de la puissance fournie à la ligne d'alimentation de l'antenne par un émetteur en fonctionnement normal, évaluée pendant un intervalle de temps relativement long par rapport à la période de la compsante de plus basse fréquence de la modulation.

MOD 3146 153 97

6.23 — *Puissance de la porteuse* (d'un émetteur radioélectrique): moyenne de la puissance fournie à la ligne d'alimentation de l'antenne par un émetteur au cours d'un cycle de radiofréquence en l'absence de modulation.

MOD 3149 154 99

6.24 — *Gain d'une antenne:* rapport généralement exprimé en décibels, entre la puissance nécessaire à l'entrée d'une antenne de référence sans pertes et la puissance fourmie à l'entrée de l'antenne donnée, pour que les deux antennes produisent dans une direction donnée le même champ ou la même puissance surfacique à la même distance. En l'absence d'indication contraire, il s'agit du gain de l'antenne dans la direction du maximum de *rayonnement*. On peut éventuellement considérer le gain pour une polarisation spécifiée.

Suivant l'antenne de référence choisie on distingue:

a) Le *gain isotrope* ou *absolu* (G_i) lorsque l'antenne de référence est une antenne isotrope isolée dans l'espace:
b) *Le gain par rapport à un doublet demi-onde* (G_d) lorsque l'antenne de référence es un doublet demi-onde, isolé dans l'espace, dont le plan équatorial continent la direction donnée:
c) Le *gain par rapport à une antenne verticale courte* (G_v) lorsque l'antenne de référence est un conducteur rectiligne beaucoup plus court que le quart de la longueur d'onde, normal à la surface d'un plan parfaitement conducteur qui contient la direction donnée.

MOD 3148 155 98A

6.25 — *Puissance isotrope rayonnée équivalente (p. i. r. e.):* produit de la puissance fournie à l'antenne par son gain dans une direction donnée par rapport à une antene isotrope (*gain isotrope ou absolu*).

MOD 3147 156 98

6.26 — *Puissance apparente rayonnée* (*p. a. r.*) (dans une direction donnée): produit de la puissance fournie à l'antenne par son *gain par rapport à un doublet demi-onde* dans une direction donnée.

ADD 3147A 157

6.27 — *Puissance apparente rayonnée sur une antenne verticale courte* (*p. a. r. v.*) (dans une direction donnée): produit de la puissance fornie à l'antenne par son *gain par rapport à une antenne verticale courte* dans une direction donnée.

NOC 3022 158 *26*

6.28 — *Diffusion troposphérique:* mode de propagation dans lequel les *ondes radioélectriques* sont diffusées par suite d'irrégularités ou de discontinuités dans les propriétés physiques de la troposphère.

NOC 3023 159 27

6.29 — *Diffusion ionosphérique:* mode de propagation dans lequel les *ondes radioélectriques* sont diffusées par suite d'irrégularités ou de discontinuités dans l'ionisation de l'ionosphère.

SECÇÃO VII

ADD

Partage de fréquences

ADD 3148A 160

7.1 — *Brouillage:* effet, sur la réception dans un système de *radiocommunication*, d'une énergie non désirée due à une émission, à un rayonnement ou à une induction (ou à une combinaison de ces *émissions, rayonnements* ou inductions), se manifestant par une dégradation de la qualité de transmission, une déformation ou une perte de l'information que l'on aurait pu extraire en l'absence de cette énergie non désirée.

ADD **3142A** **161** 7.2 — *Brouillage admissible* (1): *brouillage* observé ou prévu, qui satisfait aux niveaux de brouillage et aux critères quantitatifs de partage fixés dans le présent Règlement ou dans des Avis du CCIR ou encore dans des accords particuliers dont la possibilité est prévue dans le présent Règlement.

ADD **3140B** **162** 7.3 — *Brouillage accepté* (1): *brouillage*, supérieur à celui défini comme admissible, qui a fait l'object d'un accord entre deux ou plusieurs administrations sans porter préjudice aux autres administrations.

MOD **3142** **163** 7.4 — *Brouillage préjudiciable* (2): *brouillage* qui compromet le fonctionnement d'un *service de radionavigation* ou d'autres services de *sécurité* ou qui dégrade sérieusement, interrompt de façon répétée ou empêche le fonctionnement d'un *service de radiocommunication* utilisé conformément au présent Règlement.
93

ADD **3142** **164** 7.5 — *Rapport de protection* (R. F.): valeur minimale généralement exprimée en décibles du rapport signal utile/signal indésirable à l'entrée d'un récepteur, déterminé dans des conditions spécifiées, permettant d'obtenir une qualité de réception donnée du signal utile à la sortie du récepteur.

MOd **3157** **165** 7.6 — *Zone de coordination:* zone associée à une *station terrienne* à l'extérieur de laquelle une *station de Terre* partageant la même bande de fréquences, ne peut produire ni subir aucun *brouillage* supérieur au *brouillage admissible.*
103D

MOD **3156** **166** 7.7 — *Contour de coordination:* ligne délimitant la zone de coordination.
103C

MOd **3155** **167** 7.8 — *Distance de coordination:* dans un azimut donnée, distance à partir de la position d'une *station terrienne* au-delá de laquelle une *station de Terre* partageant la même bande de fréquences, ne peut produire ni subir aucun *brouillage* supérieur au *brouillage admissible.*
103B

MOD **3154** **168** 7.9 — *Température de bruit équivalente d'une liaison par satellite:* température de bruit rapportée à la sortie de l'antenne de réception de la *station terrienne,* correspondant à la puissance de bruit radioélectrique qui produit le bruit total observé à la sortie de la *liaison par satellite,* compte non tenu du bruit dû aux *brouillages* causés par des *liaisons par satellite* utilisant d'autres *satellites* et par des systèmes de Terre.
103A

Section VIII

ADD

Termes techniques relatifs à l'espace

NOC **3123** **169** 8.1 — *Espace lointain:* région de l'espace située à des distances de la Terre supérieures ou approximativement égales à la distance entre la Terre et la Lune.
84BA

NOC **3124** **170** 8.2 — *Engin spatial:* engin construit par l'homme et destiné à aller au-delà de la partie principale de l'atmosphère terrestre.
84BAA

(MOD) **3125** **171** 8.3 — *Satellite:* corps qui tourne autour d'un autre corps de masse prépondérante et dont le mouvement est principalment déterminé, d'une façon permanente, par la force d'attraction de ce dernier.
84BAB

MOD **3126** **172** 8.4 — *Satellite actif: satellite* portant une *station* destinée à émettre ou retransmettre des signaux de *radiocommunication.*
84BAC

MOD **3127** **173** 8.5 — *Satellite réflecteur: satellite* destiné à transmettre par réflexion des signaux de *radiocommunication.*
84BAD

ADD **3127A** **174** 8.6 — *Détecteur actif:* instrument de mesure utilisé dans le *service d'exploration de la Terre par satellite* ou dans le *service de recherche spatiale,* qui permet d'obtenir des informations par *émission* et réception d'*ondes radioélectriques.*

ADD **3127B** **175** 8.7 — *Détecteur passif:* instrument de mesure utilisé dans le *service d'exploration de la Terre par satellite* ou dans le *service de recherche spatiale,* qui permet d'obtenir des informations par réception d'*ondes radioélectriques* d'origine naturelle.

MOD **3128** **176** 8.8 — *Orbite:* trajectorie que décrit, par rapport à un système de référence spécific, le centre de gravité d'un *satellite* ou un autre object spatial soumis de façon prépondérante aux forces naturelles, essentiellement les forces de gravitation.
84BB

NOC **3129** **177** 8.9 — *Inclinaison d'une orbite* (d'un satellite de la Terre): angle formé par le plan contenant une *orbite* et le plan de l'equateur terrestre.
84BC

ADD **3142A.1** **161.1**
ADD **3140B.1** **162.1**

(1) Les termes «brouillage admissible» et «brouillage accepté» sont utilisés dans la coordination des assignations de fréquences entre administrations.

(2) Voir la Résolution **68.**

MOD 3130 84BD **178** 8.10 — *Période* (d'un satellite): intervalle de temps compris entre deux passages consécutifs d'un *satellite* en un point caractéristique de son *orbite.*

(MOD) 3131 84BE **179** 8.11 — *Altitude de l'apogée* ou du *périgée:* altitude de l'apogée ou du périgée au-dessus d'une surface de référence spécifiée servant à la représentation de la surface de la Terre.

NOC 3132 84BFA **180** 8.12 — *Satellite géosynchrone: satellite* de la Terre dont la période de révolution est égalé à la période de rotation de la Terre autour de son axe.

MOD 3133 84BG **181** 8.13 — *Satellite géostationnaire: satellite géosynchone* dont l'*orbite* circulaire et directe est située dans le plan de l'equateur terrestre et qui, par conséquent,est fixe par rapport à la Terre: par extension, *satellite* qui reste approximativement fixe par rapport à la Terre.

ADD 3133A **182** 8.14 — *Orbite des satellites géostationnaires: orbite* sur laquelle doit être placé un *satellite* pour que soit un *satellite géostationnaire.*

183 à 207 *(Non attribués.)*

N2

ARTICLE 2

NOC

Nomenclature des bandes de fréquences et des longueurs d'onde employées dans les radiocommunications

MOD 3183 112 **208** § 1. Le spectre des fréquences radioélectriques est subdivisé en neuf bande de fréquences, désignées par des nombres entiers consécutifs conformément au tableau ci-après. L'unité de fréquence étant le hertz (Hz), les fréquences sont exprimées:

En kilohertz (kHz), jusqu'à 3000 kIIz inclus;
En mégahertz (MIIz), au-delà de 3 MGz, jusqu'à 3000 MHz inclus;
En gigahertz (GIIz), au-delà de 3 GHz, jusqu'à 3000 GHz inclus.

Pour les bandes de fréquentes supérieurs à 3000 GHz, c'est-à-dire pour les ondes centimillimétriques, les ondes micrométriques et les ondes décimicrométriques, il convient d'utiliser le térahertz (TIIz).

Toutefois, dans les cas où l'observation de ces règles donnerail lieu à de sérieuses difficultés, par exemple pour la notification et l'enregistrement des fréquences, dans les questions relatives aux listes de fréquences et dans les questions connexes, on pourra s'en écarter dans une mesure raisonnable.

Numéro de la bande	Symboles (en anglais)	Gamme de fréquences (limite inférieure exclue, limite supérieure incluse)	Subdivision métrique correspondante	Abréviations metriques pour les bandes
4	VLF	3 à 30 kHz	Ondes myriamétriques	B. Mam
5	LF	30 à 300 kHz	Ondes kilométriques	B. km
6	MF	300 à 3000 kHz	Ondes hectométriques	B. hm
7	HF	3 à 30 MIIz	Ondes décamétriques	B. dam
8	VHF	30 à 300 MHz	Ondes métriques	B. m
9	UHF	300 à 3000 MHz	Ondes décimétriques	B. dm
10	SHF	3 à 30 GHz	Ondes centimétriques	B. cm
11	EHF	30 à 300 GHz	Ondes millimétriques	B. mm
12	–	300 à 3000 GHz	Ondes décimillimétriques	–

Note 1: La «bande N» (N = numéro de la bande) s'étend de 0.3×10^NHz à 3×10^NHz.
Note 2: Préfixes: k = kilo (10^3); M = méga (10^6); G = giga (10^9); T = téra (10^{12}).

ADD 3183A **209** § 2. Dans les relations entre les administrations et l'UIT, on ne devrait pas utiliser d'appelallations, de symboles ni d'abréviations destinés à désigner les bandes de fréquences autres que ceux qui figurent au numéro **208.**

210 à 234 *(Non attribués.)*

ADD **N2A**

ARTICLE 3

Nomenclature des dates et des heures employées en radiocommunications

ADD **3168** **235** § 1. Toute date utilisée en relation avec les radiocommunications doit être conforme au calendrier grégorien.

ADD **3169** **236** § 2. Si, dans une date, le moins n'est pas indiqué en toutes lettres ou en abrégé, il doit être exprimé sous forme numérique selon une séquence déterminée de chiffres, représentant, deux par deux, le jour, le mois et l'année.

ADD **3170** **237** § 3. Chaque fois qu'une date est utilisée en relation avec le temps universel coordenné (UTC), cette date doit être celle du méridien d'origine au moment approprié, le méridien d'origine correspondant à une longitude géographique de zéro degré.

MOD **3171** **238** § 4. Sauf indication contraire, chaque fois qu'une heure spécifiée est utilisée dans des activités internationales de radiocommunication, le temps universel coordonné (UTC) est applicable; l'heure doit être présentée sous la forme d'un groupe de quatre chiffres (0000-2359). L'abréviation UTC doit être utilisée dans toutes les langues.

239 à **263** *(Non attribués.)*

MOD **N3**

ARTICLE 4

NOC

Désignation des émissions

SUP **3209** à **3216** inclus avec les titres des rubriques y relatifs.

ADD **3209A** **264** § 1. (1) Les émissions sont désignées d'après leur largeur de bande nécessaire et leur classe.

ADD **3209A** **265** (2) On trouvera des exemples d'emissions désignées conformément aux dispositions du présent article dans la partie B de l'appendice 6. D'autres exemples pourront être donnés dans les Avis le plus récents du CCIR. Ces exemples pourront aussi être publiés dans la préface de la Liste internationale des fréquences.

SECTION I

ADD

Largeur de bande nécessaire

ADD **3210A** **266** § 2. (1) La largeur de bande nécessaire, telle qu'elle est définie au numéro **146** et déterminée conformément à la partie B de l'appendice 6, doit être exprimée par trois chiffres et une lettre. La lettre occupe la position de la virgule et représente l'unité de la largeur de bande. Le premier caractère ne doit être ni le chiffre zéro, ni l'une des lettres K, M ou G.

ADD **267** (2) La largeur de bande nécessaire (1):

Entre 0,001 et 999 Hz est exprimée en Hz (lettre H);
Entre 1,00 et 999 kHz est exprimée en kHz (lettre K);
Entre 1,00 et 999 MHz est exprimée en MHz (lettre M);
Entre 1,00 et 999 GHz est exprimée en GHz (lettre G).

ADD **3210A.1** **267.1** (1) Exemples:

0,002	Hz = H002;	6	kHz = 6K00;	1,25	MHz = 1M25;
0,1	H2 = H100;	12,5	kHz = 12K5;	2	MHz = 2M00;
25,3	Hz = 25H3;	180,4	kHz = 180K;	10	MHz = 10M0;
400	Hz = 400H;	180,5	kHz = 181K	202	MHz = 202M;
2,4	kHz = 2K40;	180,7	kHz = 181K;	5,65	GHz = 5G65.

SECTION II

ADD **Classes**

ADD **3211A** **268** § 3. La classe d'émission est l'ensemble des caractéristiques mentionnées au numéro **269.**

ADD **3212A** **269** § 4. Les émissions sont classées et symbolisées d'après leurs caractéristiques fondamentales, telles qu'elles figurant au numéro **270** et d'après toutes caractéristiques additionelles facultatives décrites conformément á la partie a de l'appendice 6.

ADD **3213A** **270** § 5. Les caractéristiques fondamentales sont les suivantes (voir les numéros **271, 272, 273**):

(1) Premier symbole — type de modulation de la porteuse principale;
(2) Deuxième symbole — nature du signal (ou des signoux) modulant la porteuse principale;
(3) Troisième symbole — type d'information à transmettre.

Lorsque la modulation n'est employée que pendant de courtes périodes de temps et d'une façon occasionnelle (comme, dans bien des cas, pour les signaux d'identification ou d'appel), on peut ne pas en tenir compte, à condition que la largeur de bande nécessaire indiquée ne s'en trouve pas augmentée.

ADD **3214A** **271** § 6. (1) Premier symbole — type de modulation de la porteuse principale:

(1.1) Emission d'une onde non modulée ..... N
(1.2) Emission dont l'onde porteuse principale est modulée en amplitude (y compris les cas où il y a des sous-porteuses modulées en modulation angulaire):
(1.2.1) Double bande latérale ..... A
(1.2.2) Bande latérale unique, onde porteuse complète H
(1.2.3) Bande latérale unique, onde porteuse réduite ou de niveau variable ..... R
(1.2.4) Bande latérale unique, onde porteuse supprimée J
(1.2.5) Bandes latérales indépendentes ..... B
(1.2.6) Bande latérales résiduelle C
(1.3) Emission dont l'onde porteuse principale est modulée en modulation angulaire:
(1.3.1) Modulation de fréquence ..... F
(1.3.2) Modulation de phase ..... G
(1.4) Emission dont l'onde porteuse principale est modulée en amplitude et en modulation angulaire, soit simultanément soit dans un ordre établi d'avance ..... D
(1.5) Emission d'impulsion (1):
(1.5.1) Trains d'impulsions non modulées ..... P
(1.5.2) Trains d'impulsions:
(1.5.2.1) Modulées en amplitude ..... K
(1.5.2.2) Modulées en largeur/durée L
(1.5.2.3) Modulées en position/phase ..... M
(1.5.2.4) Dans lesquels l'onde porteuse est modulée en modulation angulaire pendant la période de l'impulsion Q
(1.5.2.5) Consistant en une combinaison de cequi precède, ou produite par d'outres moyens V
(1.6) Cas non couverts ci-dessus, dans lesquels l'émission se compose de la porteuse principale modulée, soit simultanément, soit dans un ordre établi d'avance, selon une combinaison de plusieurs des modes suivants: en amplitude, en modulation angulaire ou par impulsions ..... W
(1.7) Autres cas X

ADD **3214A.1** **271.1** (1) Les émissions dont la porteuse principale est modulée directement par un signal qui a été codé sous une forme quantifiée (par exemple, modulation par impulsions et codage) doivent être désignées conformement aux points (1.2) ou (1.3).

ADD **3215A** **272** (2) Deuxième symbole — nature du signal (ou des signaux) modulant la porteuse principale:

(2.1) Pas de signal modulant	0
(2.2) Une seule contenant de l'information quantifiée ou numérique, sans emploi d'une sous-porteuse modulante (1)	1
(2.3) Une seule voie contenant de l'information quantifiée ou numérique, avec emploi d'une sous-porteuse modulante (1)	2
(2.4) Une seule voie contenant de l'information analogique	3
(2.5) Deux voies ou plus contenant de l'information quantifiée ou numérique	7
(2.6) Deux voies ou plus contenant de l'information analogique	8
(2.7) Système composite, comportant une ou plusieurs voies contenant de l'information quantifiée ou numérique et une ou plusieurs voies contenant de l'information analogique	9
(2.8) Autres cas	X

ADD **3216A** **273** (3) Troisième symbole — type d'information à transmettre (2):

(3.1) Aucune information	N
(3.2) Télégraphie — pour réception auditive	A
(3.3) Télégraphie — pour réception automatique	B
(3.4) Fac-similé	C
(3.5) Transmission de données, télémesure, télécommande	D
(3.6) Téléphonie (y compris la radiodiffusion sonore)	E
(3.7) Télévision (vidéo)	F
(3.8) Combinaison des cas ci-dessus	W
(3.9) Autres cas	X

274 à 298 *(Non attribués.)*

NII

CHAPITRE II

N4/12

ARTICLE 5

MOD

Caractéristiques techniques des stations

(MOD) **3242** 667 **299** § 1. (1) Le choix et le fonctionnement des appareils destinés à être utilisés dans les stations, ainsi que toutes les émissions de celles-ci, doivent satisfaire aux dispositions du présent Règlement.

NOC **3243** 668 **300** (2) De même, dans la mesure compatible avec les considérations pratiques, le choix des appareils d'emission, de réception et de mesure doit être fondé sur les plus récents progrès de la technique tels qu'ils sont indiqués notamment dans les Avis du CCIR.

MOD **3244** 669 **301** § 2. Dans la conception des matériels d'emission et de réception destinés à être utilisés dans une partie donnée du spectre des fréquences, il devrait être tenu compte des caractéristiques techniques des matériels d'emission et de réception susceptibles d'être utilisés dans les régions voisines de cette partie du spectre et dans d'autres régions du spectre, à condition que toutes les mesures se justifiant du point de vue technique et économique aient été prises pour réduire le niveau des rayonnements non désirés de ces derniers matériels d'emission et pour réduire la sensibilité au brouillage de ces derniers matériels de réception.

MOD **3245** 670 **302** § 3. Il convient que, dans toute la mesure du possible, les équipements à mettre en oeuvre dans une station appliquent des méthodes de traitement des signaux qui permettent d'utiliser le spectre des fréquences avec le maximum d'efficacité, conformément aux Avis pertinents du CCIR. Ces méthodes comprennent notamment certaines techniques d'étalement du spectre et, en particulier dans les systèmes fonctionnant en modulation d'amplitude, l'utilisation de la technique de la bande latérale unique.

NOC **3246** 671 **303** § 4. (1) Les stations d'émission doivent se conformer aux tolérances de fréquence fixées à l'appendice 7.

ADD **3215A.1** **272.1** (1) Cela exclut le multiplexage par répartition dans le temps.

ADD **3216A.1** **273.1** (2) Dans ce contexte, le mot «informations» a un sens restrictif, c'est-à-dire qu'il ne s'agit pas d'une information de nature permanente et invariable comme dans le cas d'émissions de fréquences étalon, de radars à ondes entretenues ou à impulsions, etc.

MOD **3247** **304** (2) Les stations d'émission doivent se conformer aux spécifications de l'appendice 8 en ce qui concerne les niveaux de puissance maximaux tolérés des rayonnements non essentiels.
672

ADD **3247A** **305** (3) Les stations d'émission doivent se conformer aux spécifications fixées dans le présent Règlement pour certains services et classes d'émission, par exemple les appendices 17 et 27Aer2 (*), en ce qui concerne les niveaux de puisance maximaux tolérés pour les émissions hors bande. En l'absence de telles spécifications, les stations doivent, dans toute la mesure du possible, se conformer aux conditions relatives à la limitation des émissions hors bande spécifiées dans les plus récents Avis du CCIR.

MOD **3248** **306** (4) De plus, on s'efforcera de maintenir les tolérances de fréquence et le niveau des rayonnements non désirés aux valeurs les plus basses permises par l'état de la technique et la nature du service à assurer.

MOD **3249** **307** § 5. (1) Les largeurs de bande des émissions doivent également permettre d'assurer
674 l'utilisation la plus efficace possible du spectre, ce qui signifie en général que le largeurs de bandes doivent être maintenues aux valeurs les plus basses permises par l'état de la technique et la nature du service à assurer. L'appendice 6 constitue un guide pour la détermination de la largeur de bande nécessaire.

ADD **3249A** **308** (2) Lorsque l'on fait usage des techniques d'étalement du spectre, on doit employer la densité spectrale de puissance minimale compatible avec l'utilisation efficace du spectre.

ADD **3249B** **309** § 6. (1) Chaque fois que cela pourrait apparaître nécessaire pour une bonne utilisation du spectre, il conviendrait que les récepteurs utilisés par un service aient, dans la mesure du possible, les mêmes tolérances de fréquence que les émetteurs de ce service, compte tenu de l'effet Doppler dans les cas où celui-ci doit être pris en considération.

ADD **3249C** **310** (2) Les stations de réception devraient utiliser un équipement dont les caractéristiques techniques soient appropriées à la classe d'émission concernée; en particulier, la sélectivité devrait être appropriée, compte tenu du numéro **307** relatif aux largeurs de bande des émissions.

ADD **3249D** **311** (3) Les caractéristiques de fonctionnement des récepteurs devraient être telles que ceux-ci ne soient pas brouillés par des émetteurs situés à une distance raisonnable et fonctionnant conformément aux dispositions du présent Règlement.

MOD **3250** **312** § 7. Afin d'assurer le respect du présent Règlement, les administrations font en
675 sorte que les émissions des stations placées sous leur juridiction fassent l'object de mesures fréquentes; à cette fin, elles emploient, si besoin est, les moyens définis dans l'article 20. La technique à appliquer et les intervalles de mesur à respecter doivent être, selon les possibilités pratiques, conformes aux plus récents Avis du CCIR.

MOD **3251** **313** § 8. Les émissions à ondes amorties sont interdites dans toutes les stations.
677

314 à **338** *(Non attribués.)*

NII

CHAPITRE III

Fréquences

ARTICLE 6

NOC

Règles générales d'assignation et d'emploi des fréquences

ADD **3276A** **339** § 1. Les Membres s'efforcent de limiter le nombre de fréquences et l'étendue du spectre utilisé au minimum indispensable pour assurer de manière satisfaisante le fonctionnement des services nécessaires. A cette fin, ils s'efforcent d'appliquer dans les moindres délais des derniers perfectionnements de la technique (1).

MOD **3277** **340** § 2. Les Membres s'engagent à se conformer aux prescriptions du Tableau
113 d'attribution des bandes de fréquences ainsi qu'aux autres prescriptions du présent Règlement pour assigner des fréquences aux stations qui peuvent causer des brouillages préjudiciables aux services assurés par les stations des autres pays.

MOD **3278** **341** § 3. Toute nouvelle assignation, on toute modification de la fréquence ou d'une
114 autre caractéristique fondamentale d'une assignation existante (voir l'appendice 1 ou

---

(*) *Note du Secrétarial général:* voir le numéro **5189** et la Résolution **400**.

ADD **3276A.1** **339.1** (1) Numéro 130 de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973).

l'appendice 3), doit être faite de manière à éviter de causer des brouillages préjudiciables aux services qui sont assurés par des stations utilisant des fréquences conformément au Tableu d'attribution des bandes de fréquences du présent chapitre et aux autres dispositions du présent Règlement, et dont les caractéristiques sont inscrites dans le Fichier de référence international des fréquences.

MOD 3279 342 115 § 4. Les administrations des Membres ne doivent assigner à une station aucune fréquence em dérogation au Tableau d'attribution des bandes de fréquences du présent chapitre ou aux autres dispositions du présent Règlement, sauf sous la réserve expresse qu'il n'en résulte pas de brouillage préjudiciable pour un service assuré par des stations fonctionnant conformément aux dispositions de la Convention et du présent Règlement.

(MOD) 3280 343 116 § 5. La fréquence assignée à une station d'une service donné doit être suffisamment éloignée des limites de la bande attribuée à ce service, de telle sorte que, compte tenu de la bande de fréquences assignée à la station, des brouillages préjudiciales ne soient pas causés aux services auxquels sont attribuées les bandes adjacents.

(MOD) 3281 344 116A § 6. Pour le règlement des cas de brouillages préjudicables, le service de radioastronomie est traité comme um service de radiocommunication. Cependant, vis-à-vis des émissions des services fonctionnant dans d'autres bandes. Il bénéficie du méme degré de protection que celui dont bénéficient ces services le uns vis-à-vis des autres.

ADD 3281A 345 § 7. Pour le règlement des cas de brouillages préjudiciables par d'autres services fonctionnant sans d'autres bandes, le service de recherche spatiale (passive) et le service d'exploration de la Terre par satellite (passive) bénéficient du même degré de protection que celui dont bénéficient ces différents services les uns vis-à-vis des autres.

MOD 3282 346 117 Lorsque, dans des Régions ou des sous-Régions adjacents, une bande de fréquences est attribuée à des services différents de même catégorie (voir les sections I et II de l'article 8), le fonctionnement de ces services est fondé sur l'égalité des droits. En conséquence, les stations de chaque service, dans une des Régions ou des sous-Régions, doivent fonctionner de telle sorte qu'elles ne causent pas de brouillage préjudicable aux services des autres Régions ou sous-Régions.

ADD 3283 347 Aucune disposition du présent Règlement ne peut faire obstacle à l'emploi, par une station en détresse, de tous les moyens de radiocommunication dont elle dispose pour attirer l'attention, signaler son état et sa position et obtenir du secours.

ADD 3284 348 § 10. Aucune disposition du présent Règlement ne peut faire obstacle à l'emploi par une station, dans les circonstances exceptionnelles indiquées au numéro 347, de tous les moyens de radiocommunication dont elle dispose pour assister une station em détresse.

349 à 373 *(Non attribués.)*

N6/4

ARTICLE 7

NOC

Accords particuliers

MOD 3308 374 118 § 1. Plusieurs Membres peuvent, dans le cadre des dispositions de l'article 31 se la Convention concernant les arrangements particuliers, conclure des accords particuliers concernant la sous-répartition des bandes de fréquences entre les services intéressés de ces pays.

MOD 3309 375 119 § 2. Plusieurs Membres peuvent, dans le cadre des dispositions de l'article 31 de la Convention concernant les arrangements particuliers, conclure, sur la base des résultats d'une conférence à laquelle tous le Membres concernés ont été invités, des accords particuliers pour l'assignation des fréquences à celles de leurs stations qui participent à un ou plusiers services déterminés dans les bandes de fréquences attribuées à ces services selon l'article 8, soit au-dessous de 5060 kHz, soit au-dessus de 27 500 kHz, mais non entre ces limites.

MOD 3310 376 120 § 3. Les Membres peuvent, dans la cadre des dispositions de l'article 31 de la Convention concernant les arrangements particuliers, conclure, sur une base mondiale, à l'issue d'une conférence à laquelle tous les Membres ont été invités, des accords particuliers pour l'assignation de fréquences à celles de leurs stations qui participent à un service déterminé, à condition que ces assignations soient faites dans les limites des bandes de fréquences attribuées exclusivement à ce service selon l'articlle 8.

NOC 3311 377 121 § 4. La faculté de conclure des accords particuliers prévue aux numéros 374 à 376 n'implique pas de dérogation aux dispositions du présent Règlement.

(MOD) 3312 378 122 § 5. Le Secrétaire général est informé à l'avance de la réunion de toute conférence convoquée en vue de la conclusion d'accords particuliers; il est également informée des termes de ces accords; il avise les Membres de l'existence de tels accords.

NOC 3313 123 379 § 6. Conformément aux dispositions de l'article 10, le Comité international d'enregistrement des fréquences peut être invité à délégeur des représentants pour participer, à titre consultatif, à l'établissement d'accords particuliers et aux travaux des conférences. Il est reconnu qu'une telle participation est désirable dans la majorité des cas.

(MOD) 3314 124 380 Si, en plus des dispositions qu'ils on la faculté de prendre aux termes du numéro **375**, plusiers Membres coordonnent, dans toutes les bandes de fréquences visées à l'article 8, l'utilisation de fréquences déterminées avant de notifier les assignations de fréquences correspondantes, ils en avisent, les cas échéant, le Comité.

381 à 390 *(Non attribués.)*

N7/5

ARTICLE 8

Attribution des bandes de fréquences

ADD

Introduction

ADD 3414A 391 § 1. Dans tous les documents de l'Union où il y a lieu d'employer les termes «Attribution», «allotissement et assignation», on leur donnera de sens défini aux numéros **17** à **19** avec la correspondance indiquée ci-après dans les trois langues de travail.

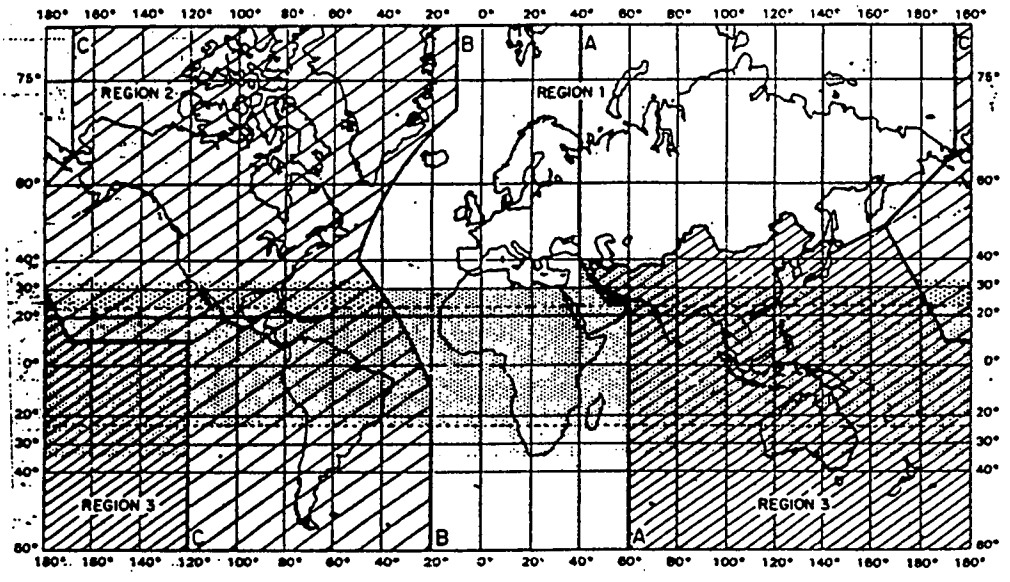
Répartition des bandes	En français	En anglais	En espagnol
Services	Attribution (Attribuer)	Allocation (To allocate)	Atribución (Atribuir)
Zones ou pays	Allotissement (Allotir)	Allotment (To allot)	Adjudicación (Adjudicar)
Stations	Assignation (Assigner)	Assignment (To assign)	Asignación

SECTION I

NOC

Règions et zones

MOD 3415 125 392 § 2. Du point de vue de l'atribution des bandes de fréquences, le monde a été divisé en trois Régions (1), comme indiqué dans le planisphère ci-dessous et dans les numéros **393** à **399**:



La partie ombrée correspond à la Zone tropicale définie aux numeros **406** à **410** et **411**.

NOC 3415.1 125.1 392.1 (1) Il convient de noter que, lorsque les mots «région» et «Régional» sont employés dans le présent Règlement sans R majuscule, ils ne concernent pas le trois Régions définies ici aux fins de l'attribution des bandes de fréquences.

NOC **3416** **393** *Région 1:*

126

La Région 1 comprend la zone limitée à l'est par la ligne A (voir ci-dessous la définition des lignes A, B, C) et à l'ouest par la ligne B, à l'exception des territoires de l'Iran situés entre ces limites. Elle comprend également la partie des territoires de la Turquie et de l'Union des Républiques Socialistes Soviétiques située en dehors de ces limites, ainsi que le territoire de la République Populaire de Mongolie et la zone au nord de l'URSS entre les lignes A et C.

NOC **3417** **394** *Région 2:*

127

La Région 2 comprend la zone limitée à l'est par la ligne B et à l'ouest par la ligne C.

NOC **3418** **395** *Région 3:*

128

La Région 3 comprend la zone limitée à l'est par la ligne C et à l'ouest par la ligne A, à exception des territoires de la République Populaire de Mongolie, de la Turquie, de l'URSS et de la zone au nord de l'URSS. Elle comprend également la partie du territoire de l'Iran située en de hours de ces limites.

NOC **3419** **396** Les lignes A, B et C sont définies comme suit:

129

NOC **3420** **397** *Ligne A:*

130

La ligne A part du Pôle Nord, suit le méridien 40° Est de Greenwich jusqu'au parallèle 40° Nord, puis l'arc de grand cercle jusqu'au point d'intersection du méridien 60° Est avec le tropique du Cancer, enfin le méridien 60° Est jusqu'au Pôle Sud.

NOC **3421** **398** *Ligne B:*

131

La ligne B part du Pôle Nord, suit le méridien 10° Ouest de Greenwich jusqu'à son intersection avec le parallèle 72° Nord, puis l'arc de grand cercle jusqu'au point d'intersection du méridiem 50° Ouest et du parallèle 40° Nord, de nouveau l'arc de grand cercle jusqu'au point d'intersection du méridien 20° Ouest et du parallèle 10° Sud, enfin le méridiem 20° Ouest jusqu'au Pôle Sud.

NOC **3422** **399** *Ligne C:*

132

La ligne A part du Pôle Nord, suit l'arc de méridien jusqu'au point d'intersection du parallèle 65° 30' Nord avec la limite internationale dans le détroit de Béring, puis l'arc de grand cercle jusqu'au point d' intersection du méridien 165° Est de Greenwich avec le parallèle 50° Nord, puis l'arc de grand cercle jusqu'au point d'intersection du méridien 170° Ouest et du parallèle 10° Nord, longe ensuite le parallèle 10° Nord jusqu'au son intersection avec le méridien 120° Ouest, enfin suit le méridien 120° Ouest jusqu'au Pôle Sud.

ADD **3422A** **400** § 3. Pour l'application du présent Règlement, le terme «Zone africaine de radiodifusion» désigne:

401 *a*) Les pays, parties de pays, territoires et groupes de territoires africains situés les paralèlles 40° Sud et 30° Nord;

402 *b*) Les îles de l'océan Indien à l'ouest du méridien 60° Est de Greenwich, situées entre le parallèle 40° Sud et l'arc de grand cercle joignant les points de coordonnées 45° Est, 11° 30' Nord et 60° Est, 15° Nord;

403 *c*) Les îles de l'océan Atlantique à l'est de la ligne B définie au numéro **398** du présent Règlement, situées entre les parallèles 40° Sud et 30° Nord.

ADD **3423** **404** § 4. La «zone européenne de radiodifusion» est délimitée: à l'ouest par les limites ouest de la Région 1, à l'est par le méridien 40° Est de Greenwich et au sud par le parallèle 30° Nord de façon à inclure la partie occidentale de l'URSS, la partie septentrionale de l'Arabie Saoudite et la partie des pays bordant la Méditerranée comprise dans lesdites limites. En outre, l'Iraq et la Jordanie sont inclus dans la Zone européenne de radiodiffusion.

133

NOC **3424** **405** § 5. La «zone européenne maritime» est délimitée: au nord par une ligne qui suit le parallèle 72° Nord, de son intersection avec le méridien 55° Est de Greenwich jusqu'au con intersection acec le méridien 5° Ouest, suit ce méridien 5° Ouest jusqu'à son intersection avec le parallèle 67° Nord, et enfin suit ce paralléle 67° Nord jusqu'au son intersection avec le méridien 30° Ouest; à l'ouest par une ligne qui suit le méridien 30°

134

Ouest jusqu'à son intersection avec le parallèle 30° Nord; au sud par une ligne qui suit le parallèle 30° Nord jusqu'à son intersection avec le méridien 43° Est; à l'est par une ligne qui suit le méridien 43° Est jusqu'à son intersection avec le parallèle 60° Nord, suit ce parallèle 60° Nord jusqu'à son intersection avec le méridien 55° Est et enfin suit ce méridien 55° Est jusqu'à son intersection avec le parallèle 72° Nord.

MOD 3425 406 § 6. (1) La «zone tropicale» (voir carte au numéro **392** est définie comme suit:
135

407 *a*) Dans la Région 2, toute la zone comprise entre les tropiques du Cancer et du Capricorne;

408 *b*) Dans l'ensemble des Régions 1 et 3, la zone comprise entre les parallèles 30° Nord et 35° Sud, et, en supplément:

409 1) La zone comprise entre les méridiens 40° Est et 80° Est de Greenwich et les parallèles 30° Nord et 40° Nord;

410 2) La partie de la Libye située au nord du parallèle 30° Nord.

MOD 3426 411 (2) Dans la Région 2, la zone tropicale peut être étendue jusqu'au parallèle 33° Nord par accords particuliers conclus entre les pays concernés de cette Région (voir l'article 7).
136

ADD 3426A 412 § 7. Une sous-Région est une zone formée par plusieurs pays d'une même Région.

SECTION II

NOC **Catégories de services et d'attributions**

MOD 3427 413 *Services primaires, permis et secondaires*

MOD 3428 414 § 8. (1) Lorsque, dans une case du Tableau qui figure à la section IV du présent article, une bande de fréquences est indiquée comme étant attribuée à plusieurs services, soit dans le monde entier, soit dans une Région, ces services sont énumérés dans l'ordre suivant:
137

415 *a*) Services dont le nom est imprimé en «majuscules» exemple: FIXE); ces services sont dénommés services «primaires»;

416 *b*) Services dont le nom est imprimé en «majuscules entre barres» (exemple: /RADIOLOCALISATION/); ces services sont dénommés services «permis» (voir le numéro **419**);

417 *c*) Services dont le nom est imprimé en «caractéres normaux» (exemple: Mobile); ces services sont dénommés services «secondaires» (voir les numéros **420** à **423**).

418 (2) Les observations complémentaires doivent être indiquées en caractéres normaux (exemple: MOBILE sauf mobile aéronautique).

NOC 3429 419 (3) Un service permis et un service ont les mêmes droits, sauf lorsqu'il s'agil de l'établissement de plans de fréquences, auquel cas, par rapport au service permis, le service primaire est le premier à choisir des fréquences.
138

(MOD) 3430 420 (4) Les stations d'un service secondaire:
139

421 *a*) Ne doivent pas causer de brouillage préjudiciable aux stations d'un service primaire ou d'un service permis auxquelles des fréquences ont été assignées antérieurement ou sont susceptibles d'être assignées ultérieurement;

422 *b*) Ne peuvent pas prétendre à la protection contre les brouillages préjudicables cuasés par les stations d'un service primaire ou d'un service permis auxquelles des fréquences ont été assignées antérieurement ou sont susceptibles d'être assignées ultérieurement;

423 *c*) Mais ont droit à la protection contre les brouillages préjudiciables causés par les stations de ce service secondaire ou des autres services secondaires auxquelles des fréquences sont susceptibles d'être assignées ultérieurement.

MOD 3431 424 (5) Lorsqu'une bande est indiquée dans un renvoi du tableau comme étant attribuée à un service «à titre secondaire» dans une zone moins étendue qu'une Région ou dans un pays déterminé, il s'agit d'un service secondaire (voir les numéros **420** à **423**).
140

NOC 3432 425 (6) Lorsqu'une bande est indiquée dans un renvoi du tableau comme étant attribuée à un service «à titre primaire» ou «à titre permis» dans une zone moins étendue qu'une Région ou dans un pays déterminé, il s'agit d'un service primaire ou d'un service permis dans cette zone ou dans ce pays seulement (voir le numéro **419**).
141

MOD 3433 426 *Attributions additionnells:*

MOD 3434 427 § 9. (1) Lorsqu'une bande est indiquée dans un renvoi du tableau comme étant «de plus attribuée» à um service dans une zone moins étendue qu'unme Région ou dans un pays déterminé, il s'agit d'une attribution «additionnelle»; c'est-à-dire d'une attribution qui s'ajoute dans cette zone ou ce pays au service ou aux services indiqués dans le tableau (voir le numéro **428**).
142

MOD 3435 428 (2) Sil le renvoi ne contient aucune restriction imposée au service ou aux services en question en dehors de l'obligation de ne fonctionner que dans une zone ou un pays déterminé, les stations de ce service ou de ces services fonctionnent sur la base de l'égalité des droits avec les stations de l'autre service ou des autres services primaires indiqués dans les tableau.
143

MOD 3436 429 (3) Si des restrictions sont inposées à une attributions additionnelle en plus de l'obligation de ne fonctionner que dans une zone ou un pays déterminé, le renvoi du tableau en fait mention.
144

NOC 3437 430 *Attributions de remplacement:*

MOD 3438 431 § 10. (1) Lorsqu'une bande est indiquée dans un renvoi du tableau comme étant «attribuée» à um service dans une zone moins étendue qu'une Région ou dans un pays dèterminé, il s'agit d'une attribution «de remplacement», c'est-à-dire d'une attribution qui remplace, dans cette-zone ou ce pays, l'attribution qui est indiquée dans le tableau (voir le numéro **432**).
145

MOD 3439 432 (2) Si le renvoi ne continent aucune restriction imposée aux stations du ou des services qui y sont mentionnés, en dehours de l'obligation de ne fonctionner que dans une zone ou en pays déterminé, les stations de ce ou de ces services fonctionnent sur la base de l'égalité des droits avec les stations des autres services primaires indiqués dans le tableau et auxquels la bande est attribuée dans d'autres zones ou d'autres pays.
146

(MOD) 3440 433 (3) Si des restrictions sont imposées aux stations d'un service qui fait l'objet d'une attribution de remplacement, en plus de l'obligation de ne fonctionner que dans une zone ou un pays déterminé, le renvoi en fait mention.
147

NOC 3441 434 *Dispositions diverses:*

(MOD) 3442 435 § 11. (1) Lorsqu'il est indiqué dans le présent Règlement qu'un service peut fonctionner dans une bande de fréquences sous réserve de ne pas causer de brouillage préjudiciable, cela signifie également que ce service ne peut pas prétendre à la protection contre les brouillages préjudiciables causés par les autres services auxquels la bande est attribuée selon le chapitre III du présent Règlement.

NOC 3443 436 (2) Sauf s'il en est disposé autrement dans un renvoi, le terme «service fixe», lorsqu'il
149 figure dans la section IV du présent article, n'inclut pas les systèmes qui utilisent la propagation par diffusion ionosphérique.

SECTION III

NOC

Disposition du tableau d'attribution des bandes de fréquences

NOC 3444 437 § 12. (1) L'en-tête du tableau qui figure à la section IV du présent article comprend
150 trois colonnes qui correspondent chacune à l'une des Régions (voir le numéro **392**). Selon qu'une attribution occupe la totalité de la largeur du tableau ou seulement une ou deux des trois colonnes, il s'agit d'une attribution mondiale ou d'une attribution Règionale, respectivement.

MOD 3445 438 (2) La bande de fréquences qui failt l'objet de chaque attribution est indiquée
151 dans l'angle supérieur gauche de la case intéressée.

NOC 3446 439 (3) Dans chacune des catégories spécifies aux numéros **415** à **417** les services sont
152 rangés dans l'ordre alphabétique de leurs noms en langue française. Leur ordre n'implique aucune priorité relative au sein de chaque catégorie.

ADD 3446A 440 (4) Lorsqu'une précision est ajoutée entre parenthèses à la suite d'une attribution dans le tableau, latide attribution est restreinte au genre d'exploitation ainsi désigné.

NOC 3447 441 (5) Les nombres qui figurent éventuellement à la partie inférieure d'une case du
153 tableau au-dessous des noms du ou des services auxquels la bande est attribuée, sont des références à des renvois placés en bas de page qui se rapportent à l'ensemble des attributions intéressées.

NOC 3448 442 (6) Les nombres qui figurent éventuellement à la droite du nom d'un service sont
154 des références à des renvois placés en bas de page qui ce se rapportent qu'à ce service.

(MOD) 3449 443 (7) Dans certains cas, les noms de pays qui figurent dans les renvois ont été simplifiés
155 afin d'abréger le texte.

SECTION IV

Tableau d'attribution des bandes de fréquences

(Voir le numéro 208

kHz

9–19,95

Attribution aux services		
Région 1	Région 2	Région 3
Inférieure à 9	(Non attribuée) 444 445	
9–14	RADIONAVIGATION	
14–19,95	FIXE MOBILE MARITIME 448 446 447	

MOD 3451 444 157 Les administrations qui autorisent l'emploi de fréquences inférieures à 9 kHz doivent s'assurer qu'il n'en résulte pas de brouillage préjudiciable aux services auxquels sont attribuées les bandes de fréquences supérieures à 9 kHz (voir le numéro **1816**).

ADD 3451A 455 Les administrations qui effectuent des recherches scientifiques sur des fréquences inférieures 9 kHz sont instamment priées d'en finformer les autres administrations qui pourraient être concernées, afin que ces recherches bénéficient de toute la protection pratiquement réalisable contre les brouillages préjudiciables.

ADD 3452A 446 *Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, la bande 14–17 kHz est, de plus, attribuée au servie de radionavigation à titre permis.

MOD 3453 447 159 Les stations des services auxquels sont attribuées les bandes 14–19,95 kHz et 20,25–70 kHz et, deplus, en Région 1 les bandes 72–84 kHz et 86–90 kHz peuvent émettre des fréquences étalon
et des signaux horaires. Ces stations sont protégées contre les brouillages préjudiciables. En Bulgarie, Hongrie, Mongolie, Pologne, Tchécoslovaquie et URSS, les frequences 25 kHz et 50 kHz seront utilisiées à cette fin dans les mêmes conditions.

MOD 3452 448 158 L'utillisation des bandes 14–19,95 kHz, kHz, 20,05–70 kHz, 70–90 kHz (72–84 kHz et 86–90 kHz en Région 1) et 90–110 kHz par le service mobile maritime est limitée aux stations côtières radiotélégraphiques (A1A et F1B seulement). Exceptionnellement, l'utilization d'émissions de la classe J2B ou J7B est autorisée à condition que la largeur de bande nécessaire ne dépasse pas celle que correspond normalement aux émissions des classes A1A ou F1B dans les bandes considérées.

kHz

19,95–90

Attribution aux services		
Région 1	Région 2	Région 3
19,95–20,05	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (20 kHz)	
20,05–70	FIXE MOBILE MARITIME 448 447 449	
70–72 RADIONAVIGATION 451	**70–90** FIXE MOBILE MARITIME 448 RADIONAVIGATION MARITIME 451 *Radiolocalisation*	**70–72** RADIONAVIGATION 451 *Fixe* *Mobile maritime* 448 450
72–84 FIXE MOBILE MARITIME 448 RADIONAVIGATION 451 447		**72–84** FIXE MOBILE MARITIME 448 RADIONAVIGATION 451

Attribution aux services		
Région 1	Région 2	Région 3
84–86 RADIONAVIGATION 451		**84–86** RADIONAVIGATION 451 *Fixe* *Mobile maritime* 448 450
86–90 FIXE MOBILE MARITIME 448 RADIONAVIGATION 451 447	452	**86–90** FIXE MOBILE MARITIME 448 RADIONAVIGATION 451

ADD 3455A 449 *Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, la bande 67–70 kHz est, de plus, attribuée au servie de radionavigation à titre permis.

MOD 3459 450 165 *Catégorie de service différente:* au Bangladesh, en Iran et au Pakistan l'attribution des bandes 70–72 kHz et 84–86 kHz aux services fixe et mobile maritime est à titre primaire (voir le numéro **425**).

MOD 3456 451 162 *L'utilisation des bandes* 70–90 kHz (70–86 kHz en Région 1) et 110–130 kHz (112–130 kHz en Région 1) par le service de radionavigation, est limitée aux systèmes à ondes entretenues.

MOD 3458 452 164 En Région 2, les stations du service de radionavigation maritime ne pouvent être établies et fonctionner dans les bandes 70–90 kHz et 110–130 kHz que sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, avec les administrations dont les services auxquels ces bandes sont attribuées sont susceptibles d'être affectés. Cependant, les stations des services fixe, mobile maritime et de radiolocalisation ne doivent pas causer de brouillage préjudiciable aux stations du service de radionavigation maritime lorsqu'elles établies à la suite de tels accords.

kHz

90–110

Attribution aux services		
Région 1	Région 2	Région 3
90–110	RADIONAVIGATION 453 *Fixe* *Mobile maritime* 448 454	

ADD 3461A 453 Les administration qui exploitent des stations du service de radionavigation dans la bande 90–110 kHz sont instamment priées d'en coordonner les caractéristiques techniques et d'exploitaton de manière à éviter des brouillages préjudiciables aux services assurés par ces stations.

MOD 3461 454 167 Les émissions des classes A1A ou F1B, A2C, A3C, F1C ou F3C sont seules autorisées pour les stations du service fixe dans les bandes attribuées à ce service entre 90 kHz et 160 kHz (148,5 kHz en Région 1) et pour les stations du service mobile maritime dans les bandes attribuées à ce service entre 110 kHz et 160 kHz (148,5 kHz en Région 1). Exceptionnellement, les émissions de la classe J2B ou J7B sont également autorisées dans la bande 110–160 kHz (148,5 kHz en Région 1) pour les stations du service mobile maritime.

kHz

110–130

Attribution aux services		
Région 1	Région 2	Région 3
110–112 FIXE MOBILE MARITIME RADIONAVIGATION 454	**110–130** FIXE MOBILE MARITIME RADIONAVIGATION MARITIME 451 *Radiolocalisation*	**110–112** FIXE MOBILE MARITIME RADIONAVIGATION 451 454

Attribution aux services		
Région 1	Région 2	Région 3
112–115 RADIONAVIGATION 451		**112–117,6** RADIONAVIGATION 451 *Fixe* *Mobile maritime* 454 455
115–117,6 RADIONAVIGATION 451 *Fixe* *Mobile maritime* 454 456		
117,6–126 FIXE MOBILE MARITIME RADIONAVIGATION 451 454		**117,6–126** FIXE MOBILE MARITIME RADIONAVIGATION 451 454
126–129 RADIONAVIGATION 451		**126–129** RADIONAVIGATION 451 *Fixe* *Mobile maritime* 454 455
129–130 FIXE MOBILE MARITIME RADIONAVIGATION 451 454.	452 454	**129–130** FIXE MOBILE MARITIME 448 RADIONAVIGATION 451 454

MOD 3464 455 170 *Catégorie de service différente:* au Bangladesh, en Iran et au Pakistan, l'attribution des bandes 112–117,6 kHz et 126–129 kHz aux services fixe et mobile maritime est à titre primaire (voir le numéro **425**).

MOD 3463 456 169 *Catégorie de service différente:* en République fédérale d'Allemagne, l'attribution de la bande 115–117,6 kHz aux services fixe et mobile maritime est à titre primaire (voir le numéro **425**) et l'attribution au service de radionavigation est à titre secondaire (voir le numéro **424**).

kHz

130–285

Attribution aux services		
Région 1	Région 2	Région 3
130–148,5 MOBILE MARITIME / FIXE / 454 457 458	**130–160** FIXE MOBILE MARITIME 454	**130–160** FIXE MOBILE MARITIME RADIONAVIGATION 454
148,5–255 RADIODIFFUSION 458 460 461 462	**160–200** FIXE 459	**160–190** FIXE *Radionavigation aéronautique*
	190–200 RADIONAVIGATION AÉRONAUTIQUE	
255–283,5 RADIODIFFUSION / RADIONAVIGATION AÉRONAUTIQUE / 463 458 462 464	**200–285** RADIONAVIGATION AÉRONAUTIQUE *Mobile aéronautique*	

MOD **3466** **457** *Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 130-148,5 kHz est, de plus, attribuée au service de radionavigation à titre secondaire. A l'intérieur de ces pays et entre eux, ce service fonctionne sur la base de l'égalité des droits.

ADD **3466A** **458** En Région 1, le changement des limites de bande de 150 kHz et 285 kHz à 148,5 kHz et 283,5 kHz aura lieu le 1er février 1986 pur la limite inférieure et 1er février 1990 pour la limite supérieure (voir la Résolution **500**).

MOD **3472** 179 **459** Dans les zones polaires de la Région 2 (au nord de 60° N et au sud de 60° S) sujettes aux perturbations dues aux aurores, le service fixe aéronautique est le service primaire dans bande 160–190 kHz.

MOD **3469** 176 **460** *Attribution de remplacement:* dans les pays suivants: Angola, Botswana, Burundi, Congo, Malawi, Rwanda, République Sudafricaine et Zaïre, la bande 160–200 kHz est attribuée au service fixe à titre primaire.

ADD **3469AB** **461** *Attribution additionnelle:* en Somalie, la bande 200–255 kHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire.

ADD **3469A** **462** *Attribution de remplacement:* dans les pays suivants: Angola, Botswana, Burundi, Cameroun, République Centrafricaine, Congo, Ethiopie, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibie, Nigeria, Oman, Rwanda, République Sudafricaine, Swaziland, Tanzanie, Tchad, Zaire, Zambie et Zimbabwe, la bande 200–283,5 kHz est attribuée au service de radionavigation aéronautique à titre primaire.

ADD **3469AC** **463** *Catégorie de service différente:* au Soudan et au Yémen (RDP du) l'attribution de la bande 255–283,5 kHz au service de radionavigation aéronautique est à titre primaire (voir le numéro **425**).

ADD **3472A** **464** *Attribution de remplacement:* en Tunisie, la bande 255–283,5 kHz est attribuée au service de radiodiffusion à titre primaire.

kHz

283,5–405

Attribution aux services		
Région 1	Région 2	Région 3
283,5–315 RADIONAVIGATION MARITIME (radiophares) 466 / RADIONAVIGATION AÉRONAUTIQUE / 458 465	**285–315** RADIONAVIGATION MARITIME (radiophares) 466 / RADIONAVIGATION AÉRONAUTIQUE /	
315–325 RADIONAVIGATION AÉRONAUTIQUE *Radionavigation maritime* (radiophares) 466 465 467	**315–325** RADIONAVIGATION MARITIME (radiophares) 466 *Radionavigation aéronautique*	**315–325** RADIONAVIGATION AÉRONAUTIQUE RADIONAVIGATION MARITIME (radiophares) 466
325–405 RADIONAVIGATION AÉRONAUTIQUE 465	**325–335** RADIONAVIGATION AÉRONAUTIQUE *Mobile aéronautique* *Radionavigation maritime* (radiophares) **335–405** RADIONAVIGATION AÉRONAUTIQUE *Mobile aéronautique*	**325–405** RADIONAVIGATION AÉRONAUTIQUE *Mobile aéronautique*

MOD **3471** 178 **465** Les stations norvégiennes du service fixe situées dans les zones septentrionales (au nord de 60° N) sujettes aux perturbations dues aux aurores sont autorisées à continuer de fonctionner en employant quatre fréquences dans les bandes 283,5–490 kHz et 510–526,5 kHz.

ADD **3472B** **466** Dans la bande 285–325 kHz (283,5–325 kHz en Région 1) dans le service de radionavigation maritime, les stations de radiophare peuvent ausai transmettre des informations supplémentaires utiles à la navigation, utilisant des techniques à bande étroite, à condition de ne pas affecter de façon significative la fonction premiére du radiophare.

MOD **3473** **467** *Catégorie de service différente:* en URSS et dans les zones bulgare, roumaine et turque de la Mer Noire, l'attribution de la bande 315–325 kHz au service de radio navigation maritime est à titre primaire (voir le numéro **425**), dans les conditions suivantes:

a) Dans les zones de la mer Noire et de la mer Blanche, le service de radionavigation maritime est le service primaire et le service de radionavigation aéronautique est le service permis;

b) Dans la zone de la mer Baltique, l'assignation de fréquence de cette bande à de nouvelles stations de radionavigation maritime ou aéronautique devra être précédée d'une consultation entre les administrations intéressées.

kHz

405–415

Attribution aux services		
Région 1	Région 2	Région 3
405–415 RADIONAVIGATION 468 465	**405–415** RADIONAVIGATION 468 *Mobile aéronautique*	

MOD **3475** **468** La fréquence 410 kHz est destinée à la radiogoniométrie dans le service de radionavigation maritime. Les autres
182 services de radionavigation auxquels la bande 405–415 kHz est attribuée ne doivent pas causer de brouillage préjudiciable à la radiogoniométrie dans la bande 406,5–413,5 kHz.

kHz

415–1606,5

<table>
<tr><td colspan="3">Attribution aux services</td></tr>
<tr><td>Région 1</td><td>Région 2</td><td>Région 3</td></tr>
<tr><td>415–435
RADIONAVIGATION AÉRONAUTIQUE
/ MOBILE MARITIME / 470
465</td><td rowspan="2">415–495
MOBILE MARITIME 470
469 471</td><td rowspan="2"></td></tr>
<tr><td>435–495
MOBILE MARITIME / 470
Radionavigation aéronautique
465 467</td></tr>
<tr><td>495–505</td><td colspan="2">MOBILE (détresse et appel)
472</td></tr>
<tr><td rowspan="2">505–526,5
MOBILE MAKITIME 470
/ RADIONAVIGATION AÉRONAUTIQUE 473
465 471 474 475 476</td><td>505–510
MOBILE MARITIME 470
471</td><td rowspan="2">505–526,5
MOBILE MARITIME 470
/ RADIONAVIGATION AÉRONAUTIQUE /
Mobile aéronautique
Mobile terrestre
471</td></tr>
<tr><td>510–525
MOBILE
RADIONAVIGATION AÉRONAUTIQUE</td></tr>
<tr><td rowspan="2">526,5–1606,5
RADIODIFFUSION
478</td><td>525–535
RADIODIFFUSION 477
RADIONAVIGATION AÉRONAUTIQUE</td><td>526,5–535
RADIODIFFUSION
Mobile
479</td></tr>
<tr><td>535–1605
RADIODIFFUSION</td><td>535–1606,5
RADIODIFFUSION</td></tr>
</table>

ADD **3479A** **469** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Australie, Chine, Territoires français d'Outre-Mer de la Région 3, Inde, Japon et Papua-Nouvelle-Guinée, la bande 415–495 kHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis.

MOD **3479** **470** L'utilisations des bandes 415–495 kHz et 505–526,5 kHz (505–510 kHz en Région 2) par le service mobile
186 maritime est limitée à la radiotélégraphie.

ADD **3479B** **471** Les bandes 490–495 kHz et 505–510 kHz sont soumises aux dispositions du numéro **3018** jusqu'à ce que les dispositions de la Recommandation 200 aient été mises en application.

NOC **3480** **472** La fréquence 500 kHz est la fréquence internationale d'appel et de détresse en radiotélégraphie. Les conditions
187 d'emploi de cette fréquence sont fixées dans l'article 38.

MOD 3481 473 Em Région 1, dans la bande 505–526,5 kHz, les administrations qui exploitent des stations du service de radionavigation aéronautique doivent prendre les mesures techniques nécessaires pour éviter que des brouillages préjudiciables soient causés au service mobile maritime.

ADD 3480A 474 Dans les pays suivants: République fédérale d'Allemagne, Belgique, Espagne, France, Islande, Italie, Norvège, Pays-Bas, Royaume-Uni, Suède et Yougoslavie, la fréquence 518 kHz est utilisée à titre expérimental pour l'émission, par les stations côtières à destination des navires, de bulletins météorologiques et d'avis aux navigateurs par télégraphie à impression directe à bande étroite.

MOD 3478 185 475 Dans la bande 515,5–526,5 kHz, l'Autriche peut continuer à exploiter uniquement les stations de radiodiffusion qui sont mentionnées dans le Protocole additionnel III aux Actes finals de la Conférence administrative de radiodiffusion à ondes kilométriques et hectométriques (Régions 1 et 3) (Genève, 1975). Cette exploitation est autorisée jusqu'à l'entrée en vigueur d'une révision du Plan de Genève, 1975, et sous réserve qu'il n'en résulte pas de brouillage préjudiciable au service mobile maritime et au service de radionavigation aéronautique.

ADD 3478A 476 *Attribution additionnelle:* au Royaume-Uni, la bande 519,5–526,5 kHz est, de plus, attribuée au service de radiodiffusion, à titre secondaire, pour la transmission de renseignements d'utilité publique.

MOD 3484 191 477 En Région 2, dans la bande 525–535 kHz, la puissance de l'onde porteuse des stations de radiodiffusion ne doit pas dépasser 1 kilowatt pendant le jour et 250 watts pendant la nuit.

MOD 3483 190 478 *Attribution additionnelle:* dans les pays suivants: Angola, Botawana, Lesotho, Malawi, Mozambique, Namibie, République Sudafricaine, Swaziland, Zambie, et Zimbabwe, la bande 526,5–535 kHz est, de plus, attribuée au service mobile à titre secondaire.

ADD 3484A 479 *Attribution additionnelle:* en Chine, la bande 526,5–535 kHz est, de plus, attribuée au service de radionavigation aéronautique à titre secondaire.

kHz

1605–1800

Attribution aux services		
Région 1	Région 2	Région 3
1606,5–1625 MOBILE MARITIME / FIXE / / MOBILE TERRESTRE / 483 484	**1605–1625** RADIODIFFUSION 480 481	**1606,5–1800** FIXE MOBILE RADIOLOCALISATION RADIONAVIGATION
1625–1625 RADIO LOCALISATION 487 485 486	**1625–1705** RADIODIFFUSION 480 / FIXE / / MOBILE / *Radiolocalisation* 481	
1635–1800 MOBILE MARITIME / FIXE / / MOBILE TERRESTRE / 483 484 488	**1705–1800** FIXE MOBILE RADIOLOCALISATION RADIONAVIGATION AÉRONAUTIQUE	482

ADD 3484B 480 En Région 2, l'utilisation de la bande 1605–1705 kHz par les stations du service de radiodiffusion est subordonnée à l'élaboration d'un plan qui devra être établi par une conférence administrative régionale des radiocommunications (voir la Recommandation **504**).

ADD 3484C 481 En Région 2, jusqu'aux dates fixées par la conférence administrative régionale des radiocommunications dont il est fait mention dans la numéro **480**, la bande 1605–1705 kHz est attribuée aux services fixe, mobile et de radionavigation aéronautique, à titre primaire et au service de radiolocalisation à titre secondaire (voir la Recommandation **504**).

ADD 3492B 482 *Attribution additionnelle:* dans les pays suivants: Australie, Indonésie, Nouvelle-Zélande, Philippines, Singapour, Sri Lanka et Thaïlande, la bande 1606,5–1705 kHz est, de plus, attribuée au service de radiodiffusion à titre secondaire.

ADD 3485A 483 *Catégorie de service différente:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Nigeria, Pologne, République Démocratique Allemande, Tchad, Tchécoslovaquie et URSS, dans les bandes 1606,5–1625 kHz, 1635–1800 kHz et 2107–2160 kHz, l'attribution aux services fixe et mobile terrestre est à titre primaire (voir le numéro **425**).

MOD 3490 195A 484 Des pays de la Région 1 utilisent des systèmes de radiorepérage dans les bandes 1606,5–1625 kHz, 1635–1800 kHz, 1850–2160 kHz, 2194–2300 kHz, 2502–2850 kHz et 3500–3800 kHz. L'installation et l'exploitation de tels systèmes sont sujettes à un accord obtenu suivant la procédure prévue à l'article 14. La puissance moyenne rayonnée de ces stations ne doit pas dépasser 50 W.

ADD 3485B 485 *Attribution additionnelle:* dans les pays suivants: Angola, Bulgarie, Hongrie, Mongolie, Nigeria, Pologne, République Démocratique Allemande, Tchad, Tchécoslovaquie et URSS, les bandes 1625–1635 kHz, 1800–1810 kHz et 2160–2170 kHz sont, de plus, attribuées aux services fixe et mobile terrestre à titre primaire, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3490B** **486** En Région 1, dans les bandes 1625–1635 kHz, 1800–1810 kHz et 2160–2170 kHz (sauf dans les pays mentionnés au numéro **485** et dans les pays mentionnés au numéro **499** en ce qui concerne la bande 2160–2170 kHz), les stations existantes des services fixe et mobile, sauf mobile aéronautique [ainsi que les stations du service mobile aéronautique (OR) dans la bande 2160–2170 kHz], peuvent continuer à fonctionner à titre primaire jusqu'à ce que des assignations de remplacement satisfaisantes aient été trouvées et mises en oeuvre conformément aux dispositions de la Résolution **38**.

ADD **3490A** **487** En Régin 1, l'installation et l'exploitation de stations du service de radiolocalisation dans les bandes 1625–1635 kHz, 1800–1810 kHz et 2160–2170 kHz doivent faire l'objet d'un accord obtenu suivant la procédure prévue à l'article 14 (voir aussi le numéro **486**. La puissance moyenne rayonnée des stations de radiolocalisation ne doit pas dépasser 50 watts. Les systèmes à impulsions sont interdits.

MOD **3488** **488** Dans pays suivants: République fédérale d'Allemagne, Danemark, Finlande, Hongrie, Irlande, Israël, Jordanie, Malte, Norvège, Pologne, République Démocratique Allemande, Royaume-Uni, Suède, Tchécoslovaquie et URSS, les
194 administrations peuvent attribuer jusqu'à 200 kHz à leur service d'amateur denas les bandes 1715–1800 kHz et 1850–2000 kHz. Cependant, en procédant à ces attributions dans ces bandes, elles doivent, après consultation préalable des administrations des pays voisins, prendre les mesures éventuellement nécessaires pour empêcher que leur service d'amateur cause des brouillages préjudiciables aux services fixe et mobile des autres pays. La puissance moyeme de toute station d'antateur ne doit pas dépasser 10 watts.

kHz

1800–2000

Attribution aux services		
Région 1	Région 2	Région 3
1800–1810 RADIO LOCALISATION 487 485 486	**1800–1850** AMATEUR	**1800–2000** AMATEUR FIXE MOBILE, sauf mobile aéronautique RADIONAVIGATION *Radiolocalisation*
1810–1850 AMATEUR 490 491 492 493	489	
1850–2000 FIXE MOBILE, sauf mobile aéronautique 484 488 495	**1850–2000** AMATEUR FIXE MOBILE, sauf mobile aéronautique RADIOLOCALISATION RADIONAVIGATION 489 494	489

MOD **3492** **489** En Région 2, les stations du système Loran qui fonctionent dans la bande 1800–2000 kHz cesseront d'être exploitées au plus tard le 31 décembre 1982. En Région 3, la fréquence de travail du système Loran est soit 1850 kHz soit 1950 kHz; les bandes occupées sont respectivement 1825–1875 kHz et 1925–1975 kHz. Les autres services auxquels est attribuée la bande 1800–2000 kHz peuvent employer n'importe quelle fréquence de cette bande à condition de ne pas causer de brouillage préjudiciable au système Loran fonctionnant sur les fréquences 1850 kHz ou 1950 kHz.

ADD **3492D** **490** *Attribution de remplacement:* dans les pays suivants: République fédérale d'Allemagne, Angola, Autriche, Belgique, Bulgarie, Cameroun, Congo, Danemark, Egypte, Espagne, Ethiopie, France, Grèce, Italie, Liban, Luxembourg, Malawi, Pays-Bas, Portugal, Syrie, République Démocratique Allemande, Somalie, Tanzanie, Tunisie, Turquie et URSS, la bande 1810–1830 kHz est attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD **3492E** **491** *Attribution additionnelle:* dans les pays suivants: Arabie Saoudite, Iraq, Israël, Lybie, Pologne, Roumanie, Tchad, Tchécoslovaquie, Togo et Yougoslavie, la bande 1810–1830 kHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD **3492C** **492** En Région 1, la bande 1810–1850 kHz est utilisée par le service d'amateur sous réserve que des assignations de remplacement satisfaisantes aient été trouvées et mises en oeuvre conformément aux dispositions de la Résolution **38**, pour les fréquences de toutes les stations existantes des services fixe et mobile, sauf mobile aéronautique, fonctionnant dans cette bande (sauf les stations des pays mentionnés aux numéro **490, 491** et **493**. Après achèvement d'un transfert satisfaisant, dans les pays situés en totalité ou en partie au nord du parallèle 40° N, l'autorisation d'utiliser la bande 1810–1830 kHz ne sera donnée au service d'amateur qu'après consultation des pays mentionnés aux numéros **490** et **491**, a fin de définir les mesures à prendre pour prévenir les brouillages préjudiciables entre les stations d'amateur et les stations des autres services fonctionnant conformément aux renvois **490** et **491**.

ADD **3492F** **493** *Attribution de remplacement:* au Burundi et Lesotho, la bande 1810–1850 kHz est attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD **3492A** **494** *Attribution de remplacement:* dans les pays suivants: Argentine, Bolivie, Chili, Mexique, Paraguay, Pérou, Uruguay et Venezuela, la bande 1850–2000 kHz est attribuée aux services fixe, mobile sauf mobile aéronautique, de radiolocalisation et de radionavigation, à titre primaire.

MOD **3499** **495** En Région 1, en faisant des assignations aux stations des services fixe et mobile dans les bandes 1850–2045 kHz, 2194–2498 kHz, 2502–2625 kHz et 2650–2850 kHz, les administrations doivent tenir compte des besoins particuliers du service mobile maritime.

kHz

2000–2170

Attribution aux services		
Région 1	Région 2	Région 3
2000–2025 FIXE MOBILE, sauf mobile aéronautique (R) 484 495	**2000–2065** FIXE MOBILE	
2025–2045 FIXE MOBILE, sauf mobile aéronautique (R) *Auxiliares de la météorologie* 496 484 495		
2045–2160 MOBILE MARITIME / FIXE / / MOBILE TERRESTRE / 483 484	**2065–2107** MOBILE MARITIME 497 498	
2160–2170 RADIOLOCALISATION 487 485 486 499	**2107–2170** FIXE MOBILE	

ADD **3493C** **496** En Région 1, l'utilisation de la bande 2025–2045 kHz par le service des auxiliaires de la météorologie est limitée aux stations de bouées océanographiques.

MOD **3493** **497** 200 En Région 2, excepté au Groenland, les stations côtières et les stations de navire qui utilisent la radiotéléphonie dans la bande 2065–2107 kHz sont limitées aux émissions de la classe R3E ou J3E la puissance en crête ne dépassant pas 1 kW. Il convient qu'elles utilisent, de préférence, les fréquences porteuses suivantes: 2065,0 kHz, 2079,0 kHz, 2082,5 kHz, 2086,0 kHz, 2093,0 kHz, 2096,5 kHz, 2100,0 kHz et 2103,5 kHz. En Argentine, au Brésil et en Uruguay, on utilise aussi à cet effet les fréquences porteuses 2068,5 kHz et 2075,5 kHz, les fréquences comprises dans la bande 2072–2075,5 kHz étant utilisées conformément au numéro **4245**.

ADD **3493B** **498** En Régions 2 et 3, sous réserve de ne pas causer de brouillage préjudiciable au service mobile maritime, les fréquences comprises entre 2065 kHz et 2107 kHz pouvent être utilisées pawr les stations du service fixe communiquant uniquement à l'intérieur des frontières nationales. La puissance moyenne de ces stations ne doit pas dépasser 50 W. Lors de la notification de ces fréquences, il conviendra d'attirer l'attention du Comité international d'enregistrement des fréquences sur ces dispositions.

ADD **3493D** **499** *Attribution additionnelle:* dans les pays suivants: Arabie Saoudite, Botawana, Ethiopie, Iraq, Lesotho, Libye, Malawi, Somalie, Swaziland et Zambie, la bande 2160–2170 kHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique (R), à titre primaire. Les stations de ces services ne doivent pas utiliser une puissance moyenne dépassant 50 W.

kHz

2170–2194

Attribution aux services		
Région 1	Région 2	Région 3
2170–2173,5	MOBILE MARITIME	
2173,5–2190,5	MOBILE (détresse et appel) 500 501	
2190,5–2194	MOBILE MARITIME	

MOD **3494** **500** La fréquence 2182 kHz est la fréquence internationale de détresse et d'appel en radiotéléphonie. Les conditions d'emploi de la bande 2173,5–2190,5 kHz sont fixées aux articles 38 et 60.

NOC **3495** **501** 201A Les fréquences 2182 kHz, 3023 kHz, 5680 kHz, 8364 kHz, 121,5 MHz, 156,8 MHz et 243 MHz peuvent, de plus, être utilisées conformément aux procédures en vigueur pour les services de radiocommunication de Terre, pour les opérations de recherche et de sauvetage des véhicules spatiaux habités.

Il en est de même pour les fréquences 10 003 kHz, 14 993, kHz et 19 993 kHz mais, pour chacune de celles-ci, les émissions doivent être limitées à une bande de ± 3 kHz de part et d'autre de la fréquence.

kHz

2194–2502

Attribution aux services		
Région 1	Région 2	Région 3
2194–2300 FIXE MOBILE, sauf mobile aéronautique (R) 484 495 502	**2194–2300** FIXE MOBILE 502	
2300–2498 FIXE MOBILE, sauf mobile aéronautique (R) RADIODIFFUSION 503 495	**2300–2495** FIXE MOBILE RADIODIFFUSION 503	
2498–2501 FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (2500 kHz)	**2495–2501** FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (2500 kHz)	
2501–2502 FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recherche spatiale*		

ADD **3495A** **502** *Attribution de remplacement:* dans les pays suivants: Belgique, Chypre, Danemark, Espagne, France, Grèce, Islande, Italie, Malte, Norvège, Pays-Bas, Portugal, Royaume-Uni, Singapour, Sri Lanka, Suède, Turquie et Yougoslavie, la bande 2194–2300 kHz est attribuée au service maritime à titre primaire et aux services fixe et mobile terrestre à titre permis.

MOD **3496** **503** Pour les conditions d'emploi des bandes 2300–2495 kHz (2498 kHz en Région 1), 3200–3400 kHz, 4750–4995 kHz et 5005–5060 kHz par le service de radiodiffusion, voir les numéros **406** à **410**, **411** et **2666** à **2673.**
202

kHz

2502–2850

Attribution aux services		
Région 1	Région 2	Région 3
2502–2625 FIXE MOBILE, sauf mobile aéronautique (R) 484 495 502	**2502–2505** FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES	
2625–2650 MOBILE MARITIME RADIONAVIGATION MARITIME 484	**2505–2850** FIXE MOBILE	
2650–2850 FIXE MOBILE, sauf mobile aéronautique (R) 484 495		

ADD **3497A** **504** *Attribution de remplacement:* dans les pays suivants: Belgique, Chypre, Danemark, Espagne, France, Grèce, Iraq, Italie, Malte, Norvège, Pays-Bas, Portugal, Royaume-Uni, Suède, Turquie et Yougoslavie, la bande 2502–2625 kHz est attribuée au service mobile maritime à titre primaire et aux services fixe et mobile terrestre à titre permis.

kHz

2850–3230

Attribution aux services		
Région 1	Région 2	Région 3
2850–3025	MOBILE AÉRONAUTIQUE (R) 501 505	
3025–3155	MOBILE AÉRONAUTIQUE (OR)	
3155–3200	FIXE MOBILE, sauf mobile aéronautique (R) 506 507	
3200–3230	FIXE MOBILE, sauf mobile aéronautique (R) RADIODIFFUSION 503 506	

MOD **3500** **505** Les fréquences porteuses (fréquences de référence) 3023 kHz et 5680 kHz peuvent, de plus, être utilisées par les 205A stations du service mobile maritime qui participent à des opérations de recherche et de sauvetage coordonnées, dans les conditions spécifiées aux numéros **2980** et **2984** respectivement.

ADD **3496A** **506** Les administrations sont instamment priées d'autoriser l'utilisation de la bande 3155–3195 kHz afin de mettre à disposition, sur une base mondiale, une voie pour des appareils de correction auditive sans fil de faible puissance. Elles pourront assigner pour ces mêmes appareils des voies supplémentaires dans les bandes comprises entre 3155 kHz et 3400 kHz afin de faire face à ds besoins locaux.

Il convient de noter que les fréquences de la gamme comprise entre 3000 kHz et 4000 kHz conviennent aux appareils de correction auditive destinés à fonctionner à de courtes distances dans le champ d'induction.

ADD **3498A** **507** *Attribution de remplacement:* dans les pays suivants: Belgique, Cameroun, Chypre, Côte d'Ivoire, Danemark, Egypte, Espagne, France, Grèce, Islande, Italie, Libéria, Malte, Norvège, Pays-Bas, Royaume-Uni, Singapour, Sri-Lanka, Suède, Togo, Turquie et Yougoslavie, la bande 3155–3200 kHz est attribuée au service mobile maritime à titre primaire et aux services fixe et mobile terrestre à titre permis.

kHz

3230–4000

<table>
<tr><td colspan="3">Attribution aux services</td></tr>
<tr><td>Région 1</td><td>Région 2</td><td>Région 3</td></tr>
<tr><td>3230–3400</td><td colspan="2">FIXE
MOBILE, sauf mobile aéronautique
RADIODIFFUSION 503
506 508</td></tr>
<tr><td>3400–3500</td><td colspan="2">MOBILE AÉRONAUTIQUE (R)</td></tr>
<tr><td>3500–3800
AMATEUR 510
FIXE
MOBILE, sauf mobile aéronautique
484</td><td>3500–3750
AMATEUR 510
509 511</td><td rowspan="2">3500–3800
AMATEUR 510
FIXE
MOBILE</td></tr>
<tr><td rowspan="2">3750–4000
AMATEUR 510
FIXE
MOBILE, sauf mobile aéronautique (R)</td></tr>
<tr><td>3800–3900
FIXE
MOBILE AÉRONAUTIQUE (R)
MOBILE TERRESTRE</td><td></td></tr>
<tr><td>3900–3950
MOBILE AÉRONAUTIQUE (OR)
513</td><td></td><td>3900–3950
MOBILE AÉRONAUTIQUE
RADIODIFFUSION</td></tr>
</table>

Attribution aux services		
Région 1	Région 2	Région 3
3950–4000		**3950–4000**
FIXE		FIXE
RADIODIFFUSION		RADIODIFFUSION
	511 512 514 515	516

ADD **3499B** **508** *Attribution additionnelle:* dans les pays suivants: Australie, Brésil, Canada, États-Unis, Japon, Mexique, Nouvelle-Zélande, Pérou et Uruguay, la bande 3230–3400 kHz est, de plus, attribuée au service de radiolocalisation à titre secondaire.

ADD **3500B** **509** *Attribution additionnelle:* dans les pays suivants: Honduras, Mexique, Pérou et Venezuela, la bande 3500–3750 kHz est, de plus, attribuée aux services fixe et mobile à titre primaire.

ADD **3499A** **510** La Résolution **640** régit l'utilisation, en cas de catastrophe naturelle, des bandes attribuées au service d'amateur aux fréquences 3,5 MHz, 7,0 MHz, 10,1 MHz, 14,0 MHz, 18,068 MHz, 21,0 MHz, 24,89 MHz et 144 MHz.

ADD **3500D** **511** *Attribution additionnelle:* au Brésil, la bande 3700–4000 kHz est, de plus, attribuée au service de radiolocalisation à titre primaire.

ADD **3500C** **512** *Attribution de remplacement:* dans les pays suivants: Argentine, Bolivie, Chili, Equateur, Paraguay, Pérou et Uruguay, la bande 3750–4000 kHz est attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD **3501A** **513** *Attribution de remplacement:* dans les pays suivants: Botswana, Lesotho, Malawi, Mozambique, Namibie, République Sudafricaine, Swaziland, Zambie et Zimbabwe, la bande 3900–3950 kHz est attribuée au service de radiodiffusion à titre primaire. L'utilisation de cette bande par le service de radiodiffusion est soumise à un accord obtenu suivant la procédure prévue à l'article **14** avec les pays voisins dont les services fonctionnent conformément au tableau.

ADD **3502** **514** *Attribution additionnelle:* au Canada, la bande 3950–4000 kHz est, de plus, attribuée au service de radiodiffusion à titre primaire. La puissance des stations de radiodiffusion exploitées dans cette bande ne doit pas dépasser la valeur nécessaire pour assurer un service national à l'intérieur des frontières de ce pays et ne doit pas causer de brouillage préjudiciable aux autres services exploités conformément au tableau.

ADD **3502AA** **515** *Attribution additionnelle:* au Groenland, la bande 3950–4000 kHz, est, de plus, attribuée au service de radiodiffusion à titre primaire. La puissance des stations de radiodiffusion exploitées dans cette bande ne doit pas dépasser la valeur nécessaire pour assurer un service national et ne doit en aucun cas être supérieure à 5 kW.

ADD **3502B** **516** En Région 3, les stations des services auxquels est attribuée la bande 3995–4005 kHz peuvent émettre des fréquences étalon et des signaux horaires.

kHz

4000–4650

Attribution aux services		
Région 1	Région 2	Région 3
4000–4063	FIXE MOBILE MARITIME 517 516	
4063–4438	MOBILE MARITIME 520 518 519	
4438–4650 FIXE MOBILE, sauf mobile aéronautique (R)		**4438–4650** FIXE MOBILE, sauf mobile aéronautique (R)

ADD **3502C** **517** L'utilisation de la bande 4000–4063 kHz par le service mobile maritime est limitée aux stations de navire fonctionnant en radiotéléphonie (voir le numéro **4373**).

MOD **3503** **518** Dans les pays suivants: Afghanistan, Argentine, Australie, Botswana, Chine, Inde, Swaziland, Tchad et URSS, dans les bandes 4063–4123 kHz, 4130–4133 kHz et 4408–4438 kHz, les stations du service fixe à puissance limitée et situées à plus de 600 km des côtes, sont autorisées à fonctionner à condition de ne pas causer de brouillage préjudiciable au service mobile maritime.
208

MOD **3504** **519** A condition qu'aucun brouillage préjudiciable ne soit causé au service mobile maritime, les fréquences des bandes 4063–4123 kHz et 4130–4438 kHz peuvent être utilisées exceptionnellement par des stations du service fixe, d'une puissance moyenne ne dépassant pas 50 W, communiquant seulement à l'intérieur des frontières nationales.
209

MOD **3505** **520** Pour l'utilisation de la fréquence porteuse 4125 kHz dans la zone des Régions 1 et 2 situées au sud du parallèle 15° N, y compris de Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° N, voir le numéro **2982**.
209A

kHz

4650–5005

Attribution aux services		
Région 1	Région 2	Région 3
4650–4700	MOBILE AÉRONAUTIQUE (R)	
4700–4750	MOBILE AÉRONAUTIQUE (OR)	
4750–4850 FIXE MOBILE AÉRONAUTIQUE (OR) MOBILE TERRESTRE RADIODIFFUSION 503	**4750–4850** FIXE MOBILE, sauf mobile aéronautique (R) RADIODIFFUSION 503	**4750–4850** FIXE RADIODIFFUSION 503 *Mobile terrestre*
4850–4995	FIXE MOBILE TERRESTRE RADIODIFFUSION 503	
4995–5003	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (5000 kHz)	
4995–5005	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recherche spatiale*	

kHz

5005–5480

Attribution aux services		
Région 1	Région 2	Région 3
5005–5060	FIXE RADIODIFFUSION 503	
5060–5250	FIXE MOBILE, sauf mobile aéronautique 521	
5250–5450	FIXE MOBILE, sauf mobile aéronautique	
5450–5480 FIXE MOBILE AÉRONAUTIQUE (OR) MOBILE TERRESTRE	**5450–5480** MOBILE AÉRONAUTIQUE (R)	**5450–5480** FIXE MOBILE AÉRONAUTIQUE (OR) MOBILE TERRESTRE

ADD **3496AA** **521** *Catégorie de service différente:* en URRS, l'attribution de la bande 5130–5250 kHz au service mobile, sauf mobile aéronautique, est à titre primaire (voir le numéro **425**).

kHz

5480–6765

Attribution aux services		
Région 1	Région 2	Région 3
5480–5680	MOBILE AÉRONAUTIQUE (R) 501 505	

Attribution aux services		
Région 1	Région 2	Région 3
5680–5730	MOBILE AÉRONAUTIQUE (OR) 501 505	
5730–5950 FIXE MOBILE TERRESTRE	**5730–5950** FIXE MOBILE, sauf mobile aéronautique (R)	**5730–5950** FIXE MOBILE, sauf mobile aéronautique (R)
5950–6200	RADIODIFFUSION	
6200–6525	MOBILE MARITIME 523 522	
6525–6685	MOBILE AÉRONAUTIQUE (R)	
6685–6765	MOBILE AÉRONAUTIQUE (OR)	

MOD **3507** **522** A condition qu'aucun brouillage préjudiciable ne soit causé au service mobile maritime, les bandes 6200–6213,5 kHz et 6220,5–6525 kHz peuvent être utilisées exceptionnellement par des stations du service fixe, d'une puissance moyenne ne dépassant pas 50 W, communiquant seulement à l'intérieur des frontières nationales. Lors de la notification de ces fréquences, l'attention du Comité international d'enregistrement des fréquences sera attirée sur ces dispositions.
211

MOD **3508** **523** Pour l'utilisation de la fréquence porteuse 6215,5 kHz dans la zone de la Région 3 située au sud du parallèle 25°N, voir le numéro **2986**.
211A

kHz

6765–7300

Attribution aux services		
Région 1	Région 2	Région 3
6765–7000	FIXE *Mobile terrestre* 525 524	
7000–7100	AMATEUR 525 AMATEUR PAR SATELLITE 526 527	
7100–7300 RADIODIFFUSION	**7100–7300** AMATEUR 510 528	**7100–7300** RADIODIFFUSION

ADD **3508A** **524** La bande 6765-6795 kHz (fréquence centrale 6780 kHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). L'utilisation de cette bande de fréquences, pour les applications ISM, est subordonnée à une autorisation particulière donnée par l'administration concernée, en accord avec les autres administrations dont les services de radiocommunication pourraient être affectés. Pour l'application de cette disposition, les administrations se reporteront aux plus récents Avis pertinents du CCIR.

ADD **3508B** **525** *Catégorie de service différente:* en Mongolie et en URSS, l'attribution de la bande 6765–7000 kHz au service mobile terrestre est à titre primaire (voir le numéro **425**).

ADD **3508BA** **526** *Attribution additionnelle:* dans les pays suivants: Angola, Iraq, Kenya, Rwanda, Somalie et Togo la bande 7000–7050 kHz est, de plus, attribuée au service fixe à titre primaire.

ADD **3508C** **527** *Attribution de remplacement:* dans les pays suivants: Egypte, Ethiopie, Guinée, Libye, Madagascar, Malawi et Tanzanie, la bande 7000–7050 kHz est attribuée au service fixe à titre primaire.

ADD **3508D** **528** L'utilisation de la bande 7100–7300 kHz par le service d'amateur en Région 2 ne doit pas imposer de contraintes au service de radiodiffusion dont l'usage est prévu en Région 1 et en Région 3.

kHz

7300–9995

Attribution aux services		
Région 1	Région 2	Région 3
7300–8100	FIXE *Mobile terrestre* 529	
8100–8195	FIXE MOBILE MARITIME	
8195–8815	MOBILE MARITIME 501	
8815–8965	MOBILE AÉRONAUTIQUE (R)	
8965–9040	MOBILE AÉRONAUTIQUE (OR)	
9040–9500	FIXE	
9500–9900	RADIODIFFUSION 530 531	
9900–9995	FIXE	

ADD **3509A** **529** En Région 3, les stations des services auxquels est attribuée la bande 7995–8005 kHz peuvent émettre des fréquences étalon et des signaux horaires.

ADD **3510B** **530** A condition de ne pas causer de brouillage préjudiciable au service de radiodiffusion, les fréquences des bandes 9775–9900 kHz, 11 650–11 700 kHz et 11 975–12 050 kHz peuvent être utilisées par des stations du service fixe communiquant seulement à l'intérieur des frontières nationales, la puissance totale rayonnée de chaque station ne dépassant pas 24 dBW.

ADD **3510A** **531** Les bandes 9775–9900 kHz, 11 650–11 700 kHz, 11 975–12 050 kHz, 13 600–13 800 kHz, 15 450–15 600 kHz, 17 550–17 700 kHz et 21 750–21 850 kHz sont attribuées au service fixe à titre primaire, sous réserve de la procédure décrite dnas la Résolution **8**. L'utilisation de ces bandes par le service de radiodiffusion sera régie par des dispositions à adopter par la conférence administrative mondiale des radiocommunications pour la planification des bandes d'ondes décamétriques attribuées au service de radiodiffusion (voir la Résolution **508**). Dans ces bandes, la date à laquelle pourront commencer les émissions du service de radiodiffusion dans un canal planifié ne devra pas être antérieure à la date à laquelle sera achevé de manière satisfaisante, conformément aux procédures décrites dans la Résolution **8**, le transfert de toutes les assignations de fréquence aux stations du service fixe qui fonctionnent conformément au tableau et aux autres dispositions du Règlement des radiocommunications, que sont inscrites dans le Fichier de référence et qui sont susceptibles d'être affectées par les émissions de radiodiffusion dans ce canal.

kHz

9995–13 200

Attribution aux services		
Région 1	Région 2	Région 3
9995–10 003	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (10 000 kHz) 501	
10 003–10 005	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recerche spatiale* 501	
10 005–10 100	MOBILE AÉRONAUTIQUE (R) 501	
10 100–10 150	FIXE *Amateur* 510	

Attribution aux services		
Région 1	Région 2	Région 3
10 150–11 175	FIXE *Mobile*, sauf mobile aéronautique (R)	
11 175–11 275	MOBILE AÉRONAUTIQUE (OR)	
11 275–11 400	MOBILE AÉRONAUTIQUE (R)	
11 400–11 650	FIXE	
11 650–12 050	RADIODIFFUSION 530 531	
12 050–12 230	FIXE	
12 230–13 200	RADIODIFFUSION 532	

ADD 3511A 532 Les bandes 12 230–12 330 kHz, 16 360–16 460 kHz, 17 360–17 410 kHz, 18 780–18 900 kHz, 19 680–19 800 kHz et 22 720–22 855 kHz, sont attribuées au service fixe à titre primaire sous réserve de la procédure décrite dans la Résolution 8. L'utilisation de ces bandes par le service mobile maritime sera régie par les dispositions que doit spécifier une conférence administrative mondiale des radiocommunications compétente. La data à laquelle le service mobile maritime pourra commencer à utiliser une fréquence conformément aux dispositions ci-dessus mentionnées ne devra pas être antérieure à la date à laquelle sera achevé de manière satisfaisante, conformément à la procédure décrite dans la Résolution 8, le transfert de toutes les assignations aux stations du service fixe que fonctionnent conformément au tableau cet aux autres dispositions du Règlement des radiocommunications, que sont inscrites dans le Fichier de référence et qui sont susceptibles d'être affectées par les émissions da service mobile maritime sur cette fréquence.

kHz

13 200–14 990

Attribution aux services		
Région 1	Région 2	Région 3
13 200–13 260	MOBILE AÉRONAUTIQUE (OR	
13 260–13 360	MOBILE AÉRONAUTIQUE (R)	
13 360–13 410	FIXE RADIOASTRONOMIE 533	
13 410–13 600	FIXE *Mobile*, sauf mobile aéronautique (R) 534	
13 600–13 800	RADIODIFFUSION 531	
13 800–14 000	FIXE *Mobile*, sauf mobile aéronautique (R)	
14 000–14 250	AMATEUR 510 AMATEUR PAR SATELLITE	
14 250–14 350	AMATEUR 510 535	
14 350–14 990	FIXE *Mobile*, sauf mobile aéronautique (R)	

ADD 3512A 533 En assignant des fréquences aux stations des autres services auxquels la bande 13 360–13 410 kHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article **36**).

MOD 3513 534 La bande 13 553–13 567 kHz (fréquence centrale 13 560 kHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.
217

MOD 3514 535 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Chine, Côte d'Ivoire, Iran et URSS, la bande 14 250–14 350 kHz est, de plus, attribuée au service fixe à titre primaire. La puissance rayonnée des stations du service fixe ne doit pas dépasser 24 dBW.
218

kHz

14 990–18 030

Attribution aux services		
Région 1	Région 2	Région 3
14 990–15 005	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (15 000 kHz) 501	
15 005–15 010	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recherche spatiale*	
15 010–15 100	MOBILE AÉRONAUTIQUE (OR)	
15 100–16 600	RADIODIFFUSION 531	
15 600–16 360	FIXE 536	
16 360–17 410	MOBILE MARITIME 532	
17 410–17 550	FIXE	
17 550–17 900	RADIODIFFUSION 531	
17 900–17 970	MOBILE AÉRONAUTIQUE (R)	
17 970–18 030	MOBILE AÉRONAUTIQUE (OR)	

ADD 3515A 536 En Région 3, les stations des services auxquels est attribuée la bande 15 995–16 005 kHz peuvent émettre des fréquences étalon et des signaux horaires.

kHz

18 030–19 990

Attribution aux services		
Région 1	Région 2	Région 3
18 030–18 052	FIXE	
18 052–18 068	FIXE *Recherche spatiale*	
18 068–18 168	AMATEUR 510 AMATEUR PAR SATELLITE 537 538	
18 168–18 780	FIXE	

Attribution aux services		
Région 1	Région 2	Région 3
18 780–18 900	MOBILE MARITIME 532	
18 900–19 680	FIXE	
19 680–19 800	MOBILE MARITIME 532	
19 800–19 990	FIXE	

ADD 3515B 537 La bande 18 068–18 168 kHz est attribuée au service fixe à titre primaire, sous réserve de la procédure décrite dans la Résolution 8. L'utilisation de cette bande par les services d'amateur et d'amateur par satellite ne pourra être autorisée qu'après transfert satisfaisant de toutes les assignations aux stations du service fixe fonctionnant dans cette bande et inscrites dans le Fichier de référence, conformément à la procédure décrite dans la Résolution 8.

ADD 3515C 538 *Attribution additionnelle:* en URSS, la bande 18 068–18 168 kHz est, de plus, attribuée au service fixe à titre primaire pour utilisation à l'intérieur des frontières de l'URSS avec une puissance en crête ne dépassant pas 1 kW.

kHz

19 990–23 350

Attribution aux services		
Région 1	Région 2	Région 3
19 990–19 995	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recherche spatiale* 501	
19 995–20 010	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (20 000 kHz) 501	
20 010–21 000	FIXE *Mobile*	
21 000–21 450	AMATEUR 510 AMATEUR PAR SATELLITE	
21 450–21 850	RADIODIFFUSION 531	
21 850–21 870	FIXE 539	
21 870–21 924	FIXE AÉRONAUTIQUE	
21 924–22 000	MOBILE AÉRONAUTIQUE (R)	
22 000–22 855	MOBILE MARITIME 532 540	
22 855–23 000	FIXE 540	
23 000–23 200	FIXE *Mobile*, sauf mobile aéronautique (R) 540	
23 200–23 350	FIXE AÉRONAUTIQUE MOBILE AÉRONAUTIQUE (OR)	

MOD 3517 539 *Attribution de remplacement:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, Tchécoslovaquie et URSS, la bande 21 850–21 870 kHz est attribuée aux services fixe aéronautique et mobile aéronautique (R) à titre primaire.

ADD 3517A 540 *Attribution additionnelle:* au Nigeria, la bande 22 720–23 200 kHz est, de plus, attribuée au service des auxiliaires de la météorologie (radiosondes) à titre primaire.

kHz

23 350–25 070

Attribution aux services		
Région 1	Région 2	Région 3
23 350–24 000	FIXE MOBILE, sauf mobile aéronautique 541 542	
24 000–24 890	FIXE MOBILE TERRESTRE 542	
24 890–24 990	AMATEUR 510 AMATEUR PAR SATELLITE 542 543	
24 990–25 005	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES (25 000 kHz)	
25 005–25 010	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES *Recherche spatiale*	
25 010–25 070	FIXE MOBILE, sauf mobile aéronautique	

MOD 3518 222 541 L'utilisation de la bande 23 350–24 000 kHz par le service mobile maritime est limitée à la radiotélégraphie de navire à navire.

ADD 3518A 542 *Attribution additionnelle:* au Kenya, la bande 23 600–24 900 kHz est, de plus, attribuée au service des auxiliaires de la météorologie (radiosondes) à titre primaire.

ADD 3518B 543 La bande 24 890–24 890 kHz est attribuée aux services fixe et mobile terrestre à titre primaire, sous réserve de la procédure décrite dans la Résolution **8**. L'utilisation de cette bande par les services d'amateur et d'amateur par satellite ne pourra être autorisée qu'après transfert satisfaisant de toutes les assignations aux stations des services fixe et mobile terrestre fonctionnant dans cette bande et inscrites dans le Fichier de référence, conformément à la procédure décrite dans la Résolution **8**.

kHz

25 070–27 500

Attribution aux services		
Région 1	Région 2	Région 3
25 070–25 210	MOBILE MARITIME 544	
25 210–25 550	FIXE MOBILE, sauf mobile aéronautique	
25 550–25 670	RADIOASTRONOMIE 545	
25 670–26 100	RADIODIFFUSION	
26 100–26 175	MOBILE MARITIME 544	

Attribution aux services		
Région 1	Région 2	Région 3
26 175–27 500	FIXE MOBILE, sauf mobile aéronautique 546	

ADD **3521A** **544** Les bandes 25 110–25 210 kHz et 26 100–26 175 kHz sont, de plus, attribuées aux services fixe et mobile terrestre à titre primaire, sous réserve de la procédure décrite dans la Résolution **8**. L'utilisation à titre exclusif des ces bandes par le service mobile maritime sera régie par les dispositions qu'établira une conférence administrative mondiale des radiocommunications compétente. La date à laquelle pourra commencer l'utilisation d'une fréquence par le service mobile maritime en vertu des dispositions ci-desss mentionnées ne devra pas être antérieure à la date à laquelle sera achevé de manière satisfaisante, conformément à la procédure décrite dans la Résolution **8**, le transfert de toutes les assignations aux stations des services fixe et mobile terrestre qui fonctionnent conformément au tableau et aux autres dispositions du Règlement des radiocommunications, qui sont inscrites dans le Fichier de référence et qui sont susceptibles d'être affectées par une telle utilisation de cette fréquence par le service mobile maritime.

ADD **3521B** **545** La bande 25 550–25 600 kHz est attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire, sous réserve de la procédure décrite dans la Résolution **8**. L'utilisation de cette bande par le service de radioastronomie ne pourra être autorisée qu'après transfert satisfaisant de toutes les assignations aux stations des services fixe et mobile, sauf mobile aéronautique, fonctionnant dans cette bande et inscrites dans le Fichier de référence, conformément à la procédure décrite dans la Résolution **8**. La bande 25 600–25 670 kHz est attribuée au service de radiodiffusion à titre primaire sous réserve des dispositions à adopter par la conférence administrative mondiale des radiocommunications pour la planification des bandes d'ondes décamétriques attribuées au service de radiodiffusion (voir la Résolution **908**). Après l'application de toutes les dispositions ci-dessus mentionnées, toutes les émissions susceptibles de causer des brouillages préjudiciables au service de radioastronomie dans la bande 25 550–25 670 kHz, seront évitées. L'utilisation de détecteurs passifs par d'autres services sera, de plus, autorisée.

MOD **3522** **546** La bande 26 957–27 283 kHz (fréquence centrale 27 120 kHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.
225

MHz

27,5–38,25

Attribution aux services		
Région 1	Région 2	Région 3
27,5–28	AUXILIARES DE LA MÉTÉOROLOGIE FIXE MOBILE	
28–29,7	AMATEUR AMATEUR PAR SATELLITE	
29,7–30,005	FIXE MOBILE	
30,005–30,01	EXPLOITATION SPATIALE (identification des satellites) FIXE MOBILE RECHERCHE SPATIALE	
30,01–37,5	FIXE MOBILE	
37,5–38,25	FIXE MOBILE *Radiastronomie* 547	

ADD **3531A** **547** En assignant des fréquences aux stations des autres services auxquels la bande 37,5–38,25 MHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant des stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

MHz

38,25–47

Attribution aux services		
Région 1	Région 2	Région 3
38,25–39,986	FIXE MOBILE	
39,986–40,02	FIXE MOBILE *Recherche spatiale*	
40,02–40,98	FIXE MOBILE 548	
40,98–41,015	FIXE MOBILE *Recherche spatiale* 549 550 551	
41,015–44	FIXE MOBILE 549 550 551	
44–47	FIXE MOBILE 551 552	

MOD 3533 **548** La bande 40,66–40,70 MHz (fréquence centrale 40,68 MHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**. 236

MOD 3536 **549** *Attribution additionnelle:* dans les pays suivants: Botswana, Burundi, Lesotho, Malawi, Namibie, Rwanda, République Sudafricaine, Swaziland, Zaire, Zambie et Zimbabwe, la bande 41–44 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire.

ADD 3538A **550** *Attribution additionnelle:* en Iran et au Japon, la bande 41–44 MHz est, de plus, attribuée au service de radiolocalisation à titre secondaire.

MOD 3538 **551** *Attribution additionnelle:* en France et à Monaco, la bande 41–47 MHz est, de plus, attribuée à titre primaire au service de radiodiffusion jusqu'au 1er janvier 1986 et, au Royaume-Uni, jusqu'au 1er janvier 1987. 240

ADD 3538AB **552** *Attribution additionnelle:* en Australie et en Nouvelle-Zélande, la bande 44–47 MHz est, de plus, attribuée ao service de radiodiffusion à titre primaire.

MHz

47–68

Attribution aux services		
Région 1	Région 2	Région 3
47–68 RADIODIFFUSION	**47–50** FIXE MOBILE	**47–50** FIXE MOBILE RADIODIFFUSION
	50–54 AMATEUR 556 557 558 560	
	54–68 RADIODIFFUSION *Fixe* *Mobile* 562	**54–68** FIXE MOBILE RADIODIFFUSION
553 554 555 559 561		

MOD 3541 243 553 *Attribution additionnelle:* dans les pays suivants: Hongrie, Kenya, Mongolie, Tchécoslovaquie et URSS, les bandes 47–48,5 MHz et 56,5–58 MHz sont, de plus, attribuées au service fixe et au service mobile terrestre à titre secondaire.

ADD 3541A 554 *Attribution additionnelle:* dans les pays suivants: Albanie, République fédérale d'Allemagne, Autriche, Belgique, Bulgarie, Danemark, Finlande, France, Gabon, Grèce, Israël, Italie, Liban, Liechtenstein, Luxembourg, Mali, Malte, Maroc, Nigeria, Norvège, Pays-Bas, Pologne, Républiqeu Démocratique Allemande, Royaume-Uni, Sénégal, Suède, Suisse, Tunisie, Turquie et Yougoslavie, la bande 47–68 MHz et, en Roumanie la bande 47–58 MHz, sont, de plus, attribuées au service mobile terrestre à titre permis. Toutefois, les stations du service mobile terrestre des pays mentionnées pour chaque bande indiquée dans le présent renvoi ne doivent pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou en projet des pays autres que ceux mentionnés pour cette même bande, ni demander à être protégées vis-à-vis de celles-ci.

MOD 3539 555 *Attribution additionnelle:* dans les pays suivants: Angola, Cameroun, Congo, Madagascar, Mozambique, Somalie, Soudan, Tchad et Yémen (RDP du), la bande 47–68 MHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre permis.

MOD 3542 244 556 *Attribution de remplacement:* en Nouvelle-Zélande, la bande 50–51 MHz est attribuée aux services fixe, mobile et de radiodiffusion à titre primaire; la bande 53–54 MHz est attribuée aux services fixe et mobile à titre primaire.

ADD 3543B 557 *Attribution de remplacement:* dans les pays suivants: Afghanistan, Bangladesh, Brunéi, Inde, Indonésie, Iran, Malaisie, Pakistan, Singapour et Thaïlande, la bande 50–54 MHz est attribuée aux services fixe, mobile et de radiodiffusion, à titre primaire.

ADD 3543A 558 *Attribution additionnelle:* en Australie, Chine et République Populaire Démocratique de Corée, la bande 50–54 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

ADD 3541B 559 *Attribution de remplacement:* dans les pays suivants: Botswana, Burundi, Lesotho, Malawi, Namibie, Rwanda, République Sudafricaine, Swaziland, Zaïre, Zambie et Zimbabwe, la bande 50–54 MHz est attribuée au service d'amateur à titre primaire.

MOD 3545 247 560 *Attribution additionnelle:* en Nouvelle-Zélande, la bande 51–53 MHz est, de plus, attribuée aux services fixe et mobile à titre primaire.

ADD 3541C 561 *Attribution additionnelle:* dans les pays suivants: Botswana, Burundi, Lesotho, Malawi, Mali, Namibie, Rwanda, République Sudafricaine, Swaziland, Zaïre, Zambie et Zimbabwe, la bande 54–68 MHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD 3543C 562 *Catégorie de service différente:* dans les Départements français d'Outre-Mer de la Région 2, en Guyane, Jamaïque et au Mexique, l'attribution de la bande 54–68 MHz aux services fixe et mobile est à titre primaire (voir le numéro **425**).

MHz

68–75,2

Attribution aux services

Région 1	Région 2	Région 3
68–74,8	**68–72**	**68–74,8**
FIXE	RADIODIFFUSION	FIXE
MOBILE, sauf mobile aéronautique	*Fixe*	MOBILE
	Mobile	
	563	
	72–73	
	FIXE	
	MOBILE	
	73–74,6	
	RADIOASTRONOMIE	
	569 570	
	74,6–74,8	
	FIXE	
	MOBILE	
564 565 567 568 571 572	572	566 568 571 572
74,8–75,2	RADIONAVIGATION AÉRONAUTIQUE	
	572	

ADD 3548B 563 *Catégorie de service différente:* à Cuba, dans les Départements français d'Outre-Mer de la Région 2, en Guyane, Jamaïque et au Mexique, l'attribution de la bande 68–72 MHz aux services fixe et mobile est à titre primaire (voir le numéro **425**).

MOD 3548 250 564 *Attribution de remplacement:* en Bulgarie, Hongrie, Pologne, Roumanie et Tchécoslovaquie, la bande 68–73 MHz est attribuée au service de radiodiffusion à titre primaire et utilisée conformément aux dispositions des Actes finals de la Conférence régionale spéciale (Genève, 1960).

MOD 3546 565 *Attribution de remplacement:* en Mongolie et en URSS, les bandes 68–73 MHz et 76–87,5 MHz sont attribuées au service de radiodiffusion à titre primaire. Les services auxquels ces bandes sont attribuées dans les autres pays et le service de radiodiffusion en Mongolie et en URSS doivent faire l'objet d'accords avec les pays voisins concernés.

MOD **3553** **566**
254

Attribution additionnelle: dans les pays suivants: Australie, Chine, République de Corée, Philippines, République Populaire Démocratique de Corée et Samoa Occidental, la bande 68–74 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

ADD **3550A** **567**

Attribution additionnelle: dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, Tchécoslovaquie et URSS, la bande 73–74 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire. L'utilisation de cette bande par le service de radiodiffusion en Bulgarie, Hongrie, Mongolie, Pologne, Tchécoslovaquie et en URSS doit faire l'objet d'accords obtenus conformément à la procédure prévue à l'article 14.

ADD **3531X** **568**

En assignant des fréquences aux stations de sautres services auxquels la bande 73–74,6 MHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastrononie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

MOD **3551** **569**
253A

Dans la Région 2, les services fixe, mobile et de radiodiffusion précédemment autorisés dans la bande 73–74,6 MHz pourront continuer à fonctionner jusqu'au 31 décembre 1985 à condition de ne pas causer de brouillages préjudiciables au service de radioastronomie.

MOD **3552** **570**
253B

Attribution additionnelle: dans les pays suivants: Colombie, Costa Rica, Cuba, El Salvador, Equateur, Guatemala, Guyane, Honduras et Nicaragua, la bande 73–74,6 MHz est, de plus, attribuée aux services fixe et mobile à titre secondaire.

MOD **3550** **571**
252

Attribution additionnelle: dans les pays suivants: Bulgarie, Chine, Hongrie, Mongolie, Pologne, Tchécoslovaquie et URSS, les bandes 74,6–74,8 MHz et 75,2–75,4 MHz sont, de plus, attribuées au service de radionavigation aéronautique à titre primaire, uniquement pour le émetteurs au sol.

MOD **3558** **572**
259

La fréquence 75 MHz est assignée aux radiobornes. Les administrations doivent éviter d'assigner des fréquences voisines des limites de la bande de garde à des stations d'autres services qui, du fait de leur puissance ou de leur position géographique, pourraient causer des brouillages préjudiciables aux radiobornes ou leur imposer d'autres contraintes.

Jusqu'au 31 décembre 1989, les administrations des Régions 2 et 3 devront éviter d'assigner des fréquences à des stations d'autres services dans les bandes 74,6–74,8 MHz et 75,2–75,4 MHz.

A l'avenir, il faudra s'efforcer, autant que possible, d'améliorer encore les caractéristiques des récepteurs de bord et de limiter la puissance des stations émettant sur des fréquences proches des limites 74,8 MHz et 75,2 MHz.

MHz

75,2–88

Attribution aux services

Région 1	Région 2	Région 3
75,2–87,5 FIXE MOBILE, sauf mobile aéronautique	**75,2–75,4** FIXE MOBILE 571 572	
	75,4–76 FIXE MOBILE	**75,4–87** FIXE MOBILE
	76–88 RADIODIFFUSION *Fixe* *Mobile*	
565 571 572 575 578		573 574 577 579
	576	

ADD **3554B** **573**

Attribution additionnelle: au Samoa Occidental, la bande 75,4–87 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

ADD **3554A** **574**

Attribution additionnelle: en Chine, dans la République de Corée, au Japon, aux Philippines et dans la République Populaire Démocratique de Corée, la bande 76–87 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

ADD **3548A** **575**

Attribution additionnelle: dans les pays suivants: Bulgarie, Hongrie, Pologne, Roumanie et Tchécoslovaquie, la bande 76–87,5 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire et utilisée conformément aux décisions contenues dans les Actes finals de la Conférence régionale spéciale (Genève, 1960).

ADD **3558X** **576**

Catégorie de service différente: aux États-Unis, dans les Départements français d'Outre-Mer de la Région 2, en Guyane, Jamaïque, au Mexique et au Paraguay, l'attribution de la bande 76–88 MHz aux services fixe et mobile est à titre primaire (voir le numéro **425**).

MOD **3560** **577**
261

En Région 3 (sauf dans la République de Corée, en Inde, au Japon, en Malaisie, aux Philippines, à Singapour et en Thaïlande), la bande 79,75–80,25 MHz est, de plus, attribuée au service de radioastronomie à titre primaire. En assignant des fréquences aux stations des autres services auxquels cette bande est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables, pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3548C** **578** *Attribution de remplacement:* en Albanie, la bande 81–87,5 MHz est attribuée au service de radiodiffusion à titre primaire et utilisée conformément aux décisions contenues dans les Actes finals de la Conférence régionale spéciale (Genève, 1960).

ADD **3553A** **579** *Attribution additionnelle:* en Afghanistan et en Australie, la bande 85–87 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire. L'introduction du service de radiodiffusion dans ces pays doit faire l'objet d'accords spéciaux entre les administrations concernées.

MHz

87–108

Attribution aux services		
Région 1	Région 2	Région 3
		87–100
87,5–100	**88–100**	FIXE
RADIODIFFUSION	RADIODIFFUSION	MOBILE
		RADIODIFFUSION
581 582		580
100–108	RADIODIFFUSION	
	582 583 584 585	
	586 587 588 589 590	

MOD **3566** **580** *Attribution de remplacement:* en Nouvelle-Zélande, la bande 87–88 MHz est attribuée au service mobile terrestre à titre primaire.
267

MOD **3563** **581** *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Espagne, France, Irlande, Italie, Liechtenstein, Monaco, Royaume-Uni, Suisse et Yémen (RDP du), la bande 87,5–88 MHz est, de plus, attribuée au service mobile terrestre à titre permis sous réserve d'un accord obtenu suivant la procédure prévue à l'article **14**.
264

MOD **3564** **582** *Attribution additionnelle:* au Royaume-Uni, la bande 97,6–102,1 MHz est, de plus, attribuée au service mobile terrestre à titre permis jusqu'au 31 décembre 1989. L'utilisation de cette bande par le service mobile terrestre est limitée aux stations en service le 1er janvier 1980. Le retrait des stations mobiles terrestres sera organisé en consultation avec les administrations intéressés.
265

ADD **3569A** **583** Dans la Région 1, les systèmes existants dans les services fixe et mobile, sauf mobile aéronautique (R), peuvent continuer à utiliser la bande 100–104 MHz à titre primaire jusqu'à la première des dates suivantes: la date d'entrée en vigueur du nouvel accord régional de radiodiffusion mentionné dans la Résolution **510** ou le 1er janvier 1985.

ADD **3570A** **584** Dans la Région 1, les stations de radiodiffusion fonctionnant dans la bande 100–108 MHz devront être installées et exploitées conformément à un accord et au plan associé relatif à la bande 87,5–108 MHz qui doivent être élaborés par une conférence régionale de radiodiffusion (voir la Résolution **510**). Avant la date d'entrée en vigueur de cet accord, des stations de radiodiffusion pourront être mises en service par accord entre les administrations intéressées, étant entendu que l'exploitation de ces stations ne pourra en aucun cas constituer un droit acquis au moment de l'établissement du plan.

MOD **3571** **585** *Attribution additionnelle:* en Chine, République de Corée, aux Philippines et à Singapour, la bande 100–108 MHz est, de plus, attribuée aux services fixe et mobile à titre permis.
272

ADD **3566A** **586** *Attribution de remplacement:* en Nouvelle-Zélande, la bande 100–108 MHz est attribuée au service mobile terrestre à titre primaire et au service de radiodiffusion à titre secondaire.

ADD **3570B** **587** *Attribution additionnelle:* dans les pays suivants: Autriche, Bulgarie, Hongrie, Israël, Kenya, Mongolie, Pologne, Syrie, République Démocratique Allemande, Royaume-Uni, Somalie, Tchécoslovaquie et URSS, la bande 104–108 MHz est, de plus, attribuée au service mobile, sauf mobile aéronautique (R) à titre permis jusqu'au 31 décembre 1995 et à titre secondaire après cette date.

ADD **3570D** **588** *Attribution additionnelle:* en Finlande et en Yougoslavie, la bande 104–108 MHz est, de plus, attribuée au services à titre permis jusqu'au 31 décembre 1995. La puissance effective rayonnée d'une station quelconque ne doit pas dépasser 25 W.

ADD **3570C** **589** *Attribution additionnelle:* dans les pays suivants: France, Roumanie, Suède, Turquie et Yougoslavie, la bande 104–108 MHz est, de plus, attribuée au service mobile, sauf mobile aéronautique (R), à titre permis jusqu'au 31 décembre 1995.

ADD **3570CA** **590** *Attribution additionnelle:* en Italie, la bande 104–108 MHz est, de plus, attribuée au service mobile terrestre à titre primaire jusqu'à la première des dates suivantes: la date d'entrée en vigueur du nouvel accord régional de radiodiffusion mentionné dans la Résolution **510** ou le 1er janvier 1985.

MHz

108–138

Attribution aux services		
Région 1	Région 2	Région 3
108–117,975	RADIONAVIGATION AÉRONAUTIQUE	
117,975–136	MOBILE AÉRONAUTIQUE (R)	
	501 591 592 593 594	

Attribution aux services		
Région 1	Région 2	Région 3
136–137	MOBILE AÉRONAUTIQUE (R) *Fixe* *Mobile*, sauf mobile aéronautique (R) 591 595	
137–138	EXPLOITATION SPATIALE (espace vers Terre) MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) RECHERCHE SPATIALE (espace vers Terre) *Fixe* *Mobile*, sauf mobile aéronautique (R) 596 597 598 599	

MOD **3573** 273A **591** La bande 117,975–137 MHz est, de plus, attribuée au service mobile aéronautique par satellite (R) à titre secondaire, sous réserve de ne pas causer de brouillage préjudiciable ao service mobile aéronautique (R) et sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3572A** **592** Les bandes 121,45–121,55 MHz et 242,95–243,05 MHz sont, de plus, attribuées au service mobile par satellite pour la réception, à bord des satellites, d'émissions en provenance de radiobalises de localisation des sinistres fonctionnant à 121,5 MHz et 243 MHz.

NOC **3572** 273 **593** Dans la bande 117,975–136 MHz, la fréquence 121,5 MHz est la fréquence aéronautique d'urgence et, si nécessaire, la fréquence aéronautique auxiliaire de 121,5 MHz. Les stations mobiles du service mobile maritime peuvent communiquer sur ces fréquences, à des fins de sécurité, avec les stations du service mobile aéronautique.

MOD **3574** 274 **594** *Attribution additionnelle:* dans les pays suivants: Angola, Bulgarie, Hongrie, Iran, Iraq, Japon, Mongolie, Mozambique, Papua-Nouvelle-Guinée, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 132–136 MHz est, de plus, attribuée au service mobile aéronautique (OR) à titre permis.

MOD **3578A** **595** Jusqu'au 1er janvier 1990, la bande 136–137 MHz est, de plus, attribuée au service d'exploitation spatiale (espace vers Terre), au service de météorologie par satellite (espace vers Terre) et au service de recherche spatiale (espace vers Terre) à titre primaire. L'introduction des stations du service mobile aéronautique (R) ne peut avoir lieu qu'après cette date et elle doit être effectuée conformément aux plans approuvés à l'échelle internationale pour ce service. Après le 1er janvier 1990, la bande 136–137 MHz sera, de plus, attribuée, à titre secondaire, aux services de radiocommunication spatiales mentionnés ci-dessus (voir la Recommandation **404**).

MOD **3584** 281E **596** *Catégorie de service différente:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Brunéi, Chine, Emirats Arabes Unis, Inde, Indonésie, Iran, Iraq, Koweït, Malaisie, Oman, Pakistan, Qatar, Singapour, Thaïlande, Yémen (RA) et Yémen (RDP du), l'attribution de la bande 137–138 MHz aux services fixe et mobile sauf mobile aéronautique (R), est à titre primaire (voir le numéro **425**).

ADD **3584A** **597** *Catégorie de service différente:* en Israël, Jordanie et Syrie, l'attribution de la bande 137–138 MHz aux services fixe et mobile, sauf mobile aéronautique, est à titre primaire (voir le numéro **425**).

MOD **3583** 281C **598** *Catégorie de service différente:* dans les pays suivants: Autriche, Bulgarie, Egypte, Finlande, Grèce, Hongrie, Liban, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie, URSS et Yougoslavie, l'attribution de la bande 137–138 MHz au service mobile aéronautique (OR) est à titre primaire (voir le numéro **425**).

MOD **3580** 279A **599** *Attribution additionnelle:* en Australie, la bande 137–144 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire, jusqu'à ce que ce service puisse être aménagé, dans le cadre des attributions régionales, à la radiodiffusion.

MHz

138–144

Attribution aux services		
Région 1	Région 2	Région 3
138–143,6 MOBILE AÉRONAUTIQUE (OR) 600 601 602 604	**138–143,6** FIXE MOBILE / RADIO LOCALISATION / *Recherche spatiale* (espace vers Terre)	**138–143,6** FIXE MOBILE *Recherche spatiale* (espace vers Terre) 599 603
143,6–143,65 MOBILE AÉRONAUTIQUE (OR) RECHERCHE SPATIALE (espace vers Terre) 601 602 604	**143,6–143,65** FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre) / RADIO LOCALISATION /	**143,6–143,65** FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre) 599 603

Attribution aux services		
Région 1	Région 2	Région 3
143,65–144	**143,65–144**	**143,65–144**
MOBILE AÉRONAUTIQUE (OR)	FIXE	FIXE
	MOBILE	MOBILE
	/ RADIO LOCALISATION /	*Recherche spatiale* (espace vers Terre)
600 601 602 604	*Recherche spatiale* (espace vers Terre)	599 603

MOD 3586 282A **600** *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Autriche, Belgique, France, Israël, Italie, Liechtenstein, Luxembourg, Royaume-Uni, Suède, Suisse et Tchécoslovaquie, les bandes 138–143,6 MHz et 143,65–144 MHz sont, de plus, attribuées au service de recherche spatiale (espace vers Terre) à titre secondaire.

ADD 3585A **601** *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Arabie Saoudite, Autriche, Bahrein, Belgique, Danemark, Emirats Arabes Unis, Espagne, Finlande, Grèce, Irlande, Israël, Kenya, Koweït, Liechtenstein, Luxembourg, Mali, Malte, Norvège, Pays-Bas, Qatar, Royaume-Uni, Suède, Suisse, Somalie, Tanzanie, Tunisie, Turquie et Yougoslavie, la bande 138–144 MHz est, de plus, attribuée aux services mobiles maritime et terrestre à titre primaire.

MOD 3577 275 **602** *Attribution de remplacement:* dans les pays suivants: Angola, Botawana, Burundi, Cameroun, République Centrafricaine, Congo, Gabon, Gambie, Ghana, Guinée, Iraq, Jordanie, Lesotho, Libéria, Libye, Malawi, Mozambique, Namibie, Nigérie, Oman, Rwanda, Sierra Leone, République Sudafricaine, Swaziland, Tchad, Togo, Zaïre, Zambie et Zimbabwe, la bande 138–144 MHz est attribuée aux services fixe et mobile à titre primaire.

MOD 3589 **603** *Attribution additionnelle:* en Chine, la bande 138–144 MHz est, de plus, attribuée au service de radiolocalisation à titre primaire.

MOD 3587 283 **604** *Attribution additionnelle:* dans les pays suivants: Ethiopie, Finlande, Kenya, Malte, Somalie, Soudan, Tanzanie, Yémen (RA) et Yougoslavie, la bande 138–144 MHz est, de plus, attribuée au service fixe à titre primaire.

MHz

144–150,05

Attribution aux services		
Région 1	Région 2	Région 3
144–146	AMATEUR 510	
	AMATEUR PAR SATELLITE	
	605 606	
146–149,9	**146–148**	**146–148**
FIXE	AMATEUR	AMATEUR
MOBILE, sauf mobile aéronautique (R)		FIXE
		MOBILE
	607	607
	148–149,9	
	FIXE	
	MOBILE	
608	608	
149,9–150,05	RADIONAVIGATION PAR SATELLITE	
	609	

ADD 3589A **605** *Attribution additionnelle:* à Singapour, la bande 144–145 MHz est, de plus, attribuée aux services fixe et mobile à titre primaire. Cette utilisation est limitée aux systèmes mis en service avant le 1er janvier 1980, qui devront cesser de fonctionner au plus tard le 31 décembre 1995.

ADD 3584AA **606** *Attribution additionnelle:* en Chine, la bande 144–146 MHz est, de plus, attribuée au service mobile aéronautique (OR) à titre secondaire.

ADD 3598A **607** *Attribution de remplacement:* dans les pays suivants: Afghanistan, Bangladesh, Cuba, Guyane et Inde, la bande 146–148 MHz est attribuée aux services fixe et mobile à titre primaire.

MOD 3591 285A **608** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 148–149,9 MHz peut être utilisée pour le service d'exploitation spatiale (Terre vers espace). La largeur de bande d'une émission ne doit pas excéder ± 25 kHz.

NOC 3593 285C **609** Les émissions du service de radionavigation par satellite dans les bandes 149,9–150,05 MHz et 399,9–400,05 MHz peuvent, de plus, être utilisées par les stations terriennes de réception du service de recherche spatiale.

kHz

150,05–174

Attribution aux services		
Région 1	Région 2	Région 3
150,05–153 FIXE MOBILE, sauf mobile aéronautique (R) RADIOASTRONOMIE 610 612	**150,05–156,7625** FIXE MOBILE	
153–154 FIXE MOBILE, sauf mobile aéronautique (R) *Auxiliaires de la météorologie*		
154–156,7625 FIXE MOBILE, sauf mobile aéronautique (R) 613	611 613	
156,7625–156,8375	MOBILE MARITIME (détresse et appel) 501 613	
156,8375–174 FIXE MOBILE, sauf mobile aéronautique 613 614 615	**156,8375–174** FIXE MOBILE 613 616 617 618	

MOD **3531** 233B **610** En assignant des fréquences aux stations des autres services auxquels la bande 150,05–153 MHz est attribuée, les administrations sont instamment prises de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3591A** **611** *Attribution additionnelle:* en Australie et en Inde, la bande 150,05–153 MHz est, de plus, attribuée au service de radioastronomie à titre primaire.

ADD **3531C** **612** *Attribution additionnelle:* en Suède et en Suisse, la bande 150,05–153 MHz est, de plus, attribuée au service mobile aéronautique (OR) à titre secondaire.

MOD **3595** 287 **613** La fréquence 156,8 MHz est la fréquence internationale utilisée pour le détresse, la sécurité et l'appel par le service mobile maritime radiotéléphonique à ondes métriques. Les conditions d'emploi de cette fréquence sont fixées dans l'article 38.

En ce qui concerne les bandes 156–156,7625 MHz, 156–8375–157,45 MHz, 160,6–160,975 MHz et 161,475–162,05 MHz, les administrations doivent accorder la priorité au service mobile maritime uniquement sur les fréquences de ces bandes assignées par ces administrations aux stations du service mobile maritime (voir l'article 60).

Il convient d'éviter que les autres services auxquels la bande est attribuée utilisent des fréquences de l'une quelconque des bandes mentionnées ci-dessus, dans toute région où cet emploi pourrait causer des brouillages préjudiciables aux radiocommunications du service mobile maritime à ondes métriques.

Toutefois, la fréquence 156,8 MHz et les bandes de fréquences dans lesquelles la priorité est accordée au service mobile maritime, peuvent être utilisées pour les radiocommunications sur les voies d'eau intérieures, sous réserve d'accords entre les administrations intéressées et celles dont les services auxquels la bande est attribuée sont susceptibles d'être affectés et en tenant compte de l'utilisation courante des fréquences et des accords existants.

MOD **3596** 288 **614** *Attribution de remplacement:* en France et à Monaco, la bande 162–174 MHz est attribuée au service de radiodiffusion à titre primaire jusqu'au 1er janvier 1985.

ADD **3596A** **615** *Attribution de remplacement:* au Maroc, la bande 162–174 MHz est attribuée au service de radiodiffusion à titre primaire. Cette utilisation fera d'objet d'accord avec les administrations dont les services fonctionnant ou prévus conformément au présent tableau sont susceptibles d'être affectés. Les stations existantes au 1er janvier 1981, avec leurs caractéristiques techniques à cette date, ne sont pas concernées par cet accord.

ADD **3594A** **616** *Attribution additionnelle:* en Chine, la bande 163–167 MHz est, de plus, attribuée au service d'exploitation spatiale (espace vers Terre) à titre primaire, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3596B** **617** *Attribution additionnelle:* en Afghanistan, en Chine et au Pakistan, la bande 167–174 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire. L'introduction du service de radiodiffusion dans cette bande devra faire l'objet d'accords avec les pays voisins de la Région 3, dont les services sont susceptibles d'être affectés.

ADD **3596C** **618** *Attribution additionnelle:* au Japon, la bande 170–174 MHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

MHz

174–235

Attribution aux services		
Région 1	Région 2	Région 3
174–223 RADIODIFFUSION 621 623 628 629	**174–216** RADIODIFFUSION *Fixe* *Mobile* 620 **216–220** FIXE MOBILE MARITIME *Radiolocalisation* 627 **220–225** AMATEUR FIXE MOBILE *Radiolocalisation* 627 **225–235** FIXE MOBILE	**174–223** FIXE MOBILE RADIODIFFUSION 619 624 625 626 630
223–230 RADIODIFFUSION *Fixe* *Mobile* 622 628 629 631 632 633 634 635		**223–230** FIXE MOBILE RADIODIFFUSION RADIONAVIGATION AÉRONAUTIQUE *Radiolocalisation* 636 637
230–235 FIXE MOBILE 629 632 633 634 635 638 639		**230–235** FIXE MOBILE RADIONAVIGATION AÉRONAUTIQUE 637

ADD **3601C** **619** *Attribution additionnelle:* en Chine la bande 174–184 MHz est, de plus, attribuée aux services de recherche spatiale (espace vers Terre) et d'exploitation spatiale (espace vers Terre) à titre primaire, sous réserve d'un accord obtenu suivant la procédure décrite dans l'article 14. Ces services ne doivent pas causer de brouillage préjudiciable à des stations de radiodiffusion existantes ou en projet, ni demander à être protégées vis-à-vis de celles-ci.

ADD **3601B** **620** *Catégorie de service différente:* au Mexique, dans la bande 174–216 MHz l'attribution aux services fixe et mobile est à titre primaire (voir le numéro **425**).

ADD **3601A** **621** *Attribution additionnelle:* dans les pays suivants: Autriche, République fédérale d'Allemagne, Belgique, Danemark, Finlande, France, Italie, Liechtenstein, Monaco, Norvège, Pays-Bas, Royaume-Uni, Suède, Suisse et Yémen (RDP du), la bande 174–223 MHz est, de plus, attribuée au service mobile terrestre à titre permis. Toutefois, les stations du service mobile terrestre ne doivent pas causer de brouillage préjuciable aux stations de radiodifusion existantes ou en projet des pays autres que ceux indiqués dans le présent renvoi, ni demander à être protégées vis-à-vis de celles-ci.

ADD **3601AA** **622** *Catégorie de service différente:* dans les pays suivants: Autriche, République fédérale d'Allemagne, Belgique, Danemark, Espagne, Finlande, France, Israël, Italie, Liechtenstein, Luxembourg, Monaco, Norvège, Pays-Bas, Portugal, Royaume-Uni, Suède, Suisse et Yémen (RDP du), la bande 223–230 MHz est attribuée au service mobile terrestre à titre permis (voir le numéro **425**). Toutefois, les stations du service mobile terrestre ne doivent pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou en projet des pays autres que ceux indiqués dans le présent renvoi, ni demander à être protégées vis-à-vis de celles-ci.

MOD **3601** **623** *Attribution additionnelle:* dans les pays suivants: Congo, Ethiopie, Gambie, Guinée, Kenya, Libye, Malawi, Mali, 293 Ouganda, Sénégal, Sierra Leone, Somalie, Tanzanie et Zimbabwe, la bande 174–223 MHz est, de plus, attribuée aux services fixe et mobile à titre secondaire.

ADD **3602A** **624** *Attribution additionnelle:* au Bangladesh, en Inde, au Pakistan et aux Philippines, la bande 200–216 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire.

ADD **3602B** **625** *Attribution additionnelle:* en Australie et en Papua-Nouvelle-Guinée, les bandes 204–208 MHz et 222–223 MHz sont, de plus, attribuées au service de radionavigation aéronautique à titre primaire.

ADD **3608AB** **626** *Attribution additionnelle:* en Chine, en Inde et en Thaïlande, la bande 216–223 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire et au service de radiolocalisation à titre sencondaire.

ADD **3608AA** **627** Dans la Région 2, la bande 216–225 MHz est attribuée au service de radiolocalisation à titre primaire jusqu'au 1er janvier 1990. A partir de cette date, aucune vouvelle station de ce service ne sera autorisée. Les stations autorisées avant le 1er janvier 1990 pourront continuer à fonctionner à titre secondaire.

ADD **3608A** **628** *Attribution additionnelle:* en Somalie, la bande 216–225 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire, sous réserve de ne pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou prévues dans les autres pays.

MOD **3608** 300 **629** *Attribution additionnelle:* à Oman, au Royaume-Uni et en Turquie, la bande 216–235 MHz est, de plus, attribuée au service de radiolocalisation à titre secondaire.

ADD **3608AC** **630** *Attribution additionnelle:* au Japon, la bande 222–223 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire et au service de radiolocalisation à titre secondaire.

ADD **3612D** **631** *Catégorie de service différente:* en Espagne et au Portugal, la bande 223–230 MHz est attribuée au service fixe à titre permis (voir le numéro **425**). Les stations de ce service ne doivent pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou en projet dans les autres pays et fonctionnant conformément au tableau, ni demander à être protégée vis-à-vis de celles-ci.

ADD **3608B** **632** *Attribution additionnelle:* dans les pays suivants: Arabie Saoudite, Bahreïn, Emirats Arabes Unis, Israël, Jordanie, Oman, Qatar et Syrie, la bande 223–235 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis.

ADD **3608C** **633** *Attribution additionnelle:* en Espagne et au Portugal, la bande 223–235 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis jusqu'au 1er janvier 1990, sous réserve de ne pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou en projet dans d'autres pays.

ADD **3608CA** **634** *Attribution additionnelle:* en Suède, la bande 223–235 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis jusqu'au 1er janvier 1990, sous réserve d'accord obtenu suivant la procédure prévue à l'article 14 et sous réserve de ne pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou en projet dans d'autres pays.

MOD **3612** 304 **635** *Attribution de remplacement:* dans les pays suivants: Botswana, Lesotho, Namibie, République Sudafricaine, Swaziland et Zambie, les bandes 223–238 MHz et 246–254 MHz sont attribuées au service de radiodiffusion à titre primaire, sous réserve d'une accord obtenu suivant la procédure prévue à l'article 14.

ADD **3612A** **636** *Attribution de remplacement:* en Nouvelle-Zélande, au Samoa Occidental, aux îles Niue et Cook, la bande 225–230 MHz est attribuée aux services fixe, mobile et de radionavigation aéronautique à titre primaire.

ADD **3612B** **637** *Attribution additionnelle:* en Chine, la bande 225–235 MHz est, de plus, attribuée au service de radioastonomie à titre secondaire.

ADD **3612C** **638** *Attribution additionnelle:* au Nigérie, la bande 230–235 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3612CA** **639** *Attribution additionnelle:* en Yougoslavie, la bande 230–235 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire jusqu'au 1er janvier 1995. L'utilisation de cette bande par le service de radionavigation aéronautique en Yougoslavie est limitée aux stations en exploitation au 1er janvier 1980.

MHz

235–335,4

Attribution aux services		
Région 1	Région 2	Région 3
235–267	FIXE MOBILE 501 592 635 640 641 642	
267–272	FIXE MOBILE *Exploitation spatiale* (espace vers Terre) 641 643	
272–273	EXPLOITATION SPATIALE (espace vers Terre) FIXE MOBILE 641	
273–322	FIXE MOBILE 641	
322–328,6	FIXE MOBILE RADIOASTRONOMIE 644	
328,6–335,4	RADIONAVIGATION AÉRONAUTIQUE 645	

MOD 3614 640 *Attribution additionnelle:* en Nouvelle-Zélande, la bande 235–239,5 MHz est, de plus, attribuée au service de rad radionavigation aéronautique, à titre primaire.
305A

MOD 3618 641 Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, les bandes 235–322 MHz et 335,4–399,9 MHz peuvent être utilisées par le service mobile par satellite, sous réserve que les stations de ce service ne causent pas de brouillage préjudiciable aux stations des autres services existants ou en projet et fonctionnant conformément au tableau.
308A

NOC 3619 642 La fréquence 243 MHz est la fréquence à utiliser dans cette bande par les engins de sauvetage et par les dispositifs utilisés dans des buts de sauvetage.
309

MOD 3621 643 Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 267–272 MHz peut être utilisée par les administrations pour la télémesure spatiale dans leur pays à titre primaire.
309B

MOD 3622 644 En assignant des fréquences aux stations des autres services auxquels la bande 322–328,6 MHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).
310

NOC 3624 645 Limité aux systèmes d'atterissage aux instruments (alignement de descente).
311

MHz

335,4–401

Attribution aux services		
Région 1	Région 2	Région 3
335,4–399,9	FIXE MOBILE 641	
399,9–400,05	RADIONAVIGATION PAR SATELLITE 609	
400,15–401	FRÉQUENCES ÉTALON ET SIGNAUX HORAIRES PAR SATELLITE (400,1 MHz) 646 647	
400,15–401	AUXILIARES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) RECHERCHE SPATIALE (espace vers Terre) *Exploitation spatiale* (espace vers Terre) 647	

MOD 3626 646 Les émissions doivent être limitées à une bande de ± 25 kHz de part et d'autre de la fréquence étalon 400,1 MHz.
312B

MOD 3627 647 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Aarbie Saudite, Bahreïn, Bulgarie, Colombie, Costa Rica, Cuba, Egypte, Emirats Arabes Unis, Equateur, Hongrie, Indonésie, Iran, Iraq, Israël, Koweit, Libéria, Malasie, Nigérie, Oman, Pakistan, Philippines, Pologne, Qatar, Syrie, République Démocratique Allemande, Roumanie, Singapour, Somalie, Sri Lanka, Tchécoslovaquie, Thaïlande, URSS et Yougoslavie, la bande 400,05–401 MHz est, de plus, attribuée aux service fixe et mobile, à titre primaire.
313

MHz

401–420

Attribution aux services		
Région 1	Région 2	Région 3
401–402	AUXILIAIRES DE LA MÉTÉOROLOGIE EXPLOITATION SPATIALE (espace vers Terre) *Exploration de la Terre par satellite* (Terre vers espace) *Fixe* *Météorologie par satellite* (Terre vers espace) *Mobile*, sauf mobile aéronautique	
402–403	AUXILIAIRES DE LA MÉTÉOROLOGIE *Exploration de la Terre par satellite* (Terre vers espace) *Fixe* *Météorologie par satellite* (Terre vers espace) *Mobile, sauf mobile aéronautique*	

Attribution aux services		
Région 1	Région 2	Région 3
403–406	AUXILIAIRES DE LA MÉTÉOROLOGIE *Fixe* *Mobile*, sauf mobile aéronautique 648	
406–406,1	MOBILE PAR SATELLITE (Terre vers espace) 649	
406,1–410	FIXE MOBILE, sauf mobile aéronautique RADIOASTRONOMIE 648 650	
410–420	FIXE MOBILE, sauf mobile aéronautique	

ADD 3633A 648 *Attribution additionnelle:* au Canada, les bandes 405,5–406 MHz et 406,1–410 MHz sont, de plus, attribuées au service mobile par satellite (Terre vers espace), sauf mobile aéronautique par satellite, à titre primaire, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

NOC 3634 649 La bande 406–406,1 MHz est réservée uniquement à l'utilisation et au développement de systèmes de radiobalises de localisation des sinistres à faible puissance (n'excédant pas 5 W) faisant appel à des techniques spatiales.
317A

MOD 3531 650 En assignant des fréquences aux stations des autres services auxquels la bande 406,1–410 MHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).
233B

MHz

420–470

Attribution aux services		
Région 1	Région 2	Région 3
420–470	FIXE MOBILE, sauf mobile aéronautique *Radiolocalisation* 651 652 653	
430–440 AMATEUR RADIOLOCALISATION 653 654 655 656 657 658 659 661 662 663 664 665	**430–440** RADIOLOCALISATION *Amateur* 653 658 659 660 663 664	
440–450	FIXE MOBILE, sauf mobile aéronautique *Radiolocalisation* 651 652 653 666 667 668	
450–460	FIXE MOBILE 653 668 669 670	
460–470	FIXE MOBILE *Metorologie par satellite* (espace vers Terre) 669 670 671 672	

MOD 3640 651 *Catégorie de service différente:* en Australie, aux États-Unis, en Inde, au Japon et au Royaume-Uni, dans les
319 bandes 420–430 Mhz et 440–450 MHz, l'attribution au service de radiolocalisation est à titre primaire (voir le numéro **425**).

ADD 3640A 652 *Attribution additionnelle:* dans les pays suivants: Australie, États-Unis, Jamaïque et Philippines, les bande 420–430 Mhz et 440–450 MHz sont, de plus, attribuées au service d'amateur à titre secondaire.

MOD 3636 653 *Attribution additionnelle:* dans les pays suivants: Chine, Inde, République Démocratique Allemande, Royaume-Uni
318 et URRS, la bande 420–460 MHz est, de plus, attribuée au service de radionavigation aéronautique (radio-alimètres) à titre secondaire.

ADD 3646D 654 *Catégorie de service différente:* en France, dans la bande 430–434 MHz, l'attribution au service d'amateur est à titre secondaire (voir le numéro **424**).

ADD 3646A 655 *Catégorie de service différente:* au Danemark, en Libye, en Norvège et en Suède, dans les bandes 430–432 MHz et 438–440 MHz, l'attribution au service de radiolocalisation est à titre secondaire (voir le numéro **424**).

MOD 3646 656 *Attribution de remplacement:* au Danemark, en Norvège et en Suède, les bandes 430–432 MHz et 438–440 MHz
322 sont attribuées aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD 3646B 657 *Attribution additionnelle:* en Finlande, en Libye et en Yougoslavie, les bandes 430–432 MHz et 438–440 MHz sont, de plus, attribuées aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

MOD 3643 658 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, Arabie Saoudite, Bahreïn, Bangladesh,
320 Brunéi, Burundi, Egypte, Emirats Arabes Unis, Equateur, Ethiopie, Grèce, Guinée, Inde, Indonésie, Iran, Iraq, Israël, Italie, Jordanie, Kenya, Koweït, Liban, Liechtenstein, Libye, Malasie, Malte, Nigérie, Oman, Pakistan, Philippines, Qatar, Syrie, Singapour, Somalie, Suisse, Tanzanie, Thaïlande et Togo, la bande 430–440 MHz est, de plus, attribuée au service fixe, à titre primaire et les bandes 430–435 MHz et 438–440 MHz sont, de plus, attribuées au service mobile, sauf mobile aéronautique à titre primaire.

ADD 4646C 659 *Attribution additionnelle:* dans les pays suivants: Angola, Bulgarie, Cameroun, Congo, Gabon, Hongrie, Mali, Mongolie, Niger, Pologne, République Démocratique Allemande, Roumanie, Rwanda, Tchad, Tchécoslovaquie et URSS, la bande 430–440 MHz est, de plus, attribuée au service fixe à titre primaire.

ADD 3640B 660 *Catégorie de service différente:* dans les pays suivants: Argentine, Colombie, Costa Rica, Cuba, Guyane, Honduras, Panama et Venezuela, dans la bande 430–440 MHz, l'attribution au service d'amateur est à titre primaire (voir le numéro **425**).

ADD 3645A 661 En Région 1, sauf dans les pays mentionnés au numéro **662**, la bande 433,05-434,79 MHz (fréquence centrale 433,92 MHz) est utilisable pour les applications industrielles scientifiques et médicales (ISM). L'utilisation de cette bande de fréquences, pour les apllications ISM, est subordonnée à une autorisation particulière donnée par l'administration concernée, en accord avec les autres administrations dont les services de radiocommunication pourraient être affectés. Pour l'application de cette disposition, les administrations se reporteront aux plus récents Avis pertinents du CCIR.

MOD 3645 662 En République fédérale d'Alllemagne, en Autriche, au Liechtenstein, au Portugal, en Suisse et en Yougoslavie,
321 la bande 433,05-434,79 MHz (fréquence centrale 433,92 MHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication de ces pays fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.

MOD 3642 663 *Attribution additionnelle:* au Brésil, en France et dans les Départements français d'Outre-Mer de la Région 2 et
319B en Inde, la bande 433,75-434,25 MHz est, de plus, attribuée au service d'exploitation spatiale (Terre vers espace) à titre primaire jusqu'au 1er janvier 1990, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14. Après le 1er de janvier 1990 et dans les mêmes pays, la bande 433,75-434,25 MHz será attribué au même service à titre secondaire.

MOD 3644 664 Le service d'amateur par satellite peut fonctionner dans les bandes 435-438 MHz, 1260-1270 MHz, 2400-2450 MHz,
320A 3400-3410 MHz (dans les Régions 2 et 3 seulement) et 5650-5670 MHz, à condition qu'il n'en résulte pas de brouillage préjudiciable aux autres services fonctionnant conformément au tableau (voir le numéro **435**). Les administrations qui autoriseront cette utilisation doivent faire en sorte que tout brouillage préjudiciable causé par les émissions d'une station du service d'amateur par satellite soit inmédiatement éliminé, conformément aux dispositions du numéro **2741**. L'utilisation des bandes 1260-1270 MHz et 5650-5670 MHz par le service d'amateur par satellite est limitée au sens Terre vers espace.

ADD 3646E 665 *Attribution additionnelle:* en Autriche, la bande 438-440 MHz est, de plus, attribué aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

ADD 3640C 666 *Attribution additionnelle:* au Canada, en Nouvelle-Zélande et en Papua-Nouvelle-Guinée, la bande 440-450 MHz est, de plus, attribuée au service d'amateur à titre secondaire.

ADD 3640D 667 *Catégorie de service différente:* au Canada, dans la bande 440-450 MHZ l'attribution au service de radiolocalisation est à titre primaire (voir le numéro **425**).

MOD 3641 668 Souis réserve d'un accord obtenu suivant le procédure prévue à l'article 14, la bande 449,75-450,25 MHz peut-être
319A utilisée pour le service d'exploitation spatiale (Terre vers espace) et le service de recherche spatiale (Terre vers espace).

NOC 3638 669 Dans le service mobile maritime, les fréquences 457,525 MHz, 457,550 MHz, 457,575 MHz, 467,525 MHz,
318B 467,550 MHz et 467,575 MHz peuvent être utilisées par les stations de communications de bord. Cet usage peut être soumis à la réglementation nationale de l'administration intéressée lorsque ces fréquences sont utilisées dans les eaux territoriales de son pays. Les caractéristiques des appareils utilisés doivent être conformes aux spécifications de l'appendice **20**.

NOC 3639 670 Dans les eaux territoriales du Canada, des États-Unis et des Philippines, les fréquences à utiliser de préference
318C par les stations de communications de bord sont 457,525 MHz, 457,550 MHz, 457,575 MHz et 457,600 MHz. Ces fréquences sont appariées respectivement avec les fréquences 467,750 MHz, 467,775 MHz, 467,800 MHz et 467,825 MHz. Les caractéristiques des appareils utilisés doivent être conformes aux spécifications de l'appendice **20**.

MOD 3650 671 Les bandes 460-470 MHz et 1690-1710 MHz peuvent, de plus, être utilisées pour les applications du service
324B d'exploration de la Terre par satellite autres que celles du service de météorologie par satellite, pour les transmissions espace vers Terre, à condition de ne pas causer de brouillage préjudiciable aux stations qui fonctionnent conformément au tableau.

MOD 3637 672 *Catégorie de service différente*: dans les pays suivants: Afghanistan, Bulgarie, Chine, Cub, Hongrie, Japon,
318A Mongolie, Pologne, Tchécoslovaquie et URSS, dans la bande 460-470 MHz, l'attribution au service de météorologie par satellite (espace vers Terre) est à titre primaire (voir le numéro **425**), et sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

MHz

470–890

Attribution aux services		
Région 1	Région 2	Région 3
470–790 RADIODIFFUSION 676 680 681 682 683 684 685 686 687 689 693 694	**470–512** RADIODIFFUSION *Fixe* *Mobile* 674 675	**470–585** FIXE MOBILE RADIODIFFUSION 673 677 679
	512–608 RADIONAVIGATION 678	**585–610** FIXE MOBILE RADIODIFFUSION RADIONAVIGATION 688 689 690
	608–614 RADIOASTRONOMIE *Mobile par satellite*, sauf mobile aéronautique par satellite (Terre vers espace)	
790–862 FIXE RADIODIFFUSION 694 695 696 697 698 699 702	**614–806** RADIODIFFUSION *Fixe* *Mobile* 675 692 693	**610–890** FIXE MOBILE RADIODIFFUSION
862–890 FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION 703 699 704	**806–890** FIXE MOBILE RADIODIFFUSION 700	677 688 689 690 691 693 701

ADD **3650C** **673** *Attribution additionnele:* en Chine, la bande 470-485 MHz est, de plus, attribuée au service de recherche spatiale (espace vers Terre) et au service d'exploitation spatiale (espace vers Terre) à titre primaire sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14 et sous réserve de ne pas causer de brouillage préjudiciable aux stations de radiodiffusion existantes ou prévues.

ADD **3650BA** **674** *Catégorie de service differente:* au Mexique et au Venezuela, dans la bande 470-512 MHz, l'attribution aux services fixe et mobile est à titre primaire (voir le numéro **425**), sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3650B** **675** *Catégorie de service différente:* au Chili, en Colombie, en Equateur, aux États-Unis, en Guyane et à la Jamaïque, dans les bandes 470-512 MHz et 614-806 MHz, l'attribution aux services fixe et mobile est à titre primaire (voir le numéro **425**). Sous réserve d'un accord obtenu suivant la procédure prévue à l' article 14.

ADD **3650A** **676** *Attribution additionnelle:* dans les pays suivants: Burundi, Cameroun, Congo, Ethiopie, Israël, Kenya, Libye, Sénégal, Soudan, Syrie et Yémem (RDP du), la bande 470-582 MHz est de plus, attribuée au service fixe à titre secondaire.

MOD **3668** 339 **677** *Attribution de remplacement:* au Pakistan, les bandes 470-582 MHz et 610-890 MHz sont attribuées au service de radiodiffusion, à titre primaire.

ADD **3650E** **678** *Attribution additionnelle:* dans les pays suivants: Costa Rica, El Salvador, Equateur, États-Unis, Guatemala, Guyane, Honduras, Jamaïque et Venezuela, la bande 512-608 MHz est, de plus, attribuée aux services fixe e mobile à titre primaire sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD **3650F** **679** *Attribution additionnelle:* en Inde, la bande 549,75-550,25 MHz est, de plus, attribuée au service d'exploitation spatiale (espace vers Terre) à titre secondaire.

ADD **3651A** **680** *Attribution additionnelle:* au Royaume-Uni, les bandes suivants sont, de plus, attribuées au service de radionavigation, aéronautique à titre primaire: 582-590 MHz jusqu'au au 31 décembre 1987; 598-606 MHz, jusqu'au au 31 décembre 1994; toutes les nouvelles assignations aux stations du service de radionavigation aéronautique dans ces bandes sont effectuées sous réserve de l'accord des Administrations des pays suivants: Rèpublique fédérale d'Allemagne, Belgique, Danemark, Espagne, France, Irlande, Luxembourg, Maroc, Norvège et Pays-Bas.

MOD **3653** 328 **681** *Attribution additionnelle:* en Belgique, la bande 582-606 MHz est, de plus, attribuée au service de radionavigation à titre primarie jusqu'au 31 décembre 1984.

ADD	3653A	682	*Attribution additionnelle:* en France et en Italie la bande 582-606 MHz est, de plus, attribuée au service de radionavigation à titre permis jusqu'au 1er janvier 1990.
ADD	3653AA	683	*Attribution additionnelle:* à Oman la bande 582-607 MHz est, de plus, attribuée au service de radionavigation à titre secondaire.
MOD	3654 329	684	*Attribution additionnelle:* en Iaraël,en Libye, en Syrie et au Soudan, la bande 582-790 MHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre secondaire.
ADD	3653B	685	*Attribution additionnelle:* au Danemark et au Koweït, la bande 590-598 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire, jusqu'au 1er janvier 1995.
MOD	3651 325	686	*Attribution additionnelle:* au Royanne-Uni, la bande 590-598 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire. Toutes les nouvelles assignations aux stations du service de radionavigation aéronautique, y compris les assignations transférées des bandes adjacentes, doivent faire l'objet de coordination avec les Administrations des pays suivants: République fédéral d'Allemagne, Belgique, Danemark, Espagne, France, Luxemborg, Maroc, Norvège et Pays -Bas.
MOD	3657 330A	687	*Attribution additionnelle:* dans la Zone africaine de radiodiffusion (voir les numéros **400** à **403**), la bande 606-614 MHz est, de plus,attribuée au service de radioastrononie à titre permis.
ADD	3660A	688	*Attribution additionnelle:* en Chine, la bande 606-614 MHz est, de plus, attribuées au service de radioastronomie à titre primaire.
MOd	3660 332	689	En Région 1, à l'exception de la Zone africainede radiodiffusion (voir les numéros **400** à **403**) et dans la Région 3, la bande 608-614 MHz est, de plus, attribuée au service de radioastrononie à titre secondaire. Lorsqu'elles feront des assignations aux stations des autres services auxquels cette bande est atribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastrononie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage pariculièrement importantes pour le servce de radioastronomie (voir les numéros **343** et **344** et l'article 36).
MOD	3658 330B	690	*Attribution additionnelle:* en Inde, la bande 608-614 MHz est, de plus, attribuée au service de radioastromie à titre primaire.
ADD	3675A	691	*Attribution additionnelle:* en Nouvelle-Zélande, la bande 610-620 MHz est, de plus, attribuée au service d'amateur à titre secondaire.
ADD	3657B	692	*Catégorie de service différente:* au Costa Rica, El Salvador et Honduras, dans la bande 614-806 MHz l'attribution au service fixe est à titre primaire (voir e numéro **425**) sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.
MOD	3661 332A	693	Des fréquences comprises dans la bande 620-790 MHz peuvent être assignées à des stations de télévision à modulation de fréquence du service de radiodiffusion par satellite, sous réserve d'accord entre les administrations concernées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être affectés (voir les Résolutions **33** et **507**). De telles stations ne devront pas produire une puissance surfacique supérieure à — 129 dB (W/m^2) pour les angles d'arrivée inférieurs à 20° (voir la Recommandation **705**) à l'intérieur des territoires des autres pays sans le consentement des administrations de ceux-ci.
MOD	3659 331	694	*Attribution additionnelle:* dans les pay suivants: Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchéscolovaquie et URSS, la bande 645-862 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis.
ADD	3662A	695	*Attribution de remplacement:* en Espagne et en France, la bande 790-830 MHz est attribuée au service de radiodiffusion à titre primaire.
ADD	3661A	696	*Attribution de remplacement:* en Grèce, en Italie, au Maroc et en Tunisie, la bande 790-838 MHz est attribuée au service de radiodiffusion à titre primaire.
ADD	3662B	697	*Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Danemark, Finlande, Israël, Liechtenstein, Norvège, Pays-Bas, Suède, Suisse et Yougoslavie, la bande 790-830 MHz, et dans ces mêmes pays, et en Espagne et France, la bande 830-862 MHz sont, de plus, attribuées au service mobile, sauf mobile aéronautique, à titre primaire. Toutefois, les stations du service mobile des pays mentionnés pour chaque bande indiqué dans le présent renvol ne doivent pas causer de brouillage préjudiciable aux stations des services fonctionnant conformément au tableau dans les pays autres que ceux mentionnés pour cette même bande ni demander à être protégées vis-à-vis de celles-ci.
ADD	3662BA	698	*Attribution additionnelle:* en Autriche, la bande 790-862 MHz est, de plus, attribuée au service mobile, sauf mobile aéronautique à titre secondaire.
ADD	3662CA	699	*Attribution additionnelle:* en Norvège et en Suède, les bandes 806-890 MHz et 942-960 MHz sont, de plus, attribuées au service mobile par satellite, sauf mobile aéronautique par satellite, à titre primaire. Ce service doit fonctionner à l'intérieur des frontières nationales, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14. Ce service ne doit pas causer de brouillage préjudiciable aux services fonetionnant conformément au tableau.
ADD	3670B	700	*Attribution additionnelle:* dans la Région 2, la bande 806-890 MHz est, de plus, attribuée au service mobile par satellite, sauf mobile aéronautique par satellite, à tittre primaire. Ce service doit fonctionner à l'intérieur des frontières nationales, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.
ADD	3662C	701	*Attribution additionnelle:* dans la Région 3, les bandes 806-890 MHz et 942-960 MHz, sont, de plus, attribuées au service mobile par satellite, sauf mobile aéronautique par satellite, à titre primaire. Ce service doit fonctionner à l'intérieur des frontières nationales, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14. Ce service ne doit pas causer de brouillage préjudiciable aux services fonctionnant conformément au tableau.
ADD	3662DA	702	*Attribution de remplacement:* en Italie, la bande 838-854 MHz est attribuée au service de radiodiffusion à titre primaire, à partir du 1er janvier 1995.
ADD	3662A	703	En Région 1, dans la bande 862-960 MHz, les stations du service de radiodiffusion doivent fonctionner uniquement dans la Zone africaine de radiodiffusion (voir les numéros **400** à **403**), en y excluant l'Algérie, l'Egypte, la Libye et le Maroc. Ce fonctionnement doit être conforme aux Actes finals de la Conférence africaine de radiodiffusion sur ondes métriques et decimétriques (Genève, 1963).
ADD	3659B	704	*Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchéscoslavaquie et URSS, la bande 862-960 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre permis jusqu'au 1er janvier 1998. Jusqu'au à cettte date le service de radionavigation aéronautique peut utiliser la bande sous réserve d'un accord obtenu conformément aux dispositions de l'article 14. Après cette date, le service de radionavigation aéronautique peut continuer à fonctionner à titre secondaire.

MHz

890–960

Attribution aux services		
Région 1	Région 2	Région 3
890–942 FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION 703 *Radiolocalisation* 704	**890–902** FIXE MOBILE, sauf mobile aéronautique *Radiolocalisation* 705	**890–942** FIXE MOBILE RADIODIFFUSION *Radiolocalisation* 706
	902–928 FIXE *Amateur* *Mobile*, sauf mobile aéronautique *Radiolocalisation* 705 707	
	928–942 Fixe MOBILE, sauf mobile aéronautique *Radiolocalisation* 705	
942–960 FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION 703 699 704	**942–960** FIXE *Mobile* 708	**942–960** FIXE MOBILE RADIODIFFUSION 701

ADD **3669A** **705** *Catégorie de service différente:* aux États-Unis, l'attribution de la bande 890-942 MHz au service de radiolocalisation est à titre primaire (voir le numéro **425**), sous réserve d'un acord obtenu suivant la procédure prévue à l'article 14.

ADD **3669B** **706** *Catégorie de service différente:* en Australie, l'attribution de la bande 890-942 MHz au service de radiolocalisation est à titre primaire (voir la numéro **425**).

MOD **3670** **707** En Région 2, la bande 902-928 MIIz (fréquence centrale 915 MHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande accepter les brouillages préjudiciables qui peuvent se produire du fait de ces apllications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.
340

ADD **3670A** **708** *Catégorie de service différente:* aux États-Unis, l'attribution des bandes 942-947 MHz et 952-960 MHz au service mobile est à titre primaire (voir le numéro **425**) sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

MHz

960–1215

Attribution aux services		
Région 1	Région 2	Région 3
960–1215	RADIONAVIGATION AÉRONAUTIQUE 709	

NOC **3671** **709** La bande 960-1215 MHz est réservée, dans le monde entier, à l'utilisation et au développement d'aides életroniques à la navigation aéronautique installées à bord d'aéronefs ainsi qu'aux installations au sol qui leur sont directement associées.
341

MHz

1215–1240

Attribution aux services		
Région 1	Région 2	Région 3
1215–1240	RADIOLOCALISATION RADIONAVIGATION PAR SATELLITE (espace vers Terre) 710 711 712 713	

ADD **3673A** **710** La bande 1215-1260 MHz peut être utilisée par le service de radionavigation par satellite, sous réserve de ne pas causer de brouillage préjudiciable au service de radionavigation autorisé au titre du numéro **712.**

MOD **3674** **711** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Angola, Arabie Saoudite, Bahreïn, Bangladesh, Cameroun, Chine, Emirats Arabes Unis, Ethiopie, Guinée, Guyane, Inde, Indonésie, Iran, Iraq, Israël, Japon, Jordanie, Koweït, Liban, Libye, Malawi, Maroc, Mozambique, Népal, Nigérie, Oman, Pakistan, Philippines, Qatar, Syrie, Somalie, Soudan, Sri Lanka, Tchad, Thaïlande, Togo et Yémen (RDP du), la bande 1215-1300 MHz est, de plus, attribuée aux services fixe e mobile à titre primaire.
344

MOD **3673** **712** *Attribution additionnelle:* dans les pays suivants: Algérie, République fédérale d'Allemagne, Autriche, Bahreïn, Belgique, Bénin, Burundi, Cameroun, Chine, Danemark, Emirats Arabes Unis, France, Grèce, Inde, Iran, Iraq, Kenya, Liechtenstein, Luxembourg, Mali, Mauritanie, Norvège, Oman, Pakistan, Pays-Bas, Portugal, Qatar, Sénégal, Somalie, Soudan, SriLanka, Suède, Suisse, Tanzanie, Turquie et Yougoslavie, la bande 1215-1300 MHz est, de plus, attribuée au service de radionavigation à titre primaire.
343

ADD **3675A** **713** Dans les bandes 1215-1300 MHz, 3100-3300 MHz, 5250-5350 MHz, 8550-8650 MHz, 9500-9800 MHz e 13,4-14 GHz, les stations de radiolocalisation installées à bord d'engins spatiaux peuvent aussi être utilisées à titre secondaire pour les services de recherche spatiale et d'exploration de la Terre par satellite.

MHz

1240–1300

Attribution aux services		
Région 1	Région 2	Région 3
1240–1260	RADIOLOCALISATION RADIONAVIGATION PAR SATELLITE (espace vers Terre) 710 *Amateur* 711 712 713 714	
1260–1300	RADIOLOCALISATION *Amateur* *664* 711 712 713 714	

ADD **3675B** **714** *Attribution additionnelle:* au Canada et aux États-Unis, les bandes 1240-1300 MHz et 1350-1370 MHz sont, de plus, attribuées au service de radionavegation aéronautique, à titre primaire.

MHz

1300–1350

Attribution aux services		
Région 1	Région 2	Région 3
1300–1350	RADIONAVIGATION AÉRONAUTIQUE 717 *Radiolocalisation* 715 716 718	

MOD **3678** **715** *Attribution additionnelle:* en Indonésie, la bande 1300-1350 MHz est, de plus, attribuée aux services fixe e mobile à titre primaire.
348

MOD **3677** **716** *Attribution de remplacement:* en Irlande et au Royaume-Uni, la bande 1300-1350 MHz est attribuée au service de radiolocalisation à titre primarie.
347

MOD **3676** **717** L'emploi des bandes 1300-1350 MHz, 2700-2900 MHz et 9000-9200 MHz par le service de radionavigation aéronautique est limité aux radars au sol et aux répondeurs aéroportés associés n'émettant que sur des fréquences de ces bandes, uniquement lorsqu'elles sont mises en action par les radars fonctionnant dans la même bande.
346

MOD **3680** **718** Les administrations sont instamment priées, lorqus'elle feront des assignations aux stations des autres services, de prendre toutes les mesures pratiquement réalisables pour protéger les observations sur les raies spectrales du service
349A

de radioastronomie contre les brouillages préjudiciables dans la bande 1330-1400 MHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

1350–1427

Attribution aux services		
Région 1	Région 2	Région 3
1350–1400 FIXE MOBILE RADIOLOCALISATION 718 719 720	**1350–1400** RADIOLOCALISATION 714 718 720	
1400–1427	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 721 722	

MOD **3679** **719** En Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchecoslovaquie et URSS, les installations existantes du service de radionavigation peuvent continuer à fonctionner dans la bande 1350-1400 MHz. 349

ADD **3680D** **720** Les bandes 1370-1400 MHz, 2640-2655 MHz, 4950-4990 MHz et 15,20-15,35 MHz sont, de plus, attribuées aux services de recherche spatiale (passive) et d'exploration de la Terre par satellite (passive) à titre secondaire.

ADD **3679B** **721** Toutes les émissions sont interdites dans la bande 1400-1427 MHz.

ADD **3679A** **722** Dans les bandes 1400-1727 MHz, 101-120 MHz et 197-220 MHz certains pays procèdent à des recherches passives dans le cadre d'un programme de recherche des émissions intentionnelles d'origine extraterrestre.

MHz

1427–1525

Attribution aux services		
Région 1	Région 2	Région 3
1427–1429	EXPLOITATION SPATIALE (Terre vers espace) FIXE MOBILE, sauf mobile aéronautique 722	
1429–1525 FIXE MOBILE, sauf mobile aéronautique 722	**1429–1525** FIXE MOBILE 723 722	

ADD **3680C** **723** En Région 2, en Australie et Papua-Nouvelle-Guinée, l'utilisation de la bande 1435-1535 MHz par le service mobile aéronautique pour la télémesure bénéficie de la priorité par rapport aux autres utilisations du service mobile.

MHz

1525–1530

Attribution aux services		
Région 1	Région 2	Région 3
1525–1530 EXPLOITATION SPATIALE (espace vers Terre) FIXE *Exploration de la Terre par satellite* *Mobile*, sauf mobile aéronautique 724 722 725	**1525–1530** EXPLOITATION SPATIALE (espace vers Terre) *Exploration de la Terre par satellite* *Fixe* *Mobile* 723 722	**1525–1530** EXPLOITATION SPATIALE (espace vers Terre) FIXE *Exploration de la Terre par satellite* *Mobile* 723 724 722

MOD **3683** **724** *Catégorie de service différente:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bulgarie, Cameroun, Egypte, Emirats Arabes Unis, France, Hongrie, Iran, Iraq, Israël, Koweït, Liban, Maroc, Mongolie, Oman, Pologne, Qatar, Syrie, République Démocratique Allemande, Roumanie, Tchécoslovaquie, URSS, Yémen (RDP du) et Yougoslavie, dans la bande 1525-1530 MHz l'attribution au service mobile, sauf mobile aéronautique, est à titre primaire (voir o numéro **425**).
350C

ADD **3683A** **725** *Attribution additionnelle:* en URSS, la bande 1525-1530 MHz est, de plus, attribuée au service mobile aéronautique à titre primaire.

MHz

1530–1535

Attribution aux services		
Région 1	Région 2	Région 3
1530–1535	**1530–1535**	
EXPLOITATION SPATIALE (espace vers Tere)	EXPLOITATION SPATIALE (espace vers Terre)	
MOBILE MARITIME PAR SATELLITE (espace vers Terre)	MOBILE MARITIME PAR SATELLITE (espace vers Terre)	
Exploration de la Terre par satellite	*Exploration de la Terre par satellite*	
Fixe	*Fixe*	
Mobile, sauf mobile aéronautique	*Mobile* 723	
722 726	722 726	

ADD **3695C** **726** L'attribution au service mobile maritime par satellite dans la bande 1530-1535 MHz sera effective le 1er janvier 1990. Jusqu'au à cette date, l'attribution du service fixe sera à titre primaire dans les Régions 1 et 3.

MHz

1535–1559

Attribution aux services		
Région 1	Région 2	Région 3
1535–1544	MOBILE MARITIME PAR SATELLITE (espace vers Terre)	
	722 727	
1544–1545	MOBILE PAR SATELLITE (espace vers Terre)	
	722 727 728	
1545–1559	MOBILE AÉRONAUTIQUE PAR SATELLITE (R) (espace vers Terre)	
	722 727 729 730	

MOD **3688** **727** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bangladesh, Congo, Egypte, Emirats Arabes Unis, Ethiopie, Iran, Iraq, Israël, Jordanie, Koweït, Liban, Malte, Maroc, Niger, Oman, Pakistan, Qatar, Soudan, Sri Lanka, Syrie, Somalie, Tchad, Thaïlande, Togo, Yémen (RDP du) et Zambie, les bandes 1540-1645,5 MHz et 1646,5-1660 MHz sont, de plus, attribuées au service fixe, à titre secondaire.
352D

ADD **3695A** **728** L'utilisation des bandes 1544-1545 MHz (espace vers Terre) et 1645,5-1646,5 MHz (Terre vers espace) par le service mobile par satellite est limitée aux émissions de détresse et de sécurité.

MOD **3691** **729** Dans la bande 1545-1559 MHz, les transmissions directes de stations aéronautiques de Terre vers les stations d'aéronef ou entre stations d'aéronef du service mobile aéronautique (R) sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies des stations de satellite vers les stations d'aéronef.
352G

MOD **3685** **730** *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Autriche,, Bulgarie, Cameroun, Guinée, Hongrie, Indonésie, Libye, Mali, Mongolie, Nigérie, Pologne, République Démocratique Allemande, Roumanie, Sénégal, Tchécoslovaquie et URSS, les bandes 1550-1645,5 MHz et 1645,5-1660 MHz sont, de plus, attribuées au service fixe, à titre primaire.
352

MHz

1559–1626,5

Attribution aux services		
Région 1	Région 2	Région 3
1559–1610	RADIONAVIGATION AÉRONAUTIQUE RADIONAVIGATION PAR SATELLITE (espace vers Terre) 722 727 730 731	
1610–1626,5	RADIONAVIGATION AÉRONAUTIQUE 722 727 730 732 733 734	

ADD **3695B** **731** *Attribution de remplacement:* en Suède, la bande 1590-1610 MHz est attribuée au service de radionavegation aéronautique à titre primaire.

MOD **3686** **732** La bande 1610-1626,5 MHz est réservée, dans le monde entier, à l'utilisation et au développement d'aides électroniques à la navegation aéronautique instalées à bord d'aéronefs ainsi qu'aux installations au sol ou à bord de satellites qui leur sont directement associées. Cette utilisation de satellites doit faire l'objet d'un accord obtenu suivant la prócedure prévue à l'article 14.
352A

MOD **3687** **733** Les bandes 1610-1626,5 MHz, 5000-5250 MHz et 15,4-15,7 GHz sont, de plus, attribuées au service mobile aéronautique par satellite (R) à titre primaire. Cette utilisation doit faire l'objet d'un accord obtenu suivant la procédure prévue à l'article 14.
352B

ADD **3695E** **734** La bande 1610,6-1613,8 MHz est, de plus, attribuée au service de radioastronomie à titre secondaire pour les observations sur les raies spectrales. Les administrations sont instamment priées, lorsqu'elles feront des assignations aux stations d'autres services auxquels cette bande est attribuée, de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

1626,5–1660,5

Attribution aux services		
Région 1	Région 2	Région 3
1626,5–1645,5	MOBILE MARITIME PAR SATELLITE (Terre vers espace) 722 727 730	
1645,5–1646,5	MOBILE PAR SATELLITE (Terre vers espace) 722 728	
1646,5–1660	MOBILE AÉRONAUTIQUE PAR SATELLITE (R) (Terre vers espace) 722 727 730 735	
1660–1660,5	MOBILE AÉRONAUTIQUE PAR SATELLITE (R) (Terre vers espace) RADIOASTRONOMIE 722 735 736	

MOD **3694** **735** Dans la bande 1646,5-1660,5 MHz, les transmissions directes de stations d'aéronef du service mobile aéronautique (R) vers les stations aéronautiques de Terre ou entre stations d'aéronef sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies de stations d'aéronef vers les stations de satellite.
352J

ADD **3696B** **736** En assignant des fréquences aux stations des autres services auxquels la bande 1660-1670 MHz est attribuée, les administrations sont instamment priées de prendre toutes ls mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

1660,5–1670

Attribution aux services		
Région 1	Région 2	Région 3
1660,5–1668,4	RADIOASTRONOMIE RECHERCHE SPATIALE (passive) *Fixe* *Mobile*, sauf mobile aéronautique 722 736 737 738 739	
1668,4–1670	AUXILIAIRES DE LA MÉTÉOROLOGIE FIXE MOBILE, sauf mobile aéronautique RADIOASTRONOMIE 722 736	

ADD **3698A** **737** *Catégorie de service différente:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bénin, Bulgarie, Cameroun, République Centrafricaine, Congo, Cuba, Egypte, Emirats Arabes Unis, Ethiopie, Hongrie, Inde, Indonésie, Iran, Israël, Kenya, Koweït, Liban, Malaisie, Mongolie, Oman, Ouganda, Pakistan, Pologne, Qatar, Syrie, République Démocratique Allemande, Singapour, Somalie, Sri Lanka, Tchad, Thaïlande, Tchécoslovaquie, Tunisie, URSS, Yémen (RA), Yémen (RDP du) et Yougoslavie, dans la bande 1660,5-1668,4 MHz l'attribution au service fixe et au service mobile, sauf mobile aéronautique, est à titre primaire jusqu'au 1er janvier 1990 (voir le numéro **425**).

ADD **3696A** **738** *Attribution additionnelle:* dans les pays suivants: Bangladesh, Inde, Indonésie, Nigérie, Pakistan, Sri Lanka, et Thaïlande, la bande 1660,5-1668,4 MHz est, de plus, attribuée aux services des auxiliares de la météorologie à titre secondaire.

MOD **3696** **739** En raison des succès obtenus par les radioastronomes dans l'observation de deux raies spectrales de l'oxhydrile
353A au voisinage de 1665 MHz et 1667 MHz, les administrations sont instamment priées d'accorder toute la protection pratiquement réalisable dans la bande 1660,5-1668,4 MHz en vue des futures recherches de radioastronomie, notamment en éliminant, dès que faire se pourra, les émissions air-sol du service des auxiliares de la météorologie faites dans la bande 1664,4-1668,4 MHz.

MHz

1670–1690

Attribution aux services		
Région 1	Région 2	Région 3
1670–1690	AUXILIAIRES DE LA MÉTÉOROLOGIE FIXE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique 722	

MHz

1690–1700

Attribution aux services		
Région 1	Région 2	Région 3
1690–1700 AUXILIAIRES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) *Fixe* *Mobile*, sauf mobile aéronautique 671 722 741	**1690–1700** AUXILIAIRES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) 671 722 740 742	

ADD **3698B** **740** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Costa Rica, Cuba, Inde, Iran, Malaisie, Pakistan, Sigapour, Sri Lanka et Thaïlande, la bande 1690-1700 MHz est, de plus, attribuée au service fixe et au service mobile, sauf mobile aéronautique, à titre primaire.

MOD **3698** **741** *Catégorie de service différent:* dans les pays suivants: Arabië Saoudite, Autriche, Bahreïn, Bulgarie, Congo, Egypte, Emirats Arabes Unis, Ethiopie, Guinée, Hongrie, Iraq, Israël, Jordanie, Kenya, Koweït, Liban, Mauritanie, Mongolie, Oman, Pologne, Qatar, Syrie, République Démocratique Allemande, Roumanie, Somalie, Tanzanie, Tchécoslovaquie, URSS, Yémen (RA), Yémen (RDP du) et Yougoslavie, dans la bande 1690-1700 MHz l'attribution au service fixe et au service mobile, sauf mobile aéronautique, est à titre primaire (voir le numéro **425**).
354A

MOD **3700** **742** *Attribution additionnelle:* en Australie et en Indonésie, la bande 1690-1700 MHz est, de plus, attribuée au service fixe et au service mobile, sauf mobile aéronautique, à titre secondaire.
354C

MHz

1700–1710

Attribution aux services		
Région 1	Région 2	Région 3
1700–1710	**1700–1710**	
FIXE	FIXE	
MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre)	MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre)	
Mobile, sauf mobile aéronautique	MOBILE, sauf mobile aéronautique	
671 722	671 722 743	

ADD **3701B** **743** *Attribution additionnelle:* en Inde, Indonésie, au Japon et en Thaïlande, la bande 1700-1710 MHz est, en plus, attribuée au service de la recherche spatiale (espace vers Terre), à titre primaire.

MHz

1710–2290

Attribution aux services		
Région 1	Région 2	Région 3
1710–2290	**1710–2290**	
FIXE	FIXE	
Mobile	MOBILE	
722 744 746 747 748 750	722 744 745 746 747 748 749 750	

MOD **3695** **744** La bande 1718,8-1722,2 MHz est, de plus, attribuée au service de radioastronomie à titre secondaire pour les observations sur les raies spectrales. En assignant des fréquences aux stations des autres services auxquels la bande est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger les service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).
352K

MOD **3703** **745** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, et pour ce qui concerne, en particulier, les systèmes à diffusion troposphérique, la bande 1750-1850 MHz peut, de plus, être utilisée par le service d'exploitaion spatiale (Terre vers espace) et le service de recherche spatiale (Terre vers espace) en Région 2, en Afghanistan, Australie, Inde, Indonésie, au Japon et en Thaïlande.
356A

MOD **3704** **746** *Attribution additionnelle:* dans les pays suivants: Bulgarie, Cuba, Hongrie, Mali, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchéscoslovaquie et URSS, la bande 1770-1790 MHz est, de plus, attribuée au service de météorologie par satellite, à titre primaire, sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.
356AA

ADD **3707A** **747** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 2025-210 MHz peut, de plus, être utilisée pour des émissions Terre vers espace et espace vers espace dans les services de recherche spatiale, d'exploitation spatiale et d'exploration de la Terre par satellite. Les services utilisant des émissions espace vers espace doivent à fonctionner conformément aux disposition des numéros **2557** à **2560**; ils ne doivent pas causer de brouillage préjudiciable aux autres services spatiaux.

ADD **3707B** **748** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 2110-2120 MHz peut, de plus, être utilisée pour des émissions Terre vers espace du service de recherche spatiale (espace lointain).

ADD **3707D** **749** Sous réserves d'un accord suivant la procédure prévue à l'article 14, la bande 2110-2120 MHz peut, de plus, être utilisée au Japon pour les services de recherche spatiale (Terre vers espace) et d'exploitation spatiale (Terre vers espace) jusqu'au 31 décembre 1990.

ADD **3707C** **750** Sous réserves d'accord obtenu suivant la procédure prévue à l'article 14, la bande 2200-2290 MHz peut, de plus, être utilisée pour les émissions espace vers Terre et espace vers espace dans les services de recherche spatiale, d'exploitation spatiale et d'exploration de la Terre par satellite. Ces services doivent fonctionner conformément aux dispositions des numéros **2557** á **2560**; les émissons espace vers espace ne doivent pas causer de brouillage préjudiciable aux autres services spatiaux.

MHz

2290–2450

Attribution aux services		
Région 1	Région 2	Région 3
2290–2300 FIXE RECHERCHE SPATIALE (espace lointain) (espace vers Terre) *Mobile*, sauf mobile aéronautique	**2290–2300** FIXE MOBILE, sauf mobile aéronautique RECHERCHE SPATIALE (espace lointain) (espace vers Terre)	
2300–2450 FIXE *Amateur* *Mobile* *Radiolocalisation* 664 752	**2300–2450** FIXE MOBILE RADIOLOCALISATION *Amateur* 664 751 752	

ADD **3680A** **751** En Australie, aux États-Unis et en Papua-Nouvelle-Guinée, l'utilisation de la bande 2310-2390 MHz par le service mobile aéronautique pour la télémesure bénéficie de la priorité par rapport aux autres utilisations du service mobile.

MOD **3709** **752** La bande 2400-2500 MHz (fréquence centrale 2450 MHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces apllications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815.**
357

MHz

2450–2500

Attribution aux services		
Région 1	Région 2	Région 3
2450–2500 FIXE MOBILE *Radiolocalisation* 752 753	**2450–2500** FIXE MOBILE RADIOLOCALISATION 752	

MOD **3713** **753** En France, la bande 2450-2550 MHz est attribuée, à titre primaire, au service de radiolocalisation et, à titre secondaire, aux services fixe et mobile (voir les numéros **424** e **425**. Cette utilisation fait l'objet d'un accord avec les administrations dont les services fonctionnant ou devant fonctionner conformément au présente tableau, sont susceptibles d'être affectés.
361

MHz

2500–2655

Attribution aux services		
Région 1	Région 2	Région 3
2500–2655 FIXE 762 763 764 MOBILE, sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 757 760 720 753 756 758 759	**2500–2655** FIXE 762 764 FIXE PAR SATELLITE (espace vers Terre) 761 MOBILE, sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 757 760 720 755	**2500–2535** FIXE 762 764 FIXE PAR SATELLITE (espace vers Terre) 761 MOBILE, sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 757 760 754 **2535–2655** FIXE 762 764 MOBILE, sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 757 760 720

ADD **3723B** **754** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article **14**, la bande 2500-2535 MHz peut, de plus, être utilisée en Région 3 pour le service mobile par satellite (espace vers Terre) sauf mobile aéronautique par satellite, pour l'exploitation limitée à l'intérieur des frontières nationales.

MOD **3714** **755** *Attribution additionnelle:* au Canada, la bande 2500-2550 MHz est, de plus, attribuée au service de radiolocalisation à titre primaire.
361A

MOD **3716** **756** *Attribution additionnelle:* au Royaume-Uni, la bande 2500-2600 MHz est, de plus, attribuée au service de radiolocalisation à titre secondaire.
362

MOD **3715** **757** L'utilisation de la bande 2500-2690 MHz par le service de radiodiffusion par satellite est limitée aux systèmes nationaux et régionaux pour la réception communautaire; cette utilisation doit faite l'objet d'un accord obtenu suivant la procédure prévue à l'article 14. La puissance surfacique à la surface de la Terre ne doit pas dépasser les valeurs spécifiques aux numéros **2561** à **2564**.
361B

MOD **3717** **758** *Attribution de remplacement:* en République fédérale d'Allemagne et en Grèce, la bande 2500-2690 MHz est attribuée au service fixe à titre primaire.
363

MOD **3724** **759** *Attribution de remplacement:* en Bulgarie et URSS, la bande 2500-2690 MHz est attribuée au service fixe et au service mobile, sauf aéronautique, à titre primaire.
364F

MOD **3726** **760** Dans las conception de systèmes de radiodiffusion par satellite dans les bandes situées entre 2500 MHz et 2690 MHz, les administrations sont instamment priées de prendre toutes le mesures nécessaires pourprotéger le service de radioastrononie dans la bande 2690-2700 MHz.
364H

MOD **3723** **761** L'utilisation de la bande 2500-2690 MHz en Région 2 et des bandes 2500-2535 MHz et 2655-2690 MHz en Région 3 par le service fixe par satellite est limitée aux systèmes nationaux et régionaux: cette utilisation doit faire l'objet d'un accord obtenu suivant la procédure prévue à l'article 14 en tenant particulièrement compte du service de radiodiffusion par satellite en Région1. Dans le sens espace vers Terre, la puissance surfacique à la surface de la Terre ne doit pas dépasser les valeurs spécifiées aux numéros **2561** à **2564**.
364E

MOD **3722** **762** Les administrations doivent faire tous les efforts pratiquement possibles pour éviter le développement de nouveaux systèmes a diffusion troposphérique dans la bande 2500-2690 MHz.
364D

MOD **3718** **763** Sous réserve d'un accord obtenui suivant la procédure prévue à l'article 14, la bande 2500-2690 MHz peut être utilisée pour les systèmes à diffusion troposphérique en Région 1.
364

NOC **3721** **764** Lors de la planification de nouveaux faisceaux hertziens utilisant la diffusion troposphérique dans la bande 2500-2690 MHz, toutes les mesures possibles seront prises pour éviter de diriger les antennes vers l'orbite des satellites géostationnaires.
364C

MHz

2655–2690

Attribution aux services		
Région 1	Région 2	Région 3
2655–2690	**2655–2690**	**2655–2690**
FIXE 762 763 764	FIXE 762 764	FIXE 762 764
MOBILE, sauf mobile aéronautique	FIXE PAR SATELLITE (Terre vers espace) (espace vers Terre) 761	FIXE PAR SATELLITE (Terre vers espace) 761
RADIODIFFUSION PAR SATELLITE 757 760	MOBILE, sauf mobile aéronautique	MOBILE, sauf mobile aéronautique
Exploration de la Terre par satellite (passive)	RADIODIFFUSION PAR SATELLITE 757 760	RADIODIFFUSION PAR SATELLITE 757 760
Radioastronomie	*Exploration de la Terre par satellite* (passive)	*Exploration de la Terre par satellite* (passive)
Recherche spatiale (passive)	*Radioastronomie*	*Radioastronomie*
	Recherche spatiale (passive)	*Recherche spatiale* (passive)
758 759 765	765	765 766

MOD **3725** **765** En assignant des fréquences aux stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables dans la bande 2655-2690 MHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **2344** ainsi que l'article 36).
364G

ADD **3723A** **766** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 2655-2690 MHz peut, de plus, être utilisée en Région 3 pour le service mobile par satellite (Terre vers espace) sauf mobile aéronautique par satellite, pour une exploitation limitée à l'intérieur les frontières nationales.

MHz

2690–2700

Attribution aux services		
Région 1	Région 2	Région 3
2690–2700	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 767 768 769	

ADD **3717A** **767** *Attribution additionnelle:* en République fédérale d'Allemagne et en Autriche, la bande 2690-2695 MHz est, de plus, attribuée au service fixe à titre primaire. L'utilisation de cette bande est limitée aux matériels en exploitation au 1er janvier 1985.

ADD **3717B** **768** Toutes les émissions sont interdites dans la bande 2690-2700 MHz, exceptecelles qui sont prévues au titre des numéros **767** et **769**.

MOd **3719** 364A **769** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bulgarie, Cameroun, République Centrafricaine, Congo, Côte d'Ivoire, Cuba, Egypte, Emirats Arabes Unis, Ethiopie, Gabon, Guinée-Bissau, Hongrie, Iran, Iraq, Israël, Liban, Malaisie, Malawi, Mali, Maroc, Mauritanie, Mongolie, Nigérie, Oman, Pakistan, Philippines, Pologne, Qatar, Syrie, République Démocratique Allemande, Roumanie, Singapour, Somalie, Sri Lanka, Tchécoslovaquie, Thaïlande, Tunisie, URSS, Yémn (RA) Yémen (RDP du), Yougoslavie, Zaire et Zambie, la bande 2690-2700 MHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire. L'utilisation de cette bande et limitée aux materiels en exploitation au 1er janvier 1985.

MHz

2700–3100

Attribution aux services		
Région 1	Région 2	Région 3
2700–2900	RADIONAVIGATION AÉRONAUTIQUE 717 *Radiolocalisation* 770 771	
2900–3100	RADIONAVIGATION 773 774 775 *Radiolocalisation* 772	

NOC **3727** 366 **770** Les radars au sol utilisés dans la bande 2700-2900 MHz pour les besoins de la météorologie sont autorisés à fonctionner sur une base d'égalité avec les stations du service de radionavigation aéronautique.

ADD **3727A** **771** *Attribution additionnelle:* au Canada, la bande 2850-290 MHz est, de plus, attribuée au service de radionavigation maritime, à titre primaire, pour les radars côtiers.

ADD **3730A** **772** Dans les bandes 2900-3100 MHz, 5470-5650 MHz et 9200-9300 MHz, l'emploi de systèmes à respondeurs à bord de navires est limitée aux sous-bandes 2930-2950 MHz, 5470-5480 MHz et 9280-9300 MHz.

NOC **3728** 367 **773** L'utilisation de la bande 2900-3100 MHz par le service de radionavigation aéronautique est limitée aux radars au sol.

NOC **3729** 367A **774** Dans les bandes 2900-2920 MHz et 9300-9320 MHz dans le service de radionavigation maritime, l'emploi de radars de bord autres que les radars existants à la date du 1er janvier 1976 n'est pas autorisé.

NOC **3730** 367B **775** Dans les bandes 2920-3100 MHz et 9320-9500 MHz, dans les service de radionavigation maritime, l'emploi, sur la terre ferme ou en mer, de balises-radar (racons) à fréquence fixe n'est pas autorisé.

MHz

3100–3300

Attribution aux services		
Région 1	Région 2	Région 3
3100–3300	RADIOLOCALISATION 713 776 777 778	

MOD **3732** 369 **776** Dans la bande 3100-3300 MHz, les balises-radar (racons) et les radars à bord des navires marchands sont autorisés à fonctionner à l'intérieur de la bande 3100-3266 MHz

MOD **3731** 368 **777** *Attribution additionnelle:* dans les pays suivants: Bulgarie, Canada, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 3100-3300 MHz est, de plus, attribuée au service de radionavigation à titre primaire.

ADD **3732A** **778** En assignant des fréquences à des stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger les observations des raies spectrales par le service de radioastrononie contre les brouillages préjudiciables dans les bandes 3260-3267 MHz, 3332-3339 MHz, 3345,8-3352,5 MHz et 4825-4835 MHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sorces de brouillage particulièrement importantes pour le service de radioastrononie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

3300–3400

Attribution aux services		
Région 1	Région 2	Région 3
3300–3400 RADIOLOCALISATION 778 779 780	**3300–3400** RADIOLOCALISATION *Amateur* *Fixe* *Mobile* 778 780	**3300–3400** RADIOLOCALISATION *Amateur* 778 779

MOD 3739 779
376

Attribution additionnelle: dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bangladesh, Chine, Congo, Emirats Arabes Unis, Inde, Indonésie, Iran, Iraq, Israël, Japon, Koweït, Liban, Libye, Malaisie, Oman, Pakistan, Qatar, Syrie, Singapour, Sri Lanka et Thaïlande, la bande 3300-3400 MHz est, de plus, attribuée aux services fixe et mobile à titre primaire. Les pays riverains de la Méditerranée ne peuvent pas prétendre à la protection de leurs services fixes et mobile de la part du service de radiolocalisation.

MOD 3733 780
370

Attribution additionnelle: dans les pays suivants: Bulgarie, Cuba, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 3300-3400 MHz est, de plus, attribuée au service de radionavigation à titre primaire.

MHz

3400–4200

Attribution aux services		
Région 1	Région 2	Région 3
3400–3600 FIXE FIXE PAR SATELLITE (espace vers Terre) *Mobile* *Radiolocalisation* 781 782 785	**3400–3500** FIXE FIXE PAR SATELLITE (espace vers Terre) *Amateur* *Mobile* *Radiolocalisation* 784 664 783	
3600–4200 FIXE FIXE PAR SATELLITE (espace vers Terre) *Mobile*	**3500–3700** FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique *Radiolocalisation* 784 786	
	3700–4200 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique 787	

MOD 3738 781
375

Attribution additionnelle: en République fédérale d'Allemagne, Israël, au Nigérie et Royaume-Uni, la bande 3400-3475 MHz est, de plus, attribuée au service d'amateur à titre secondaire.

ADD 3735A 782

Catégorie de service différente: en Autriche, dans la bande 3400-3500 MHz, l'atribution au service de radiolocalisation est à titre primaire (voir le numéro **425**) sous réserve de l'accord des Administrations des pays suivants: Hongrie, Italie, République Démocratique Allemande, Tchéscoslovaquie et Yougoslavie. Cette utilisation est limitée aux stations au sol. Cependant, cette Administration est instamment priée de mettre fin à cette exploitation en 1985 au plus tard. Après 1985, elle devra prendre toutes les mesures pratiquement possibles pour protéger le service fixe par satellite et aucune exigence de coordination ne sera imposée au service fixe par satellite.

ADD 3739A 783

Catégorie de service différente: en Indonésie, au Japon, Pakistan et en Thaïlande, la bande 3400-3500 MHz est attribuée au service mobile, sauf mobile aéronautique, à titre primaire (voir la numéro **425**).

ADD 3736A 784

Dans les Régions 2 et 3, dans la bande 3400-3600 MHz, l'attribution au service de radiolocalisation est à titre primaire. Toutefois, toutes les administrations qui exploitent des systèmes de radiolocalisation dans cette bande sont instamment priées d'en cesser l'exploitation avant 1985: Après quoi, les administrations prendront toutes les mesures pratiquement possibles pour protéger le service fixe par satellite et faire en sorte que des besoins de coordination ne soient pas imposés au service fixe par satellite.

MOD 3736 785
373

Au Danemark, en Norvège et au Royaume-Uni, les services fixe, de radiolocalisation et fixe par satellite sont exploités sur la base de l'égalité des droits dans la bande 3400-3600 MHz. Toutefois, les Administrations de ces pays exploitant des systèmes de radiolocalisation dans cette bande sont instamment priées de mettre fin à cette exploitation en 1985 au plus tard. Après 1985, ces Administrations devront prendre toutes les mesures pratiquement possibles pour protéger le service fixe par satellite et aucune exigence de coordination ne sera imposée au service fixe par satellite.

NOC 3741 786
378

Au Japon, dans la bande 3620-3700 MHz, le service de radiolocalisation est exclu.

ADD 3742A 787

Attribution additionnelle: en Nouvelle-Zélande, la bande 3700-3770 MHz est, de plus, attribuée au service de radiolocalisation à titre secondaire.

MHz

4200–4400

Attribution aux services		
Région 1	Région 2	Région 3
4200–4400	RADIONAVIGATION AÉRONAUTIQUE 789 788 790 791	

MOD **3748** **788** *Attribution additionnelle*: en République fédérale d'Allemagne, au Danemark, en Norvège et Suède, **la bande** 4220-4210 MHz est, de plus, attribuée au service fixe à titre secondaire.
383

ADD **3743A** **789** L'utilisation de la bande 4200-4400 MHz, par le service de radionavigation aéronautique est réservée exclusivement aux radioaltimètres installés à bord d'aéronefs ainsi qu'aux répondeurs au sol associés. Cependant, la détection passive des services d'exploration de la Terre par satellite et de recherche spatiale, peut être autorisée dans cette bande à titre secondaire (aucune protection n'est assurée par les radioaltimètres).

MOD **3744** **790** *Attribution additionnelle:* en Chine, Iran, Libye, Philippines et Sri Lanka, la bande 4200-4400 MHz est, de plus, attribuée au service fixe à titre secondaire.
381

MOD **3743** **791** Le service de fréquences étalon et des signaux horaires par satellite peut être autorisé à utiliser la fréquence
379A 4202 MHz pour des émissions dans le sens espace vers Terre et la fréquence 6427 MHz pour des émissions dans le sens Terre vers espace. Ces émissions doivent être contenues dans les limites s'étendant à ± 2 MHz de ces fréquences et doivent faire l'objet d'un accord obtenu suivant la procédure prévue à l'article 14.

MHz

4400–4990

Attribution aux services		
Région 1	Région 2	Région 3
4400–4500	FIXE MOBILE	
4500–4800	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 792	
4800–4990	FIXE MOBILE 793 *Radioastronomie* 720 778 794	

ADD **3748B** **792** *Attribution de remplacement:* dans les pays suivants: Belgique, Norvège, Pays-Bas et Royaume-Uni, **la bande** 4500-4800 MHz est attribuée aux services fixe et mobile à titre primaire. Une telle utilisation ne doit pas imposer aux service fixe par satellite des limites de puissance surfacique plus strictes que celles qui sont prévues au numéro **2566.**

ADD **3746A** **793** Dans les bandes 4825-4835 MHz et 4950-4990 MHz, l'attribution au service mobile est limitée au service mobile, sauf mobile aéronautique.

ADD **3746B** **794** Catégorie de service différente: en Argentine, Australie et au Canada, l'attribution des bandes 4825-4835 Mhz et 4950-4990 MHz au servive de radioastronomie est à titre primaire (voir le numéro **425**). En assignant des fréquences aux stations des autres services auxquels ces bandes sont atribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aeronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

4990–5000

Attribution aux services		
Région 1	Région 2	Région 3
4990–5000	FIXE MOBILE, sauf mobile aéronautique RADIOASTRONOMIE *Recherche spatiale* (passive) 795	

ADD **3531L** **795** En assignant des fréquences aux stations des autres services auxquels la bande 4990-5000 MHz et attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

MHz

5000–5470

Attribution aux services		
Région 1	Région 2	Région 3
5000–5250	RADIONAVIGATION AÉRONAUTIQUE 733 796 797	
5250–5255	RADIOLOCALISATION *Recherche spatiale* 713 798	
5255–5350	RADIOLOCALISATION 713 798	
5350–5460	RADIONAVIGATION AÉRONAUTIQUE 799 *Radiolocalisation*	
5460–5470	RADIONAVIGATION 799 *Radiolocalisation*	

ADD **3750AA** **796** La bande 5000-5250 MHz est à utiliser pour l'exploitation du système international normalisé (système d'atterrissage aux hyperfréquences) pour l'approche et l'atterrissage de précision. Les besoins de ce système ont priorité sur les autres utilisations de cette bande.

MOD **3750** **797** Les bandes 5000-5250 MHz et 15,4-15,7 GHz sont, de plus, attribuées au service fixe par satellite et au service inter-satellites pour la connexion entre une ou plusieurs stations terriennes situées en des points fixes déterminés de la Terre et des stations spatiales, lorsque ces services sont utilisés conjointement avec le service de radionavigation aéronautique et ou le service mobile aéronautique (R). Cette utilisation se fait sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.
383B

MOD **3751** **798** *Attribution additionnelle:* dans les pays suivants: Autriche, Bulgarie, Hongrie, Libye, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 5250-5350 MHz est, de plus, attribuée au service de radionavigation à titre primaire.
384

NOC **3753** **799** L'emploi de la bande 5350-5470 MHz par le service de radionavigation aéronautique est limité à l'usage des radars aéroportés et de radiobalises de bord associées.
385

MHz

5470–5650

Attribution aux services		
Région 1	Région 2	Région 3
5470–5650	RADIONAVIGATION MARITIME 772 *Radiolocalisation* 800 801 802	

MOD **3754** **800** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Autriche, Bulgarie, Hongrie, Iran, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 5470-5650 MHz est, de plus, attribuée au service de radionavigation aéronautique à titre primaire.
386

ADD **3755A** **801** *Attribution additionnelle:* au Royaume-Uni, la bande 5470-5850 MHz est, de plus, attribuée au service mobile terrestre à titre secondaire, les limites de puissance indiquées aux numéros **2502, 2505, 2506** et **2507** sont applicables dans la bande 5725-5850 MHz.

NOC **3755** **802** Les radars au sol utilisés dans la bande 5600-5650 MHz poir les besoins de la météorologie sont autorisés à fonctionner sur une base d'égalité avec les stations du service de radionavegation maritime.
387

MHz

5650–5725

Attribution aux services		
Région 1	Région 2	Région 3
5650–5725	RADIOLOCALISATION *Amateur* *Recherche spatiale* (espace lointain) 664 801 803 804 805	

MOD 3757 803 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bangladesh, République Centrafricaine, Chine, Congo, République de Corée, Egypte, Emirats Arabes Unis, Gabon, Guinée, Inde, Indonésie, Iran, Iraq, Israël, Japon, Jordanie, Koweït, Liban, Libye, Madagascar, Malaisie, Malawi, Malte, Niger, Nigérie, Pakistan, Philippines, Qatar, Syrie, Singapour, Sri Lanka, Tanzanie, Tchad, Thaïlande et Yémen (RDP du), la bande 5650-5850 MHz est, de plus, attribuée aux services fixe et mobile à titre primaire.
389

MOD 3758 804 *Catégorie de service différente*: dans les pays suivants: Bulgarie, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, dans la bande 5670-5725 MHz, l'attribution au service de recherche spatiale est à titre primaire (voir le numéro **425**).
389A

ADD 3758A 805 *Attribution additionnelle:* dans les pays suivants: Bulgarie, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, la bande 5670-5850 MHz est, de plus, attribuée au service fixe à titre primaire.

MHz

5725–5925

Attribution aux services		
Région 1	Région 2	Région 3
5725–5850	**5725–5850**	
FIXE PAR SATELLITE (Terre vers espace)	RADIOLOCALISATION	
RADIOLOCALISATION	*Amateur*	
Amateur		
801 803 805 806 807 808	803 805 806 808	
5850–5925	**5850–5925**	**5850–5925**
FIXE	FIXE	FIXE
FIXE PAR SATELLITE (Terre vers espace)	FIXE PAR SATELLITE (Terre vers espace)	FIXE PAR SATELLITE (Terre vers espace)
MOBILE	MOBILE	MOBILE
	Amateur	*Radiolocalisation*
	Radiolocalisation	
806	806	806

MOD 3760 806 La bande 5725-5875 MHz (fréquence centrale 5800 MHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.
391

MOD 3756 807 *Attribution additionnelle:* en République fédérale d'Allemagne et au Cameroun, la bande 5755-5850 MHz est, de plus attribuée au service fixe à titre primaire.
388

ADD 3761C 808 La bande 5830-5850 MHz est, de plus, attribuée au service d'amateur par satellite (espace vers Terre) à titre secondaire.

MHz

5925–7250

Attribution aux services		
Région 1	Région 2	Région 3
5925–7075	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 791 809	
7075–7250	FIXE MOBILE 809 810 811	

ADD 3761B 809 Dans la bande 6425-7075 MHz, des mesures sont effectuées à l'aide de détecteurs passifs à hyperfréquences au-dessus des océans. Dans la bande 7075-7250 MHz, des mesures sont effectuées à l'aide de détecteurs passifs à hyperfréquences. Il convient que dans leur planification de l'utilisation future de cette bande, les administrations ne négligent pas les besoins du service d'exploitation de la Terre par satellite (passive) et du service de recherche spatiale (passive).

ADD 3762A 810 Sous service d'un accord obtenu suivant la procédure prévue à l'article 14 en Région 2, la bande 7125-7155 MHz peut être utilisée pour les émissions dans le sens Terre vers espace dans le service l'exploitation spatiale.

MOD 3763 811 Sous réserve d'un accord obtenu suivant la procéedure prévue à l'article 14, la bande 7145-7235 MHz peut être utilisée pour les émissions dans les sens Terre vers espace dans le service de recherche spatiale. L'utilisation de la bande 7145-7190 MHz est limitée à l'espace lointain; aucune émission vers l'espace lointain ne doit être effectuée dans la bande 7190-7235 MHz.
392B

MHz

7250–7550

Attribution aux services		
Région 1	Région 2	Région 3
7250–7300	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 812	
7300–7450	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique 812	
7450–7550	FIXE FIXE PAR SATELLITE (espace vers Terre) MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique	

ADD **3764B** **812** Les bandes 7250-7375 MHz (espace vers terre) et 7900-8025 MHz (Terre vers espace) peuvent, de plus, être utilisées par le service mobile par satellite. L'utilisation de ces bandes par ce service devra faire l'objet d'un accord obtenu suivant la procédure prévue à l'article 14.

MHz

7550–8025

Attribution aux services		
Région 1	Région 2	Région 3
7550–7750	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique	
7750–7900	FIXE MOBILE, sauf mobile aéronautique	
7900–7975	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 812	
7975–8025	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 812	

MHz

8025-8175

Attribution aux services		
Région 1	Région 2	Région 3
8025-8175 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815	**8025-8175** EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXO POR SATELLITE (Terre vers espace) MOBILE 814	**8025-8175** FIXE FIXE POR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815

ADD **3770B** **813** Dans la bande 8025-8400 MHz, les limites de puissance surfacique indiquées au numéro **2570** s'appliquent en Régions 1 et 3 au service d'exploration de la Terre par satellite.

ADD **3726B** **814** En Région 2, les stations d'aéronef ne sont pas autorisées à émettre dans la bande 8025–8400 MHz.

ADD **3770A** **815** Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 8025–8400 MHz peut être utilisée à titre primaire pour le service d'exploration de la Terre par satellite (espace vers Terre) dans les pays suivants: Bangladesh, Bénin, Cameroun, Chine, République Centrafricaine, Côte d'Ivoire, Egypte, France, Guinée, Haute-Volta, Inde, Iran, Israël, Italie, Japon, Kenya, Libye, Mali, Niger, Pakistan, Sénégal, Somalie, Soudan, Suède, Tanzanie, Zaïre et Zambie.

MHz

8175-8400

Attribution aux services

Région 1	Région 2	Région 3
8175-8215 FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815	**8175-8215** EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE 814	**8175-8215** FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815
8215-8400 FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815	**8215-8400** EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 814	**8215-8400** FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace vers Terre) 813 815

MHz

8400-8500

Attribution aux services

Région 1	Région 2	Région 3
8400-8500	FIXE MOBILE, sauf mobile aéronautique RECHERCHE SPATIALE (espace vers Terre) 816 817 818	

ADD **3771A** **816** Dans le service de recherche spatiale, l'utilisation de la bande 8400–8450 MHz est limitée à l'espace lointain.

MOD **3771** **817** *Catégorie de service différente:* dans les pays suivants: Belgique, Israël, Luxembourg, Malaisie, Singapour et Sri Lanka dans la bande 8400–8500 MHz, l'attribution au service de recherche spatiale est à titre secondaire (voir le numéro **424**).
394D

NOC **3769** **818** *Attribution de remplacement:* au Royaume-Uni, la bande 8400–8500 MHz est attribuée aux services radiolocalisation et de recherche spatiale à titre primaire.
394A

MHz

8500-8850

Attribution aux services		
Région 1	Région 2	Région 3
8500-8750	RADIOLOCALISATION 713 819 820	
8750-8850	RADIOLOCALISATION RADIONAVIGATION AÉRONAUTIQUE 821 822	

ADD 3772A 819 *Attribution additionnelle:* dans les pays suivants: Arabie Saoudite, Bahreïn, Bangladesh, Burundi, Cameroun, Chine, Congo, Costa Rica, Egypte, Emirats Arabes Unis, Gabon, Guinée, Guyane, Indonésie, Iran, Iraq, Israël, Jamaïque, Koweït, Libye, Malaisie, Mali, Maroc, Mauritanie, Népal, Niger, Nigérie, Oman, Pakistan, Qatar, Syrie, Sénégal, Singapour, Somalie, Sri Lanka, Tanzanie, Tchad, Thaïlande, Togo et Tunisie, la bande 8500–8750 MHz est, de plus, attribuée aux services fixe et mobile à titre primaire.

MOD 3772 820 395 *Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, la bande 8500–8750 MHz est, de plus, attribuée aux services mobile terrestre et de radionavigation à titre primaire.

NOC 3773 821 396 L'utilisation de la bande 8750-8850 MHz par le service de radionavigation aéronautique est limitée aux aides à la navigation à bord d'aéronefs qui utilisent l'effet. Doppler sue une fréquence centrale de 8800 MHz.

MOD 3774 822 397 *Attribution additionnelle:* dans le pays suivants: Algérie, République fédérale d'Allemagne, Bahreïn, Belgique, Chine, Emirats Arabes Unis, France, Grèce, Indonésie, Iran, Libye, Pays-Bas, Qatar, Soudan et Thaïlande, les bandes 8825-8850 MHz et 9000-9200 MHz sont, de plus, attribuées au service de radionavigation maritime, à titre primaire, pour les radars côtiers seulement.

MHz

8850-9300

Attribution aux services		
Région 1	Région 2	Région 3
8850-9000	RADIOLOCALISATION RADIONAVIGATION MARITIME 823 824	
9000-9200	RADIONAVIGATION AÉRONAUTIQUE 717 *Radiolocalisation* 822	
9200-9300	RADIOLOCALISATION RADIONAVIGATION MARITIME 772 823 824	

ADD 3774A 823 Dans las bandes 8850-900 MHz et 9200-9225 MHz, le service de radionavigation maritime est limité aux radars côtiers.

MOD 3775 824 398 *Attribution additionnelle:* dans les pays suivants: Autriche, Bulgarie, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS les bandes 8850-9000 MHz et 9200-9300 MHz sont, de plus, attribuées au service de radionavigation à titre primaire.

MHz

9300-10 000

Attribution aux services		
Région 1	Région 2	Região 3
9300-9500	RADIONAVIGATION 774 775 *Radiolocalisation* 825	
9500-9800	RADIOLOCALISATION RADIONAVIGATION 713	
9800-10 000	RADIOLOCALISATION FIXE 826 827 828	

MOD 3776 399 **825** Dans la bande 9300-9500 MHz, le service de radionavigation aéronautique est limité aux radars météorologiques d'aéronefs et aux radars au sol. De plus, les balises radar au sol du service de radionavigation aéronautique sont autorisées dans la bande 9300-9320 MHz à condition qu'aucun brouillage préjudiciable ne soit causé au service de radionavigation maritime. Dans le bande 9300-9500 MHz, les radars au sol, utilisés pour les besoins de la météorologie ont priorité sur les autres dispositifs de radiolocalisation.

MOD 3778 401 **826** *Catégorie de service différente:* dans les pays suivants: Afghanistan, Algérie, Arabie Saoudite, Autriche, Bahreïn, Bangladesh, Cameroun, République de Corée, Egypte, Emirats Arabes Unis, Ethiopie, Guyane, Inde, Indonésie, Iran, Iraq, Israël, Jamaïque, Japon, Jordanie, Koweït, Liban, Libéria, Malaisie, Nigérie, Pakistan, Qatar, Singapour, Somalie, Soudan, Sri Lanka, Suède, Thaïlande, Trinité et Tobago et Yémen (RDP du) dans la bande 9800-10 000 MHz, l'attribution au service fixe est à titre primaire (voir le numéro **425**).

MOD 3777 400 **827** *Attribution additionnelle:* dans les pays suivants: Bulgarie, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie,Tchécoslovaquie et URSS, la bande 9800-10 000 MHz est, de plus, attribuée au service de radionavigation à titre primaire.

MOD 3779 401A **828** La bande 9975-10 025 MHz est, de plus, attribuée, à titre secondaire, au service de météorologie par satellite pour être utilisée par les radars météorologiques.

GHz

10–10,6

Attribution aux services		
Région 1	Région 2	Région 3
10–10,45 FIXE MOBILE RADIOLOCALISATION *Amateur* 828	**10–10,45** RADIOLOCALISATION *Amateur* 828 829	**10–10,45** FIXE MOBILE RADIOLOCALISATION *Amateur* 828
10,45–10,5	RADIOLOCALISATION *Amateur* *Amateur par satelite* 830	
10,5–10,55 FIXE MOBILE *Radiolocalisation*	**10,5–10,55** FIXE MOBILE RADIOLOCALISATION	
10,55–10,6	FIXE MOBILE, sauf mobile aéronautique *Radiolocalisation*	

MOD **3780** **829**
402

Attribution additionnelle: au Costa Rica, Equateur, au Guatemala et au Honduras, la bande 10-10,45 GHz est, de plus, attribuée aux services fixe et mobile, à titre primaire.

ADD **3780A** **830**

Attribution additionnelle: dans les pays suivants: République fédérale d'Allemagne, Angola, Chine, Equateur, Espagne, Japon, Kenya, Maroc, Nigérie, Suède, Tanzanie et Thaïlande, la bande 10,45-10,5 GHz est, de plus, attribuée aux service fixe et mobile à titre primaire.

GHz

10,6–10,7

Attribution aux services		
Région 1	Région 2	Région 3
10,6–10,68	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE, sauf mobile aéronautique RADIOASTRONOMIE RECHERCHE SPATIALE (passive) *Radiolocalisation* 831 832	
10,68–10,7	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 833 834	

ADD **3786B** **831**

Dans la bande 10,6-10,68 GHz la p. i. r. e. maximale des stations des services fixe et mobile, sauf mobile aéronautique, doit être limitée à 40 dBW et la puissance d'alimentation de l'antenne ne doit pas dépasser — 3 dBW. Ces limites peuvent être dépassées sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14. Cependant, les restrictions imposées aux services fixe et mobile, sauf mobile aéronautique, ne sont pas applicables dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bangladesh, Chine, Emirats Arabes Unis, Finlande, Inde, Indonésie, Iran, Iraq, Japon, Koweït, Liban, Nigérie, Pakistan, Philippines, Qatar, Syrie et URSS.

ADD **3531A** **832**

En assignant des fréquences aux stations des autres services auxquels la bande 10,6-10,68 GHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

ADD **3784B** **833**

Toutes les émissions sont interdites dans la bande 10,68-10,7 GHz, sauf celles auxquelles s'appliquent les dispositions du numéro **834**.

MOD **3784** **834**
405B

Attribution additionnelle: dans les pays suivants: Arabie Saoudite, Bahreïn, Bulgarie, Cameroun, Chine, Colombie, République de Corée, Costa Rica, Cuba, Egypte, Emirats Arabes Unis, Equateur, Hongrie, Iran, Iraq, Israël, Japon, Koweït, Liban, Mongolie, Pakistan, Pologne, Qatar, République Démocratique Allemande, Roumanie, Tchécoslovaquie, URSS et Yougoslavie, la bande 10,68-10,7 GHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire. Une telle utilisation est limitée aux matériels en exploitation au 1er janvier 1985.

GHz

10,7–11,7

Attribution aux services		
Région 1	Région 2	Région 3
10,7–11,7 FIXE FIXE PAR SATELLITE (espace vers Terre) (Terre vers espace) 835 MOBILE, sauf mobile aéronautique	**10,7–11,7** FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE, sauf mobile aéronautique	

ADD **3784A** **835**

En Région 1, l'utilisation de la bande 10,7-11,7 GHz par le service fixe par satellite (Terre vers espace) est limitée aux liaisons de connexion pour le service de radiodiffusion par satellite.

GHz

11,7–12,75

Attribution aux services		
Région 1	Région 2	Région 3
11,7–12,5 FIXE RADIODIFFUSION RADIDUFFUSION PAR SATELLITE *Mobile*, sauf mobile aéronautique 838 840	**11,7–12,1** FIXE 837 FIXE PAR SATELLITE (espace vers Terre) *Mobile*, sauf mobile aéronautique 836 839 840	**11,7–12,2** FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 838 840
	12,1–12,3 FIXE 837 FIXE PAR SATELLITE (espace vers Terre) *Mobile*, sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 839 840 841 842 843 844	**12,2–12,5** FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION 838 840 845
11,7–12,5 FIXE PAR SATELLITE (espace vers Terre) (Terre vers espace) 840 848 849 850	**12,3–12,7** FIXE MOBILE, sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 839 840 843 844 846 **12,7–12,75** FIXE FIXE PAR SATELLITE (Terre vers espace) *Mobile*, sauf mobile aéronautique 840	**12,5–12,75** FIXE 837 FIXE PAR SATELLITE (espace vers Terre) *Mobile*, sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 847 840

ADD **3787A** **836** En Région 2, dans la bande 11,7-12,1 GHz, des répéteurs installés à bord de stations spatiales du service fixe par satellite peuvent aussi être utilisées pour des transmissions du service de radiodiffusion par satellite, à condition que la p. i. r. e. de ces répéteurs ne dépasse pas 53 dBW par canal de télévision, et qu'ils ne causent pas plus de brouillages ou n'exigent pas plus de protection que ce qui résulterait des assignations de fréquence coordonnées du service fixe par satellite. En ce qui concerne les services de radiocommunication spatiale, cette bande doit être utilisée principalement pour le service fixe par satellite. La limite supérieure de cette bande sera modifiée, conformément aux décisions de la conférence administrative régionale des radiocommunication de 1983 pour la Région 2 (voir le numéro **841**).

ADD **3787G** **837** *Catégorie de service différente:* au Canada, Mexique et aux États-Unis, dans la bande 11,7-12,2 GHz l'attribution au service fixe est à titre secondaire (voir le numéro **424**).

MOD **3785** 405BA **838** Dans la bande 11,7-12,5 GHz dans les Régions 1 et 3, les services fixe, fixe par satellite, mobile, sauf mobile aéronautique, et de radiodiffusion, selon leurs attributions respectives, ne doivent pas causer de brouillage préjudiciable aux stations de radiodiffusion par satellite fonctionnant conformément aux dispositions de l'appendice **30**.

MOD **3787** 405BC **839** L'utilisation de la bande 11,7-12,7 GHz en Région 2 par les services de radiodiffusion par satellite et fixe par satellite est limitée aux systèmes nationaux et subrégionaux et doit faire l'objet d'accord préalable entre les administrations concernées et celles dont les services fonctionnant, ou prévus pour fonctionner, confomément au présent tableau son susceptibles d'être affectés (voir les articles 11, 13, 14 et la Résolution **33**).

ADD **3785H** **840** Pour l'utilisation de la bande 11,7-12,75 GHz dans les Régions 1, 2 et 3, voir les Résolutions **31, 34, 504, 700** et **701**.

ADD **3787B** **841** La conférence administrative régionale des radiocommunications de 1983 pour la Région 2 divisera la bande 12,1-12,3 GHz en deux sous-bandes. Elle attribuera la sous-bande inférieure au service fixe par satellite et la sous-bande supérieure aux services de radiodiffusion par satellite, de radiodiffusion, mobile, sauf mobile aéronautique, et fixe, tous ces services étant à titre primaire.

ADD **3787C** **842** *Attribution additionnelle:* au Brésil et au Pérou, la bande 12,1-12,3 GHz et aux États-Unis, la bande 12,2-12,3 GHz sont, de plus, attribuées au service fixe à titre primaire.

ADD **3787E** **843** Dans la bande 12,1-12,7 GHz, les services de radiocommunication spatiale existants ou en projet en Région 2, avant la conférence administrative régionale des radiocommunciations de 1983 pour la Région 2 ne doivent pas imposer de restrictions à l'elaboration du plan de radiodiffusion par satellite en Région 2 et doivent fonctionner dans les conditions qui seront fixées par ladite conférence.

ADD **3787D** **844** En Région 2, dans la bande 12,1-12,7 GHz, les services de radiocommunication de Terre existants ou futurs ne doivent pas causer de brouillage préjudiciable aux services de radiocommunication spatiale fonctionnant conformément au plan de radiodiffusion par satellite qu'établira la conférence administrative régionale des radiocommunications de 1983 pour la Région 2 et ne doivent pas imposer de restrictions à l'élaboration de ce plan. La limite inférieure de cette bande sera modifiée conformément aux décisions de ladite conférence (voir le numéro **841**).

ADD **3785B** **845** Dans la Région 3, la bande 12,2-12,5 GHz est, de plus, attribuée au service fixe par satellite (espace vers terre), limité à des systèmes nationaux et subrégionaux. Les limites de puissance surfacique spécifiées au numéro **2574** s'appliquent à cette bande de fréquences. L'introduction de ce service doit se faire conformément aux procédures spécifiées dans l'article 7 de appendice **30**, du point de vue de ses relations avec le service de radiodiffusion par satellite en Région 1, la bande de fréquences applicable étant étendue à 12,2-12,5 GHz.

ADD **3787F** **846** En Région 2, dans la bande 12,3-12,7 GHz, les assignations aux stations du service de radiodiffusion par satellite dont on disposera conformément a plan qu'établira la conférence administrative régionale des radiocommunications de 1983 pour la Région 2 pourront aussi être utilisées pour des transmissions du service fixe par satellite (espace vers Terre) à condition que ces transmissions ne causent pas plus de brouillage ou ne nécessitent pas plus de protection contre les brouillages que les transmissions du service de radiodiffusion par satellite conformes au plan correspondant. En ce qui concerne les services de radiocommunication spatiale, cette bande doit être utilisée principalement par le service de radiodiffusion par satellite. La limite inférieure de cette bande sera modifiée conformément aux décisions de ladite conférence (voir le numéro **841**).

ADD **3785A** **847** En Région 3, dans la bande 12,5-12,75 GHz, le service de radiodiffusion par satellite est limité à la réception communautaire avec une puisance surfacique ne dépassant pas — 111 dB (W/m²) selon la définition donnée dans l'annexe 8 de l'appendice **30**.

MOD **3788** **848** 405BD *Attribution additionnelle:* dans les pays suivants: Algérie, Angola, Arabie Saoudite, Bahreïn, Cameroun, République Centrafricaine, Congo, Côte d'Ivoir, Egypte, Emirats Arabes Unis, Ethiopie, Gabon, Ghana,Guinée, Iraq, Israël, Jordanie, Kenya, Koweït, Liban, Madagascar, Mali, Maroc, Mongolie, Niger, Nigérie, Qatar, Syrie, Sénégal, Somalie, Soudan, Tchad, Togo, Yémen (RDP du) et Zaïre, la bande 12,5-12,75 GHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire.

MOD **3789** **849** 405BE *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Belgique, Danemark, Espagne, Finlande, France, Grèce, Liechtenstein, Luxemburgo, Monaco, Norvège, Ouganda, Pays-Bas, Portugal, Roumanie, Suède, Suisse, Tanzanie, Tunisie et Yougouslavie, la bande 12,5-12,75 GHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre secondaire.

ADD **3788A** **850** *Attribution additionnelle:* dans les pays suivants: Autriche, Bulgarie, Hongrie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, la bande 12,5-12,75 GHz est, de plus, attribuée aux services fixe et mobile, sauf mobile aéronautique, à titre primaire. Toutefois, les stations de ces services ne doivent pas causer de brouillage préjudiciable aux stations terriennes du service fixe par satellite des pays de la Région 1 autres que ceux mentionnés au présent renvoi. Aucune coordination de ces stations terriennes n'est requise avec les stations des services fixe et mobile des pays mentionnés au présent renvoi. Les limites de puissance surfacique à la surface de la Terre prescrites au numéro **2574** pour le service fixe pour satellite doivent s'appliquer sur le territoire des pays mentionnés au présent renvoi.

GHz

12,75–13,25

Attribution aux services		
Région 1	Région 2	Région 3
12,75–13,25	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE *Recherche spatiale* (espace lointain) (espace vers Terre)	

GHz

13,25–14

Attribution aux services		
Région 1	Région 2	Région 3
13,25–13,4	RADIONAVIGATION AÉRONAUTIQUE 851 852 853	
13,4–14	RADIONAVIGATION *Fréquences étalon et signaux horaires par satellite* (Terre vers espace) *Recherche spatiale* 713 853 854 855	

MOD **3791** **851** 406 Dans la bande 13,25-13,4 GHz, le service de radionavigation aéronautique est limité aux aides à la navigation utilisant l'effet Doppler.

MOD **3793** **852** 407A Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 13,25-13,14 GHz peut, de plus, être utilisée par le service de recherche spatiale (Terre vers espace) a titre secondaire.

ADD **3793A** **853** *Attribution additionnelle:* au Bangladesh, en Inde et au Pakistan, la bande 13,25-14 Ghz est, de plus, attribuée au service fixe à titre primaire.

ADD **3794D** **854** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, Angola, Arabie Saoudite, Bahreïn, Cameroun, République de Corée, Egypte, Emirats Arabes Unis, Finlande, Gabon, Guinée, Indonésie, Iran, Iraq, Israël, Jordanie, Koweït, Liban, Madagascar, Malaisie, Malawi, Mali, Malte, Maroc, Mauritanie, Niger, Nigérie, Pakistan, Qatar, Syrie, Sénégal, Singapour, Sri Lanka, Soidan, Suède, Tchad, Thaïlande et Tunisie, la bande 13,4-14 GHz est, de plus, attribuée aux services fixe et mobile à titre primaire.

MOD 3798 409 855 *Attribution additionnelle:* dans les pays suivants: Autriche, Bulgarie, Hongrie, Japon, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Royaume-Uni, Tchécoslovaquie et URSS, la bande 13,4-14 GHz est, de plus, attribuée au service de radionavigation à titre primaire.

GHz

14–14,25

Attribution aux services

Région 1	Région 2	Région 3
14–14,25	FIXE PAR SATELLITE (Terre vers espace) 858 RADIONAVIGATION 856 *Recherche spatiale* 857 859	

MOD 3795 408A 856 L'utilisation de la bande 14-14,3 GHz par le service de radionavigation se fera de manière qu'une protection suffisante soit assurée aux stations spatiales du service fixe par satellite (voir le Recommendation **708**).

ADD 3795C 857 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, Angola, Arabie Saoudite, Australie, Bahreïn, Bangladesh, Botswana, Cameroun, Chine, République de Corée, Egypte, Emirats Arabes Unis, Gabon, Guatemala, Guinée, Inde, Indonésie, Iran, Iraq, Israël, Japon, Kenya, Koweït, Lesotho, Liban, Malaisie, Malawi, Mali, Malte, Maroc, Mauritanie, Niger, Pakistan, Philippines, Qatar, Syrie, Sénégal, Singapour, Somalie, Soudan, Sri Lanka, Swaziland, Tanzanie, Tchad, Thaïlande et Yémen (RDP du), la bande 14-14,3 GHz est, de plus, attribuée au service fixe à titre primaire.

ADD 3793B 858 La bande 14-14,5 GHz peut être utilisée, au titre du service fixe par satellite (Terre vers espace), pour les liaisons de connexion destinées au service de radiodiffusion par satellite, sous réserve d'une coordination avec les autres réseaux du service fixe par satellite. L'utilisation de ces liaisons de connexion est réservée aux pays situés hors de l'Europe et à Malte.

ADD 3794B 859 La bande 14-14,5 GHz est, de plus, attribuée au service mobile terrestre par satellite (Terre vers espace) à titre secondaire.

GHz

14,25–14,3

Attribution aux services

Région 1	Région 2	Région 3
14,25–14,3	FIXE PAR SATELLITE (Terre vers espace) 858 RADIONAVIGATION 856 *Recherche spatiale* 857 859 860 861	

ADD 3795B 860 *Attribution additionnelle:* dans les pays suivants: République fédérale d'Allemagne, Autriche, Belgique, Danemark, Espagne, Finlande, France, Grèce, Irlande, Islande, Italie, Jordanie, Libye, Liechtenstein, Luxembourg, Norvège, Pays-Bas, Portugal, Royaume-Uni, Suède, Suisse, Turquie et Yougoslavie, la bande 14,25-14,3 GHz est, de plus, attribuée au service fixe à titre primaire.

ADD 3795D 861 *Attribution additionnelle:* au Japon, Pakistan, Royaume-Uni et en Thaïlande, la bande 14,25-14,3 GHz est, de plus, attribuée au service mobile, sauf mobile aéronautique, à titre primarie.

GHz

14,3–14,5

Attribution aux services

Région 1	Région 2	Région 3
14,3–14,4 FIXE FIXE PAR SATELLITE (Terre vers espace) 858 MOBILE, sauf mobile aéronautique *Radionavigation par satellite* 859	**14,3–14,4** FIXE PAR SATELLITE (Terre vers espace) 858 *Radionavigation par satellite* 859	**14,3-14,4** FIXE FIXE PAR SATELLITE (Terre vers espace) 858 MOBILE, sauf mobile aéronautique *Radionavigation par satellite* 859
14,4-14,47	FIXE FIXE PAR SATELLITE (Terre vers espace) 858 MOBILE sauf mobile aéronautique *Recherche spatiale* (espace vers Terre) 859	
14,47-14,5	FIXE FIXE PAR SATELLITE (Terre vers espace) 858 MOBILE sauf mobile aéronautique *Radioastronomie* 859 862	

MOD 3797 408C **862** En assignant des fréquences aux stations des autres services auxquels la bande 14,47-14,5 GHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger contre les brouillages préjudiciables les observations de raies spectrales effectuées par le service de radioastronomie. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

GHz

14,5–15,35

Attribution aux services

Région 1	Région 2	Région 3
14,5–14,8	FIXE FIXE PAR SATELLITE (Terre vers espace) 863 MOBILE *Recherche spatiale*	
14,8–15,35	FIXE MOBILE *Recherche spatiale* 720	

MOD 3796A **863** L'utilisation de la bande 14,5-14,8 GHz par le service fixe par satellite (Terre vers espace) est limitée aux liaisons de connexion pour le service de radiodiffusion par satellite. Cette utilisation est réservée aus pays situés hors de l'Europe et à Malte.

GHz

15,35–15,7

Attribution aux services		
Région 1	Région 2	Région 3
15,35–15,4	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 864 865	
15,4–15,7	RADIONAVIGATION AÉRONAUTIQUE 733 797	

ADD **3799C** **864** Dans la bande 15,35-15,4 GHz toutes les émissions sont interdites, à l'exception de celles prévues au numéro **865.**

MOD **3799** **865** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bhareïn, Cameroun, Egypte, Emirats Arabes Unis, Guinée, Iran, Iraq, Israël, Koweït, Liban, Libye, Pakistan, Qatar, Syrie, Somalie et Yougoslavie, la bande 15,35-15,4 GHz est, de plus, attribuée aux services fixe et mobile à titre secondaire.
409C

GHz

15,7–17,7

Attribution aux services		
Région 1	Région 2	Région 3
15,7–16,6	RADIOLOCALISATION 866 867	
16,6–17,1	RADIOLOCALISATION *Recherche spatiale* (espace lointain) (Terre vers espace) 866 867	
17,1–17,2	RADIOLOCALISATION 866 867	
17,2–17,3	RADIOLOCALISATION *Exploration de la Terre par satellite* (active) *Recherche spatiale* (active) 866 867	
17,3–17,7	FIXE PAR SATELLITE (Terre vers espace) 869 *Radiolocalisation* 868	

ADD **3794F** **866** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, Angola, Arabie Saoudite, Autriche, Bahreïn, Bangladesh, Cameroun, Costa Rica, Egypte, El Salvador, Emirats Arabes Unis, Finlande, Guatemala, Inde, Iran, Indonésie, Iran, Koweït, Libye, Malaisie, Malawi, Malte, Maroc, Mozambique, Népal, Nicaragua, Oman, Pakistan, Qatar, Singapour, Somalie, Soudan, Sri Lanka, Suède, Tanzanie, Tchad, Thaïlande, Yémen (RDP du) et Yougoslavie, la bande 15,7-17,3 GHz est, de plus, attribuée aux services fixe et mobile à titre primaire.

ADD **3794FA** **867** *Attribution additionnelle:* en Israël, la bande 15,7-17,3 GHz est, de plus, attribuée aux services fixe et mobile à tritre primaire. Les services exploités au titre du présent renvoi ne doivent prétendre à aucune protection contre des brouillages préjudiciables causés par les services fonctionnant conformément au tableau dans les pays autres que ceux qui sont mentionnées dans le numéro **866,** ni causer de brouillages préjudiciables auxdits services.

ADD **3794G** **868** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, République fédérale d'Allemagne, Angola, Arabie Saoudite, Autriche, Bahreïn, Bangladesh, Cameroun, Costa Rica, El Salvador, Emirats Arabes Unis, Finlande, Guatemala, Honduras, Inde, Indonésie, Iran, Iraq, Israël, Japon, Koweït, Libye, Népal, Nicaragua, Pakistan, Qatar, Soudan, Sri Lanka, Suède, Thaïlande, et Yougoslavie, la bande 17,3-17,7 GHz est, de plus, attribuée aux services fixe et mobile à trite secondaire. Les limites de puissance indiquées dans les numéros **2505** et **2508** s'appliquent provisoirement (voir la Résolution **101**).

ADD **3794H** **869** L'utilisation de la bande 17,3-18,1 GHz par le service fixe par satellite (Terre vers espace) est limitée aux liaisons de connexion pour le service de radiodiffusion par satellite.

GHz

17,7–19,7

Attribution aux services		
Région 1	Région 2	Région 3
17,7-18,1	FIXE FIXE PAR SATELLITE (espace vers Terre) (Terre vers espace) 869 MOBILE	
18,1–18,6	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 870	
18,6–18,8 FIXE PAR SATELLITE (espace vers Terre) 872 MOBILE, sauf mobile aéronautique *Exploration de la Terre par satellite* (passive) *Recherche spatiale* (passive) 871	**18,6–18,8** EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE FIXE PAR SATELLITE (espace vers Terre) 872 MOBILE, sauf mobile aéronautique RECHERCHE SPATIALE (passive) 871	**18,6–18,8** FIXE PAR SATELLITE (espace vers Terre) 872 MOBILE, sauf mobile aéronautique *Exploration de la Terre par satellite* (passive) *Recherche spatiale* (passive) 871
18,8–19,7	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE	

ADD 3799A 870 La bande 18,1-18,3 GHz est, de plus, attribuée au service de météorologie par satellite (espace vers Terre) à titre primaire. Son utilisation est réservée aux satellites géostationnaires et sera conforme aux dispositions du numéro **2578**).

ADD 3800B 871 En assignant des fréquences aux stations des services fixe et mobile, les administrations sont invitées à tenir compte des détecteurs passifs des services d'exploration de la Terre pr satellite et de recherche spatiale, fonctionnant dans la bande 18,6-18,8 GHz. En particulier dans cette bande, les administrations devraient autant que possible s'efforcer de limiter à la fois la puissance fournie par l'émetteur à l'antenne et la p. i. r. e. afin de réduire au strict minimum les risques e brouillage aux détecteurs passifs.

ADD 3800D 872 En assignant des fréquences aux stations du service fixe par satellite dans le sons espace vers Terre, il est demandé aux administrations de limiter, dans la mesure du possible, la puissance surfacique produite à la surface de la Terre dans la bande 18,6-18,8 GHz, afin de réduire les risques de brouillage aux détecteurs passifs des services d'exploration de la Terre par satellite et de recherche spatiale.

GHz

19,7–22

Attribution aux services		
Région 1	Région 2	Région 3
19,7–20,2	FIXE PAR SATELLITE (space vers Terre) *Mobile par satellite* (espace vers Terre) 873	
20,2–21,2	FIXE PAR SATELLITE (space vers Terre) MOBILE PAR SATELLITE (espace vers Terre) *Fréquences étalon et signaux horaires par satellite* (espace vers Terre) 873	
21,2–21,4	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE RECHERCHE SPATIALE (passive)	
21,4–22	FIXE MOBILE	

ADD **3800M** **873** *Attribution additionnelle:* dans les pays suivants: Afghanistan, Algérie, Angola, Arabie Saoudite, Bahreïn, Bangladesh, Brésil, Cameroun, Chine, Congo, République de Corée, Costa Rica, Egypte, Emirats Arabes Unis, Gabon, Guatemala, Guinée, Inde, Indonésie, Iran, Iraq, Israël, Japon, Kenia, Koweït, Malaisie, Mali, Maroc, Mauritanie, Népal, Niger, Nigérie, Pakistan, Philippines, Qatar, Syrie, Singapour, Somalie, Soudan, Sri Lanka, Tanzanie, Tchad, Thaïlande, Togo, Tunisie et Zaire, la bande 19,7-21,2 GHz est, de plus, attribuée aux services fixe e mobile à titre primaire. Cette utilisation additionnelle ne doit pas imposer de limitation de puissance surfacique aux stations spatiales du service fixe par satellite.

GHz

22–22,5

Attribution aux services		
Région 1	Région 2	Région 3
22,7–22,21	FIXE MOBILE, sauf mobile aéronautique 874	
22,21–22,5	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE, sauf mobile aéronautique RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 875 876	

ADD **3801A** **874** En assignants des fréquences aux stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger contre les brouillages préjudiciables les observations de raies spectrales effectuées par le service de radioastronomie dans la bande 22,01-22,21 GHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3801B** **875** En assignant des fréquences aux stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables dans la bande 22,21-22,5 GHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343 et 344** et l'article 36).

ADD **3801BA** **876** L'utilisation de la bande 22,21-22,5 GHz par les services d'exploration de la Terre par satellite (passive) et de recherche spatiale (passive) ne doit pas imposer de contraintes aux services fixe et mobile, sauf mobile aéronautique.

GHz

22,5–23,6

Attribution aux services		
Région 1	Région 2	Région 3
22,5-22,55 FIXE MOBILE	**22,5-22,55** FIXE MOBILE RADIODIFFUSION PAR SATELLITE 877 878	
22,55-23 FIXE INTER-SATELLITES MOBILE 879	**22,55-23** FIXE INTER-SATELLITES MOBILE RADIODIFFUSION PAR SATELLITE 877 878 879	
23-23,55	FIXE INTER-SATELLITES MOBILE 879	
23,55-23,6	FIXE MOBILE	

MOD 3802 877 410B

En Régions 2 et 3 le service de radiodiffusion par satellite est autorisé dans la bande 22,5-23 GHz sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14.

ADD 3801C 878

Attribution additionnelle: au Japon, la bande 22,5-23 GHz est, de plus, attribuée au service de radiodiffusion à titre primaire.

ADD 3801D 879

En assignant des fréquences aux stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger contre les brouillages préjudiciables les observations de raies spectrales effectuées par le service de radioastronomie dans les bandes 22,81-22,86 GHz et 23,07-23,12 GHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

GHz

23,6–24,25

Attribution aux services		
Région 1	Région 2	Région 3
23,6-24	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 880	
24-24,05	AMATEUR AMATEUR PAR SATELLITE 881	
24,05-24,25	RADIOLOCALISATION *Amateur* *Exploration de la Terre par satellite* (active) 881	

ADD 3531B 880

Toutes les émissions sont interdites dans la bande 23,6-24 GHz.

MOD 3503 881 410C

La bande 24-24,5 GHz (fréquence centrale 24,125 GHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). Les services de radiocommunication fonctionnant dans cette bande doivent accepter les brouillages préjudiciables qui peuvent se produire du fait de ces applications. Les appareils ISM fonctionnant dans cette bande sont soumis aux dispositions du numéro **1815**.

GHz

24,25–27,5

Attribution aux services		
Région 1	Région 2	Région 3
24,25–25,25	RADIONAVIGATION	
25,25–27	FIXE MOBILE *Exploration de la Terre par satellite* (espace-escape) *Fréquences étalon et signaux horaires par satellite* (Terre vers espace)	
27–27,5 FIXE MOBILE *Exploration de la Terre par satellite* (espace-espace)	**27–27,5** FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE *Exploration de la Terre par satellite* (espace-espace)	

GHz

27,5–31

Attribution aux services		
Région 1	Région 2	Région 3
27,5–29,5	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE	
29,5–30	FIXE PAR SATELLITE (Terre vers espace) *Mobile par satellite* (Terre vers espace) 882 883	
30–31	FIXE PAR SATELLITE (Terre vers espace) MOBILE PAR SATELLITE (Terre vers espace) *Fréquences étalon et signaux horaires par satellite* (espace vers Terre) 883	

ADD **3805A** **882** La bande 29,95-30 GHz peut être utilisée, à titre secondaire, par les liaisons espace vers espace du service d'exploration de la Terre par satellite à des fins de télémesure, de poursuite et de télécommande.

MOD **3800** **883** 409E *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Cameroun, Chine, République de Corée, Emirats Arabes Unis, Ethiopie, Inde, Indonésie, Iran, Iraq, Israël, Japon, Kenya, Koweït, Liban, Malaise, Mali, Maroc, Mauritanie, Népal, Pakistan, Qatar, Syrie, Singapour, Somalie, Soudan, Sri Lanka, Tchad et Thaïlande, la bande 29,5-31 GHz est, de plus, attribuée aux services fixe et mobile à titre secondaire. Les limites des puissances spécifiées aux numéros **2502** et **2508** s'appliquent.

GHz

31–31,5

Attribution aux services		
Région 1	Région 2	Région 3
31–31,3	FIXE MOBILE *Fréquences étalon et signaux horaires par satellite* (espace vers Terre) *Recherce spatiale* 884 885 886	
31,3–31,5	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 887	

ADD **3813A** **884** Dans la bande 31-31,3 GHz, les limites de puissance surfacique indiquées au numéro **2542** s'appliquent au service de recherche spatiale.

MOD **3813** **885** 412H *Catégorie de service différente:* dans les pays suivants: Bulgarie, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, dans la bande 31-31,3 GHz, l'attribution au service de recherche spatiale est à titre primaire (voir le numéro **425**).

MOD **3814** **886** 4121 En assignant des fréquences aux stations des autres services, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables dans la bande 31,2-31,3 GHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

ADD **3531P** **887** Toutes les émissions sont interdites dans la bande 31,3-31,5 GHz.

GHz

31,5–31,8

Attribution aux services		
Région 1	Région 2	Région 3
31,5–31,8	**31,5–31,8**	**31,5–31,8**
EXPLORATION DE LA TERRE PAR SATELLITE (passive)	EXPLORATION DE LA TERRE PAR SATELLITE (passive)	EXPLORATION DE LA TERRE PAR SATELLITE (passive)
RADIOASTRONOMIE	RADIOASTRONOMIE	RADIOASTRONOMIE
RECHERCHE SPATIALE (passive)	RECHERCHE SPATIALE (passive)	RECHERCHE SPATIALE (passive)
Fixe		*Fixe*
Mobile, sauf mobile aéronautique		*Mobile*, sauf mobile aéronautique
888 889	888	888

ADD **3802A** **888** En Régions 1 et 3, en assignant des fréquences aux stations des autres services auxquels la bande 31,5-31,8 GHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillages particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

En Région 2, toutes les émissions sont interdites dans cette bande.

ADD **3806A** **889** *Catégorie de service différente:* dans les pays suivants: Bulgarie, Egypte, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Roumanie, Tchécoslovaquie et URSS, dans la bande 31,5-31,8 GHz, l'attribution aux services fixe et mobile, sauf mobile aéronautique, est à titre primaire (voir le numéro **425**).

GHz

31,8–33

Attribution aux services		
Région 1	Région 2	Région 3
31,8-32	RADIONAVIGATION *Recherche spatiale* 890 891 892	
32–32,3	INTER-SATELLITES RADIONAVIGATION *Recherche spatiale* 890 891 892 893	
32,3–33	INTER-SATELLITES RADIONAVIGATION 892 893	

ADD **3807E** **890** *Catégorie de service différente:* en Australie, Espagne et aux États-Unis, dans la bande 31,8-32,3 GHz l'attribution au service de recherche spatiale (espace lointain) dans le sens espace vers Terre, est à titre primaire (voir le numéro **425**). Cette utilisation ne doit pas imposer de limites de puissance surfacique aux systèmes du service inter-satellite dans la bande 32-32,3 GHz.

MOD **3807** **412B** **891** *Catégorie de service différente:* dans les pays suivants: Bulgarie, Cuba, Hongrie, Mongolie, Pologne, République Démocratique Allemande, Tchécoslovaquie et URSS, dans la bande 31,8-32,3 GHz, l'attribution au service de recherche spatiale est à titre primaire (voir le numéro **425**).

ADD **3807D** **892** Sous réserve d'un accord obtenu suivant le procédure prévue à 'article 14, la bande 31,8-33,8 GHz peut, de plus, être utilisée au Japon pour des émissions dans le sens espace vers Terre du service fixe par satellite jusqu'au 31 décembre 1990.

ADD **3807A** **893** Lors de la conception de systèmes du service inter-satellites et du service de radionavigation fonctionnant dans la bande 32-33 GHz, les administrations prendront toutes les mesures nécessaires pour éviter les brouillages préjudiciables entre ces deux services, en tenant compte de l'aspect sécurité du service de radionavigation (voir la Recommandation **707**).

GHz

33–34,2

Attribution aux services		
Région 1	Région 2	Région 3
33-33,4	RADIONAVIGATION 892	
33,4–34,2	RADIOLOCALISATION 892 894	

MOD 3794 894 *Attribution additionnelle:* dans les pays suivants: Afghanistan, Arabie Saoudite, Bahreïn, Bangladesh, Egypte, Emirats Arabes Unis, Espagne, Finlande, Gabon, Guinée, Indonésie, Iran, Iraq, Israël, Kenya, Koweït, Liban, Libye, Malaise, Malawi, Mali, Malte, Maroc, Mauritanie, Népal, Niger, Nigérie, Oman, Pakistan, Philippines, Qatar, Syrie, Sénégal, Singapour, Somalie, Soudan, Sri Lanka, Suède, Tanzanie, Thaïlande, Togo, Tunisie, Yémen (RA) et Zaire, la bande 33,4-36 GHz est, de plus, attribuée aux services fixe et mobile à titre primaire.
408

GHz

34,2-36

Attribution aux services		
Région 1	Région 2	Région 3
34,2-35,2	RADIOLOCALISATION *Recherche spatiale* 895 896 894	
35,2-36	AUXILIARES DE LA MÉTÉOROLOGIE RADIOLOCALISATION 894 897	

ADD 3808A 895 *Catégorie de service différente:* en Australie, en Espagne et aux États-Unis, dans la bande 34,2-34,7 GHz, l'attribution au service de recherche spatiale (espace vers lointain) (Terre vers espace) est à titre primaire (voir le numéro **425**).

MOD 3808 896 *Catégorie de service différente:* dans les pays suivants: Bulgarie, Cuba, Hongrie, Pologne, Mongolie, République Democratique Allemande, Tchécoslovaquie et URSS, dans la bande 34,2-35,2 GHz, l'attribution au service de recherche spatiale est à titre primaire (voir le numéro **425**).
412C

ADD 3799B 897 Les systèmes de radiodétection (radars) installés à bord d'un engin spatial peuvent être utilisés dans la bande 35,5-35,6 GHz à titre primaire.

GHz

36-40,5

Attribution aux services		
Région 1	Région 2	Région 3
36-37	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE RECHERCHE SPATIALE (passive) 898	
37-37,5	FIXE MOBILE 899	
37,5-39,5	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 899	
39,5-40,5	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE MOBILE PAR SATELLITE (espace vers Terre)	

MOD **3761** **898**
391

En assignant des fréquences aux stations des autres services, les administrations sont instamment priées de Aprendre toutes les mesures pratiquement réalisables pour protéger contre les brouillages préjudiciables les observations de raies spectrales effectuées par le service de radioastronomie dans la bande 36,43-36,5 GHz. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** ainsi que l'article 36).

ADD **3807C** **899**

Sous réserve d'un accord obtenu suivant la procédure prévue à l'article 14, la bande 37-39 GHz peut, de plus, être utilisée au Japon pour les transmissions dans le sens Terre vers espace du service fixe par satellite, jusqu'au 31 décembre 1990.

GHz

40,5-43,5

Attribution aux services		
Région 1	Région 2	Région 3
40,5–42,5	RADIODIFUSÃO PAR SATÉLITE / RADIODIFFUSION / *Fixe* *Mobile*	
42,5–43,5	FIXE FIXE PAR SATELLITE (Terre vers espace) 901 MOBILE, sauf's mobile aéronautique RADIOASTRONOMIE 900	

ADD **3814A** **900**

En assignant des fréquences aux stations des autres services auxquels la bande 42,5-43,5 GHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables, notamment dans les bandes 42,77-42,87 GHz, 43,07-43,17 GHz et 43,37-43,47 GHz qui sont utilisées pour les observations sur les raies spectrales du monoxyde de silicium. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article **36**).

ADD **3814B** **901**

La partie du spectre attribuée dans les bandes 42,5-43,5 GHz et 47,2-50,2 GHz au service fixe par satellite pour des transmissions dans le sens Terre vers espace est plus large que celle attribuée dans la bande 37,5-39,5 GHz, aux émissions dans le sens espace vers Terre. Ceci permet de placer des liaisons de connexion pour les satellites de radiodiffusion. Les administrations son instamment priées de prendre toutes les mesures pratiquement réalisables pour réserver la bande 47,2-49,2 GHz aux liaisons de connexion pour le service de radiodiffusion par satellite fonctionnant dans la bande 40,5-42,5 GHz.

GHz

43,5-50,2

Attribution aux services		
Région 1	Région 2	Région 3
43,5–47	MOBILE MOBILE PAR SATELLITE RADIONAVIGATION, RADIONAVIGATION PAR SATELLITE 903	
47–47,2	AMATEUR AMATEUR PAR SATELLITE	
47,2–50,2	FIXE FIXE PAR SATELLITE (Terre vers espace) 901 MOBILE 905 904	

ADD 3814CA 902 Dans les bandes 43,5-47 GHz, 60-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 GHz et 252-265 GHz, les stations du service mobile terrestre peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable aux services de radiocommunication spatiale auxquels ces bandes sont attribuées (voir le numéro **435**).

ADD 3814C 903 Dans les bandes 43,5-47 GHz, 66-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 Ghz et 252-265 GHz, les liaisons par satellite entre des stations terrestres situées en des points fixes spécifiés sont, de plus, autorisées lorsque ces liaisons fonctionnent dans le cadre du service mobile par satellite on du service de radionavigation par satellite.

ADD 3814D 904 Les bandes 48,94-49,04 GHz et 97,88-98,08 GHz sont, de plus, attribuées au service de radioastronomie à titre primaire pour les observations sur les raies spectrales. Lorsqu'elles feront des assignations aux stations des autres services auxquels ces bandes sont attribuées, les administrations sont instamments priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastrononie contre les brouillages. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD 3814E 905 Dans la bande 48,94-49,04 GHz toutes les émissions de stations aéroportées sont interdites.

GHz

50,2–59

Attribution aux services		
Région 1	Région 2	Région 3
50,2–50,4	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE RECHERCHE SPATIALE (passive)	
50,4–51,4	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE *Mobile par satellite* (Terre vers espace)	
51,4–54,25	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RECHERCHE SPATIALE (passive) 906 907	
54,25–58,2	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE 999 RECHERCHE SPATIALE (passive) 908	
58,2–59	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RECHERCHE SPATIALE (passive) 906 907	

ADD 3815A 906 Aux termes d'arrangements nationaux des observations de radioastronomie peuvent être effectuées dans les bandes 51,4-54,25 GHz, 58,2-59 GHz, 64-65 GHz et 72,77-72,91 GHz. Les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger contre les brouillages préjudiciables les observations de radioastronomie faites dans ces bandes.

MOD 3815 907 Dans les bandes 51,4-54,25 GHz, 58,2-59 GHz, 64-65 GHz, 86-92 GHz, 105-116 GHz et 217-231 GHz toutes les
412J émissions sont interdites.

ADD 3815B 908 *Attribution additionnelle:* en République fédérale d'Allemagne, au Japon et au Royaume-Uni, la bande 54,25-58,2 GHz est, de plus, attribuée au service de radiolocalisation à titre primaire.

ADD 3815BA 909 Dans les bandes 54,25-58,2 GHz, 59-64 GHz, 116-134 GHz, 170-182 GHz et 185-190 GHz, les staitons du service mobile aéronautique peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellites (voir le numéro **435**).

GHz

59–66

Attribution aux services		
Région 1	Région 2	Région 3
59–64	FIXE INTER-SATELLITES MOBILE 909 RADIOLOCALISATION 910 911	
64–65	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RECHERCHE SPATIALE (passive) 906 907	
65–66	EXPLORATION DE LA TERRE PAR SATELLITE RECHERCHE SPATIALE *Fixe* *Mobile*	

ADD **3815C** **910** Dans les bandes 59-64 GHz et 126-134 GHz, les radars aéroportés du service de radiolocalisation peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellites (voir le numéro **435**).

ADD **3815D** **911** La bande 61-61,5 GHz (fréquence centrale 61,25 GHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). L'utilisation de cette bande pour les applications ISM est subordonnée à une autorisation particulière donnée dans chaque cas par l'administration concernée, en accord avec les autres administrations dont services de radiocommunication pourraient être affectés. Pour l'application de cette disposition, les administrations se reporteront aux plus récents Avis pertinents du CCIR.

GHz

66–76

Attribution aux services		
Région 1	Région 2	Région 3
66–71	RADILOCALISATION MOBILE PAR SATELITES RADIONAVIGATION RADIONAVIGATION PAR SATELLITE	
71–74	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE MOBILE PAR SATELLITE (Terre vers espace) 906	
74–75,5	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE	
75,5–76	AMATEUR AMATEUR PAR SATELLITE	

GHz

76–86

Attribution aux services		
Région 1	Région 2	Région 3
76–81	RADIOLOCALISATION *Amateur* *Amateur par satellite* 912	
81–84	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE MOBILE PAR SATELLITE (espace vers Terre)	
84–86	FIXE MOBILE RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 913	

ADD **3815E** **912** Dans la bande 78-79 GHz, les radars installés à bord des stations spatiales peuvent fonctionner, à titre primaire, dans le service d'exploration de la Terre par satellite et le service de recherche spatiale.

ADD **3815F** **913** Dans la bande 84-86 GHz, les stations des services fixe, mobile et de radiodiffusion ne doivent pas causer de brouillages préjudiciables aux stations de radiodiffusion par satellite fonctionnant conformément aux décisions de la conférence qui sera chargée de la planification des assignations de fréquences pour le service de radiodiffusion par satellite.

GHz

86–95

Attribution aux services		
Région 1	Région 2	Région 3
86–92	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 907	
92–95	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE RADIOLOCALISATION 914	

ADD **3815G** **914** La bande 93,07-93,2 GHz est, de plus, utilisée par le service de radioastronomie pour les observations sur les raies spectrales. Lorqu'elles feront des assignations aux stations des services auxquels cette bande est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger les observations de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

GHz

95–116

Attribution aux services		
Région 1	Région 2	Région 3
95–100	MOBILE 902 MOBILE PAR SATELLITE RADIONAVIGATION RADIONAVIGATION PAR SATELLITE *Radiolocalisation* 903 904	
100–102	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE RECHERCHE SPATIALE (passive) 722	
102–105	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 722	
105–116	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 722 907	

GHz

116-142

Attribution aux services		
Région 1	Région 2	Région 3
116–127	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE INTER-SATELLITES MOBILE 909 RECHERCHE SPATIALE (passive) 722 915 916	
126–134	FIXE INTER-SATELLITES MOBILE 909 RADIOLOCALISATION 910	
134–142	MOBILE 902 MOBILE PAR SATELLITE RADIONAVIGATION RADIONAVIGATION PAR SATELLITE *Radiolocalisation* 903 917 918	

ADD **3816B** **915** La bande 119,98-120,02 GHz, est de plus, attribuée au service amateur à tire secondaire.

ADD **3816A** **916** La bande 122-123 GHz (fréquence centrale 122,5 GHZ) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). L'utilisation de cette bande pour les applications ISM est subordonnée à une autorisation particulière donnée dans chaque cas par l'administration concernée, en accord avec les autres administrations dons les services de radiocommunication pourraient être affectés. Pour l'application de cette disposition, les administrations se reporteront aux récents Avis pertinents du CCIR.

ADD **3816D** **917** Dans la bande 140,69-140,98 GHz, toutes les émissions provenant de stations d'aéronefs de stations dans le sens espace vers Terre sont interdites.

ADD **3816C** **918** Les bandes 140,69-140,98 GHz, 144,68-144,98 GHz, 145,45-145,75 GHz et 146,82-147,12 GHz sont, de plus, attribuées au service de radioastronomie à titre primaire pour les observations sur les spectrales. Lorsqu'elles feront des assignations aux stations des autres services auxquels ces bandes sont attribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

GHz

142-151

Attribution aux services		
Région 1	Région 2	Région 3
142–144	AMATEUR AMATEUR PAR SATELLITE	
144–149	RADIOLOCALISATION *Amateur* *Amateur par satellite* 918	
149–150	FIXE FIXE PAR SATELLITES (espace vers Terre) MOBILE	
150–151	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE RECHERCE SPATIALE (passive) 919	

ADD **3816E** **919** Les bandes 150-151 GHz, 174,42-175,02 GHz, 177-177,4 GHz, 178,2-178,6 GHz, 181-181,46 GHz et 186,2-186,6 GHz sont, de plus, attribuées au service de radioastronomie à titre secondaire pour les observations sur les raies spectrales. Lorsq'elles feront des assignations aux stations des autres services auxquels ces bandes sont attribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour les service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

GHz

151-182

Attribution aux services		
Région 1	Région 2	Région 3
151–164	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE	
164–168	EEXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive)	

Attribution aux services		
Région 1	Région 2	Région 3
168–170	FIXE MOBILE	
170–174,5	FIXE INTER-SATELLITES MOBILE 909 919	
174,5–176,5	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE INTER-SATELLITES MOBILE 909 RECHERCE SPATIALLE (passive) 919	
176,5–182	FIXE INTER-SATELLITES MOBILE 909 919	

GHz

182-217

Attribution aux services		
Région 1	Région 2	Région 3
182–185	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 920 921	
185–190	FIXE INTER-SATELLITES MOBILE 909 919	
190–200	MOBILE 902 MOBILE PAR SATELLITE RADIONAVIGATION RADIONAVIGATION PAR SATELLITE 722 903	
200–202	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE MOBILE RECHERCHE SPATIALE (passive) 722	
202-217	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 722	

ADD **3816F** **920** *Attribution additionnelle:* au Royaume-Uni, la bande 182-185 GHx est, de plus, attribuée aux services fixe et mobile à titre primaire.

ADD **3816G** **921** Dans la bande 182-185 GHz, toutes les émissions sont interdites à l'exception des émissions relevant des dispositions du numéro **920.**

GHz

217-248

Attribution aux services

Région 1	Région 2	Région 3
217–231	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RADIOASTRONOMIE RECHERCE SPATIALE (passive) 722 907	
231–235	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE *Radiolocalisation*	
235–238	EXPLORATION DE LA TERRE PAR SATELLITE (passive) FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE RECHERCE SPATIALE (passive)	
238–241	FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE *Radiolocalisation*	
241–248	RADIOLOCALISATION *Amateur* *Amateur par satellite* 922	

ADD **3816H** **922** La bande 244-246 GHz (fréquence centrale 245 GHz) est utilisable pour les applications industrielles, scientifiques et médicales (ISM). L'utilisation de cette bande pour les applications ISM est subordonnée à une autorisation particulière donnée dans chaque cas par l'administration concernée, en accord avec les autres administrations dont les services de radiocommunication pourraient être affectés. Pour l'application de cette disposition, les administrations se reporteront aux plus récents Avis pertinents du CCIR.

GHz

248-265

Attribution aux services

Région 1	Région 2	Région 3
248–250	AMATEUR AMATEUR PAR SATELLITE	
250–252	EXPLORATION DE LA TERRE PAR SATELLITE (passive) RECHERCE SPATIALE (passive) 923	

Attribution aux services		
Région 1	Région 2	Région 3
252–265	MOBILE 902 MOBILE PAR SATELLITE RADIONAVIGATION RADIONAVIGATION PAR SATELLITE 903 923 924 925	

ADD **3816I** **923** Les bandes 250-251 GHZ et 262,24-262,76 GHz sont, de plus, attribuées au service de radioastronomie à titre primaire, pour les observations sur les raies spectrales. Lorsqu'elles feront des assignations aux stations de autres services auxquels ces bandes sont attribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3816J** **924** La bande 257,5-258 GHz est, de plus, attribuée au service de radioastronomie à titre secondaire, pour les observations sur les raies spectrales. Lorsqu'elles feront des assignations aux stations des autres services auxquels ces bandes sont attribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3816K** **925** Dans les pays suivants: République fédérale d'Allemagne, Argentine, Espagne, Finlande, France, Inde, Italie, Pays-Bays et Suède, la bande 261-265 GHz est, de plus, attribuée au service de radioastronomie à titre primaire. Lorsqu'elles feront des assignations aux stations des autres services auxquels cette bande est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables. Le émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes les service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

GHz

265-400

Attribution aux services		
Région 1	Région 2	Région 3
265–275	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE RADIONASTRONOMIE 926	
275–400	*(Pas d'attribution)* 927	

ADD **3816L** **926** En assignant des fréquences aux stations des autres services auxquels la bande 265-275 GHz est attribuée, les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger le service de raidoastronomie contre les brouillages préjudiciables notamment dans les bandes 265,64-266,16 GHz, 267,34-267,86 GHz et 271,74-272,26 GHz, qui sont utilisées pour les observations sur les raies spectrales. Les émissions provenant de stations à bord d'engins spatiaux ou d'aéronefs peuvent constituer des sources de brouillage particulièrement importantes pour le service de radioastronomie (voir les numéros **343** et **344** et l'article 36).

ADD **3816M** **927** La bande 275-400 GHz peut être utilisée par les administrations aux fins d'expérimentation et de développement de divers services actifs ou passifs. Dans cette bande, le besoin a été reconnu d'effectuer des mesures sur les raies spectrales dans les services passifs suivants:

Service de radioastronomie: 278-280 GHz et 343-348 GHz;
Service d'exploration de la Terre par satellite (passive) et de recherche spatiale (passive): 275-277 GHz, 300-302 GHz, 324-326 GHz, 345-347 GHz, 363-365 GHz et 379-381 GHz.

Dans cette partie du spectre encore peu explorée, les futurs travaux de recherche pourraient permettre de découvrir de nouvelles raies spectrales et des bandes du continuum qui intéressent les services passifs. Les administrations sont instamment priées de prendre toutes les mesures pratiquement réalisables pour protéger ces services passifs contre les brouillages préjudiciables jusqu'à la prochaine conférence administrative mondiale des radiocommunication compétente.

928 à 952 *(Non attribués.)*

N8/6

ARTICLE 9

NOC

Dispositions spéciales relatives à l'assignation et à l'emploi des fréquences

ADD 3916A 953 § 1. Les Membres reconnaissent que le rôle joué en matière de sécurite par le service de radionavigation et les autres services de sécurité nécessite des dispositions spéciales pour les mettre à l'abri des brouillages préjudiciables, il est donc nécessaire de tenir compte de ce facteur en ce qui concerne l'assignation et l'emploi des fréquences.

MOD 3917 954 § 2. (1) Les Membres reconnaissant que, parmi les fréquences susceptibles de se
413 propager à grande distance, celles des bandes comprises entre 5 MHz et 30 MHz sont particulièrement utiles pour les communications à grande distance; ils conviennent de s'efforcer de réserver ces bandes pour de telles communications. Lorsque des fréquences de ces bandes sont utilisées pour des communications à courte ou moyenne distance, les émissions doivent être effectuées avec le minimum de puissance nécessaire.

(MOD) 3918 955 (2) Afin de réduire les besoins en fréquences dans les bandes comprises entre 5
414 MHz et 30 MHz et de prévenir en conséquence les brouillages préjudiciables entre les communications à grande distance, il est recommandé aux administrations d'utiliser, partout où cela est possible en pratique, tout autre moyen de communication possible.

MOD 3919 956 § 3. (1) Si une administration se trouve placée dans des circonstances qui rendent
415 indispensable pour elle l'application des méthodes de travail exceptionnelles énumérées ci-après, elle peut y avoir recours, à la condition expresse que les caractéristiques des stations restent conformes à celles qui sont inscrites dans le Fichier de référence international des fréquences:

957 *a*) Une station du service fixe ou une station terrienne du service fixe par satellite peut, dans les conditions prescrites aux numéros **420** à **423**, émettre à destination des stations mobiles sur ses fréquences normales;

958 *b*) Une station terrestre peut, dans les conditions prescrites aux numéros **420** à **423**, communiquer avec des stations fixes du service fixe ou des stations terriennes du service fixe par satellite, ou avec d'autres stations terrestres de la même catégorie.

NOC 3920 959 (2) Cependent, dans les circonstances où est en jeu la sécurité de la vie humaine
416 ou celle d'un navire ou d'un aéronef, une station terrestre peut communiquer avec des stations fixes ou des stations terrestres d'une autre catégorie.

NOC 3921 960 § 4. Toute administration peut assigner une fréquence choisie dans une bande
417 attribuée au service fixe ou au service fixe par satellite à une station autorisée à émettre unilatéralement d'un point fixe déterminé vers un ou plusieurs points fixes déterminés, pourvu que de telles émissions ne soient pas destinées à être reçues directement par le public en général.

(MOD) 3922 961 § 5. Toute station mobile dont l'émission satisfait à la tolérance de fréquence
418 exigée de la station côtière avec laquelle elle communique, peut émettre sur la même fréquence que la station côtière, à condition que cette station lui ait demandé une telle émission et que les autres stations n'en éprouvent aucun brouillage préjudiciable.

NOC 3923 962 § 6. Dans certains cas prévus aux articles 38 et 59, les stations d'aéronef sont
419 autorisées á utiliser les fréquences des bandes attribuées au service mobile maritime pour entrer en communications avec les stations de ce service (voir le numéro **4148**).

MOD 3924 963 § 7. Les stations terriennes d'aéronef sont autorisées à utiliser les fréquences des
419A bandes attribuées au service mobile maritime par satellite pour entrer en communication, par l'intermédiaire des stations de ce service, avec les réseaux télégraphique et téléphonique publics.

MOD 3925 964 § 8. Toute émission susceptible de produire des brouillages préjudiciables aux
421 communications de détresse, d'alarme, d'urgence ou de sécurité surt les fréquences internationales de détresse et d'urgence désignées á cette fin par le présent Règlement est interdite. Il convient que les fréquences de détresse supplémentaires, disponibles sur une base géographique plus restreinte que la base mondiale, béneficient d'une protection appropriée.

965 à 989 *(Non attribués.)*

NIV/III

CHAPITRE IV

NOC

Coordination, notification et enregistrement des fréquences. Comité internacional d'enregistrement des fréquences

N9/8

ARTICLE 10

MOD

Comité internacional d'enregistrement des fréquences

SECTION I

ADD

Fonctions du Comité

NOC 3951 990 471

§ 1. La constitution et les tâches essentielles du Comité international d'enregistrement des fréquences sont définies dans la Convention.

NOC 3952 991 472

§ 2. Les fonctions du Comité consistent à:

MOD 3953 992 473

a) Traiter les fiches de notifications des assignations de fréquence reçues des administrations, contenant aussi des renseignements sur toute position orbitale de satellite géostationnaire associée à ces assignations, en vue de les inscrire dans le Fichier de référence international des fréquences;

ADD 3953A 993

b) Traiter les renseignements reçus des administrations en application des procédures de publication anticipée, de coordination et autres procédures spécifiées dans le Règlement des radiocommunications et dans les actes finals des conférences administratives des radiocommunications; fournir aux administrations qui en font le demande une assistence dans ce domaine;

NOC 3954 994 474

c) Traiter et coordonner les horaires saisonniers de radiodiffusion à ondes décamétriques en vue de satisfaire les besoins de toutes les administrations dans ce domaine;

NOC 3955 995 475

d) Établir, aux fins de publication par le Secrétaire général, sous une forme appropriée et à des intervalles convenables, les listes de fréquences reflétant les donnés contenues dans le Fichier de référence internacional des fréquences, ainsi que d'autres documents relatifs à l'assignation et à utilisations des fréquences;

NOC 3956 996 476

e) Reviser les inscriptions contenues dans le Fichier de référence international de fréquences, en vue de modifier ou d'eliminer, selon le cas, les inscriptions qui ne reflètent pas l'utilisation réelle du spectre des fréquences, en accord avec les administrations qui ont notifié les assignations correspondantes;

NOC 3957 997 477

f) Étudier, à long terme, l'utilisation du spectre des fréquences radioélectriques, afin de formuler des recommandations tendent à la rendre plus efficace;

NOC 3958 998 478

g) Enquêter, à la demande d'une ou de plusiers des administrations intéressées, sur les cas de brouillages nuisibles et formuler les reccomendations nécessaires;

NOC 3959 999 479

h) Donner aux administrations une assistance dans le domaine de l'utilisation du spectre des fréquences radioélectriques, notamment aux administrations qui ont besoin d'assistance spéciale, et formuler à l'intention des administrations, lorsqu'il y a lieu, des recommandations tendant au remaniement de leurs assignations de fréquence, afin d'obtenir une meilleure utilisation du spectre des fréquences radioélectriques;

NOC 3960 1000 480

i) Rassembler les résultats des observations faites au cours du contrôle des émissions, que les administrations ou les organismes de contrôle peuvent lui fournir, et prendre toures les dispositions utilies, par l'intermédiaire du Sécretaire général. pour leur publication sous une forme appropriée;

ADD **3960A** **1001** *j*) Élaborer des Normes techniques (1) conformément aux numéros **1454** et **1582** du présent Règlement et des Règles de procédure (1) destinées à l'usage interne du Comité dans l'exercice de ses fonctions;

NOC **3961** **1002** *k*) Formuler et renvoyer au CCIR toutes les questions techniques d'ordre
481 général rencontrées par le Comité au cours de l'examen des assignations de fréquence;

MOD **3962** **1003** *l*) Apporter son aide technique à la préparation et à l'organisation des
482 conférences de radiocommunications en consultant selon le cas les autres organismes permanents de l'Union, et en tenant compte de toute directive du Conseil d'administration conformément à la Convention;

NOC **3963** **1004** *m*) Participer à titre consultatif, sur l'invitation des organisations ou des
483 pays intéressés, aux conférences et réunions où sont discutées des questions relatives à l'assignation et à l'utilisation des fréquences;

ADD **3963A** **1005** *n*) Contribuer à la formation des cadres des administrations qui en font la demande, notamment ceux des pays qui en ont le plus besoin, dans le domaine de la gestion et de l'utilisation du spectre de fréquences;

ADD **3963B** **1006** *o*) Remplir les autres fonctions spécifiées dans le Règlement des radiocommunications et dans les actes finals des conférences administratives des radiocommunications.

SUP **3964**
484

MOD **3965** **1007** § 3. Le secrétariat spécialisé du Comité travaille sous la direction immédiate du
485 Comité pour lui permettre de s'acquitter des tâches et des fonctions qui lui sont confiées.

SECTION II

ADD

Méthodes de travail du Comité

NOC **3991** **1008** § 4. Le Comité se réunit aussi souvent qu'il lui est nécessaire pour rempli
659 rapidement ses fonctions, et normalement au moins une fois par semaine.

MOD **3992** **1009** § 5. (1) Conformément à la Convention, les membres du Comité élisent parm eux
660 un président et un vice-président qui remplissent leus fonctions pendant un durée d'une année. Par la suite, le vice-président succède chaque année au président et un nouveau vice-président est élu.

NOC **3993** **1010** (2) Dans le cas d'une absence inévitable du président et du vice-président les
661 membres du Comité élisent, pour la circonstance, un président temporaire chois parmi eux.

NOC **3994** **1011** § 6. (1) Chaque membre du Comité, y compris le président, dispose d'une voix.
662 Le vote par procuration ou par correspondance est interdit.

NOC **3995** **1012** (2) Les procès-verbaux indiquent si une décision a été prise á l'unanimité ou à
663 la majorité.

NOC **3996** **1013** (3) Le quorum requis pour que le Comité puisse délibérer valablement es égal
664 à la moitié du nombre de ses membres. Si, cependent, lors d'une séance dan laquelle le nombre des membres présents ne dépasse pas le quorum, l'unanimité ne peut pas être obtenue sur une question, celle-ci est renvoyée pour décision à une réunion ultérieure où les deux tiers au moins des membres sont présents. Si le calcude la moitié ou des deux tiers des membres donne un nombre fractionnaire, on l'arrondit au nombre entier immédiatement supérieur.

NOC **3997** **1014** (4) Le Comité doit s'efforcer de prendre ses décisions par accord unanime. S'il
665 n'y parvient pas, il doit prendre sa décision par un vote, à la majorité des deux tiers des membres présents et votant pour ou contre.

ADD **3977A** **1015** § 7. Le Comité peut adopter, pour ses propres besoins et pour l'accomplisement efficace de ses tâches, les dispositions internes qu'il juge nécessaires, confromément à la Convention et au Règlement des radiocommunications.

ADD **3960A.1** **1001.1** (1) Les Normes techniques et les Règles de procédure de IRFB sont communiquées à tous les Membres de l'Union et peuvent faire l'objet de commmentaire de la part de toute administration. Au cas où il subsiste un désaccord qui ne peut être résolu, la procédure à suivre est indiquée dans la Résolution 35.

NOC 3998 666 1016 § 8. Les documents du Comité, qui comprennent des archives complètes de tous ses actes officiels et les procès-verbaux de toutes ses réunions, sont tenus à jour par le Comité dans les langues de travail de l'Union, telles qu'elles sont définies dans la Convention; à cette fin, ainsi que lors des réunions du Comité, le personne linguistique et tout autre moyen matérial nécessaire lui sont fournis par le Secrétaire général. Un exemplaire de tous les documents du Comité est tenu à la dispositior du public dans les bureaux du Comité aux fins de consultation.

1017 à 1040 *(Non attribués.)*

N11

ARTICLE II

MOD **Coordination des assignations de fréquence aux stations d'une service de radiocommunications spatiale, à l'exeception des stations du service de radiodiffusion par satellite, et aux stations de Terre appropriées (1)**

SECTION I

MOD **Procédures pou r la publication anticipée de renseignements concernant les réseaux á satellite en projet (2)**

NOC 4099 1041 *Publication de renseignements:*

MOD 4100 639AA 1042 § 1. (1) Toute administration (ou toute administration agissant au nom d'un groupe d'administrations nommément désignées) qui se propose d'établir un système à satellites envoie au Comité internacional d'enregistrement des fréquences, avant d'engager, le cas échéant, la procédure de coordination décrite au numéro **1060**, au plus tôt cinq ans et de préférence au plus tard plus tard deux ans avant la mise en service de chaque réseau á satellite du système en project, les renseignements énumérés à l'appendice **4**.

NOC 4101 639AB 1043 (2) Toute modification aux renseignements communiqués conformément aux dispositions du numéro **1042** au sujet d'une système à satellites en projet est également communiquée au Comité dès le moment où elle est disponible.

MOD 4102 639AC 1044 (3) Le Comité public les renseignements dont il est question aux numéros **1042** et **1043** dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire. Ce télégrame-circulaire indique les bandes de fréquences à utiliser et, dans le cas d'un satellite géostationnaire, la position orbitale de la station spatiale.

ADD 4102A 1045 (4) Si les renseignements communiqués sont jugés incompletes, le Comité les publie conformément aux dispositions du numéro **1044** et demande immédiatement à l'administration concernée tous les éclaircissements nécessaires et tous renseignements qui n'ont pas été fournis. Dans de tels cas, la période de quatre mois spédifiée au numéro **1047** est comptée à partir de la date de la publication aux termes du numéro **1044** des renseignements complets.

NOC 4103 1046 *Observations sur les renseignements publiés:*

MOD 4104 639AD 1047 § 2. Si, après avoir étudié les renseignements publiés aux termes du numéro, **1044,** une administration quelle qu'elle soit est d'avis que des brouillages qui peuvent être inacceptables pourront être causés à ses services de radiocommunication spatiale existents ou en projet, elle communique ses observations à l'administration concernée dans le délai de quatre mois qui suit la date de la circulaire hebdomadaire dans laquelle la totalité des renseignements énumérés á l'appendice **4** on été publiés. Elle envoie également au Comité une copie de ces observations. Si l'administration concernée ne reçoit aucune observation de cette nature d'une autre administration pendant la période

---

ADD A.11.1 (1) Pour la coordination des assignations de fréquence aux stations du service de radiodiffusion par satellite et aux autres services dans les bandes de fréquence 11,7-12,2 GHz (dans les Régions 2 et 3) 11,7-12,5 GHz (dans la Région 1), voir également l'article 15.

ADD A.11.2 (2) Ces procédures peuvent être applicables aux stations à bord d'engins lanceurs de satellites.

susmentionnée, elle peut supposer que cette dernière n'a pas d'objection à formuler à l'encontre du (ou des) réseau(x) à satellite en projet du système à l'égard desquels des renseignements ont été publiés.

NOC **4105** **1048** *Résolution des difficultés:*

MOD **4106** **1049** § 3. (1) Une administration qui reçoit des observations formulées aux termes du
639AE numéro **1047** s'efforce de résoudre les difficultés de toute nature qui peuvent se présenter et elle fournit tous les renseignements supplémentaires dont elle peut disposer.

NOC **4107** **1050** (2) Dans le cas où des difficultés se présentent lorsque l'un quelconque des
639AF réseaux à satellite en projet d'une système est destiné à faire usage de l'orbite des satellites géostationnaires:

1051 *a*) L'administration responsable du système en projet recherche en premier lieu tous les moyens possibles de faire face à ses besoins, en tenant compte des caractéristiques des réseaux à satellite géostationaire faisant partie d'autres systèmes et sans prendre em considération que des resmaniements puissent être apportés à des systèmes relevant d'autres administrations. Si elle ne peut pas trouver de tels moyens, l'administration concernée peut alors s'adresser aux autres administrations concernées afin de résoudre ces difficultés;

1052 *b*) Une administration qui reçoit une requête aux termes du numéro **1051** recherche, de concert avec l'administration requérante, tous les moyens possibles de faire face aux besoins de celle-ci, par exemple en changeant l'emplacement d'une ou plusiers de ses propres stations spatiales géostationnaires en jeu ou en modifiant les émissions, l'utilisation des fréquences (y compris des changements de bande de fréquences), ou d'outres caractéristiques techniques ou d'exploitation;

1053 *c*) Si, aprês application de la procédure décrite aux numéros **1051** et **1052**, des difficultés non résolues subsistent, les administrations en cause font de concert tous les efforts possibles pour résoudre ces difficultés au moyen de remaniements acceptables par les deux parties, par example en modifiant les emplacements de stations spatiales géostationnaires ainsi que d'autres caractéristiques des systèmes en jeu afin de permettre le fonctionnement normal, à la fois du système en projet et des systèmes existants.

NOC **4108** **1054** (3) Les administrations peuvent demander l'aide du Comité dans leurs tentatives
639AG pour résoudre les difficultés mentionnées ci-dessus.

NOC **4109** **1055** *Résultats de la publication anticipée:*

MOD **4110** **1056** § 4. Toute administration au nom de laquelle des renseignements sur les réseaux à
639AI satellite en projet ont été publiés conformément aux dispositions des numéros **1042** à **1044** fait connaître au Comité á l'expiration de la période de quatre mois spécifiée au numéro **1047**, si elle a reçu ou non les observations dont il est question dans les dispositions du numéro **1047** et elle lui communique l'état d'avancement du règlement des difficultés éventuelles. Des renseignements supplémentaires sur l'état d'avancement de ces difficultés doivent être envoyes au Comité à des intervalles de temps ne dépassant pas six mois avant le début de la coordination ou avant l'envoi des fiches de notification au Comité. Le Comité publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire.

NOC **4111** **1057** *Commencement des procédures de coordination ou de notification:*

MOD **4112** **1058** § 5. En se conformant aux dispositions des numéros **1049** à **1054**, une admi-
639AH nistration responsable d'un système à satellites en projet diffère, si c'est nécessaire, le début de la procédure de coordination ou, si celle-ci n'est pas applicable, l'envoi de ses fiches de notification au Comité, jusqu'à une date postérieure de six mois à la date de la circulaire hebdomadaire contenant les renseignements énumérés à l'appendice **4** et concernant le réseau à satellite pertinent. Cependent, vis-à-vis des administrations avec lesquelles les difficultés ont été résolues on qui ont répondu favorablement, la procédure de coordination peut, le cas échéant, être engagée avant l'expiration du délai de six mois précité.

SECTION II

NOC

Coordination des assignations de fréquence à une station spatiale à bord d'une satellite géostationnaire ou à une station terrienne communiquant avec une telle station spatiale, vis-á-vis des stations appartenant à d'autres réseuax à satellite géostationnaire

NOC 4113 1059 *Conditions régissant la coordination:*

MOD 4114 639AJ 1060 § 6. (1) Avant de notifier au Comité ou de mettre en service une assignation de fréquence à une station spatiale installée à bord d'un satellite géostationnaire ou à une station terrienne destinée à communiquer avec une telle station spatiale, toute administration (ou, dans le cas d'une station spatiale, toute administration agissant au nom d'un groupe d'administrations nommément désignées) coordonne, sauf dans les cas fixées aux numéros **1066** à **1071**, l'utilisation de cette assignation de fréquence avec toute autre administration dont une assignation de fréquence, concernant une station spatiale instalée à bord d'un satellite géostationnaire ou une station terrienne qui communique avec une telle station spatiale, pourrrait être affectée.

ADD 4114A 1061 (2) Les assignations de fréquence auxquelles s'appliquent des dispositions du numéro **1060** sont celles:

1062 *a*) Situées dans la même bande de fréquences que l'assignation en projet et conformes aux dispositions du numéro **1503**; *et*

1063 *b*) Soit inscrites dans le Fichier de référence ou ayant fait l'objet de la coordination prévue dans la présente section;

1064 *c*) Soit à prendre en considération pour la coordination à compter de la date de réception par le Comité conformément aux dispositions du numéro **1074**, des renseignements pertinents tels que spécifiés dans l'appendice 3;

1065 *d*) Soit notifiées au Comité sans aucune coordination dans les cas où les dispositions des numéros **1066** à **1071** s'appliquent.

MOD 4115 639AK 1066 (3) Aucune coordination aux termes du numéro **1060** n'est requise:

1067 *a*) Lorque, du fait de l'utilisation d'une nouvelle assignation de fréquence, la température de bruit du récepteur de toute station spatiale ou terrienne ou la température équivalente de bruit de toute liaison par satellite, selon le cas, relevant d'une autre administration, subit un accroissement qui, calculé conformément à la méthode prévue à l'appendice **29**, ne dépasse pas la valeur de seuil définie dans cetter méthode;

1068 *b*) Lorsque le bouillage résultant de la modification d'une assignation de fréquence, ayant déjà été coordonnée, n'excède pas la valeur convenue au cours de la coordination;

ADD 1069 *c*) Lorsqu'une administration se propose de notifier ou de mettre en service une nouvelle station terriene à l'intérieur d'une zone de service d'un réseau à satellite existant, à condition que la nouvelle station terrienne ne cause pas de brouillage d'un niveau supérieur à celui qui serait causé par une srtation terrienne appartenant au même réseau à satellite et dont les caractéristiques ont été publiées conformément aux dispositions du numéro **1078**, en même temps que les renseignements concernant la station spatiale;

ADD 1070 *d*) Lorsque, pour une nouvelle assignation de fréquence à une station de réception, l'administration notificatrice déclare qu'elle accepte le brouillage résultant des assignations de fréquence citées aux numéros **1061** à **1065**;

ADD 1071 *e*) Entre des stations terriennes utilisant des assignations de fréquence dans le même sens (soit Terre vers espace soit espace vers Terre).

NOC 4116 1072 *Données concernant la coordination:*

MOD 4117 639AJ 1073 § 7. (1) En vue d'effectuer la coordination, l'administration qui recherche la coordination envoie à toute autre administration visée dans le numéro **1060** tous les renseignements énumérés à l'appendice **3** et nécessaires à la coordination. La demande de coordination concernant une station spatiale ou une station terrienne associée peut comprendre toutes ou certaines des assignations de frequénce qu'elle prévoit d'utiliser pour cette station spatiale, mais par la suite, chaque assignation est traitée séparément.

MOD 4118 639AL 1074 (2) En même temps qu'une administration engage la procédure de coordination, elle envoie au Comité une copie de la demande de coordination, accompagnée de tous les renseignements énumérés á l'appendice **3** nécessaires à la coordination ainsi que le

nom de la ou des administrations auprès de laquelle ou desquelles elle recherche la coordination. Une administration qui est d'avis que les dispositions des numéros **1066** à **1071** s'appliquent à son assignation em projet peut envoyer au Comité les renseignements pertinents énumérés à l'appendice **3**, soit aux termes de la présent disposition, soit conformément aux dispositions des numéros **1488** à **1491**. Dans ce dernier cas, le Comité en avise immédiatement toutes les administrations par télégramme-circulaire.

ADD **4118A** **1075** § 8. Au reçu des renseignements dont il est question au numéro **1074**, le Comité:

ADD **4118B** **1076** *a*) Examine immédiatement ces renseignements du point de vue de leur conformité avec les dispositions du numéro **1503** et envoie le plus rapidement possible un télégramme á toutes les administrations, indiquant l'identité du réseau à satellite, les conclusions qu'il a formulées relativement au numéro **1503** et la date de réception des renseignements; cetter date est prise en compte comme la date à partir de laquelle l'assgination est prise en considération pour la coordination;

ADD **4118C** **1077** *b*) Examine des renseignements reçus en vue d'identifier les administrations dont les services peuvent être affectés aus termes des dispositions du numéro **1060** est informe par télégramme les administrations concernées;

ADD **4118D** **1078** *c*) Publie dans une section spéciale de sa circulaire hebdomadaire les renseignements reçus em application du numéro **1074** et le résultat de l'examen effectué conformément aux numéros **1076** et **1077** ainsi qu'une référence à la circulaire hebdomadaire dans laquelle les renseignements concernant le réseau à satellite ont été publiés aux termes de la section I du présent article. Lorsque la circulaire hebdomadaire contient des renseignements de cette nature, le Comité en avise toutes les administrations par télégrame-circulaire.

NOC **4119** **1079** *Demandes de participation à la procédure de coordination:*

MOD **4120** 639AM **1080** § 9. Toute administration qui estime qu'elle aurait dû être incluse dans la procédure de coordenation dont il est question au numéro **1060** a le droit de demander à être partie à la procédure de coordination. Cette demande est envoyée à l'administration ayant engagé la procédure de coordenation, avec copie au Comité, le plus rapidement possible.

NOC **4121** **1081** *Accusé de réception des données concernant la coordination:*

MOD **4122** 639AO **1082** § 10. Toute administration auprès de laquelle la coordination est recherchée aux termes du numéro **1060** accuse immédiatement réception, par télégrame, des données concernant la coordination. Si l'adiministration qui recherche la coordination ne reçoit pas d'accusé de réception dans le délai de trente jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés conformément aux dispositions du numéro **1078**, elle envoie un télégramme demandant cet accusé de réception, télégramme auqeul l'administration qui le reçoit répond dans un nouveau délai de quinze jours.

NOC **4123** **1083** *Examen des données concernant la coordination et accord entre les administrations:*

MOD **4124** 639AO **1084** § 11. (1) Au reçu des renseignements concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question, du point de vue des brouillages (1) qui seraient causés au service assuré par celles de ses stations pour lesquelles la coordination est recherchée aux termes du numéro **1060** on causés par ces stations. Ce faisant, elle prendra en considération la date prévue de mise en service de l'assignation pour laquelle la coordination est recherchée. Puis elle communique son accord, dans le délai de quatre mois qui suit la date de la circulaire hebdomadaire pertinente, à l'administration qui recherche la coordination. Si l'administration auprès de laquelle la coordination est recherchée ne communique pas son accord, elle envoie dans le même délai à l'administration qui recherche la coordination des renseignements techniques indiquant les raisons qui motivent son désaccord y compris les caractéristiques pertinentes contenues dans l'appendice **3** qui n'ont pas été précédemment notifiées au

---

MOD **4124.1** 639AO.I **1084.1** (1) Les mèthodes de calcul et les critères à utiliser pour évaluer le brouillage devraient être fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'une autre façon. En cas de désaccord sur un Avis du CCIR ou en l'absence de tels Avis, les méthodes et les critères font l'objet d'accords entre les administrations concernées. Ces accords doivent être conclus sans porter préjudice aux autres administrations.

Comité et elle lui présente les suggestions qu'elles peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du probléme. Une copie de ces observations est envoyée également au Comité.

MOD **4125** **1085** (2) L'administration qui recherche la coordination, ou toute administration auprès de laquelle la coordination est recherchée, peuvent demander les renseignements supplémentaires dont elles estiment avoir besoin pour évaluer le brouillage causé aux services concernés.
639AT

ADD **4125A** **1086** *Résultats de la coordination:*

ADD **4125B** **1087** § 12. Toute administration qui a engagé une procédure de coordination conformément aux dispositions des numéros **1060** à **1074** fait connaître au Comité, á l'issue du délai de quatre mois qui suit la date de la circulaire hebdomadaire pertinente mentionnée au numéro **1078**, les noms des administrations avec lesquelles un accord est obtenu ainsi que les modifications des caractéristiques de ses assignations de fréquence. Elle fait également connaître au Comité l'état d'avancement du règlement de la coordination avec les autres administrations ou les difficultés éventuelles. Une telle communication est faite au Comité tous les six mois après le délai mentionné ci-dessus. Le Comité publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire et, lorsque celle-ci contient de tels renseignements sur les modifications aux caractéristiques publiées, il en avise les administrations par télégramme-circulaire.

NOC **4126** **1088** *Assistance demandée à l'IFRB en vue d'effectuer la coordination:*

MOD **4127** **1089** § 13. (1) L'administration qui recherche la coordination peut demander au Comité de s'effectuer cette coordination dans les circonstances suivantes:
639AS

1090 *a*) Une administration auprès de laquelle la coordination est recherchée aux termes du numéro **1060** n'envoie pas d'accusé de réception, aux termes du numéro **1082**, dans un délai de quarante-cinq jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements relatifs à la demande de coordination ont été publiés;

1091 *b*) Une administration a envoyé un accusé de réception aux termes du numéro **1082**, mais ne communique pas sa decision dans un délai de quatre mois à partir de la date de la circulaire hebdomadaire pertinente;

1092 *c*) L'administration qui recherche la coordination et l'administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le brouillage acceptable;

1093 *d*) Ou encore la coordination n'est pas possible pour toute autre raison.

1094 (2) En présentant sa demande au Comité, l'administration concernée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

NOC **4128** **1095** *Mesures à prendre par l'IFRB:*

MOD **4129** **1096** § 14. (1) Lorsque le Comité reçoit une demande aux termes du numéro **1090**, il envoie sans délai un télégramme à l'administration concernée en lui demandant d'en accuser réception immédiatement.
639AU

MOD **4130** **1097** (2) Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il prise aux termes du numéro **1096** ou lorsqu'il reçoit une demande aux termes du numéro **1091**, il envoie sans délai un télégramme à l'administration concernée en lui demandant de prendre rapidement une décision sur la question.
639AV

MOD **4131** **1098** (3) Lorsque le Comité reçoit une demande aux termes du numéro **1093**, il s'efforce d'effectuer la coordination conformément aux dispositions du numéro **1060**. Le Comité prend également les mesures prévues aux numéros **1075** à **1078**. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de coordination dans le délai spécifié au numéro **1082**, il agit conformément aux dispositions du numéro **1096**.
639AW

MOD **4132** **1099** (4) S'il y a lieu, le Comité évalue le brouillage, au titre de la procédure spécifiée aux numéros **1089** à **1094**. En tout état de cause, il communique aux administrations concernées les résultats obtenus.
639AY

MOD **4133** **1100** (5) Le Comité peut demander les renseignements supplémentaires dont il estime avoir besoin pour évaluer le brouillage causé aux services concernés.
639AT

(MOD) **4134** **1101** (6) Lorsqu'une administration ne répond pas dans un délai de trente jours qui suit l'envoi du télégramme que le Comité lui a envoyé aux termes du numéro **1096** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suit l'envoi du télégramme du Comité aux
639AX

termes du numéro **1097**, l'administration auprés de laquelle la coordination a été recherchée est réputée s'être engagée:

1102 *a*) À ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés au service assuré pas ses stations de radiocommunication spatiale par l'utilisation de l'assignation de fréquence pour laquelle la coordination a été recherchée;

1103 *b*) À faire en sorte que ses stations de radiocommunications spatiale ne causeront pas de brouillages préjudiciables à l'utilisation de l'assignation de fréquence pour laquelle la coordenation a été recherchée.

NOC **4135** **1104** *Notification des assignations de fréquence en cas de désaccord persistant:*

MOD **4136** 639AZ **1105** § 15. En cas de désaccord persistant entre l'administration qui recherche la coordination et l'administration auprès de laquelle la coordination a été recherchée, l'administration qui recherche la coordination diffère, excepté dans les cas ou l'assistance du Comité a été demandée, l'envoi au Comité de sa fiche de notification concernant l'assignation en projet, de six mois à compter de la date de publication de la demande de coordination aux termes du numéro **1078** en prenant en considération les dispositions du numéro **1496**.

SECTION III

NOC **Coordination des assignations de fréquence à une station, vis-à-vis des stations de Terre**

NOC **4137** **1106** *Conditions régissant la coordination:*

MOD **4138** 639AN **1107** § 16. (1) Avant de notifier au Comité ou de mettre en service une assignation d'une fréquence d'émission ou de réception à une station terrienne dans une bande déterminée, attribuée avec égalité des droits à des services de radiocommunication saptiale et à des services de radiocommunication de Terre dans le gamme de fréquences située au-delà de 1 GHz, toute administration coordonne, sauf dans les cas visés aux numéros **1108 à 1111**, l'utilisation de cette assignation avec l'administration de chaque pays dont le territoire est situé en tout ou en partie à l'intérieur de la zone de coordination (1) de la station terrienne en projet. La demande de coordination concernant une station terrienne peut comprendre toutes ou certaines des assignations de fréquence à la station spatiale associée mais, par la suite, chaque assignation est traitée séparément.

MOS **4139** 639AR **1108** (2) Aucune coordination aux termes du numéro **1107** n'est requise lorsqu'une administration se propose:

1109 *a*) De mettre en service une station terrienne dont la zone de coordination est entièrement extérieure au territoire de tout autre pays;

1110 *b*) De modifier les caractéristiques d'une assignation existante de telle sorte que les brouillages causés à ou par des stations de radiocomunication de Terre d'autres administrations ne s'en trouvent pas accrus;

1111 *c*) De faire fonctionner une station terrienne mobile. Cependant, si la zone de coordination liée au fonctionnement d'une telle station terrienne mobile dans l'une des bandes de fréquences auxquelles référence est faite au numéro **1107** recouvre tout ou partie du territoire d'un autre pays, le fonctionnement de cette station fait l'objet d'un accord de coordination entre les administrations concernées. Cet accord porte sur les caractéristiques de la ou des stations terriennes mobiles ou sur les

---

MOD **4138.1** 639AN.1 **1107.1** (1) L'appendice **28**, qui est utilisé pour calculer la zone de coordination, contient les critères relatifs uniquement à la coordination entre les stations terriennes et les stations du service fixe ou du service fixe ou du service mobile. Les critères relatifs aux autres services de radiocommunication de Terre devraient être fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'autres dispositions.

En cas de désaccord sur un Avis du CCIR ou en l'absence de tel Avis, les méthodes et critères à utiliser font l'objet d'accords entre les administrations concernées. Ces accords doivent être conclus sans porter préjudice aux autres administrattions.

SUP **4138.2** 639AN.2

caractéristiques d'une station terrienne mobile type, et est conclu pour une zone de service donnée. Sauf dispositions contraires de l'acoord, celui-ci s'applique à toute station terrienne mobile se déplaçant dans la zone de service considérée, sous réserve que le brouillage causé par elle ne soit pas plus élevé que dans le cas de la station terrienne type dons les caractéristiques techniques figurent sur la fiche de notification ou dont la notification a été faite ou est en cours aux termes du numéro **1494**.

NOC **4140** **1112** *Données concernant la coordination:*

MOD **4141** 639AN **1113** § 17. L'administration qui recherche la coordination envoie à cet effet à chacune des administrations concernées aux termes des dispositions du numéro **1107**, une copie d'un schéma établi à l'échelle convenable, indiquant, pour l'émission et la réception, l'emplacement de la station terrienne et de ces zones de coordination associées, ou la zone de coordination correspondant à la zone de service dans laquelle il est prévu d'exploiter la station terrieenne mobile, ainsi que les paramètres sur lesquels le calcul de ces zones est fondé, et tous les renseignements pertinents concernant l'assignation de fréquence en projet, tels qu'ils sont énumérés à l'appendice **3**, et une indication de la date approximative à laquelle il est prévu qu'elle commencera à fonctionner. Une copie de ces renseignements, avec la date d'expédition de la demande de coordination est, de plus, envoyée au Comité pour information.

NOC **4142** **1114** *Accusé de réception des données concernant la coordination:*

MOD **4143** 639AP **1115** § 18. Toute administration auprès de laquelle la coordination est recherchée aux termes du numéro **1107** accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'acussé de réception dans un délai de trente jours à partir de l'envoi des données concernant la coordination, elle envoie un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans un nouveau délai de quinze jours.

NOC **4144** **1116** *Examen des données concernant la coordination et accord entre les administrations:*

MOD **4145** 639AP **1117** § 19. (1) Au reçu des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question eu égard à la date prévue de mise en service de l'assignation pour laquelle la coordination est recherchée, à la fois du point de vue:

1118 *a*) Des brouillages (1) qui seraient causés au service assuré par ses stations de radiocommunication de Terre fonctionnat conformémente aux dispositions de la Convention et du présent Règlement, ou destinées à fonctionner ainsi avant la date prévue de mise en service de l'assignation à la station terrienne, ou encore dans les trois années à venir, selon celle de ces dates qui est la plus tardive; *et*

1119 *b*) Des brouillages (1) qui seraient causés à la réception à la station terrienne par le service assuré par ses stations de radiocommunication de Terre fonctionnant conformément aux dispositions de la Convention et du présent Règlement, ou destinées à fonctionner ainsi avant la date prévue de mise en service de l'assignation à la station terrienne, ou encore dans les trois années à venir, selon celle de ces dates que est la plus tardive.

1120 (2) Les périodes dont il est question dans les numéros **1118** et **1119** peuvent être prolongées par accord entre les administrations concernées afin de tenir compte des réseaux de Terre planifiés.

SUP **4141.2** 639AN.2

MOD **4145.1** 639AP.1 **1118.1** **1119.1** (1) Les méthodes de calcul et les critères à utiliser pour évalur le brouillage devraient être fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'autres dispositions. En cas de désaccord sur un Avis du CCIR ou en l'absence de tels Avis, les méthodes et les critères font l'objet d'accords entre les administrations concernées. Ces accords doivent être conclus sans porter préjudice aux autres administrations.

ADD **4145A** **1121** (3) Puis, dans un délai de quatre mois à partir de l'envoi des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée communique à l'administration qui recherche la coordination:

1122 *a*) Soit son accord sur la coordination, avec copie au Comité indiquant, le cas échéant, la partie de la bande de fréquences attribuée comprenant les assignations de fréquence coordonnés;

1123 *b*) Soit une demande tendant à inclure dans la coordination ses stations de radiocommunication de Terre visées aux numéros **1118** et **1119**;

1124 *c*) Soit son désaccord.

1125 (4) Dans le cas des numéros **1123** et **1124**, l'administration auprès de laquelle la coordination est recherchée communique à la administration qui recherche la coordination un graphique à échelle convenable indiquant l'emplacement de celles de ses stations de radiocommunication de Terre qui sont ou seront à l'intérieur de la zone de coordination de la station terrienne d'emisson ou de récepcion selon le cas, ainsi que toutes les autres caractéristiques fondamentales pertinentes et lui présente les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

MOD **4146** **1126** (5) Lorsque l'administration auprès de laquelle la coordination est recherchée envoie
639AQ à l'administration qui recherche la coordination les renseignements requis dans le cas du numéro **1124**, elle envoie aussi une copie de ces renseignements au Comité. Celui-ci considère comme notifications aux termes de la section I de l'article 12 seulement ceux de ces renseignements qui concernent des assignations à des stations de radiocommunication de Terre existantes ou qui seront mises en service dans le trois mois à venir.

ADD **4146A** **1127** (6) Lorsqu'un accord sur la coordination a été conclu suite à l'application des numéros **1121** à **1125**, l'administration responsable des sations de Terre peut envoyer au Comité les renseignements concernant celles de ses stations de Terre converts par l'accord et qu'elle désire notifier aux termes de la section I de l'article 12. Le Comité considère comme notifications aux termes de la latide section seulement ceux de ces renseignements qui concernent des assignations à des stations de radiocommunication de Terre existantes ou qui seront mises en service dans les trois années à venir.

MOD **4147** **1128** (7) L'administration qui recherche la coordination, ou toute administration auprès de
639AT laquelle la coordination est recherchée, peuvent, demander les renseignements supplémentaires dont elles estiment avoir besoin pour évaluer le brouillage causé aux services concernés.

NOC **4148** **1129** *Assintance demandée à l'IFRB en vue d'effectuer la coordination:*

MOD **4149** **1130** § 20. (1) L'administration qui recherche la coordination peut demander au Comité
639AS de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

1131 *a*) Une administration auprès de laquelle la coordination est recherchée aux termes du numéro **1107** n'envoie pas d'accusé de réception, aux termes du numéro **1115** dans un délai de quarante-cinq jours à partir de l'envoi des donnés concernant la coordination;

1132 *b*) Une administration a envoyé un accusé de réception aux termes du numéro **1115**, mais ne communique pas sa décision dans un délai de quatre mois à partir de l'envoi des données concernant la coordination aux termes du numéro **1113**;

1133 *c*) L'administration qui recherche la coordination et l'administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le brouillage acceptable;

1134 *d*) Ou encore la coordination n'est pas possible pour toute autre raison.

1135 (2) En présentant sa demande au Comité, l'administration concernée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

NOC **4150** **1136** *Mesures à prendre par l'IFRB:*

(MOD) **4151** **1137** § 21. (1) Lorsque le Comité reçoit une demande aux termes de numéro **1131**, il
639AU envolve sans un télegramme à l'administration concernée en lui demandant d'en accuser réception immédiatement.

(MOD) **4152** **1138** (2) Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il
639AV a prise aux termes du numéro **1137** ou lorsqu'il reçoit une demande aux termes du numéro **1132**, il envoie sans délai un télegramme à l'administration concernée en lui demandant de prendre rapidement une décision sur la question.

MOD 4153 639AW 1139 (3) Lorsque le Comité reçoit une demande aux termes du numéro **1134**, il s'efforce d'effectuer la coordination conformément aux dispositions du numéro **1107**. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de dispositions du numéro **1137**.

MOD 4154 639AY 1140 (4) S'il y a lieu, le Comité évalue le brouillage, au titre de la procédure spécifié aux numéros **1130** à **1135**, En tout état de cause, il communique aux administrations concernées les résulats obtenus.

MOD 4155 639AT 1141 (5) Le Comité peut demander les renseignements supplémentaires dont il estime avoir bessoin pour évalour le brouillage cause aux services concernés.

MOD 4156 639AX 1142 (6) Lorsqu'une administration ne répond pas dans un délai de trente jours qui suit envoi du télégramme que le Comité lui a envoyé aux termes du numéro **1137** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suit l'envoi du télegramme du Comité aux termes du numéro **1138**, l'administration auprès de laquelle la coordionation a été recherchée est réputée s'être engagée:

1143 *a*) À ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés au service assuré par ses sations de radiocommucation de Terre par l'utilisation de l'assignation de fréquence pour laquelle la coordinatio a été receherchée;

1144 *b*) À faire en sorte que ses sations de radiocommucations de Terre ne causeront pas de brouillages préjudiciables à l'utilisation de l'assigantion de fréquice pour laquelle la coordination a été recherchée.

NOC 4157 1145 *Notification des assignations de fréquence en cas de désaccord persistant:*

MOD 4158 639AZ 1146 § 22. En cas de désaccord persistant entre l'administration qui recherche la coordination et l'adminsitration auprés de laquelle la coordination a été recherchée, l'administration qui recherche la coordination diffère, excepté dans les cas ou l'assistance du Comité a été demandée, l'envoi au Comité de sa fiche de notification concernant l'assignation en projet, de six mois à compter de la demande de coordination, en prenant en considération les dispositions du numéro **1496**.

SECTION IV

NOC

Coordination des assignations de fréquence à une station de Terre émettrice vis-à-vis d'une station terrienne

NOC 4159 1147 *Conditions régissant la coordiantion:*

MOD 4160 492A 1148 § 23. (1) Avant de notifier au Comité ou de mettre en service une assignation de fréquence à une station de Terre située à l'intérieuer de la zone de coordination (1) d'une station terrienne, dans une bande de fréquences au -dessus de 1GHz, attribuée avec égalité des droits aux services de radiocommunication de Terre et aux services de radiocommunication spatiale (espace vers Terre), à l'exception du service de radiodiffusion par satellite, toute administration coordonne, sauf dans les cas visés aux numéros **1155** à **1158**, l'assignation en projet avc l'administration responsable de la station terrienne en ce qui concerne les assignations de fréquence qui sont:

1149 *a*) Conformes aux dispositions du numéro **1503**; *et*

1150 *b*) Soit coordonnés aux termes du numéro **1107**;

1151 *c*) Soit à prendre en considération pour la coordinarion à compter de la date de communication des renseigneiments dont il est question au numéro **1107**;

1152 *d*) Soit inscrites dans le Fichier de référence avec une conclusion favorable relativement au numéro **1505**;

MOD 4160.1 492A.1 1148.1 (1) L'appendice **28**, qui est utilisé pour calculer la zone de coordination, contient les critères relatifs uniquement à la coordination entre les stations terriennes et les stations du service fixe ou du service fixe ou du service mobile. Les critères relatifs aux autres services de radiocommunication de Terre devraient être fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'autres dispositions.

En cas de désaccord sur un Avis du CCIR ou en l'absence de tel Avis, les méthodes et les critères à utiliser font l'objet d'accords entre les administrations concernées. Ces accords doivent être conclus sans porter préjudice aux autres administrations.

1153 *e)* Soit inscrites dans le Fichier de référence avec une conclusion défavorable relativement au numéro **1505** et une conclusion favorable relativement au numéro **1509**;

1154 *f)* Soit inscrites dans le Fichier de référence avec une conclusion défavorable relativement aux numéros **1505** et **1509**, l'administration notificatrice ayant déclaré qu'elle a accepté le brouillage résultant des stations de Terre existantes, situées à l'intérieur de la zone de coordination de la station terrienne à la date de son inscription.

(MOD) **4161** 492C **1155** (2) Aucune coordination aux termes des numéros **1148** à **1154** n'est requise lorsqu'une administration se propose:

1156 *a)* De mettre en service une station de Terre située en dehors de la zone de coordination d'une station terrienne;

1157 *b)* De modifier les caractéristiques d'une assignation existante de telle sorte que les brouillages causés à des stations terriennes d'autres administrations ne s'en trouvent pas accrus;

ADD **1158** *c)* De mettre en service une station de Terre à l'intérieur de la zone de coordination d'une station terrienne, à condition que l'assigntion projetée pour la station de Terre se trouve à l'extérieur d'une partie quelconque d'une bande de fréquences ayant fait l'objet d'une coordinatin en application des dispositions du numéro **1122** pour la réception par cette station terrienne.

NOC **4162** **1159** *Données concernant la coordination:*

MOD **4163** 492A **1160** § 24. Pour effectuer cette coordination, l'administrative qui recherche la coordiantion envoie à chacune des administrations visés aux numéros **1148** à **1154**, par le moyen le plus rapide possible, un graphique à échelle convenable indiquant l'emplacement de la stations de Terre et lui communique tous les autres détails pertinents concernant l'assignation de fréquence en projet, ainsi qu'une indication de la date approximative prévue pour la mise service de la station. Le demande de coordination peut comprendre toutes ou certaines des assignations de fréquence dont l'utilisation est prévue dans les trois années à venir pour des stations d'un réseau de Terre, situées entièrement ou en partie à l'intérieur de la zone de coordination d'une station terrienne. Cette période peut être prolongée par accord entre les administrations concernées. Par la suite, chaque assignation est traitée séparément.

NOC **4164** **1161** *Accusé de réception des données concernant la coordination:*

MOD **4165** 492B **1162** § 25. Toute administration auprès de laquelle la coordination est recherchée aux termes des numéros **1148** à **1154** accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'accusé de réception dans le délai de trente jours qui suit l'envoi des données concernant la coordination, elle peut envoyer un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui l'a reçu répond dans un nouveau délai de quinze jours.

NOC **4166** **1163** *Examen des données concernant la coordination et acoord entre les administrations:*

MOD **4167** 492B **1164** § 26. (1) Au reçu des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question du point de vue des brouillages (1) qui seraint causés au service assuré par sus stations terriennes visées aux numéros **1148** à **1154** qui fonctionnent ou sont destinnés à fonctionner dans les trois années à venir.

1165 (2) Ce faisant, l'administration peut prendre en considération toute assignation de fréquence qui lui est communiquée et destinée à être utilisée plus de trois ans à l'avance.

1166 (3) Dans un délai global de quatre mois (2) à partir de l'envoi des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée ou bien

---

MOD **4167.1** 492B.1 **1164.1** (1) Les méthodes de calcul et les critères à utiliser pour évalur le brouillage devraient être fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'autres dispositions. En cas de désaccord sur un Avis du CCIR ou en l'absence de tels Avis, les méthodes et les critères font l'objet d'accords entre les administrations concernées. Ces accords doivent être conclus sans porter préjudice aux autres administrations.

ADD **4167.2** **1166.1** (2) Cette période peut, être prolongée avec l'accord de l'administration qui a recherché la coordination.

communique à l'administration qui recherche la coordination son accord sur l'assignation en projet, ou bien, en cas d'impossibilité, lui indique les motifs de son désaccord et lui présent les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

MOD **4168** **1167** § 27. L'administration qui recherche la coordination, ou toute administration auprès
492E de laquelle la coordination est recherchée, peuvent demander les renseignements supplémentaires dont elles estiment avoir besoin pour évaluer le brouillage causé aux services concernés.

NOC **4169** **1168** *Assistance demandée à l'IFRB en vue d'effectuer la coordination:*

MOD **4170** **1169** § 28. (1) L'administration qui recherche la coordination peut demander au Comité
492D de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

1170 *a*) Une administration auprès de laquelle le coordination est recherchée aux termes des numéros **1148** à **1154** n'envoie pas d'accusé de réception, aux termes du numéro **1162**, dans un délai de trente jours à partie de la date de l'envoi des donnés concernant la coordination;

1171 *b*) Une administration a envoyé un accusé de réception conformément aux dispositions du numéro **1162** mais ne communique pas sa décision dans un délai de quatre mois à partie de l'envoi des données concernant la coordination;

1172 *c*) L'administration qui recherche la coordination et une administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le brouillage acceptable;

1173 *d*) Ou encore la coordination n'est pas possible pour toute autre raison.

1174 (2) en présentant sa demande au Comité, l'administreation concernée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

NOC **4171** **1175** *Mesures à prendre par l'IFRB:*

(MOD) **4172** **1176** § 29. (1) Lorsque le Comité reçoit une demande aux termes du numéro **1170**, il
492F envoie sans délai un télégramme à l'administration concernée en lui demandant d'en accuser réception immédiatement.

(MOD) **4173** **1177** (2) Lorsque le Comité reçoit un accusé de rèception à la suite de la mesure qu'il
492FA a prise aux termes du numéro **1176**, ou lorsque le Comité reçoit une demande aux termes du numéro **1171**, il envoie sans délai un télégramme à l'administration concernée en lui demandant de prendre rapidement une décision sur la question.

NOC **4174** **1178** (3) Lorsque le Comité reçoit une demande aux termes du numéro **1173**, il s'efforce
492FB d'effectuer la coordination conformément aux dispositions des numéros **1148** à **1154**. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de coordination dans le délai spécifié au numéro **1162**, il agit conformément aux dispositions du numéro **1176**.

MOD **4175** **1179** (4) S'il a lieu, le Comité évalue le brouillage, au titre de la procédure spéficiée aux
492G numéros **1169** à **1174**. En tout état de cause il communique aux administrations concernées les résultants obtenus.

MOD **4176** **1180** (5) Le Comité peut demander les renseignements supplémentaires dont il estime
492E avoir besoin pour évaluer le brouillage cause aux services concernés.

(MOD) **4177** **1181** (6) Lorsqu'une administration ne répond pas dans un délai de trente jours qui suit
492FC l'envoi du télégramme que le Comité lui a envoyé aux termes du numéro **1176** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de deux mois qui suit l'envoi du télégramme du Comité aux termes du numéro **1177**, l'administration auprès de laquelle la coordination est recherchée est réputée s'être engagée à ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés par la station de Terre e voie de coordination au service assuré par sa station terrienne.

NOC **4178** **1182** *Notification des assignations de fréquences en cas de désaccord persistant:*

MOD **4179** **1183** § 30. En cas de désaccord persistant entre l'administration qui recherche la coor-
492GA dination et l'administration auprès de laquelle la coordination a été recherchée, l'administration qui recherche la coordination différe, excepté dans les cas où l'assistance

du Comité a été demandée, l'envoi au Comité de sa fiche de notification concernant l'assignation en projet, de six mois à comter de la demande de coordination, en prenant en considération, en prenant en considération les dispositions des numéros **1230** et **1496**.

SECTION V

Assistance spéciale fournie par l'IFRB

ADD **1184** § 31. (1) Si la demande lui en est faite par une administration quelconque et, en particulier par l'administration d'un pays qui a besoin d'assistance spéciale, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assitance suivante:

1185 *a*) Calcul des accroissements de température de bruit, selon le numéro **1066**;

1186 *b*) Établissement de graphiques représentant les zones de coordination, selon le numéro **1113**;

1187 *c*) Toute autre assistance de caractère tecnique afin que les procédures décristes dans le présent article puissent être menées à bien.

ADD **4179B** **1188** (2) En présentant sa demande au Comité aux termes des numéros **1184** à **1187**, l'administration lui fournit les renseignements nécessaires.

1189 à **1213** *(Non attribués.)*

N12/9

ARTICLE 12

Notification et inscription dans le Fichier de référence international des assignations de fréquence (1) aux stations de radiocommunication de Terre (2) (3)

SECTION I

Notification des assignations de fréquence

MOD **4280** 486 **1214** § 1. (1) Toute assignation de fréquence (4) à une station fixe, terrestre, de radiodiffusion (5), terrestre de radionavegation, terrestre de radiolocalisation, de fréquences étalon et de signaux horaires, ou à une station à terre du service des auxiliaires de la météorologie, doit être notifiée au Comité international d'enregistrement des fréquences:

1215 *a*) Si l'utilisation de la fréquence en question est susceptible d'entrainer des brouillages préjudiciables à un service quelconque d'une autre administration (6);

1216 *b*) Ou si la fréquence doit être utilisée pour des radiocommunications internationales;

1217 *c*) Ou encore si l'on désire obtenir une reconnaissance internationale de l'utilisation de cette fréquence (6).

NOC **A.12.1** (1) L'expression *assignation de fréquence*, partout où elle figure dans le présent article, doit être entendue comme se référent soit à une nouvelle assignation de fréquence, soit à une modification à une assignation déjà inscrite dans le Fichier de référence international des fréquences (dénommé ci-après le *Fichier de référence*).

NOC **A.12.2** (2) En ce qui concerne la notification et l'inscription dans le Fichier de référence des assignations de fréquence aux stations de radioastronomie et aux stations de radiocommunication spatiale, voie l'article 13.

ADD **A.12.3** (3) En ce qui concerne la notification et l'incription des assignations de fréquence aux stations de Terre dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7-12,5 GHZ (en Région 1), dans la mesure où leurs relations avec le service de radiodiffusion par satellite dans ces bandes sont impliquées, voir également l'article 15.

(MOD) **4280.1** **1214.1** (4) Dans les as où de noimbreuses stations relevant d'une même administration utilisent la même fréquence, voir l'appendice 1 (section F, II, colone 5a, paragraphes 3 et 4).

NOC **4280.2** **1214.2** (5) En ce qui concerne les assignations aux stations de radiodiffusion dans les bandes attribuées en exclusivité au service de radiodiffusion entre 5950 kHz et 26 100 kHz, voir l'article 17.

NOC **4280.3** **1215.1** **1217.1** (6) L'attention des administrations est particulièrement attirée sur l'application des dispositions des numéros **1215** et **1217** dans les cas où elles font une assignation de fréquence à une station de Terre située à l'intérieur de la zone de coordination d'une station terrienne (voir les numéros **1148** à **1154**, dans une bande que les services de radiocommunication de Terre partagent, avec égalité des droits, avec les services de radiocommunication spatiale dans la gamme des fréquences supérieures à 1 GHz.

ADD **4280A** **1218** (2) Une notification analogue (1) doit être faite lorsqu'une administration désire demander l'assistance du Comité concernant le choix d'une assignation de fréquence à une station du service fixe dans l'une quelconque des bandes attribuées en exclusivité ou en partage à ce service entre 3000 kHz et 27 500 kHz, ou lorsqu'elle désire utiliser pour le même type de station, une assignation de fréquence prédéterminée; dans ce dernier cas, elle indique les raisons qui motivent sa demande ainsi que les modifications éventuelles qu'elle pourrait apporter aux caractéristiques de son assignation et le Comité tiendra compte de cette information dans la recherche d'une solution satisfaisante. A cet effect, une fiche individuelle de notification est établie dans la forme spécifiée à la section D de l'appendice **1**. Il est recommendé que l'administration notificatrice communique au Comité les autres renseignements indiqués dans cet appendice, ainsi que tout autre renseignement qu'elle peut juger utile. La procédure à suivre est décrite dans les numéros **1275** à **1304**.

NOC **4281** **1219** 487 (3) Une notification analogue doit être faite dans le cas de toute fréquence destinée à être utilisée à la réception des émissions de stations mobiles par une station terrestre déterminée, chaque fois que l'une au moins des circonstances spécifiées aux numéros **1214** à **1217** se présente.

MOD **4282** **1220** 488 (4) Les fréquences énumérées à la Préface à la Liste internationale des fréquences qui sont prescrites dans le présent Règlement comme devant être utilisées en commun par les stations d'un service déterminé (par example les fréquences internationales de détress 500 kHz et 2182 kHz, les fréquences des stations radiotélégraphiques de navire fonctionnant en ondes décamétriques dans leurs bandes exclusives, etc.) ne doivent pas faire l'object de notification.

NOC **4283** **1221** 489 § 2. (1) Toute assignation de fréquence notifiée en exécution des numéros **1214** à **1217** ou **1219** doit faire l'objet d'une fiche individuelle de notification établie dans la forme prescrite à l'appendice **1**, dont les sections A ou B spécifient les caractéristiques fondamentales à fournir selon le cas. Il est recommandé que l'administration notificatrice communique également au Comité les autres renseignements indiqués dans cet appendice, ainsi que tout autre renseignement qu'elle peut juger utile.

ADD **4283A** **1222** (2) Les fiches de notification relatives aux assignations de fréquence á des stations du service fixe dans les bandes attribuées à ce service entre 3000 kHz et 27 500 kHz présentées aux termes des números **1214** à **1217** ou **1218** doivent indiquer, à l'aide des symboles suivants, la classe de fonctionnement de l'assignation:

Symbole A — assignation destinée à être utilisée pour exploitation régulière qui n'est pas assurée par un autre moyen satisfaisant de télécommunication; ou

Symbole B — assignation destinée à être utilisée comme assignation de réserve pour un autre moyen de télécommunication; *ou*

Symbole C — assignation pour utilisation occasionnelle en réserve n'exigeant pas de protection internationalement reconnue contre les brouillages préjudiciables.

MOD **4284** **1223** 490 (3) Lorsque des stations d'une même servie, tel le service mobile terrestre, utilisent une bande de fréquences au-dessus de 28 000 kHz dans ou plusieurs zones déterminés, il convient d'établir pour chaque fréquence assignée à des stations dans cetter bande une fiche de notification dans la forme prescrite à l'appendice **1** dont la section C fixe les caractéristiques fondamentales à fournir, mais les caractéristiques notifiées doivent se rapporter à une station type. Cette disposition ne s'applique pas:

1224 *a*) Aux stations de radiodiffusion;

1225 *b*) Aux autres stations de Terre auxquelles les dispositions de la sous section II-E du présent article s'appliquent;

1226 *c*) Aux stations des services fixe ou mobile qui fonctionnent dans les bandes de fréquences énumérées au tableau II de l'appendice **28** avec une puissance isotrope rayonnée équivalent supérieure à la valeur pertinente indiquée dans ce tableau;

1227 *d*) Aux stations de Terre dans les bandes de fréquences énumérées aux numéros **2509**, **2510** et **2511**.

MOD **4285** **1228** § 3. (1) Chaque fiche de notification présenté aux termes des numéros **1214** à **1217** **1219** ou **1223** à **1227** doit, autant que faire se peut, parvenir au Comité avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir au plus tôt trois mois avant cette date, mais en tout cs au plus tard trente jours après cette date.

ADD **4280A.1** **1218.1** (1) Voir la Résolution **103**.

ADD **4285A** **1229** (2) Une fiche de notification présentée aux termes du numéro **1218** doit parvenir au Comité au plus tôt une année avant la date de mise en servie de la fréquence faisant l'objet de la demande.

ADD **4285B** **1230** (3) Une fiche de notification concernant une assignation de fréquence aux stations de Terre auxquelles s'appliquent les dispositions de la sous-section II-E du présent article doit parvenir au Comité au plus tôt trois ans et au plus tard trois mois avant la date de mise en service de l'assignation de fréquence intéressée.

MOD **4286** **1231** 492 (4) A l'exception des cas couverts dans les numéros **1218** et **1229**, une assignation de fréquence dont la notification parvient au Comité plus de trente jours après la date de mise en service notifiée ou, dans le cas d'une station de Terre dont il est question à la sous-section II-E du présent article, une assignation de fréquence dont la notification parvient au Comité moins de trois mois avant la date de mise en service notifiée, porte, lorsqu'il y a lieu de l'inscrite dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions des numéros **1228** ou **1230**. Toutefois, cette observation n'est pas à inscrire dans le Fichier de référence en regard d'une assignation à une station de Terre qui n'a pas été notifiée aux termes des numéros **1214** à **1217**, mais qui doit être notifiée après sa mise en service à la suite d'une coodination ou d'une notification relative à une assignation à une station terrienne.

SUP **4287** 492GB

NOC **4288** **1232** 493 § 4. Quel que soit le moyen de communication, y compris le télégraphe, par lequel une fiche de notification est transmise au Comité, elle est considérée comme complète lorsqu'elle contient au moins les caractéristiques fondamentales appropriées, telles que'elles sont spécifiées à l'appendice **1.**

SUP **4289** 494

NOC **4290** **1233** 495 § 5. Lorsqu'un accord régional de service a été conclu, le Comité doit être informé des détails de cet accord.

SECTION II

NOC

Procédure pour l'examen des fiches de notification et l'inscription des assinagtions de fréquence dans de Fichier de référence

MOD **4291** **1234** 496 § 6. Lorque le Comité recçoit une fiche de notification, soumise aux termes des numéros **1214** à **1217**, **1219** ou **1223** à **1227** qui ne contient pas au moins les caractéristiques fondamentales spécifiées à l'appendice **1,** il la retourne par poste aérienne à l'administration dont elle émane, accompagnée des motifs de ce renvoi, sauf si les renseignements que n'avaient pas été fournis sont reçus immédiatement en réponse á une demande du Comité. Le Comité informe l'administration par télégramme lorsqu'une fiche de notification est retournée aux termes de la présente disposition.

MOD **4292** **1235** 497 § 7. Lorsque le Comité reçoit une fiche de notification complète, il inclut les renseignements qu'elle contient, avec sa date de réception, dans une circulaire hebdomadaire que est publiée dans un délai de quarante jours après la réception de la fiche et qui est envoyée par poste aérienne à toutes les administrations. Si le Comité n'est pas en mesure de respecter ce délai, il en informe dès que possible les administrations concernées, en indiquant les motifs.

MOD **4293** **1236** 498 § 8. La circulaire contient les renseignements complets relatifs à toutes les fiches de notification de cette catégorie reçues depuis la publication de la circulaire précédente; elle tient lieu d'accusé de réception par le Comité, à l'administration notificatrice, d'une fiche notification complète.

ADD **4293A** **1237** § 9. Aux fins des numéros **1235** et **1236**, les fiches de notification soumises aux termes du número **1218**, sous la forme d'une demande d'assistance du Comité, sont groupées et spécialement identifiées.

MOD **4294** **1238** 499 § 10. Les fiches de notification complètes sont examinées par le Comité dans l'ordre où il les reçoit; cependant, les fiches de notification présentées aus termes du numéro **1218** sont traitées immédiatement dès leur réception. Le Comité ne peut pas ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement, et encore en cours d'examen, avant d'avoir pris une décision en ce qui concerne cette dernière.

SOUS-SECTION II-A

NOC

Procédure à suivre dans les cas non traités dans les sous-section II-A à II-E du présent article

MOD **4295** 500 **1239** § 11. (1) A l'exception des fiches de notification dont il est question au numéro **1218**, lesquelles font l'object de la procédure prévue aux numéros **1275** à **1304**, le Comité examine chaque fiche de notification du point de vue de:

MOD **4296** 501 **1240** *a)* Sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radiocommunications à l'exception de celles qui sont relatives à la probabilité de brouillages préjudiciables, lesquelles font l'objet des dispositions des numéros **1241** et **1242**;

MOD **4297** 502 **1241** *b)* La probabilité dún brouillage préjudiciable au détriment du service assuré par une station pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence:

1) Qui porte une date dans la colonne 2a (voir de numéro **1416**);
2) Ou qui est conforme aux dispositions du numéro **1240** et porte une date dans la colonne 2b (voir le número **1417**), mais n'a pas, en fait, causé de brouillage prédudiciable à une assignation de fréquence quelconque portant une date dans la colonne 2a ou à une assignation de fréquence quelconque conforme au numéro **1240** et portant dans la colonne 2b une date antérieure;

NOC **4298** 503 **1242** *c)* La probabilité d'un brouillage préjudiciable au détriment du service assuré par une station pour laquelle a déjà été inscrite, dans le Fichier de référence, une assignation de fréquence:

1) Qui est conforme aux dispositions du número **1240** et a été inscrite dans le Fichier de référence avec une date dans la colonne 2d à la suite d'une conclusion favorable relativement au numéro **1242**;
2) Ou qui est conforme aux dispositions du numéro **1240** a été inscrite dans le Fichier de référence avec une date dans la colonne 2d après une conclusion défavorable relativement au número **1242**, mais n'a pas, en fait, causé de brouillage préjudiciable à une assignation de fréquence quelconque antérieurement inscrite dans le Fichier de référence et conforme au numéro **1240**.

ADD **4298A** **1243** (2) En procédant à l'examen prévu aux números **1241** ou **1242** le Comité applique pour la classe de fonctionnement A des critères de protection plus stricts que pour la classe de fonctionnement B (1). Le Comité ne tient compte de la probabilité de brouillage aux assignations de fréquence de la classe de fonctionnement C.

MOD **4299** 504 **1244** (3) Lorsqu'il s'agit d'une fiche de notification concernant une fréquence supérieure à 28 000 kHz, le Comité ne procède à l'examen spécifie au numéro **1242** qu'à la demande d'une administration directement intéressée ou dont les services sont affectés lorsqu'une coordination n'a pas été entre les administrations en cause.

MOD **4300** 505 **1245** (4) Lorsqu'il y a lieu, le Comité examine aussi la fiche du point de vue de sa conformité avec un accord régional ou de service. La procédure à suivre à l'égard des assignations de fréquence faites en applications d'un tel accord est conforme aux dispositions des numéros **1240** et **1241** ou **1242**, sauf que le Comité n'examine pas la question des probabilités de brouillages préjudiciables entre les parties contractantes de l'accord. De même, le Comité n'examine pas la question des probabilités de brouillages préjudiciables causés aux assignations de toute administration avec laquelle l'administration notificatrice a coordonné l'utilisation de la fréquence intéressée.

MOD **4301** 506 **1246** § 12. Selon les conclusions auxquelles le Comité parvient à la suite de l'examen prévu aux numéros **1240** et **1241** ou **1242** et le résultat de l'action entreprise par le Comité aux termes des numéros **1275** à **1278** et **1279**, la procédure se poursuit comme suit.

SUP **4298.1** 503.1

ADD **4298A.1** **1243.1** (1) Les différents critères de protection devant être appliqués par le Comité pour les classes de fonctionnement A et B sont publiés dans les Normes techniques du Comité (voir le numéro **1001**).

NOC **4302** **1247** § 13. (1) *Conclusion favorable relativement* **1240** *dans des cas où les dispositions des numéros* **1241** *ou* **1242** *ne sont pas applicables (voir le numéro* **1248**).
507

NOC **4303** **1248** (2) L'assignation est inscrite dans le Fichier de référence. La date à inscrire dans la partie appropriée de la colonne 2, selons les dispositions pertinentes de la section III du présent article, est la date de réception par le Comité de la fiche de notification.
508

NOC **4304** **1249** § 14. (1) *Conclusion favorable relativament aux numéros* **1240** *et* **1241** *ou* **1242**.
509

NOC **4305** **1250** (2) L'assignation est inscrite dans le Fichier de référence. La date à inscrire dans la partie appropriée de la colonne 2, selon les dispositions pertinentes de la section III du présent article, est la date de réception par le Comité de la fiche de notification.
510

MOD **4306** **1251** (3) Cependant s'il résulte de l'examen qu'a certaines heures, certaines saisons ou certaines phases du cycle de l'activité solaire la probabilité de brouillages préjudiciables est légèrement plus élevée que celle que est tenue pour souhaitable, une observation est insérée dans le Fichier de référence afin d'indiquer qu'une faible probabilité de brouillages préjudiciables existe et qu'en conséquence des précautions doivent être prises dans l'utilisation de cette assignation pour éviter les brouillages préjudiciables aux assignations déjà inscrites dans le Fichier de référence.
511

NOC **4307** **1252** § 15. (1) *Conclusion favorable relativement au numéro* **1240** *mais défavorable relativement aux numéros* **1241** *ou* **1242**.
512

MOD **4308** **1253** (2) La fiche est retournée immédiatement par poste aérienne à l'administration dont elle émane, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les sugestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème du point de vue des administrations qu'il a identifiées.
513

NOC **4309** **1254** (3) Si l'administration notificatrice présent à nouveau sa fiche avec des modifications qui, aprés nouvel examen, entrainent de la part du Comité une conclusion favorable relativement aux numéros **1241** ou **1242**, l'assignation est inscrite dans le Fichie de référence. La date à inscrire dans la partie appropriée de la colonne 2 selon les dispositions pertinentes de la section III du présent article est la date de réception par le Comité de la première de notification. La date de réception par le Comité de la deuxième fiche est indiquée dans la colonne Observations.
514

MOD **4310** **1255** (4) L'administration notificatrice peut présenter de nouveau sa fiche, soit non modifiée, soit avec des modifications dont l'effect est de diminuer la probabilité de brouillages préjudiciables. Lorsqu'il n'existe aucune modification ou lorsque les modifications ne permettent pas d'appliquer les dispositions du numéro **1254** et que la conclusion du Comité demeure inchangée, si l'administration notificatrice insiste pour que sa fiche soit examinée une nouvelle fois, en indiquant qu'elle a mis son assignation en service, le Comité:
515

ADD **4310A** **1256** *a*) Publie les renseignements contenus das la fiche de notification, reçus aux termes du numéro **1255** dans la circulaire hebdomadaire, en y indiquant toutes les administrations qui risquent d'être affectées;

ADD **4310B** **1257** *b*) Adresse, dans le même temps, un télégramme à chacune des administrations visées au numéro **1256** avec une référence à la fiche de notification en question, en leur demandant:

1258 1) De lui faire connaître si l'assignation inscrite est encore utilisée et, dans l'affirmative, si elle est utilisée avec les caractéristiques fondamentales notifiées;

1259 2) De lui signaler tout brouillage préjudiciable qui est survenu dans un délai de deux mois à compter de la date de publication de la circulaire hebdomadaire mentionnée au numéro **1256**;

ADD **4310BA** **1260** *c*) Prend les mesures appropriées conformément aux numéros **1964** à **1996**, si l'assignation à la'origine de la conclusion défavorable a été présentée en application du numéro **1218**;

ADD **4310C** **1261** *d*) Inscrit l'assignation dans le Fichier de référence si, à l'expiration du délai dont il est question au numéro **1259**, il n'a pas reçu d'information concernant um brouillage préjudiciable; la date à inscrire dans la partie appropriée de la colonne 2, selon les dispositions pertinentes de la section III du présent article, est la date de réception par le Comité de la fiche de notification initiale;

ADD **4310D** **1262** *e*) Dans le cas où il reçoit des informations concernant un brouillage préjudiciable qui est apparu pendant la période de deux mois mentionnée au numéro **1259**, il retourne immédiatement la fiche de notification à l'administration notificatrice en l'informant du brouillage ayant fait l'object du rapport, avec les suggestions qu'il peut faire en vue d'eliminer le brouillage.

ADD **4310E** **1263**
§ (5) Si le Comité reçoit des informations concernant un brouillage préjudiciable qui est survenu après l'inscription d'une assignation aux termes du numéro **1261**, celui-ci réexamine la question et, s'il y a lieu, il inscrit, en regard de l'assignation, une observation spéciale signifiant qu'il ne tiendra pas compte de cette assignation lors de l'examen de fiches de notification reçues ultérieurement.

MOD **4311** **1264**
516
(6) Si, à la suite des renseignements reçus aux termes des numéros **1257** à **1259**, le Comité est en mesure de formuler une conclusion favorable relativement aux numéros **1241** ou **1242** à l'égard d'une assignation inscrite dans le Fichier de référence aux termes des numéros **1255** et **1261**, les modifications convenables sont apportées à l'inscription dans le Fichier de référence. Si la conclusion reste défavorable, le Comité insère dans le Fichier de référence, en regard des assignations intéressées, des observations décrivant la situation telle qu'elle lui apparaît.

SUP **4312**
517

MOD **4313** **1265**
518
(7) Dans le cas où l'administration notificatrice présent pour la deuxième fois sa fiche avec des modifications dont l'effect est d'accroître la probabilité de brouillages préjudiciables et où les conclusions du Comité restent les mêmes, cette deuxième fiche est traitée selon les dispositions du numéro **1253**.

NOC **4314** **1266**
519
§ 16. (1) *Conclusion défavorable relativement au numéro* **1240** *dans les cas où les dispositions des numèros* **1241** *ou* **1242** *ne sont pas applicables (voir le numéro* **1244**).

MOD **4315** **1267**
520
(2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du présent Règlement, l'assignation est inscrite dans le Fichier de référence sous réserve des dispositions des numéros **1419** ou **1420**. La date à inscrire dans la partie appropriée de la colonne 2 selon les dispositions pertinentes de la section III du présent article est la date de réception par le Comité de la fiche de notification.

(MOD) **4316** **1268**
521
(3) Lorsque la fiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du présent Règlement, cette fiche est retournée immédiatement par post aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème.

SUP **4317**
522

NOC **4318** **1269**
523
§ 17. (1) *Conclusion défavorable relativement au numéro* **1240** *dans le cas où les dispositions des numéros* **1241** *ou* **1242** *sont applicables.*

NOC **4319** **1270**
524
(2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du present Règlement, elle est examinée immédiatement du point de vue des numéros **1241** ou **1242** et les dispositions des numéros **1271** ou **1272**, selon le cas, sont appliquées.

MOD **4320** **1271**
525
(3) Si la conclusion est favorable relativement aux números **1241** ou **1242**, l'assignation est inscrite dans le Fichier référence sous réserve des dispositions du numéro **1419**. La date à inscrire dans la partie appropriée de la colonne 2 selon les dispositions pertinentes de la section III du présent article est la date de réception par le Comité de la fiche de notification.

MOD **4321** **1272**
526
(4) Si la conclusion est défavorable relativement aux numéros **1241** ou **1242**, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice. Si cette administration insiste pour un nouvel examen de la fiche, l'assignation de fréquence est inscrite pour information seulement avec une observation appropriée se référant au número **1419**.

MOD) **4322** **1273**
527
(5) Lorsque la fiche ne porte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du présent Règlement, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème.

SUP **4323**
528

SUP **4324**
529

SUP **4325**
530

SUP **4326**
531

ADD **4326bis** **1274**
§ 18. *Procédure à suivre pour le traitement des fiches de notification présentées aux termes du numéro* **1218**.

ADD **4326A** **1275** (1) Dans le cas d'une fiche de notification présentée aux termes du numéro **1218** concernant de choix d'une assignation de fréquence destinée à être utilisée pour exploitation régulière (classe de fonctionnement A), le Comité choisit, aussi rapidement que possible, une fréquence qui soit:

1276 *a*) Capable de fournir le service requis;

1277 *b*) Conforme aux numéros **1240** et **1241** ou **1242**, selon de cas, afin d'assurer une conclusion favorable;

1278 *c*) Exempte de brouillage préjudiciable causé par toute assignation inscrite dans le Fichier de référence, et conforme au numéro **1240**.

ADD **4326AA** **1279** (2) Dans le cas d'une fiche de notification présentée aux termes du numéro **1218** concernant la notification d'une assignation de fréquence prédéterminée, l'administration notificatrice peut demander au Comité d'effectuer, en plus de l'examen visé aux numéros **1240** et **1241** ou **1242**, le calcul de la probabilité de brouillage préjudiciable qui serait causé à cette assignation par des assignations inscrites dans le Fichier de référence. Le Comité avise l'administration notificatrice des résultats de cet examen et il formule si nécessaire des suggestions visant à eviter tout brouillage préjudiciable éventuel à l'assignation.

ADD **4326B** **1280** (3) Si l'application des dispositions des numéros **1275** à **1278** et **1279**. soulève des difficultés, la procédure décrite ci-dessous doit être suivie:

ADD **4326BA** **1281** *a*) Le Comité recherche d'abord l'accés à l'une des parties les moins chargées d'une bande appropriée, sans considérer la possibilité de modifier une assignation déjà inscrite;

ADD **4326BB** **1282** *b*) Si nécessaire, le Comité consulte l'administration ayant présenté une fiche de notification conformément au numéro **1218**, en vue de modifier éventuellement les caractéristiques de cette assignation;

ADD **4326BC** **1283** *c*) Au cas où des mesures prises aux termes des disposition des numéros **1281** et **1282** ci-dessus n'aboutiraient pas, et si l'administration demanderesse juge que la fréquence choisie est acceptable, le Comité déterminé si l'assignation qui fait l'objet de la demande pourrait être insérée par annulation ou déclassement d'une assigantion déjà inscrite. Les enquêtes à efectuer en pareil cas sont celles qui sont décrires dans la section VII du présent article;

ADD **4326BD** **1284** *d*) Au cas où les mesures prises aux termes des dispositions du numéro **1283** n'aboutiraient pas, le Comité cherche d'autres moyens d'insérer l'assignation demandée, de manière à ne modifier qu'au minimum les característiques de toute assignation déjà inscrite;

ADD **4326BE** **1285** *e*) Aux fins des mesures envisagées au numéro **1284**, le Comité axe se enquêtes sur les plus anciennes assignations inscrites et pour lesquelles le Comité pense qu'il existe des moyens de télécommunication satisfaisants à titre de remplacement;

ADD **4326BF** **1286** *f*) Après avoir identifié en pareil cas les modifications minimales des caractéristiques qu'il faudrait apporter à une assignation déjà inscrite pour insérer une nouvelle assignation demandée aux termes du número **1218**, le Comité invoque les dispositions pertinentes de la Convention pour rechercher l'assistance de l'administration appropriée afin que celle-ci accepte, le moment venu, d'effectuer la modification de l'assignation déjà inscrite à son nom;

ADD **4326BG** **1287** *g*) Aux cas où les mesures prises aux termes des dispositions du numéro **1286** n'aboutiraient pas, le Comité attire l'attention de l'administration intéressée sur le fait qu'en pareil cas, celle-ci est alors dans l'obligation de réduire la largeur de la bande de fréquences assignée, si cela est possible du point de vue de l'exploitation, ou de déplacer la fréquence assignée d'une valeur n'excédant pas la largeur de bande de l'assignation de fréquence inscrite, à condition de ne pas causer de brouillage préjudiciable aux assignations de fréquence adjacentes;

ADD **4326BH** **1288** *h*) L'administration intéressée doit:

1289 1) Donner son accord en vue d'apporter les modifications nécessaires à son assignation existante inscrite, en indiquant la date à laquelle la modification sera effective; *ou*

1290 2) Indiquer les raisons pour lesquelles une telle modification ne peut être apportée;

ADD **4326BI** **1291**

i) Si un tel cas n'est pas résolu dans un délai de trois mois suivant la demande d'assignation présentée aux termes du numéro **1218**, le Comité publie, pour information de tout les Membres de l'Union, un rapport sur la question;

ADD **4326BJ** **1292**

j) En temps approprié au cours de la procédure, le Comité consulte l'administration qui a demandé une assignation conformément aux dispositions du numéro **1218** pour savoir si la fréquence choisie est acceptable;

ADD **4326BK** **1293**

k) Si, en application du présent paragraphe, une administration accepte une modification aux caractéristiques fondamentales de son assignation de fréquence, cette modification est inscrite dans de Fichier de référence sans toucher à la date ou aux dates initiales.

ADD **4326C** **1294**

(4) Les administrations sont instamment priées de fournir au Comité toute l'assistance possible au moyen de leurs stations de contrôle des émissions en vue de lui permettre de s'acquitter avec succès des tâches prévues dans la présente sous-section.

ADD **4326D** **1295**

§ 19. (1) *Résultat des mesures prises par le Comité en application des dispositions des numéros* **1275** *à* **1278** *et relatives à une demande d'assistance présentée aux termes du numéro* **1218**.

ADD **4326E** **1296**

(2) Aprés avoir choisi une fréquence en application des números **1275** à **1278**, le Comité soumet immédiatement, par télégramme, la fréquence choisie à l'approbation de l'administration notificatrice et insère une inscription provisoire dans de Fichier de référence conformément au numéro **1311**. La date de récéption de la demande adressée au Comité, conformément au numéro **1218**, est inscrite dans la partie appropriée de la colonne 2.

ADD **4326F** **1297**

(3) A la réception du télégramme mentionnée au numéro **1296**, l'administration notificatrice étudie rapidement la question et, en cas de non acceptation de la fréquence choisie, en informe le Comité en donnant les motifs de son refus.

ADD **4326G** **1298**

(4) Dans les conditions mentionnées au numéro **1297**, le Comité annule l'inscription et porte cette annulation à la connaissance de l'administration concernée. En pareil cas, si l'administration notificatrice le demande, le Comité s'efforce à nouveau de choisir une fréquence acceptable; toutefois, la demande est considérée comme une nouvelle notification aux termes du numéro **1218**.

ADD **4326H** **1299**

(5) Lorsque l'administration notificatrice accepte une fréquence choisie par le Comité, elle en informe celui-ci dès que possible.

ADD **4326I** **1300**

(6) Si le Comité ne reçoit pas de réponse dans les deux mois qui suivent l'envoi du télégramme visé au numéro **1296** demandant l'approbation de la fréquence choisie, l'inscription provisoire est annulée et le Comité porte cette annulation à la connaissance des autres administrations.

ADD **4326J** **1301**

§ 20. (1) *Résultat des mesures prises par le Comité en application des dispositions du numéro* **1280** *au sujet d'une demande d'assistance présentée aux termes du numéro* **1218**.

ADD **4326K** **1302**

(2) Après avoir choisi une fréquence en application du numéro **1280**, si les modifications nécessaires à l'assignation insrite antérieurement ont été acceptées, conformément aux dispositions du número **1289**, le Comité traite l'assignation choisie conformément aux dispositions du numéro **1295**.

ADD **4326L** **1303**

(3) Après avoir choisi une fréquence en application du numéro **1280**, si les modifications nécessaires ne peuvent être apportées à l'assignation inscrite antérieurement par suite de mesures prises conformément aux dispositions du numéro **1290**, et si la fréquence choisie est toujours acceptable pour l'administration qui a demandé une assignation, le Comité procedé à une inscription dans de Fichier de référence au nom de l'administration dont émane la demande. La date de réception de la demande adressée au Comité aux termes du numéro **1218** est inscrite dans la partie appropriée de la colonne 2.

ADD **4326M** **1304**

(4) Les brouillages préjudiciables susceptibles de résulter de l'utilisation simultanée des deux assignations font l'objet de consultations entre les administrations intéressées.

NOC **4327** **1305**
532

§ 21. (1) *Modifications aux caractérisiques fondamentales des assignations déjà inscrites dans le Fichier de référence.*

MOD **4328** **1306**
533

(2) Toute notification de modification aux caractéristiques fondamentales d'une assignation déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice **1** (à l'exception toutefois de celles qui figurent dans les colonnes 2c, 3, 4a et 11 du Fichier de référence), et examinée par le Comité selon des dispositions des numéros **1240** et **1241**, **1242** ou **1244**, selon le cas, et les dispositions des numéros **1247** à **1273** inclus sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation originale est modifiée selon la notification.

(MOD) **4329** **1307**
534

(3) Cepedant, dans le cas d'une modification aux caractéristiques fondamentales d'une assignation conforme aux dispositions du numéro **1240** (à l'exception d'un changement de la fréquence assignée qui excède la moitié de la bande de fréquences

primitivement assignée, telle qu'elle est définie au numéro **141**), et où le Comité formule une conclusion favorable relativement aux numéros **1241** ou **1242**, ou conclut que cette modification n'accroît pas la propabilité de brouillages préjudiciables au détriment d'assignations de fréquence déjà inscrites dans de Fichier de référence, l'assignation de fréquence modifiée conserve la date primitivement inscrite dans la partie appropriée de la colonne 2. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est inscrite dans la colonne Observations.

ADD **4329A** **1308** (4) La date prévue de mise en servie d'une assignation de fréquence peut être prorogée de trois mois á la demande de l'administration notificatrice. Au cas où l'administration déclare que des circonstances exceptionnelles motivent une nouvelle prolongation de ce délai, cette nouvelle prolongation peut être accordée mais ne doit en aucun cas dépasser six mois à compter de la date initiale prévue pour la mise en service.

MOD **4330** **1309** § 22. *Dans l'application des dispositions des sous-sections* II-A à II-C, toute fiche
535 de notification présentée de nouveau au Comité et reçue par lui plus de six mois après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.

NOC **4331** **1310** § 23. (1) *Inscription des assignations de fréquence notifiées avant leur mise en*
536 *service.*

NOC **4332** **1311** (2) Si une assignation de fréquence notifié avant sa mise en service est l'objet de con-
537 clusions favorables formulées par le Comité relativement aux numéros **1240** et **1241** ou **1242**, elle est inscrit: provisoirement dans le Fichier de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractère provisoire de cette inscription.

MOD **4333** **1312** (3) Dans un délai de trente jours (voirs le numéro **1228**) après la date prévue pour la mise en service initialement notifiée aux termes du numéro **1308**, l'administration
538 notificatrice confirme que l'assignation de fréquence a été mise en servie. Lorsque le Comité est avisé que l'assignation a été mise en service, il biffe symbole spécial dans la colonne Observations.

MOD **4334** **1313** (4) Si le Comité ne reçoit pas la confirmation dans le délai prévu au numéro **1312**,
539 l'inscription en question est annulée. Le Comité consulte l'administration concernée avant de prendre cette mesure.

MOD **4335** **1314** (5) Les dispositions des numéros **1311** à **1313** ne s'appliquent pas aux assignations
540 de fréquence conformes aux Plans d'allotissement figurant dans des appendices 25 Mar2, 26, 27 (*) et 27 Aer2 (*) au présent Règlement; le Comité inscrit ces assignations de fréquence dans le Fichier de référence dès réception de la fiche de notification.

SOUS-SECTION II-B

NOC

Procédure à suivre par les stations côtières radiotéléphoniques fonctionnant das les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 23 000 kHz

MODD **4336** **1315** § 24. (1) *Examen des fiches de notification concernant les assignations de fréquence*
541 *aux stations côtières radiotéléphoniques dans les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 23 000 kHz pour les stations côtières radiotéléphoniques (voir le numéro* **1239**).

NOC **4337** **1316** (2) Le Comité examine chacune des fiches de notification dont il est question au
542 numéro **1315**:

NOC **4338** **1317** *a*) Relativement aux dispositions du numéro **1240** et en particulier à celles
542A du número **4373**;

NOC **4339** **1318** *b*) Afin de déterminer si l'assignation notifiée est conforme à un allotissement
542B du Plan d'allotissement qui figure à l'appendice 25 Mar2 au présent Règlement.

NOC **4340** **1319** (3) Toute assignation de fréquence qui fait l'objet d'une conclusion favorable
543 relativement aux dispositions des numéros **1317** et **1318** est inscrite dans le Fichier de référence (voir également le numéro **1314**). La date à inscrire dans la colonne 2a est celle qui est déterminée selon les dispositions pertinentes de la section III du présent article.

SUP **4336.1**
541.1

(*) Note du Secrétariat général: voir le numéro **5189** et la Résolution **400**.

NOC 4341 543A 1320 (4) Toute assignation de fréquence qui fait d'une conclusion défavorable relativement aux dispositions du numéro **1317** est examinée selon les dispositions des numéros **1267** et **1268**. La date à inscrire la colonne 2b est déterminée selon les dispositions pertinentes de la section III du présent article.

(MOD) 4342 545 1321 (5) Dans le cas d'une fiche de notification qui fait l'objet d'une conclusion favorable relativement aux disposition du número **1317**, mais défavorable relativement à celles du número **1318**, le Comité examine cette fiche du point de vue de probabilité d'un brouillage préjudiciable au détriment du service assuré par une station côtière radiotéléphonique pour laquelle une assignation de fréquence:

1322 *a*) Est conforme à l'un des allotissements du Plan et est déjà inscrite dans le Fichier de référence ou est susceptible d'y être inscrite dans l'avenir;

1323 *b*) Ou bien a été inscrite dans le Fichier de référence sur une fréquence spécifiée à l'appendice **16**, à la suite d'une conclusion favorable relativement aux numéros **1231** à **1324**;

1324 *c*) Ou encore a été inscrite dans le Fichier de référence sur une fréquence spécifiée à l'appendice **16**, après une conclusion défavorable relativement aux numéros **1321** à **1324**, mais n'a pas, en fait, crée de brouillage préjudiciable à une assignation de fréquence quelconque à une station côtiére radiotéléphonique antérieurement inscrite dans le Fichier de référence.

(MOD) 4343 546 1325 (6) Conformément aux conclusions du Comité relativement aux numéros **1321** à **1324**, la procédure se poursuit selon les dispositions des numéros **1249** á **1265** inclus ou **1305** à **1307** inclus, selon de cas, étant entendu que dans le texte de ces dispositions les numéros **1321** à **1324** doivent être lus au lieu du numéro **1241**.

(MOD) 4344 547 1326 § 25. (1) *Examen des fiches de notification concernant les fréquences de réception utilisées par les stations côtières radiotéléphoniques dans les bandes attribuées en exclusivité au servie mobile maritime entre 4000 kHz et 23 000 KHz pour les stations radiotéléphoniques de navire (voir les numéros* **1219** et **1239**).

NOC 4345 548 1327 (2) Le Comité examine chacune des fiches de notification dont il est question au numéro **1326**:

NOCV 4346 548A 1328 *a*) Relativement aux dispositions du numéro **1240** et en particulier à celles du numéro **4374**;

NOC 4347 548B 1329 *b*) Afin de déterminer si l'assignation notifiée correspond à une fréquence associée, selon l'appendice 16, à une fréquence allotie à l'administration notificatrice dans le Plan d'allotissement qui figure à l'appendice 25 Mar2 au présent Règlement.

NOC 4348 549 1330 (3) Toute assignation de fréquence de réception à une satation côtière radiotéléphonique qui fais l'objet d'une conclusion favorable relativement aux numéros **1328** et **1329** est inscrite dans le Fichier de référence. La date à inscrire dans la colonne 2a est celle qui est déterminée selon les dispositions pertinentes de la section III du présente article.

(MOD) 4349 549A 1331 (4) Tout assignation de fréquence de réception à une station côtière radiotéléphonique qui fait l'objet d'une conclusion défaborable relativement au numéro **1328** est examinée selon les dispositions des numéros **1267** et **1268**. La date à inscrire dans la colonne 2b est celle qui est déterminée selon les dispositions pertinentes de la section III du présent article.

(MOD) 4350 551 1332 (5) Toute assignation de fréquence de réception à une station côtière radiotéléphonique qui fait l'objet d'une conclusion favorable relativement au numéro **1238** mais défavorable relativement au numéro **1329** est inscrite dans le Fichier de référence. La date à inscrire dans la colonne 2b est celle qui est déterminée selon les dispositions pertinentes de la section III du présent article.

SOUS-SECTION II-C

Procédure à suivre par les stations aéronautiques fonctionnant dans les bandes attribuées en exclusivité aux services mobiles aéronautiques entre 2850 kHz et 22 000 kHz

NOC 4351 552 1333 § 26. (1) *Examen des fiches de notification concernant les assignations de fréquence aux stations aéronautiques du service mobile aéronautique (R) dans les bandes attribuées en exclusivité à ce service entre 2850 kHz et 22 000 kHz (voir le numéro* **1239**).

SUP 4344.1 547.1

NOC 4352 553 **1334** (2) Le Comité examine chacune des fiches de notification dont il est question au numéro **1333** afin de déterminer:

NOC 4352A 553A **1335** *a*) Si la fiche de notification est conforme aux dispositions du numéro **1240**;

NOC 4353 554 **1336** *b*) Si la fréquence notifiée corresponde à l'une des fréquences spécifiées dans la colonne 1 du Plan d'allotissement des fréquences pour le service mobile aéronautique (R) qui figure á l'appendice 27 Aer2 (*) (partie II, section II, article 2), ou si l'assignation résulte d'une modification permise de la classe d'emission, la largeurs de bande nécessaire à la nouvelle émission satisfaisant à la disposition des voies, telle qu'elle est donnée à l'appendice 27 Aer2 (*);

NOC 4354 555 **1337** *c*) Si les limitations d'utilisation spécifiées dans la colonne 3 du Plan sont dûment observées;

NOC 4355 556 **1338** *d*) Si la fiche de notification est conforme aux principes techniques du Plan tels qu'ils sont exposés à l'appendice 27 Aer2 (*);

NOC 4356 557 **1339** *e*) Si la zone d'utilisation est comprise à l'intérieur des zones indiquées dans la colonne 2 du Plan.

NOC 4356A 557A **1340** (3) Une fiche de notification non, conforme aux dispositions du numéro **1335** est examinée selon les dispositions des numéros **1267** et **1268**. La date à inscrire dans la colonne 2b est déterminée selon dispositions pertinentes de la section III du présent article.

NOC 4357 558 **1341** (4) Dans le cas d'une fiche de notification conforme aux dispositions des numéros **1335** à **1338**, mais non à celles du numéro **1339**, le Comité examine si la protection spécifiée à l'appendice 27 Aer 2 (*) (partie 1, section II-A, paragraphe 5) est assurée aux allotissements du Plan. Ce faisant, le Comité admet que la fréquence sera utilisée selon les «Conditions de partage entre les zones» telles qu'elles sont spécifiées dans l'appendice 27 Aer2 (*) partie I, section II-B, paragraphe 4.

NOC 4358 560 **1342** (5) Toutes les assignations de fréquence dont il est question au numéro **1333** sont inscrites dans le Fichier de référence selon les conclusions du Comité. La date à inscrire dans la colonne 2a ou la colonne 2b est celle qui est déterminée selon les dispositions pertinentes de la section III du présent article.

NOC 4359 561 **1343** § 27. (1) *Examen des fiches de notification concernant les assignations de fréquence à des stations aéronautiques du service mobile aéronautique (OR) dans les bandes attribuées en exclusivité à ce service entre 3025 kHz et 18 030 kHz (voir le numéro* **1239**).

NOC 4360 562 **1344** (2) Le Comité examine chacune des fiches de notification dont il est question au numéro **1343** afin de déterminer:

NOC 4361 563 **1345** *a*) Si l'assignation est conforme à l'un des allotissements primaires du Plan d'allotissement des fréquences du service mobile aéronautique (OR) qui figure á l'appendice **26**, ainsi qu'aux conditions spécifiées dans cet appendice (parties III et IV);

NOC 4362 564 **1346** *b*) Si l'assignation est conforme à l'un des allotissements secondaires du Plan d'allotissement des fréquences du service mobile aéronautique (OR) qui figure à l'appendice **26** ou satisfait aux conditions requises pour les allotissements secondaires, ainsi, qu'aux conditions spécifiées dans ce même appendice [partie III, section II, paragraphe 4, sous-paragraphe *d*), et partie IV]. En appliquant ces dispositions, le Comité admet que la fréquence est utilisées le jour;

NOC 4363 565 **1347** *c*) Si l'assignation résulte d'une modification permise de la classe d'emission, si la largeur de bande occupée par la nouvelle émission satisfait à la définition des voies, telle que'elle figure à l'appendice **26** (partie III, section II, paragraphes 1 et 2), et si l'assignation satisfait à toutes les conditions requises pour un allotissement primaire ou un allotissement secondaire du Plan, à cela près que la fréquence ne correspond pas du point de vue numérique à l'une des fréquences spécifiées dans le Plan.

NOC 4364 566 **1348** (3) Les critères techniques à utiliser par le Comité au cours de l'examen des fiches de notification sont ceux qui figurent à l'appendice **26** (partie III).

(*) Note du Secrétarial général: voir le numéro **5189** et la Résolution **400**.

NOC **4365** 567 **1349**

(4) Toutes les assignations de fréquence dont il est question au numérmo **1343** sont inscrites dans le Fichier de référence selon les conclusions du Comité. La date à inscrire dans la colonne 2a ou la colonne 2b est celle qui est déterminée selon les dispositions pertinentes de la section III du présent article.

SOUS-SECTION II-D

Procédure à suivre par les stations de radiodifusion fonctionnant das les bandes attribuées en exclusivité au service de radiodifusion entre 5950 kHz et 26 100 kHz

MOD **4366** 568 **1350**

§ 28. Les assignations de fréquence aux stations de radiodifusion dans les bandes attribuées en exclusivité au service de radiodiffusion entre 5950 kHz et 26 100 kHz sont traitées conformément aux dispositions de l'article 17 et ne sont incluses que dans la liste annuelle mentionnée au numéro **1769**, qui est considérée comme un supplément à la Liste internacionale des fréquences.

SUP **4367** 569

SUP **4368** 570

NOC

SOUS-SECTION II-E

Procédure à suivre dans les cas où des stations de Terre fonctionnent dans la même bande de fréquences qu'une station terrienne et sont situées dans la zone de coordination de cette station, qu'il s'agisse d'une station terrienne existante ou d'une station terrienne pour laquelle la coordination a été effectuée ou engagée

NOC **4369** 570AA **1351**

§ 29. Le Comité examine chaque fiche de notification:

MOD **4370** 570AB **1352**

a) Du point de vue de sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radiocommunications, à l'exception de celles qui sont relatives à la procédure de coordination et à la probabilité de brouillage préjudiciables, lesquelles font l'objet des dispositions des numéros **1353** et **1354**;

NOC **4371** 570AC **1353**

b) Du point de vue de sa conformité avec les dispositions des numéros **1148** à **1154**, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées;

NOC **4372** 570AD **1354**

c) Le cas échéant, du point de vue de la probabilité d'un brouillage préjudiciable au détriment du service assuré par une station terrienne de réception pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions du numéro **1503**, si l'assignations de fréquence correspondant á la station spatiale d'émission n'a pas, en fait, causé de brouillage préjudiciable à une assignation quelconque antérieurement inscrite dans le Fichier de référence et conforme aux numéros **1240** ou **1352**, selon le cas.

NOC **4373** 570AE **1355**

§ 30. Selon les conclusions auxquelles le Comité parvient à la suite de l'examen prévu aux numéros **1352**, **1353** et **1354**, la procédure se poursuit comme suit.

NOC **4374** 570AF **1356**

§ 31. (1) *Conclusion défavorable relativement au numéro* **1352**.

MOD **4375** 570AG **1357**

(2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** et que la conclusion est favorable relativement aux numéros **1353** ou **1354**, selon le cas, l'assignation est inscrite dans le Fichier de référence sous réserve des dispositions du numéro **1420**. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

SUP **4376** 570AGA

MOD **4377** 570AGB **1358**

(3) Si la conclusion est défavorable relativement aux numèros **1353** ou **1354**, selon le cas, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité. Si l'administration notificatrice insiste pour un nouvel examen de la fiche de notification,

l'assignation est inscrite dans le Fichier de référence, sous réserve que les dispositions du numéro **1420** soient applicables. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d.

SUP **4378** 570AGC

(MOD) **4379** **1359** (4) Lorsque la fiche ne comporte aucune rèférence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342**, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème.

SUP **4380** 570AI

MOD **4381** **1360** (5) Si l'administration notificatrice présente à nouveau sa fiche avec une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342**, la fiche de notification est traitée comme une nouvelle fiche de notification.

SUP **4382** 570AK

NOC **4383** **1361** § 32. (1) *Conclusion favorable relativement au numéro* **1352**.

MOD **4384** **1362** (2) Lorsque le Comité conclut que la procédure de coordination dont il est question au numéro **1353** a été appliquée avec succès en ce qui concerne toutes les administrations dont les stations terriennes peuvent être affectées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

MOD **4385** **1363** (3) Lorsque le Comité conclut que la procédure de coordination dont il est question au numéro **1353** n'a pas été appliquée et:

ADD **4385A** **1364** *a*) Si l'administration notificatrice lui demande d'effectuer la coordination requise, le Comité prend les mesures nécessaires à cet effet; si les tentatives du Comité en vue d'aboutir à un accord sont couronnées de succès, il en informe les administrations intéressées et traite la fiche de notification conformément aux dispositions du numéro **1362**;

ADD **4585B** **1365** *b*) Si les tentatives du Comité en vue à un accord en application des numéros **1364** ou **1169** à **1174** échouent, ou si, lorsqu'elle notifie l'assignation, l'administration déclare qu'elle n'a pas eu de succès et qu'elle ne lui demande pas d'effectuer la coordination requise, le Comité examine la fiche de notification relativement au numéro **1354**. Simultanément, il en informe les administrations intéressées;

MOD **4386** **1366** *c*) Si l'administration notificatrice ne lui demande pas d'effectuer la coordination requise, la fiche de notification est retournée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent ce renvoi, et avec les suggestions que le Comité peut faire, en vue d'arriver à une solution satisfaisante du problème.

NOC **4387** **1367** (4) Lorsque l'administration notificatrice présent à nouveau sa fiche de notification, et si le Comité conclut que la procédure de coordination dont il est question au numéro **1353** a été appliquée avec succés en ce qui concerne toutes les administration dont les stations terriennes peuvent être défavorablement influencées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

MOD **4388** **1368** (5) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en demandant au Comité d'effectuer la coordination requise, la fiche de notification est traitée conformément aux dispositions des numéros **1363, 1364** ou **1365**. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Ficher de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

SUP **4389** 570AR

NOC **4390** **1369** § 33. (1) *Conclusion favorable relativement aux numéros* **1352** *et* **1354**.

NOC **4391** **1370** (2) L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

NOC **4392** **1371** § 34. (1) *Conclusion favorable relativement ao numéro* **1352**, *mais défavorable relativement au numéro* **1354**.

(MOD) **4393** 570AV **1372** (2) La fiche est retournée immédiatement par poste aérienne à l'administration don elle émane, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème.

NOC **4394** 570W **1373** (3) Si l'administration notificatrice présente à nouveau sa fiche avec des modifications qui, après nouvel examen, entrainent de la part du Comité une conclusion favorable relativement au numéro **1354,** l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la cologne Observations.

MOD **4395** 570AX **1374** (4) Dans le cas ou l'administration notificatrice présente de nouveau sa fiche, soit non modifiée, soit avec des modifications dont l'effect est de diminuer la probabilité de brouillages préjudiciables, mais dans des proportions insuffisantes pour permettre l'application des dispositions du numéro **1373,** et ou cette administration insiste pour un nouvel examen de la fiche, mais ou les conclusions du Comité restent les mêmes, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite qui si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins quatre mois à compter de la date à laquellle les deux stations sont en service sans qu'aucune plainte en brouillage préjudiciable en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage préjudiciable n'a eu lieu est indiquée dans la colonne Observations.

ADD **4395A** **1375** (5) Lorsque l'administration notificatrice n'est pas en mesure d'aviser le Comité au sujet du brouillage mentionné au numéro **1374** parce que l'assignation suceptible d'être brouillée n'est pas encore mise en service, elle peut demander au Comité d'inscrire provisoirement son assignation dans le Fichier de référence. Le Comité inscrit alors cette assignation avec un symbole spécial dans la colonne Observations indiquant le caratère provisoire de cette inscription.

NOC **4396** 570AZ **1376** § 35. (1) *Modifications aux caractéristiques fondamentales des assignations déjà inscrites dans le Fichier de référence.*

MOD **4397** 570BA **1377** (2) Toute notification de modification aux caractéristiques fondamentales d'une assignation notifiée aux termes du numéro **1221** et déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice **1,** sections A ou B (à l'exception toutefois de cellles qui figurent dans les colonnes 2c, 3 et 4 du Ficher de référence), ou une notification conforme au numéro **1221** concernant une assignation déjà inscrite aux termes des numéros **1223** à **1227** (appendice **1,** section C) est examinée par le Comité selon les dispositions des numéros **1352** à **1353** et, le cas échéant, **1354,** et les dispositions des numéros **1356** à **1374** sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Ficher de référence, l'assignation originale est modifiée selon la notification.

(MOD) **4398** 570BB **1378** (3) Cependant, dans les cas d'une modification aux caractéristiques fondamentales d'une assignation conforme aux dispositions du numéro **1352,** et où le Comité formule une conclusion favorable relativement au numéro **1353,** et au numéro **1354** lorsque les dispositions de celui-ci sont applicables, ou conclut que cette modification n'accroit pas le probabilité de brouillages préjudiciables au détriment d'assignations de fréquence dejà inscrites dans le Fichier de référence, l'assignation de fréquence modifiée conserve la data primitivement inscrite dans la colonne 2d. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est inscrite dans la colonne Observations.

ADD **4398A** **1379** (4) La date prévue pour la mise en service d'une assignation de fréquence peut être prorogée de trois mois à la demande de l'administration notificatrice. Au cas où l'administration déclare que des circonstances execeptionnelles notivent une nouvelle prolongation de ce délai, cette nouvelle prolongation peut être accordée mais elle ne doit en aucun cas dépasser six mois à compter de la date initiale prévue pour la mise en service.

NOC **4399** 570BC **1380** § 36. Dans l'application des dispositions de la présente sous-section, toute fiche de notification présentée de nouveau au Comité et reçue par lui plus de deux ans aprés la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considerée comme une nouvelle fiche de notification.

NOC **4400** 570BD **1381** § 37. (1) *Inscription des assignations de fréquence notifiées avant leur mise en service.*

NOC **4401** 570BE **1382** (2) Si une assignation de fréquence notifiée avant sa mise en service est l'objet de conclusions favorables formulées par le Comité relativement aux numéros **1352** et **1353** et, les cas échéant, **1354,** elle est inscrite provisoirement dans le Ficher de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractére provisoire de cette inscription.

MOD **4402** **1383** (3) Dans un délai de trente jours après la date prévue pour la mise en service, initialement notifiée (voir le numero **1230**) ou modifiée aux termes du numéro **1379**, l'administration notificatrice confirme que l'assignation de fréquence a été mise en service. Lorsque le Comité est avisé que l'assignation a été mise en service, il biffe le symbole spécial dans la colonne Observations.
570BF

ADD **4402A** **1384** (4) Si le Comité ne reçoit pas la confirmation dans le délai prévu au numéro **1383**, l'inscription en question est annulée. Le Comité consulte l'administration concernée avant de prende cette mesure.
570BH

MOD **4403** **1385** (5) Lorsque, á l'expiration de la période définie au numéro **1374**, le Comité est avisé
570BG de l'absence de plainte en brouillage préjudiciable, il biffe le symbole inscrit en application du numéro **1375**.

SUP **4404**

NOC

SECTION III

Inscription de dates et des conclusions dans le Fichier de référence

MOD **4405** **1386** § 38. Chaque fois que le Comité inscrit une assignation de fréquence dans le Fichier de référence, il indique sa conclusion par un symbole placé dans la colonne appropriée. De plus, il insère dans la colonne Observations les motifs qui donnent lieu à une conclusion défavorable.
571

MOD **4406** **1387** § 39. La procédure à appliquer pour l'inscription de dates dans la partie appropriée de la colonne 2 du Ficher de référence, selon les bandes de fréquences et les services intéressées, est décrite ci-dessous dans les numéros **1388** à **1413** pour ce qui concerne les assignations de fréquence dont il est question dans les sous-sections II-A à II-C.
572

NOC **4407** **1388** § 40. (1) *Bandes de fréquences:*
573

9-2850 KHz;
3155-3400 KHz;
3500-3900 KHz dans la Région 1;
3500-4000 KHz dans la Région 2;
3500-3950 KHz dans la Région 3;
4219,4-4349,4 KHz;
6325,4-6493,9 KHz;
8435,4-8704,4 KHz;
12 652,3-13 070,8 KHz;
16 859,4-17 196,9 KHz;
22 310,5-22 561 KHz.

MOD **4408** **1389** (2) En regard de toute assignation à laquelle des dispositions des numéros **1250**, **1251** ou **1254** sont applicables, la date pertinente est inscrite dans la colonne 2a du Fichier de référence; toutefois, pour les assignations de la classe de fonctionnement B à des stations du service fixe, la date pertinente est inscrite dans la colonne 2b.
574

MOD **4409** **1390** (3) En regard de toute assignation à laquelle les dispositions des numéros **1255**, **1265**, **1267**, **1271** ou **1272** sont applicables, la date pertinente est inscrite dans la colonne 2b du Fichier de référence.
575

SUP **4410**
576

MOD **4411** **1391** § 41. (1) *Bandes de fréquences attribuées en exclusivité au service mobile maritime entre 4000 KHz et 23 000 KHz pour les stations côtières radiotéléphoniques.*
577

NOC **4412** **1392** (2) Si la conclusion est favorable relativement aux numéros **1317** et **1318**, la date du 6 juin 1974 est inscrite dans la colonne 2a.
578

NOC **4413** **1393** (3) Dans tous les autres cas dont il est question au numéro **1315**, la date pertinente est inscrite dans la colonne 2b (voir les numéros **1250**, **1254**, **1255**, **1261**, **1265**, **1306** et **1307**).
580

(MOD) **4414** **1394** (4) En ce qui concerne les assignations à des stations autres que des stations côtières radiotéléphoniques, la date pertinente est inscrite dans la colonne 2b (voir les numéros **1271** e **1272**).
581

SUP **4411.1**
577.1

MOD	**4415** 582	**1395**	§ 42. (1) *Bandes des fréquences attribuées en exclusivité au service mobile maritime entre 4000 kHz et 23 000 kHz pour les stations radiotéléphoniques de navire.*
NOC	**4416** 583	**1396**	(2) Si la conclusion est favorable relativement aux numéros **1328** et **1329,** la date du 7 juin 1974 dans la colonne 2a.
NOC	**4417** 585	**1397**	(3) Dans touts les autres cas dont il est question au numéro **1326,** la date de réception de la fiche de notification par le Comité est inscrite dans la colonne 2b.
(MOD)	**4418** 586	**1398**	(4) En ce qui concerne les assignations autres que des assignations de fréquence de réception à des stations côtières radiotéléphoniques, la data pertinente est inscrite dans la colonne 2b (voir les numéros **1271** et **1272**).
NOC	**4419** 587	**1399**	§ 43. (1) *Bandes de fréquences attribuées en exclusivité au service mobile maritime entre 4000 kHz et 25 110 kHz pour les stations radiotéléphoniques de navire (voir le numéro* **1220**).
NOC	**4420** 588	**1400**	(2) En ce qui concerne les assignations à des stations autres que des stations radiotélégraphiques de navire, la date pertinente est inscrite dans la colonne 2b (voir les numéros **1271** et **1272**).
NOC	**4421** 589	**1401**	§ 44. (1) *Bandes de fréquences attribuées en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz.*
MOD	**4422** 590	**1402**	(2) Si la conclusion est favorable relativement aux numéros **1336** à **1339,** la date de 5 mars 1978 inscrite dans la colonne 2a.
MOD	**4423** 591	**1403**	(3) Si la conclusion est favorable relativement au numéro **1341,** la date du 5 mars 1978 est inscrite dans la colonne 2b
MOD	**4424** 592	**1404**	(4) Dans tous les autres cas dont il est question au numéro **1333,** la date du 6 mars 1978 est inscrite dans la colonne 2b par le Comité.
(MOD)	**4425** 593	**1405**	(5) En ce qui concerne les assignations à des stations autres que des stations aéronautiques du service mobile aéronautique (R), la date pertinente est inscrite dans la colonne 2b (voir les numéros **1271** et **1272**).
NOC	**4426** 594	**1406**	§ 45. (1) *Bandes des frequences attribuées en exclusivité au service mobile aéronautique (OR) entre 3025 kHz et 18 030 kHz.*
NOC	**4427** 595	**1407**	(2) Si la conclusion est favorable relativement au numéro **1345,** la date du 3 décembre 1951 est inscrite dans la colonne 2a.
NOC	**4428** 596	**1408**	(3) Si la conclusion est favorable relativement au numéro **1346,** la date du 3 décembre 1951 est inscrite dans la colonne 2b.
NOC	**4429** 597	**1409**	(4) Si le Comité conclut que les dispositions du numéro **1347** sont applicables, la date du 3 décembre 1951 est inscrite dans la colonne 2a s'il s'agit d'un allotissement primaire ou dans la colonne 2b, s'il s'agit d'un allotissement secondaire.
NOC	**4430** 598	**1410**	(5) Dans tous les autres cas dont il est question au numéro **1343** la date de réception de la fiche par le Comité est inscrite dans la colonne 2b.
(MOD)	**4431** 599	**1411**	(6) En ce qui concerne les assignations à des stations autres que des stations aéronautiques du service mobile aéronautique (OR), la date pertinente est inscrite dans la colonne 2b (voir les numeros **1271** et **1272**).
SUP	**4432** 600		
SUP	**4433** 601		
SUP	**4434** 602		
NOC	**4435** 603	**1412**	§ 46. (1) *Bandes de fréquences comprises entre 3950 kHz (4000 kHz dans la Région 2) et 28 000 kHz, autres que les bandes attribuées en exclusivité au service mobile aéronautique, au service mobile maritime, au service de radiodiffusion ou au service d'amateur, et bandes de fréquences supérieures à 28 000 kHz.*
NOC	**4436** 604	**1413**	(2) En regard de toute assignation de fréquence à inscrire dans la Fichier de référence selon les dispositions de la section II du présent article, la date pertinente est inscrite dans la colonne 2d.
NOC	**4437** 605	**1414**	§ 47. *Date à inscrire dans la colonne 2c.*
MOD	**4438** 606	**1415**	La date à inscrire dans la colonne 2c est la date de mise en service notifiée par l'administration intéressée (voir les numéros **1228** à **1231**).

SUP	**4415.1** 582.1	

SECTION IV

NOC

Catégories d'assignations de fréquence

MOD **4439** 607 **1416** § 48. (1) Toute assignation de fréquence portant une date dans la colonne 2a du Fichier de référence a droit à la protection internacionale contre les brouillages préjudiciables, il en va de même pour les assignations de classe de fonctionnement A à des stations du service fixe dans les bandes appropriées comprises entre 3000 kHz et 27 500 kHz inscrites avec une date la colonne 2d à la suite d'une conclusion favorable relativement aux numéros **1240** et **1242,** en particulier celles résultant de l'application du numéro **1218.**

NOC **4440** 608 **1417** (2) Toute assignation de fréquence portant une date dans la colonne 2b est inscrite dans la Fichier de référence en vue de donner aux administrations la possibilité de tenir compte de fait que l'assignation de fréquence en question est en service. Cette inscription ne donne assignation de fréquence aucun droit à une protection internacionale, sauf dans le cas prevú à l'alinéa 2) du numéro **1241.**

NOC **4441** 609 **1418** (3) En ce qui concerne les assignations de fréquence qui portent des dates dans deux des parties de la colonne 2, la date inscrite dans la colonne 2c est donnée à titre d'information seulement.

SUP **4442** 610

MOD **4443** 611 **1419** (4) Si l'utilisation d'une assignation de fréquence non conforme aux dispositions des numéros **1240** ou **1352** cause effectivement un brouillage préjudiciable à la réception d'une station quelconque fonctionnant conformémemt à ces dispositions, la station utilisant d'assignation de fréquences non conforme à ces dispositions doit immédiatement éliminer le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

MOD **4444** 611A **1420** (5) Si l'utilisation d'une assignation de fréquence non conforme aux dispositions des numéros **1240** ou **1352** cause effectivement un brouillage préjudiciable à la réception d'une station quelconque fonctionnant conformément aux dispositions du numéro **1503,** la station utilisant l'assignation de fréquence non conforme aux dispositions des numéros **1240** ou **1352** doit immédiatement éliminer le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

SECTION V

NOC

Réexamen des conclusions

(MOD) **4445** 612 **1421** § 49. (1) Une conclusion peut être réexaminée par le Comité:

a) À la demande de l'administration notificatrice;
b) À la demande de toute autre administration intéressée à la question mais uniquement en raison d'un brouillage préjudiciable constaté;
c) Sur la propre initiative du Comité lui-même lorsqu'il estime cette mesure justifiée.

NOC **4446** 613 **1422** (2) Le Comité, se fondant sur tous les renseignements dont il dispose, réexamine la question en tenant compte des dispositions des numéros **1240** ou **1352** et des numéros **1241, 1242, 1353** ou **1354,** selon le cas, et il formule une conclusion appropriée, puis informe de cette conclusion l'administration notificatrice, soit avant de publier la conclusion, soit, le cas échéant, avant de la reporter dans le Fichier de référence.

(MOD) **4447** 614 **1423** § 50. Si l'administration notificatrice demande le réexamen d'une conclusion défavorable, à titre d'assistance spéciale, afin de faire face à un besoin urgent et essentiel dans un cas ou un brouillage préjudiciable a eu lieu, le Comité consulte immédiatement les administrations intéressées et leur présente des suggestions de nature à faciliter à l'administration qui a demandé l'assistance spéciale l'utilisation de son assignation; les modifications résultant de cette consultation sont apportées au Ficher de référence.

NOC **4448** 615 **1424** §51. (1) Aprés utilisation réelle pendant une période raisonnable d'une assignation de fréquence inscrite dans le Fichier de référence sur l'insistance de l'administration notificatrice, à la suite d'une conclusion défavorable relativement aux numéros **1241, 1242** ou **1354** selon le cas, cette administration peut demander au Comité de réexaminer la conclusion. Le Comite réexaminc alors la question après avoir consulté les administrations intéressées.

NOC **4449** 616 **1425** (2) Si la conclusion du Comité est alors favorable, il apporte au Fichier de référence les modifications requises pour que l'inscription y figure désormais comme si la conclusion initiale avait été favorable.

(MOD) **4450** **1426** (3) Si la conclusion relative à la probabilité d'un brouillage préjudiciable reste
617 défavorable, l'inscription initiale n'est pas modifiée.

SUP **4451**
618

ADD **4451A** **1427** § 52. (1) Dans le cas de la supression ou de la modification de toute assignation de fréquence inscrite dans le Fichier de référence qui avait été à l'origine d'une conclusion défavorable et avait conduit à l'inscription conformément au número **1255** d'une assignation notifiée ultérieurement, le Comité réexamine celle-ci et, s'il y a lieu, révise sa conclusion du point de vue des numéros **1241** ou **1242.**

ADD **4451B** **1428** (2) En vue d'obtenir un critère permettant la révision d'une inscription dans le Fichier de référence faite en application des dispositions du numéro **1255,** le Comité, en examinant la fiche de notification en question, détermine la date à laquelle il doit réexaminer cette assignation de fréquence. Si, jusqu'à cette date, aucune plainte en brouillage préjudiciable n'a été reçue par l'administration concernée, le Comité modifique automatiquement l'inscription dans le Fichier de référence de manière que celle-ci y figure à l'avenir comme si la conclusion originale avait été favorable relativement aux numéros **1241** ou **1242.**

Section VI

MOD

Mise à jour du Fichier de référence

ADD **4451C** **1429** § 53. *Modification, annulation et révision des inscriptions du Fichier de référence.*

NOC **4452** **1430** § 54. Si l'utilisation d'une assignation de fréquence inscrite au Fichier de référence
619 vient à être abandonnée définitivement, l'administration notificatrice doit en informer le Comité dans un délai de trois mois, à la suite de quoi l'inscription au Fichier de référence est annulée.

NOC **4453** **1431** § 55. Chaque fois qu'il apparaît au Comité, d'après les renseignements dont il
620 dispose, qu'une assignation inscrite dans le Fichier de référence n'a pas été mise en service régulier conformément aux caractéristiques fondamentales notifiées ou n'est pas utilisée conformément à ces caractéristiques, le Comité consulte l'administration notificatrice et, sous réserve de son accord, il anule l'inscription ou lui apporte les modifications qui conviennent.

(MOD) **4454** **1432** § 56. Si, à la suite d'une enquête faite par le Comité aux termes des numéros **1264**
621 ou **1431,** l'administration notificatrice n'a pas fourni au Comité dans un délai de trois mois les renseignements nécessaires ou pertinents, le Comité ne tient dorénavant plus compte de l'assignation en question lorsqu'il statue sur les fiches de notification qu'il reçoit ultérieurement, jusqu'à ce qu'il ait été informé que l'assignation est utilisée selon les caractéristiques notifiées ou jusqu'à ce qu'il ait reçu les renseignements requis. Le Comité insère dans la colonnne Observations du Fichier de référence des observations indiquant la situation, et en particulier le période pendant laquelle l'assignation n'a pas été prise en considération par le Comité.

SUP **4455**
622

ADD **4454A** **1433** § 57. (1) *Examens périodiques du Fichier de référence.*

ADD **4454B** **1434** (2) Le Comité établit un programme à long terme d'examens périodiques de chaque section du Fichier de référence en vue d'améliorer et de maintenir la précision dudit Fichier.

AD **4454C** **1435** (3) Pour les examens mentionnés au numéro **1434,** le Comité envoie à chaque administration, pour révision et renvoi, en extrait national du Fichier de référence relatif à la section à l'étude. Le Comité attire em même temps l'attention des administrations sur toute assignation à une station du service fixe fonctionnant dans les bandes de fréquences comprises entre 3000 kHz et 27 500 kHz, pour laquelle en estime que d'autres moyens de télécommunicaton sont disponibles.

ADD **4454D** **1436** (4) Les administrations collaborent, en vue d'améliorer et de maintenir la précision du Fichier de référence, aux examens périodiques en notifiant la suppression de toute assignation inutilisée et, si nécessaire, la modification des autres inscriptions.

ADD **4454E** **1437** (5) Le Comité ajoute à son rapport annuel aux administrations une section relative aux travaux effectués en application des dispositions du présent paragraphe 57, aux résultats obtenus et au programme de l'année suivante.

SECTION VII

Études et recommandations

NOC

(MOD) **4456** **1438** § 58. (1) Si la demande lui en est faire par une administration quelconque, en
623 particulier, s'il s'agit de l'administration d'un pays qui a besoin d'assistance spéciale, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, procède à une étude de tout problème d'utilisation des fréquences entrant dans les catégories suivants:

(MOD) **4457** **1439** *a*) Recherche d'une fréquence de remplacement permettant d'éviter un
624 brouillage préjudiciable probable, dans les cas visés au numéro **1252**;

NOC **4458** **1440** *b*) Nécessité éventuelle d'inclure des assignations de fréquence supplémen-
625 taires dans une fraction déterminée du spectre des fréquences radioélectriques;

(MOD) **4459** **1441** *c*) Cas où, en raison de brouillages préjudiciables, plusieurs fréquences du
626 même ordre de grandeur sont utilisées tour à tour pour maintenir une liaison en fonctionnement alors que celle-ci ne requiert qu'une seule fréquence de l'ordre de grandeur en question;

(MOD) **4460** **1442** *c*) Présomption de contravention au présent Règlement ou de non-observa-
627 tion de ce Règlement, ou cas de brouillage préjudiciable.

NOC **4461** **1443** (2) Le Comité établit ensuite un rappport qu'il communique aux administrations
628 intéressées et dans lequel il consigne ses conclusions et ses recommandations pour la solution du problème.

ADD **4461A** **1444** (3) Lorsqu'elle reçoit les recommandations du Comité pour la solution du problème, une administration en accuse promptement réception par télégrame et fait savoir par la suite les mesures qu'elle compte prendre. Dans le cas où les suggestions ou les recommendations du Comité ne peuvent être acceptées par les administrations concernées, le Comité s'efforce à nouveau de trouver pour le problème une solution acceptable.

NOC **4462** **1445** § 59. Si, em particulier à la suite d'une demande de l'administration d'un pays qui
629 a besoin d'assistance spéciale, le Comité constate qu'une modification des caractéristiques fondamentales, y compris une modification de fréquence dans une gamme de fréquences donnée, d'une ou plusieurs assignations conformes aux dispositions du numéro **1240** doit permettre:

NOC **4463** **1446** *a*) Soit de loger une nouvelle assignation;
630

(MOD) **4464** **1447** *b*) Soit de faciliter la solution d'un problème de brouillage préjudiciable;
631

NOC **4465** **1448** *c*) Soit, de toute autre manière, de concourir à améliorer l'utilisation d'une
632 fraction déterminée du spectre des fréquences radioélectriques;

NOC **4466** **1449** et si une telle modification est acceptée par la ou les administrations intéressées, cette
633 modification des caractéristiques fondamentales est inscrite dans le Fichier de référence sans changement de la date ou des dates primitives.

NOC **4467** **1450** § 60. Dans le cas où, à la suite d'une étude, le Comité présente à une ou plusieurs administrations des propositions ou recommandations tendant à la solution d'une question, et où, dans un délai de trente jours, il n'a pas reçu de réponse d'une ou plusieurs de ces administrations, il considère que ses propositions ou recommandations ne sont pas acceptables para la ou les administrations qui n'ont pas répondu. Si l'administration requérante elle-même n'a pas répondu dans ce délai, al Comité ne poursuit pas l'étude.

SECTION VIII

Dispositions diverses

NOC

NOC **4468** **1451** § 61. Les dispositions des sections V, VI (à la exception du numéro **1430**) et VII
635 du présent article ne s'appliquent pas aux assignations de fréquence conformes aux Plans d'allotissement qui figurent aux appendices 25 Mar 2, 26, 27 (*) et 27 Aer 2 (*) au présent Règlement.

(*) Note du Secrétariat général: Voir le numéro **5189** et la Résolution **400**.

MOD 4469 635A 1452 § 62. (1) Si la demande lui en est faite par une administration quelconque et, en particulier, par l'administration d'un pays qui a besoin d'assistance spéciale, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

a) Vérification du graphique indiquant la zone de coordination dont il est question au numéro **1113;**
b) Calcul des niveaux de brouillage dont il question aux numéros **1164** à **1166;**
c) Toute autre assistance de caractère technique afin que les procédures décrites dans le présent article puissent être menées à bien.

NOC 4470 635B 1453 (2) En présentant sa demande au Comité aux terms du numéro **1452,** l'administration lui fournit les renseignements nécessaires.

MOD 4471 636 1454 § 63. Les Normes techniques du Comité sont fondées sur les dispositions pertinentes du présent Règlement et de ses appendices, sur les décisions, le cas échéant, des conférences administratives de l'Union, sur les Avis du CCIR, su l'état d'avancement de la technique radioélectrique et sur les perfectionnements de nouvelles techniques de transmission compte tenu des conditions de propagation exceptionnelles qui peuvent dominer dans certaines régions (par exemple, en effet de conduit particulièrement marqué).

MOD 4472 637 1455 § 64. (1) Le Comité porte à la connaissance des administrations ses conclusions et l'exposé de leurs motifs, ainsi que toutes les modifications apportées au Fichier de référence, au moyen de la circulaire hebdomadaire. Ces renseignements sont publiés dans un délai de quarante-cinq jours à compter de la date de publication de la fiche complète dans la circulaire hebdomadaire dont il est question au numéro **1235.** Lorsque le Comité n'est pas en mesure de se conformer au délai mentionné ci-dessus, il en informe aussitôt que possible les administrations concernées en donnant les raisons.

ADD 4472A 1456 (2) La circulaire hebdomadaire de l'IFRB est publiée dans les langues de travail de l'Union, telles qu'elles sont définies dans la Convention. En appliquant les diverses procédures spécifiées dans le présent Règlement des radiocommunications, le Comité utilise dans toute la mesure du possible cette circulaire hebdmadaire comme moyen de communication avec les administrations.

NOC 4473 638 1457 § 65. Le Comité informe les administrations, à intervalles convenables, des cas d'assistance spéciale qu'il a étudies aux termes des numéros **1423** et **1438** à **1450** inclus du présent Règlement.

MOD 4474 639 1458 § 66. Si un Membre a recours aux dispositions de l'article 50 de la Convention, le Comité, si la demande lui en est faite, met ses documents à la disposition des parties intéresées pour l'application de toute procédure prescrite dans la Convention en vue d'apporter une solution aux différends internationaux.

1459 à 1487 *(Non attribués.)*

(MOD) N13/9A

ARTICLE 13

Notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence (1) aux stations de radioastronomie et aux stations de radiocommunication spatiale à l'exception des stations du service de radiodiffusion par satellite (2)

SECTION I

NOC

Notification des assignations de fréquence

MOD 4575 639BA 1488 § 1. (1) Toute assignation de fréquence destinée à être utilisée pour l'émission ou la réception par une station terrienne ou par une station spatiale doit être notifiée au Comité:

1489 *a*) Si l'utilisation de la fréquence en question est susceptible d'entrainer des brouillages préjudiciables à un service quelconque d'une autre administration;

NOC A.13.1 (1) L'expression *assignation de fréquence,* partout ou elle figure dans le présente article, doit être entendue comme se référant soit à une nouvelle assignation de fréquence, soit à une modification à une assignation déjà inscrite dans le Fichier de référence international des fréquences (dénommé ci-après le *Fichier de référence*).

ADD A.13.2 (2) Pour la notification et l'inscription des assignations de fréquence aux stations du service de radiodiffusion par satellite et aux autres services dans les bandes 11,7-12,2 GHz (dans la Région 2 et 3) et 11,7-12,5 GHz (dans la Région 1), voir également l'article 15.

1490 *b*) Ou si la fréquence doit être utilisée pour des radiocommunications internacionales;

1491 *c*) Ou encore si l'on désire obtenir une reconnaissance internacionale officielle de l'utilisation de cette fréquence.

SUP **4576** 639BB

MOD **4577** 639BC **1492** (2) Toute fréquence ou bande de fréquences destinée à être utilisée à la réception par une station de radioastronomie déterminée, peut être notifiée si l'on désire que ce renseignement soit inscrit dans le Fichier de référence.

ADD **4577A** **1493** (3) Lorsque le Comité reçoit d'une administration une fiche de notification relative à la modification ou l'annulation d'une assignation à une station spatiale déjà inscrite dans le Fichier de référence au nom d'un groupe d'administrations, il considère, sauf avis contraire, que la fiche de notification est présentée au nom de toutes les administrations qui étaient associées à la notification originale.

MOD **4578** 639BD **1494** (4) Une notification faite aux termes des numéros **1488** à **1491** et concernant une assignation de fréquence à des stations terriennes mobiles d'un système satellites comporte les caractéristiques techniques soit de chaque station terrienne mobile, soit d'une station terrienne mobile type, ainsi que l'indication de la zone de service dans laquelle ces stations sont destinées à fonctionner.

MOD **4579** 639BE **1495** § 2. Toute assignation de fréquence notifiée en exécution des numéros **1488** à **1492** ou **1494** doit faire l'objet d'une fiche de notification établie dans la forme prescrite à l'appendice **3**, dont les diverses sections spécifient les caractéristiques fondamentales à fournir selon le cas. Il est recommandé que l'administration notificatrice communique également au Comité les autres renseignements indiqués à la section A dudit appendice, ainsi que tout autre renseignement qu'elle peut juger utile.

(MOD) **4580** 639BF **1496** § 3. (1) Lorsqu'il s'agit d'une assignation de fréquence à une station terrienne ou spatiale, la fiche de notification doit parvenir au Comité au plus trois ans avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir en tout cas au plus tard trois mois (1) avant cette date, sauf en ce qui concerne une assignation de fréquence à une station du service de recherche spatiale dans une bande attribuée en exclusivité à ce service ou une bande partagée dans laquelle il est le seul service primaire. Dans le cas d'une telle assignation à une station du service de recherche spatiale, la fiche de notification doit, autant que faire se peut, parvenir au Comité avant la date de mise en service de l'assignation de fréquence intéressée, mai elle doit, en tout cas, lui parvenir au plus tard trente jours après la date à laquelle l'assignation de fréquence est effectivement mise en service.

NOC **4581** 639BG **1497** (2) Toute assignation de fréquence à une station terrienne ou spatiale dont la notification parvient au Comité après l'expiration des délais voulus spécifiés au numéro **1496** porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions du numéro **1496**.

SECTION II

NOC

Procédure pour l'examen des fiches de notification et l'inscription des assignations de fréquence dans le Fichier de référence

MOD **4582** 639BH **1498** § 4. Lorsque le Comité reçoit une fiche de notification qui ne contient pas au moins les caractéristiques fondamentales spécifiées à l'appendice **3**, il la retourne par poste aérienne á l'administration dont elle émane, accompagnée des motifs de ce renvoi, sauf si les renseignements qui n'avaient pas été fournis sont reçus immédiatement en réponse à une demande du Comité. Le Comité informe l'administration par télégramme lorsqu'une fiche de notification est retournée aux termes de la présente disposition.

MOD **4583** 639BI **1499** § 5. Lorsque de Comité reçoit une fiche de notification compléte, il inclut les renseignements qu'elle contient, y compris les diagrammes, avec sa date de réception, dans la circulaire hebdomadaire dont il est question au numéro **1235,** qui est publiée dans une délai de quarente jours après la réception de la fiche de notification. Lorsque

---

NOC **4580.1** 639BF.1 **1496.1** (1) L'administration notificatrice engage, le cas échéant, la ou les procédures de coordination en temps voulu pour que cette date limite soit respectée.

le Comité n'est pas en mesure de se conformer à ce délai, il en informe aussitôt que possible les administrations concernées en donnant les raisons.

MOD 4584 639BJ 1500 § 6. La circulaire contient tous les renseignements figurant dans toutes les fiches de notification complètes reçues par le Comité depuis la publication de la circulaire précédente et elle tient lieu, pour chaque administration notificatrice, d'accusé de réception par le Comité d'une fiche de notification complète.

MOD 4585 639BK 1501 § 7. Le Comité examine les fiches de notification complètes dans l'ordre où il les reçoit en tenant compte du délai mentionné au numéro **1583**. Il ne peut pas ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement et encore le cours d'examen, avant d'avoir pris une décision en ce qui concerne cette dernière.

NOC 4586 639BL 1502 § 8. Le Comité examine chaque fiche de notification:

MOD 4587 639BM 1503 *a*) Du point de vue de sa conformité avec les clauses de la Convention, le tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radiocommunications, à l'exception de celles qui sont relatives aux procédures de coordination et à la probabilité de brouillages préjudiciables et qui font l'objet des alinéas suivants;

MOD 4588 639BN 1504 *b*) Du point de vue de sa conformité avec les dispositions relatives à la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations concernées, vis-à-vis, des stations de radiocommunication spatiale, dans les cas où les dispositions des numéros **1060** ou **1066** à **1071** sont applicables;

MOD 4589 639BO 1505 *c*) Du point de vue de sa conformité aves les dispositions relatives à la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations concernées, vis-à-vis des stations de radiocommunication de Terre, dans le cas où les dispositions du numéro **1107** sont applicables;

MOD 4590 639BP 1506 *d*) Du point de vue de la probabilité d'un brouillage préjudiciable lorsque la coordination aux termes du numéro **1060** n'a pas été appliquée avec succés; dans cet examen (1), il est tenu compte des assignations de fréquence pour l'emission ou la réception déjà inscrites dans le Fichier de référence:

1507 1) Soit en application des dispositions des numéros **1526, 1531, 1534** ou **1543**;

1508 2) Soit en application des dispositions du numéro **1544** si cette assignation de fréquence n'a pas, en fait, causé de brouillage préjudiciable à une assignation quelconque antérieurement inscrite dans le Fichier de référence et qui est conforme au numéro **1503**;

MOD 4591 639BQ 1509 *e*) Du point de vue de la probabilité d'un brouillage préjudiciable lorsque la coordination aux termes du numéro **1107** n'a pas été appliquée avec succés; dans cet examen, il est tenu compte des assignations de fréquence pour l'emission ou la réception déjà inscrites dans le Fichier de référence:

1510 1) Soit en application des dispositions du numéro **1248**;

1511 2) Soit en application des dispositions des numéros **1362, 1367, 1370** ou **1373**;

1512 3) Soit en application des dispositions du numéro **1374** si cette assignation de fréquence n'a pas, en fait, causé de brouillagge préjudiciable à une assignation quelconque antérieurement inscrite dans le Fichier de référence et qui est conforme au numéro **1503**.

SUP 4592 639BR

(MOD) 4593 639BS 1513 § 9. Lorsque, à la suite de l'examen d'une fiche de notification relativement aux numéros **1506** à **1508,** le Comité formule une conclusion défavorable en se fondant sur la probabilité de brouillages préjudiciables au détriment d'une assignation de fréquence

---

ADD 4590.1 1506.1 (1) L'examen d'une telle fiche de notification relativement à toute autre assignation de fréquence publiée aux termes du numéro **1078,** mais pas encore notifiée est différé jusqu'à ce que les deux assignation aient été notifiées; le Comité les examine ensuite dans l'ordre de leur publication aux termes du numéro **1078**.

inscrite au Fichier de référence et concernant une station spatiale dont le Comité a des raisons de croire qu'elle peut n'être pas régulièrement en service, par exemple comme conséquence des dispositions du numéro **1569,** le Comité consulte sans délai l'administration responsable de cette assignation. Si, après cette consultation, il est établi, d'après les renseignements disponibles, que cette assignation inscrite au Fichier de référence n'a pas été utilisée depuis deux ans, il n'en est plus tenu compte lors de l'examen en cours ni lors de l'examen de toute autre fiche de notification auquel il sera procédeé ultérieurement, aux terms des numéros **1506 à 1508,** avant la date à laquelle l'assignation de fréquence sera remise en service. Avant sa remise en service, l'assignation de fréquence est l'objet, selon le cas, d'une nouvelle coordination conformément aux dispositions du numéro **1060** ou d'un nouvel examen par le Comité relativement aux numéros **1506** à **1508.** La date de remise en service est alors inscrite dans le Fichier de référence.

(MOD) **4594** 639BT **1514** § 10. Selon les conclusions auxquelles le Comité parvient à la suite de l'examen prévu aux numéros **1503, 1504, 1505, 1506** à **1508** et **1509** à **1512,** selon le cas, la procédure se poursuit comme suit.

MOD **4595** 639BU **1515** § 11. (1) *Conclusion favorable relativement au numéro* **1503** *dans le cas où les dispositions des numéros* **1504** *et* **1505** *ne sont pas applicables (station spatiale à bord d'un satellite non géostationnaire).*

NOC **4596** 639BV **1516** (2) L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

ADD **4596A** **1517** § 12. (1) *Conclusion défavorable relativement au numéro* **1503** *dans les cas où les dispositions des numéros* **1504** *et* **1505** *ne sont pas applicables (station spatiale à bord d'un satellite non géostationnaire).*

ADD **4596B** **1518** (2) Lorsque la fiche de notification comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342,** l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

ADD **4596C** **1519** (3) Lorsque la fiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342,** cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité ainsi que les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisante du problème.

MOD **4597** 639BW **1520** § 13. (1) *Conclusion défavorable relativement au numéro* **1503** *dans les cas où les dispositions des numéros* **1504** *et* **1505** *sont applicables.*

MOD **4598** 639BX **1521** (2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** et que la conclusion est favorable relativement aux numéros **1504, 1505, 1506** à **1508** et **1509** à **1512,** selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

MOD **4599** 639BY **1522** (3) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** et que la conclusion est défavorable relativement aux numéros **1504, 1505, 1506** à **1508** ou **1509** à **1512,** selon le cas, la fiche est retournée immédiatement par post aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité. Si l'administration notificatrice insiste pour un nouvel examen de la fiche de notification, l'assignation est inscrite dans le Fichier de référence, étant entendu que les dispositions du numéro **1560** s'appliquent. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d.

SUP **4600** 639BZ

MOD **4601** 639CA **1523** (4) Lorsque lafiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342,** cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, ainsi que les suggestions qu'il peut faire, en vue d'arriver à une solution satisfaisante du problème.

NOC **4602** 639CB **1524** (5) Si l'administration notificatrice présente de nouveau sa fiche non modifiée, celle-ci est traitée selon les dispositions du numéro **1523.** Si l'administration notificatrice présente à nouveau sa fiche avec une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342,** la fiche de notification est traitée conformément aux dispositions des numéros **1521** ou **1522,** selon le cas. Si la fiche est présentée à nouveau avec les modifications telles que, après un nouvel examen, la conclusion du Comité devient favorable relativement au numéro **1503,** la fiche est traitée comme une nouvelle fiche de notification.

NOC **4603** 639CC **1525** § 14. (1) *Conclusion favorable relativement au numéro* **1503** *dans les cas où les dispositions des numéros* **1504** *ou* **1505** *sont applicables.*

(MOD) **4604** **1526**
639CD

(2) Lorsque le Comité conclut que les procédures de coordination dont il est question aux numéros **1504** ou **1505** on été appliqquées avec succès en ce qui concerne toutes les administrations dont les stations de radiocommunication spatiales ou de Terre peuvent être affectées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

MOD **4605** **1527**
639CE

(3) Lorsque le Comité conclut que l'une ou l'autre des procédures de coordination dont il est question aux numéros **1504** et **1505** n'ont pas été appliquées, et:

ADD **4605A** **1528**

a) Si l'administration notificatrice demande au Comité d'effectuer la coordination, le Comité prend les mesures nécessaires á cet effet; si les tentatives du Comité en vue d'aboutir à un accord sont couronnées de succès, il en informe les administrations concernées et la fiche de notification est traitée conformément aux dispositions du numéro **1526**;

ADD **4605B** **1529**

b) Si les tentatives du Comité en vue d'aboutir à un acord en application des dispositions des numéros **1528** ou **1089** à **1094** ou **1130** à **1135** ne sont pas couronnées de succès, ou si, en notifiant l'assignation, l'administration déclare qu'elle n'a pas eu de succès et qu'elle ne demande pas au Comité d'effectuer la coordination requise, le Comité examine la fiche de notification du point de vue des dispositions des numéros **1506** à **1508** et **1509** à **1512,** selon le cas. En même temps, le Comité en informe les administrations concernées;

MOD **4606** **1530**
639CF

c) Si l'administration ne lui demande pas d'effectuer la coordination requise, la fiche de notification est renvoyée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent ce renvoi que les suggestions que le Comité peut faire, en vue d'arriver à une solution satisfaisante du problème.

(MOD) **4607** **1531**
639CG

(4) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification, et si le Comité conclut que les procédures de coordination dont il est question aux numéros **1504** et **1505** ont été appliquées avec succès en ce qui concerne toutes les administrations dont les stations de radiocommunication spatiale ou de Terre peuvent être affectées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

MOD **4608** **1532**
639CH

(5) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en demandant au Comité d'effectuer la coordination requise aux termes des numéros **1060** ou **1107,** la fiche de notification est traitée conformément aux dispositions des numéros **1527, 1528** ou **1529**. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

SUP **4609**
639CI

MOD **4610** **1533**
639CJ

§ 15. (1) *Conclusion favorable relativement aux numéros* **1503, 1506** à **1508** et **1509** *à* **1512**, *selon le cas.*

NOC **4611** **1534**
639CK

(2) L'assignation est inscrit dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

MOD **4612** **1535**
639CL

(3) Cependent, s'il résulte de l'examen que le brouillage et le pourcentage de temps pendent lequel celui-ci est susceptible de se produire ont des valeurs légèrement plus élevées que celles qui sont utilisées pour évaluer la probabilité de brouillages préjudiciables (conditions particulières de propagation, humidité anormale de l'atmosphère, etc.), une observation est insérée dans le Fichir de référence afin d'indiquer qu'un faible risque de brouillages préjudiciables peut exister et qu'en conséquence des précautions supplémentaires doivent être prises dans l'utilisation de l'assignation pour éviter les brouillages préjudiciables aux assignations déjà inscrites dans le Fichier de référence.

ADD **4612A** **1536**

(4) En plus de l'examen de l'assignation de fréquence à une station terrienne du point de vue des dispositions des numéros **1509** à **1512,** le Comité, dans les cas d'un désaccord persistant, examine cette assignation de fréquence du point de vue de la probabilité d'un brouillage préjudiciable, causé aux stations de Terre ou produit par les stations de Terre dont les assignations ont été communiquées au Comité en application des dispositions du numéro **1126** et qui seront mises en service dans les trois années à venir.

ADD **4612B** **1537** (5) A la suite de l'examen aux termes du numéro **1536**, le Comité, selon le cas:

1538 *a*) Informe les administrations concernées de toute conclusion défavorable;

1539 *b*) Insère une observation indiquant une telle conclusion défavorable dans le Fichier de référence en regard de l'assignation à la station terrienne;

1540 *c*) Inscrit les assignations aux stations de Terre dans le Fichier de référence avec une observation indiquant toute conclusion défavorable; la date de réception des renseignements communiquées aux termes du numéro **1126** est inscrite dans la colonne 2d.

MOD **4613** **1541** § 16. (1) *Conclusion favorable relativement au numéro* **1503**, *mais défavorable relativement aux numéros* **1506** à **1508** ou **1509** à **1512**, *selon le cas.*
639CM

MOD **4614** **1542** (2) La fiche de notification est retournée immédiatement par poste aérienne à
639CN l'administration dont elle émane, avec un exposé des raisons qui motivent la conclusion du Comité ainsi que les suggestions qu'il peut faire, en vue d'arriver à une solution satisfaisante du problème.

MOD **4615** **1543** (3) Si l'administration notificatrice présente à nouveau sa fiche avec des modifications
639CO qui, après nouvel examen, entraînent de la part du Comité une conclusion favorable relativement aux numéros **1506** à **1508** ou **1509** à **1512**, selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par de Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

MOD **4616** **1544** (4) Dans le cas où l'administration notificatrice présente de nouveau sa fiche de
639CP notification, soit non modifiée, soit avec des modifications dont l'effet est de diminuer la probabilité de brouillages préjudiciables, mais dans des proportions insuffisantes pour permettre l'application des dispositions du numéro **1543**, et où cette administration insiste pour un nouvel examen de la fiche de notification, mais où les conclusions du Comité restent les mêmes, l'assignation est inscrite dans le Fichier de réference. Mais cette inscription n'est faite que si le Comité est informé que la nouvelle assignation a été en service en même temps que l'assignation de fréquence à la station qui est à l'origine de la conclusion défavorable, pendent au moins quatre mois sans qu'aucune plainte en brouillage préjudiciable en soit résultée, à la condition que la plus ancienne des assignations de fréquence ait été mise en service durant le délai additionnel mentionné au numéro **1550**. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage préjudiciable n'a eu lieu est indiquée dans la colonne Observations.

NOC **4617** **1545** § 17. (1) *Fiches de notification concernant les stations de radioastronomie.*
639CQ

MOD **4618** **1546** (2) Une fiche de notification concernant une station de radioastronomie est
639CR examinée par le Comité du point de vue des dispositions du numéro **1503** seulement. Quelle que soit la conclusion, l'assignation est inscrite dans le Fichier de référence avec une date dans la colonne 2c. La date de réception par le Comité de la fiche de notification est indiquée dans la colonne Observations.

NOC **4619** **1547** § 18. (1) *Modifications aux caractéristiques fondamentales des assignations déjà*
639CS *inscrites dans le Fichier de référence.*

MOD **4620** **1548** (2) Toute notification de modification aux caractéristiques fondamentales d'une assignation déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice **3** (à l'exception toutefois du nom de la station ou du nom de la localité dans laquelle elle est située ou la date de mise en service), est examinée par le Comité selon les dispositions des numéros **1503**, et, le cas échéant, **1504**, **1505**, **1506** à **1508** et **1509** à **1512** et les dispositions des numéros **1515** à **1546** inclus sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation inscrite est modifiée selon la notification.

MOD **4621** **1549** (3) Cependent, dans le cas d'une modification aux caractéristiques d'une assigna-
639CU tion conforme aux dispositions du numéro **1503** et où le Comité formule une conclusion favorable relativement aux numéros **1504**, **1505**, **1506** à **1508** et **1509** à **1512**, selon le cas, ou conclut que cette modification n'accroît pas la probabilité de brouillages préjudiciables au détriment d'assignations de fréquence déjà inscrites dans le Fichier de référence, l'assignation de fréquence modifiée conserve la date primitivement inscrite dans la colonne 2d. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est indiquée dans la colonne Observations.

ADD **4621A** **1550** (4) La date prévue de mise en service d'une assignation de fréquence peut être prorogée de quatre mois à la demande de l'administration notificatrice. Au cas où l'administration déclare que des circonstances exceptionnelles motivent une nouvelle prolongation de ce delai, cette nouvelle prolongation peut être accordée mais ne doit en aucun cas dépasser dix-huit mois à compter de la date initiale prévue pour la mise en service.

NOC **4622** **1551** § 19. Dans l'application des dispositions de la présent section, toute fiche de notification présentée de nouveau au Comité est reçue par lui plus de deux ans après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.
639CV

NOC **4623** **1552** § 20. (1) *Inscription des assignations de fréquence notifiées avant leur mise en service.*
639CW

MOD **4624** **1553** (2) Si une assignation de fréquence notifiée avant sa mise en service est l'objet de conclusions favorables formulées par le Comité relativement aux numéros **1503** et, le cas échéant, **1504, 1505, 1506** à **1508** et **1509** à **1512,** elle est inscrite provisoirement dans le Fichier de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractère provisoire de cette inscription.
639CX

MOD **4625** **1554** (3) Dans un délai de trente jours après la date prévue pour la mise en service initialement notifiée ou modifiée aux termes du numéro **1550,** l'administration notificatrice confirme que l'assignation de fréquence a été mise en service. Lorsque le Comité est avisé que l'assignation a été mise en service, il biffe le symbole spécial dans la colonne Observations.
639CY

ADD **4625A** **1555** (4) Si le Comité ne reçoit pas la confirmation dans le délai prévu au numéro **1554,** l'inscription en question est annulée. Le Comité consulte l'administration concernée avant le prendre cette mesure.

MOD **4626** **1556** (5) Dans le cas prévu aux numéros **1522** et **1544,** et aussi longtemps qu'une fiche de notification ayant fait l'objet d'une conclusion défavorable ne peut être présentée de nouveau au Comité accompagnée d'une déclaration relative au fonctionnement sans brouillage, l'administration notificatrice peut demander au Comité d'inscrire provisoirement l'assignation de fréquence en question dans le Fichier de référence. Un symbole spécial indiquant le caractère provisoire de cette inscription est alors inséré dans la colonne Observations. Le Comité biffe ce symbole lorsque l'administration notificatrice l'avise, à l'expiration de la période définie au numéro **1544,** de l'absence de plainte en brouillage préjudiciable.
639CZ

SUP **4627**
639DA

SECTION III

NOC

Inscription des conclusions dans le Fichier de référence

NOC **4628** **1557** § 21. Chaque fois que le Comité inscrit une assignation de fréquence dans le Fichier de référence, il indique sa conclusion par un symbole placé dans la colonne appropriée. De plus, il insère dans la colonne Observations une observation indiquant les motifs de toute conclusion défavorable.
639DB

NOC

SECTION IV

NOC

Cátegories d'assignations de fréquence

NOC **4629** **1558** § 22. (1) La date à inscrire dans la colonne 2c est la date de mise en service notifiée par l'administration concernée. Elle est donnée à titre d'information seulement.
639DC

MOD **4630** **1559** (2) Si l'utilisation d'une assignation de fréquence à une station de radiocommunications spatiales qui a été inscrite au Fichier de référence conformément aux dispositions du numéro **1544** cause effectivement un brouillage préjudiciable à le réception d'une station de radiocommunications spatiales pour laquelle une assignation de fréquence a été antérieurement inscrite dans le Fichier de référence à la suite d'une conclusion favorable relativement aux numéros **1503, 1504, 1505, 1506** à **1508** et **1509** à **1512,** selon le cas, la station utilisant l'assignation de fréquence inscrite conformément aux dispositions du numéro **1544** doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.
639DD

NOC **4631** **1560** (3) Si l'utilisation d'une assignation de fréquence non conforme aux dispositions du numéro **1503** cause effectivement un brouillage préjudiciable à la réception d'une station quelconque fonctionnant conformément aux dispositions des numéros **1240, 1352** ou **1503,** selon le cas, la station utilisant l'assignation de fréquence non conforme aux dispositions du numéro **1503** doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.
639DE

NOC

SECTION V

Réexamen des conclusions

NOC **4632** **1561** § 23. (1) Une conclusion peut être réexaminée par le Comité:
639DF

1562 *a*) À la demande de l'administration notificatrice;

1563 *b*) À la demande de toute autre administration intéressée à la question, mais uniquement en raison d'un brouillage préjudiciable constaté;

1564 *c*) Sur la propre initiative du Comité lui même lorsqu'ill estime cette mesure justifiée.

MOD **4633** **1565** (2) Le Comité, se fondant sur tous les renseignements dont il dispose, réexamine la question en tenant compte des dispositions du numéro **1503** et, le cas échéant , des dispositions des numéros **1504, 1505, 1506** à **1508** et **1509** à **1512** et il formule une conclusion approprié, puis informe de cette conclusion l'administration notificatrice, soit avant de publier la conclusion, soit avant de la reporter dans le Fichier de référence.
639DG

MOD **4634** **1566** § 24. (1) Après utilisation réelle pendant une période raisonnable d'une assignation de fréquence inscrite dans le Fichier de référence sur l'insistance de l'administration notificatrice, à la suite d'une conclusion défavorable relativement aux numéros **1506** à **1508** ou **1509** à **1512**, cette administration peut demander au Comité de réexaminer la conclusion. Le Comité réexamine alors la question après avoir consulté les administrations concernées.
639DH

NOC **4635** **1567** (2) Si la conclusion du Comité est alors favorable, il apporte au Fichier de référence les modifications requises pour que l'inscription y figure désormais comme si la conclusion initiale avait été favorable.
639DI

NOC **4636** **1568** (3) Si la conclusion relative à la propabilité d'un brouillage préjudiciable reste défavorable, l'inscription initiale n'est pas modifiée.
639DJ

SECTION VI

NOC

Modification, annulation et révision des inscriptions du Fichier de référence

ADD **4636A** **1569** § 25. Le Comité demande à l'administration notificatrice de confirmer, à des intervalles ne dépassant pas deux ans, que son assignation a été et continue à être régulièrement utilisée avec des caractéristiques identiques à celles inscrites dans le Fichier de référence.

NOC **4637** **1570** § 26. (1) Lorsque l'utilisation d'une assignation de fréquence à une station spatiale inscrite au Fichier de référence est suspendue pendant une période de dix-huit mois, l'administration notificatrice informe le Comité, au cours de cette période de dix-huit mois, de la date à laquelle cette utilisation a été suspendue et de la date à laquelle l'utilisation réguliére de cette assignation reprendra.
639DK

NOC **4638** **1571** (2) Chaque fois qu'il apparaît au Comité, qu'ill s'agisse ou non du résultat des mesures prises aux termes du numéro **1570,** qu'une assignation de fréquence à une station spatiale inscrite au Fichier de référence n'a pas été utilisée régulièrement pendant plus de dix-huit mois, le Comité s'enquiert auprès de l'administration notificatrice de la date à laquelle l'utilisation régulière de cette assignation reprendra.
639DL

NOC **4639** **1572** (3) Si, dans un délai de six mois, le Comité ne reçoit aucune réponse à sa demande de renseignements aux termes du numéro **1571,** ou si la réponse qu'il reçoit ne confirme pas que l'utilisation régulière de cette assignation à une station spatiale reprendra dans un délai de six mois, un symbole est inséré dans le Fichier de référence en regard de l'inscription. Dorénavant, l'assignation est traitée conformément aux dispositions du numéro **1513** comme une assignation à l'égard de laquelle il a été établi qu'elle n'a pas été effectivement utilisée depuis deux ans.
639DM

(MOD) **4640** **1573** § 27. Si l'utilisation d'une assignation de fréquence inscrite au Fichier de référence vient à être abandonnée définitivement, l'administration notificatrice doit en informer le Comité dans un délai de trois mois, à la suite de quoi l'inscription au Fichier de référence est annulée.

MOD **4641** **1574** § 28. Chaque fois qu'il apparaît au Comité, d'après les renseignements dont il dispose, qu'une assignation inscrite dans le Fichier de référence n'a pas été mise en service régulier conformément aux caractéristiques fondamentales notifiées, ou n'est pas utilisée conformément à ses caractéristiques fondamentales, le Comité consulte l'administration notificatrice et, sous réserve de son accord, il annule l'inscription ou lui apporte les modifications qui conviennent ou maintient ses caractéristiques fondamentales.
639DO

MOD 4642 639DP 1575 § 29. Si, à la suite d'une enquête faite par le Comité aux termes du numéro **1574**, l'administration notificatrice n'a pas fourni au Comité dans le trois mois qui suivant la date de ladite enquête les renseignements nécessaires ou pertinents, le Comité insère dans la colonne Observations du Fichier de référence des observations indiquant la situation.

SECTION VII

NOC

Études er recommandations

(MOD) 4643 639DQ 1576 § 30. (1) Si la demande lui en est faire par une administration quelconque, le Comité utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, procède à une étude des cas de présomption de contravention au présent Règlement ou de non-observations de ce Règlement, ou des cas de brouillage préjudiciable.

(MOD) 4644 639DR 1577 (2) Le Comité établit ensuite un rapport qu'ill communique aux administrations concernées et dans lequel il consigne ses conclusions et ses recommandations pour la solution du problème.

ADD 4644A 1578 (3) A la réception des recommandations du Comité pour la solution du problème, une administration en accuse réception dans les meilleurs délais par télégramme et indique par la suite les mesures qu'elle entend prendre. Lorsque ces propositions ou recommandations ne sont pas considérées comme étant acceptables par les administrations en cause, le Comité poursuivra ses efforts afin de trouver une solution acceptable.

MOD 4645 639DS 1579 § 31. Dans le cas où, à la suite d'une étude, le Comité présente a une ou plusieurs administrations des propositions ou recommandations tendant à la solution d'une question, et où, dans un délai de quatre mois, il n'a pas reçu de réponse d'une ou de plusieurs de ces administrations, il considère que ses propositions ou recommandations ne sont pas acceptables par la ou les administrations qui n'ont pas répondu. Si l'administration requérante elle-même n'a pas répondu dans ce délai, le Comité ne poursuit pas l'étude.

SECTION VIII

NOC

Dispositions diverses

MOD 4646 639DT 1580 § 32. (1) Si la demande lui en est faite par une administration quelconque et, en particulier, par l'administration d'un pays qui a besoin d'assistance spéciale, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit toute assistance de caractère technique dans l'application des dispositions de cet article.

NOC 4647 639DU 1581 (2) En présentant sa demande au Comité aux termes du numéro **1580**, l'administration lui fournit les renseignements nécessaires.

MOD 4648 639DV 1582 § 33. Les Normes techniques du Comité sont fondées sur les dispositions pertinentes du présent Règlement et de ses appendices, sur les décisions, le cas échéant, des conférences administrative de l'Union, sur les Avis du CCIR, sur l'état d'avancement de la technique radioélectrique et sur les perfectionnements de nouvelles techniques de transmission compte tenu des conditions de propagation exceptionelles qui peuvent dominer dans certaines régions (par exemple, un effet de conduit particulièrement marque).

MOD 4649 639DW 1583 § 34. Le Comité porte à la connaissance des administrations ses conclusions et l'exposé de leurs motifs, ainsi que toutes les modifications apportées au Fichier de référence, au moyen de sa circulaire hebdomadaire. Ces renseignements sont publiés dans un délai de quarente-cinq jours à compter de la date de publication de la fiche complète dans la circulaire hebdomadaire dont il est question au numéro **1235**. Lorsque le Comité n'est pas en mesure de se conformer au délai mentionné ci-dessus, il en informe aussitôt que possible les administrations concernées en en donnant les raisons.

MOD 4650 639DX 1584 § 35. Si un Membre a recours aux dispositions de l'article 50 de la Convention, le Comité, si la demande lui en est faite, met ses documents à la disposition des parties intéressées pour l'application de toute procédure prescrite dans la Convention en vue d'apporter une solution aux différends internationaux.

1585 à 1609 *(Non attribués.)*

ADD N13A

ARTICLE 14

Procédure supplémentaire à appliquer dans les cas où un accord avec une administration est requis par un renvoi du tableau d'attribution des bandes de fréquences

ADD 4730 1610 § 1. (1) Avant de notifier au Comité une assignation de fréquence conforme à un renvoi du tableau d'attribution des bandes de fréquences contenant une référence au présent article, l'administration intéressée doit obtenir l'accord de toute autre administration dont les services sont susceptibles d'être affectés. Lorsque le renvoi concerne un service de radiocommunication spatiale, cette procédure peut être engagée avant l'application des dispositions de l'article **11** ou en même temps.

ADD 4731 1611 (2) L'administrations qui recherche un tel accord doit communiquer au Comité, assez longtemps avant la date prévue de mise en service de l'assignation:

ADD 4732 1612 *a*) Pour les services de radiocommunication de Terre, les caractéristiques fondamentales de l'assignation en projet, tellles qu'elles sont énumérées dans la section pertinente de l'appendice **1**;

ADD 4733 1613 *b*) Pour les services de radiocommunication spatiale, les caractéristiques de l'assignation en projet, telles qu'elles sont énumérées dans l'appendice **4**, ou l'appendice **3** lorsque celles-ci sont disponibles (1).

ADD 4734 1614 (3) L'administration qui recherche un accord peut indiquer au Comité, en même temps qu'elle lui communique les caractéristiques susmentionnées, les administrations dont, á son avis, certains services sont susceptibles d'être affectés.

ADD 4735 1615 § 2. (1) Le Comité publie les renseignements communiqués en application des numéros **1611** á **1614** dans une section spétiale de sa circulaire hebdomadaire (2); en outre, lorsqu'une circulaire hebdomadaire contient des renseignements de cette nature.

ADD 4736 1616 (2) Le Comité s'efforce d'identifier les administrations dont les services sont susceptibles d'être affectés et il indique le nom de celles qu'il a pu identifier dans la section spéciale de da circulaire hebdomadaire ainsi que dans le télégramme-circulaire dont il est question au numéro **1615**.

ADD 4737 1617 § 3. (1) Au reçu de ces renseignements, toute administration qui estime que l'assignation en projet est susceptible d'affecter ses services fonctionnant conformément au tableau d'attribution des bandes de fréquences ou destinées à fonctionner ainsi, en informe, dans un délai de quatre mois à compter de la date de publication de la circulaire hebdomadaire, l'administration qui recherche l'accord, ainsi que le Comité.

ADD 4738 1618 (2) Une administration qui n'a pas formulé de commentaire dans le délai spécifié au numéro **1617** est réputée n'être pas affectée par l'assignation en projet.

ADD 4739 1619 (3) Une administration qui répond à une demande d'accord, en application du numéro **1617**, communique, si possible en même temps, au moins les caractéristiques fondamentales de ses stations relevant de services susceptibles d'être affectés, ainsi que les suggestions qu'elle peut formuler pour aboutir à un règlement satisfaisant du problème. Elle envoie simultanément au Comité copie de tous ces renseignements.

ADD 4740 1620 § 4. L'administration qui recherche un accord en application des numéros **1611** à **1613** et l'administration qui répond en application du número **1617** doivent s'efforcer de résoudre en commun (3) le problème avant la date de mise en service de l'assignation en projet.

ADD 4741 1621 § 5. Chacune d'elles peut demander à l'autre des renseignements supplémentaires qui peuvent conduire à la solution du problème. Copie de la demande et de tout renseignement donné en réponse et communiquée au Comité.

ADD 4742 1622 § 6. Chacune des administrations peut demander l'aide du Comité en vue de résoudre le problème.

ADD 4743 1623 § 7. Une fois le problème résolu, l'administration que a recherché l'accord en informe le Comité.

ADD 4733.1 1613.1 (1) Les renseignements énumérés dans les appendices **3** ou **4** et communiqués au Comité en application de l'article **11** peuvent aussi être utilisés aux fins de la présente procédure.

ADD 4735.1 1615.1 (2) Dans le cas d'un service de radiocommunication spatiale, l'administration qui présent les renseignements énumérés dans les appendices **3** ou **4** conformément aux dispositions de l'article **11** peut demander au Comité d'utiliser également ces renseignements dans l'application de la présent procédure; en pareil cas, le Comité indique dans la section spéciale appropriée de sa circulaire hebdomadaire, qu'un accord est également recherché au titre du présent article.

ADD 4740.1 1620.1 (3) En l'absence d'Avis pertinents du CCIR ou de Normes techniques de l'IFRB, les critères techniques à appliquer en pareil cas doivent avoir fail l'object d'un accord entre les administrations concernées.

ADD **4744** **1624** § 8. Une administration qui a recherché un accord en application des numéros **1611** à **1613** et qui n'a reçu de réponse d'aucune administration en application du numéro **1617** en informe le Comité; elle est alors réputée avoir appliqué avec succès la procédure du présent article.

ADD **4745** **1625** § 9. Une administration qui a recherché un accord en application des numéros **1611** à **1613**, qui a reçu une ou plusieurs réponses en application du numéro **1617** et qui a informé le Comité, conformément au numéro **1623**, que le problème était résolu, est réputée avoir obtenu l'accord requis par le renvoi pertinent du tableau d'attribution des bandes de fréquences.

ADD **4746** **1626** § 10. Le Comité, une fois avisé aux termes du numéro **1624** ou du numéro **1625**, de l'application complète de la présente procédure, publie ce renseignement dans la section spétiale appropriée de sa circulaire hebdomadaire.

ADD **4747** **1627** § 11. Une administration qui rechercher un accord ou auprès de laquelle un accord recherché, ou toute autre administration dont les services sont susceptibles d'être affectés, peut demander l'aide du Comité dans l'application des différentes étapes de la présente procédure, particulièrement pour:

ADD **4748** **1628** *a*) Identifier les administrations dont les services sont susceptibles d'être affectés;

ADD **4749** **1629** *b*) Évaluer les niveaux de brouillage;

ADD **4750** **1630** *c*) Définir, avec l'accord des administrations impliquées, les critères techniques à utiliser (1).

1631 à 1655 *(Non attribués.)*

ADD **N13B**

ARTICLE 15

ADD

Coordination, notification et inscription des assignations de fréquence aux stations du service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7 12,5 GHz (dans la Région 1) et aux autres services auxquels ces bandes sont attribuées, dans la mesure où leur relation avec le service de radiodiffusion par satellite dans ces bandes est impliquée.

ADD **4750A** **1656** Les dispositions et le Plan associé applicables au service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7--12,5 GHz (dans le Région 1), tels qu'adoptés par la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Genève, 1977) et figurant dans l'appendice **30**, s'appliquent à l'assignation de fréquence aux stations du service de radiodiffusion par satellite dans ces bandes et aux stations des autres services auxquels ces bandes sont attribuées et á l'utilisation de ces fréquences par lesdites stations, dans la mesure où leur relation avec le service de radiodiffusion par satellite dans ces bandes est impliquée.

1657 à 1681 *(Non attribués.)*

N14/9B

ARTICLE 16

Procédure de mise à jour du Plan d'allotissement (2) de fréquences aux stations côtières radiotéléphoniques fonctionnant dans les bandes exclusives du service mobile maritime entre 4000 kHz et 23 000 kHz.

(Appendice 25 Mar2)

4751 639DY **1682** § 1. (1) Avant de notifier au Comité international d'enregistrement des fréquences ou de mettre en service une assignation de fréquence à une station côtière radiotéléphonique pour laquelle aucun allotissement correspondant ne figure dans le Plan d'allotissement de fréquences contenu dans l'appendice 25 Mar2, toute administration qui:

1683 *a*) Se propose de mettre en service une station côtière radiotéléphonique et n'a aucun allotissement dans le Plan; *ou*

ADD **4750.1** **1630.1** (1) En l'absence d'Avis pertinents du CCIR ou de Normes techniques de l'IFRB, les critères techniques à appliquer en pareil cas doivent avoir fait l'objet d'un accord entre les administrations concernées.

(MOD) **A.16.1** (2) Voir le numéro **18.**

1684 *b*) Se propose de développer le service radiotéléphonique assuré par sa ou ses stations côtières et a besoin d'un allotissement additionel;

envoie au comité au plus tôt deux années dans le cas mentionné au numéro **1683,** ou au plus tôt six mois dans le cas mentionné au numéro **1684,** mais en tout cas au plus tard trois mois avant la date prévue de mise en service de son service radiotéléphonique en projet, les renseignements énumérés à l'appendice **5**.

4752 639DZ **1685** (2) Le Comité publie dans une section spéciale de sa circulaire hebdomadaire les renseignements dont il est question aux numéros **1682** à **1684,** accompagnés des cas d'incompatibilité apparente que le Comité peut déceler entre l'allotissement en projet faisant l'object de la publication et toute autre allotissement existent ou en projet. Le Comité fournit également toute information de caractère technique et toute suggestion qu'il peut présenter en vue d'éviter ces incompatibilités.

(MOD) **4753** 639EA **1686** (3) Si la demande lui en est faite par une administration quelconque et, en particulier, par une administration d'un pays qui a besoin d'assistance spéciale, et si les circonstances paraissent le justifier, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

1687 *a*) Détermination d'une ou de plusieurs voies qui conviennent le mieux pour le service projeté par l'administration avant que celle-ci communique les renseignements à publier;

1688 *b*) Application de la procédure prévue au numéro **1690**;

1689 *c*) Toute autre assistance de caractère technique afin que les procédures décrites dans le présent article puissant être menées à bien.

4754 639EB **1690** § 2. (1) Em même temps qu'elle envoie au Comité les renseignements énumérés à l'appendice **5** en vue de leur publication, l'administration concernée recherche, relativement à l'allotissement en question, l'accord des administrations auxquelles la voie est allotie. Elle envoie au Comité une copie de toute la correspondance y afférente.

4755 639EC **1691** (2) Si, après avoir étudie les renseignements publiés par le Comité, une administration est d'avis que ses services existants ou ses services en project destinés à être mis en service dans les délais mentionnés aux numéros **1682** à **1684** pourraient être défavorablement influencés, elle a le droit d'être partie à la procédure entamée aux termes du numéro **1690.**

4756 639ED **1692** § 3. (1) Toute administration qui reçoit une demande aux termes du numéro **1690** en accuse immédiatement réception par télégramme. Si l'administration qui a envoyé la demande n'a pas reçu d'accusé de réception dans le délai de trente jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés conformément aux dispositions du numéro **1685,** elle envoie un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans un nouveau délai de quinze jours.

4757 639EE **1693** (2) Au reçu de la demande faite aux termes du numéro **1690,** l'administration interessée étudie rapidement la question, eu égard à la date prévue de mise en service de la ou des assignations correspondant à l'allotissement pour lequel l'accord est demandé, du point de vue du brouillage préjudiciable qui serait causé au service assuré par sa ou ses station(s) côtière(s):

1694 *a*) Qui utilise(nt) une assignation de fréquence conforme à un allotissement figurant dans le Plan; *ou*

1695 *b*) Qui sera (seront) mise(s) en service, dans le délai prescrit au numéro **1720**, et pour laquelle (lesquelles) un allotissement figure dans le Plan; *ou*

1696 *c*) Qui sera (seront) mise(s) en service dans le délai prescrit au numéro **1720,** et pour laquelle (lesquelles) un allotissement en project a été communiqué au Comité aux termes des numéros **1682** à **1684,** aux fins de publication conformément au numéro **1685.**

4758 639EF **1697** (3) Toute administration qui reçoit une demande aux termes du numéro **1690** et qui considère que le projet d'utilisation d'une voie ne causera pas un brouillage préjudiciable au service assuré pas ses stations côtières dont il est question aux numéros **1693** à **1696,** communique son accord à l'administration qui le lui a demandé, le plus rapidement possible et au plus tard deux mois après la date de la circulaire hebdomadaire pertinente.

(MOD) 4759 639EG 1698 (4) Toute administration qui reçoit une demande aux termes du numéro **1690** et qui considère que le projet d'utilisation d'une voie pourrait causer un brouillage préjudiciable au service assuré pas ses stations côtières dont il est question aux numéros **1693** à **1696,** communique à l'administration qui lui a envoyé la demande les raisons de son désaccord le plus rapidement possible et au plus tard deux mois après la date de la circulaire hebdomadaire pertinente. Elle lui fournit également toute information et suggestion en vue d'arriver à une solution satisfaisante du problème. L'administration recherchant l'accord s'efforce d'adapter ses besoins, dans la mesure du possible, en prenant en considération les observations qu'elle a reçues.

4760 639EH 1699 (5) Dans le cas où une administration recherchant un accord n'a pas d'allotissement dans la bande considérée, toute administration à laquelle la demande d'accord est adressée recherche, de concert avec l'administration requérante, tous les moyens de faire face aux besoins de celle-ci.

(MOD) 4761 639EI 1700 § 4. (1) L'administration qui recherche un accord peut demander au Comité de s'efforcer d'obtenir cet accord dans les circonstances suivantes:

1701 *a*) Une administration à laquelle une demande d'accord a été envoyée aux termes du numéro **1690** n'envoie pas d'accusé de réception de cette demande dans un délai de quarante-cinq jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés;

1702 *b*) Une administration a envoyé un accusé de réception aux termes du numéro **1692** mais ne communique pas sa décision dans un délai de deux mois à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés;

1703 *c*) L'administration qui recherche un accord et l'administration auprès de laquelle l'accord est recherché sont en désaccord sur les possibilités de partage;

1704 *d*) Il n'est pas possible d'arriver à un accord pour toute autre raison.

4762 639EJ 1705 (2) L'administration qui recherche un accord, on toute administration à laquelle une demande d'accord a été adressée, on bien le Comité, peuvent demander des renseignements supplémentaires dont ils estiment avoir besoin pour l'étude des problèmes relatifs à cet accord.

4763 639EK 1706 (3) Lorsque le Comité reçoit une demande aux termes du numéro **1701**, il envoie sans délai un télégramme à l'administration intéressée en lui demandant d'en accuser réception immédiatement.

4764 639EL 1707 (4) Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il a prise aux termes du numéro **1706** ou lorsque le Comité reçoit une demande aux termes du numéro **1702,** il envoie sans délai un télégramme à l'administration intéressée en lui demandant deprendre rapidement une décision sur la question.

4765 639EM 1708 (5) Lorsque le Comité reçoit une demande aux termes du numéro **1704,** il s'efforce d'obtenir l'accord mentionné au numéro **1690**. Lorsque le Comité ne reçoit pas d'une administration un accusé de réception à la demande qu'il a formulée en application des dispositions du numéro **1690** dans le délai spécifié au numéro **1692,** il agit, en ce qui concerne cette administration, conformément aux dispositions du numéro **1706.**

(MOD) 4766 639EN 1709 (6) Lorsqu'une administration ne répond pas dans le délai de quinze jours qui suit l'envoie du télégramme que le Comité lui a envoyé aux termes du numéro **1706** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suit l'envoie du télégramme du Comité aux termes du numéro **1707,** l'administration est réputée s'être engagée, une fois que l'allotissement en projet est inséré dans le Plan:

1710 *a*) À ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés au service assuré pas ses stations côtières radiotéléphoniques par l'utilisation d'assignations de fréquence conformes à l'allotissement pour lequel l'accord a été recherché;

1711 *b*) Et à faire en sorte que ses stations côtières radiotéléphoniques existantes ou en projet ne causeront pas de brouillages préjudiciables à l'utilisation d'assignations de fréquence conformes à l'allotissement pour lequel l'accord a été recherché.

1712 (7) Le Comité inscrit dans le Fichier de référence en regard de l'allotissement et des assignations qui en découlent une observation dans le colonne Observations indiquant

que ces assignations ne bénéficient pas des dispositions du numéro **1416** du présent Règlement en ce qui concerne les assignations de l'administrations qui recherche l'accord.

(MOD) **4767** 639EO **1713** /(8) Le Comité examine l'allotissement en projet du point du vue de la probabilité du brouillage préjudiciable que cet allotissement serait susceptible de subir de la part d'un allotissement figurant dans le Plan au nom de l'administration qui n'a pas répondu à la demande du Comité, ou qui a communiqué son désaccord sans en fournir les raisons; si sa conclusion est favorable et si l'application de la présent procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

4768 639EP **1714** (9) Dans le cas d'une conclusion défavorable, le Comité informe l'administration concernée du résultat de son examen; si cette dernière insiste et, si l'application de la présent procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

4769 639EQ **1715** (10) Lorsque le Comité reçoit une demande aux termes du numéro **1703,** il évalue les possibilités de partage et il communique aux administrations intéressées les résultats obtenus.

(MOD) **4770** 639ER **1716** (11) En cas de désaccord persistant, le Comité examine l'allotissement en projet du point de vue du brouillage préjudiciable qui serait causé au service assuré par les stations de l'administrations ayant manifesté son désaccord. Dans la cas où la conclusion du Comité est favorable et si l'application de présent procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

(MOD) **4771** 639ES **1717** (12) Si, à la suite de l'examen dont il est question au numéro **1716,** le Comité aboutit à une conclusion défavorable, il examine l'allotissement en projet du point de vue du brouillage préjudiciable suscepitble d'être causé aux services assurés dans les différentes voies dans la bande considerée. Si la Comité formule une conclusion défavorable dans tous le cas, il choisit la voie le moins défavorablement influencée et, si l'administration qui recherche l'accord lui en fait la demande, il insère l'allotissement en projet dans cette voie du Plan.

4772 639ET **1718** § 5. L'administration qui recherche l'accord pour un allotissement informe le Comité des résultats de ses consultations avec les administrations concernées. Lorsque le Comité conclut que la procédure décrite dans le présent article a été appliquée à l'égard de toutes les administrations concernées, il publie sa conclusion dans une section spéciale de sa circulaire hebdomadaire et, selon le cas, il met le Plan à jour.

4773 639EU **1719** § 6. Nonobstant les dispositions qui précèdent et si les circonstances le justifient, une administration peut, dans de cas exceptionnels, notifier au Comité, en vue de son inscription provisoire dans le Fichier de référence, une assignation de fréquence non couverte par un allotissement. Ele doit cependant commencer en même temps la procédure décrite au présent article.

4774 639EV **1720** § 7. Lorsque, dans le délai de douze mois qui suit la date d'insertion d'un allotissement dans le Plan, le Comité ne reçoit pas la notification d'une première assignation de fréquence relative à cet allotissement ou lorsque cette première assignation notifiée n'a pas été mise en service dans les délais prescrits dans le présent Règlement, avant de procéder à la suppression de l'allotissement dans de Plan, il consulte l'administration concernée sur l'opportunité d'une telle suppression et publie cette information dans le cadre de la mise à jour du Plan. Cependant, au cas où à la suite d'une demande reçue de l'administration concernée, le Comité conclut que des circonstances exceptionnelles motivent un délai supplémentaire, ce dernier ne doit en aucun cas dépasser six mois, sauf dans le cas d'une administration qui n'a pas de station côtière en service, administration pour laquelle ce délai peut être étendu à dix-huit mois.

4775 639EW **1721** § 8. Toute administration au nom de laquelle un allotissement figure dans le Plan et qui a besoin, en vue d'améliorer son service, de remplacer cet allotissement par un autre dans la même bande de fréquences, applique la procédure décrite dans le présent article. Dans le cas où cette administration aboutit dans l'application de cette procédure à un résultat positif, le Comité remplace, à sa demande, l'allotissement existant dans le Plan par l'allotissement en projet.

4776 639EX **1722** § 9. Le Comité tient à jour un Plan de référence, tel qu'il résulte de l'application de la présente procédure. Il établit sous une forme appropriée, aux fins de publication par le Secrétaire général, tout ou partie d'une revisée du Plan chaque fois que les circonstances le justifient, et en tout cas une fois par an.

1723 à 1747 *(Non attribués.)*

N15/10

ARTICLE 17

Procédure relative aux bandes en exclusivité au service de radiodiffusion entre 5950 kHz et 26 100 kHz

SECTION I

Présentation des horaires saisonniers de radiodiffusion à ondes décamétriques

(MOD) **4877** 640 **1748** § 1. A intervalles réguliers, les administrations présentent au Comité international d'enregistrement des fréquences les projets d'horaires saisonniers de leurs stations de radiodiffusion dans les bandes attribuées en exclusivité au service de radiodiffusion entre 5950 kHz et 26 100 kHz. Les horaires ainsi notifiés sont relatifs à chacune des saisons suivantes, déterminées d'après les conditions de propagation, et ils sont mis en application le premier dimanche de chacune des saisons intéressées, à 0100 UTC:

Horaire de mars — mars et avril;
Horaire de mai — mai, juin, juillet et août;
Horaire de septembre — septembre et octobre;
Horaire de novembre — novembre, décembre, janvier et février.

4878 641 **1749** § 2. Les premiers horaires sont entrés en viguer le 4 septembre 1960 pour être appliqués pendant la période septembre-octobre 1960. Les dates limites avant lesquelles il convient que les horaires parviennent au Comité sont déterminées par celui-ci de telle manière que l'avance laquelle les horaires devront lui parvenir soit progressivement réduite jusqu'au minimum que le Comité aura estimé convenable. Celles des assignations qui figurent dans un horaire déterminé et dont les caractéristiques sont susceptibles de ne pas subir de modification peuvent être présentées au Comité au plus tôt un à l'avance, et elles doivent être confirmées au plus tard à la data limite de réception par le Comité des horaires relatifs aux saisons intéressées. Le Comité prend les mesures nécessaires pour rappeler aux administrations en temps opportun les diverses étapes de la présente procédure.

4879 642 **1750** § 3. Plusiers administrations peuvent présenter au Comité des horaires coordonées dans lesquels est indiquée l'utilisation projetée des fréquences sur laquelle eles sont tombées d'accord.

4880 643 **1751** § 4. Les fréquences indiquées fans les horaires doivent être les fréquences qui seront effectivement utilisées pendant la saison considérée et il convient que leur nombre soit le nombre minimum nécessaire pour assurer une réception satisfaisante du programme intéressé dans chacune des zones auxquells il est destiné. Il convient que chaque administration, en établissant ses horaires de saison en saison, utilise dans toute la mesure du possible, dans une bande donnée, les fréquences qu'elle a utilisées dans ses horaires précédents.

4881 644 **1752** § 5. Les horaires sont présentés au Comité dans la forme prescrite à l'appendice 2 où sont spécifiées les caractéristiques à fournir pour chaque assignation.

4882 645 **1753** § 5. Les fréquences indiquées dans les horaires doivent satisfaire aux dispositions du numéro **1240** du présent Règlement et il convient que les fréquences choisies correspondent autant que pratiquement possible à des inscriptions figurant dans le Fichier de référence internacional des fréquences. Les administrations au nom desquelles aucune inscription qui convienne ne figure dans le Fichier de référence peuvent suggérer toute fréquence qu'elles julgent convenable ou, si elles le désirent, se contenter d'indiquer la bande de fréquences.

SECTION II

Examen préliminaire et établissement de l'Horaire provisoire de radiodiffusion à ondes décamétriques

4883 646 **1754** § 7. (1) Au reçu des horaires saisonniers, y compris, le cas échéant, la confirmation que certaines assignations comprises dans l'horaire de la saison précédente continueront à être utilisées, le Comité incorpore les données concernant l'utilisation des fréquences projetée par toutes les administrations dans un horaire combiné, et il procède à l'examen technique préliminaire requis pour l'établissement de l'«Horaire provisoire de radiodiffusion à ondes décamétriques» (ci-aprés dénommé *Horaire provisoire*) pour la saison considérée. Cet Horaire provisoire comprend:

1755 *a*) Toutes les assignations de fréquence, dans le cas où l'administration ne propose aucune variante;

1756 *b*) Les choix faits par le Comité, dans le cas où l'administration a proposé une ou plusieurs variantes;

1757 *c*) Les fréquences que propose le Comité pour tous les services pour lesquels aucune fréquence déterminée n'a été incluse dans l'horaire présenté: en formulant ces suggestions, le Comité tient dûment compte des dispositions du numéro **1759**, de la compatibilité de l'Horaire provisoire et des modifications qu'il pourrait y avoir intérêt à apporter à l'utilisation projetée des fréquences afin de satisfaire plus équitablement les demandes des administrations;

1758 *d*) Les cas d'incompatibilité apparente que le Comité peut déceler pendant le laps de temps dont il dispose, entre des assignations de fréquence.

4884 647 **1759** (2) A la demande des administrations, particulièrement des administrations des pays qui ont besoin d'assistance spéciale et au nom desquels aucune inscription qui convienne ne figure dans le Fichier de référence, le Comité accorde une attention particulière aux demandes de ces administrations dans l'établissement de l'Horaire provisoire.

4885 648 **1760** (3) Le Comité commence les travaux spécifiés aux numéros **1754** à **1758** suffisamment tôt pour que l'Horaire provisoire relatif à une saison donnée puisse être envoyé aux administrations deux mois au plus tard avant le début de cette saison.

SECTION III

Examen technique et révision de l'Horaire provisoire

(MOD) 4886 649 **1761** § 8. (1) Le Comité poursuit l'examen technique de l'Horaire provisoire en vue non seulement de déceler et de corriger, chaque fois qu'il le peut, d'autres cas d'incompatibilité entre assignations de fréquence qu'aura révélés l'examen technique, mais encore d'améliorer du point de vue technique l'Horaire provisoire en y apportant des modifications à l'égard desquelles il doit, à la suite de consultations obtenir l'assentiment des administrations concernées.

4887 650 **1762** (2) En présentant des recommandations aux administrations, le Comité tient compte des résultats du contrôle des émissions et de toute autre donnée dont il dispose. Cependant, lorsqu'il apparaît qu'une utilisation de fréquence n'est pas conforme aux assignation figurant dans l'horaire présenté par une administration, le Comité s'adresse à cette administration afin d'en obtenir confirmation.

4888 650 **1763** (3) Lorsque les administrations ont examiné l'Horaire provisoire ainsi que les recommandations éventuelles du Comité, il convient qu'elles notifient au Comité, aussitôt que possible, et de préférence avant le début de la saison en question, toutes les modifications à l'Horaire provisoire qu'elles ont l'intention de mettre en application.

4889 652 **1764** (4) Les modifications aux assignations des stations de radiodiffusion qui sont mises en application après le début de la saison considérée doivent être notifiées au Comité dès qu'elles sont prévues.

(MOD) 4890 653 **1765** (5) Le Comité applique aux modifications qui lui sont notifiées aux termes des numéros **1763** et **1764** la procédure spécifiée aux numéros **1759**, **1761** et **1762**. Toutes les modifications à l'Horaire provisoire qui résultent de l'application de la procédure spécifiée dans la présente section sont publiées dans les circulaires hebdomadaires de l'IFRB afin que les administrations soient en mesure de tenir à jour leurs exemplaires de l'Horaire provisoire.

SECTION IV

Publication de l'Horaire de radiodiffusion à ondes décamétriques

4891 654 **1766** § 9. Après la fin de chaque période, le Comité publie l'Horaire de radiodiffusion à ondes décamétriques, lequel reflète l'Horaire provisoire tel qu'il a été modifié à la suite de tous les changements notifiés au Comité depuis sa publication. Dans cet Horaire de radiodiffusion a ondes décamétriques, sont indiquées au moyen de symboles:

1767 *a*) Les assignations à l'égard desquelles les administrations ont fait connaître au Comité qu'elles ne les avaient pas jugées satisfaisantes en pratique;

1768 *b*) Les assignations non incluses dans l'Horaire provisoire et dont le Comité a tenu compte dans l'examen auquel il a procédé aux termes de la section III du présent article.

SECTION V

Liste annuelle des fréquences de radiodiffusion à ondes décamétriques

4892 655 **1769** § 10. Une Liste des fréquences de radiodiffusion à ondes décamétriques sera publiée à la fin de la première année pendant laquelle la procédure spécifiée dans le présent article aura été en vigueur. Cette liste comprendra toutes les assignations de fréquence qui ont figuré pendant l'année écoulée dans les Horaires de radiodiffusion à ondes décamétriques. Elle sera publiée à titre de supplément à la Liste international des fréquences et dans la même forme d'ensemble. Elle comportera également des symboles indiquant les assignations dont le Comité a eu connaissance qu'elles ne s'étaient pas révélées satisfaisantes en pratique, et d'autres symboles indiquant les saisons pendant lesquelles chaque assignation a été utilisée. Une liste récapitulative sera ensuite publiée chaque année.

SECTION VI

Dispositions diverses

4893 656 **1770** § 11. Il convient que les normes techniques utilisées par le Comité dans l'application des dispositions du présent article soient fondées, non seulement sur les bases indiquées au numéro **1454**, mais encore sur l'expérience du passé en matière d'établissement de plans de radiodiffusion et sur l'expérience acquise par le Comité dans l'application des dispositions du présent article.

4894 657 **1771** § 12. En vue de l'évolution ultérieure vers des plans techniquement compatibles pour les bandes de fréquences intéressées, le Comité prend toutes les mesures nécessaires pour procéder à des études techniques à long terme. Il utilise à cet effet tous les renseignements sur l'utilisation des fréquences mis à sa disposition au cours de l'application de la procédure décrite dans le present article. Le Comité tient les administrations informées, à intervalles réguliers, des progrès et des résultats de ces études.

(MOD) **4895** 658 **1772** § 13. En appliquant les dispositions de l'article 22 du présent Règlement, les administrations doivent faire preuve du maximum de bonne volonté et d'entraide dans la solution des problèmes de brouillages préjudiciables dans les bandes en question; elles doivent prendre dûment considération tous les facteurs pertinents, tant techniques que d'exploitation.

1773 à **1797** *(Non attribués.)*

NV

CHAPITRE V

Mesures contre les brouillages — Essais

N16

ARTICLE 18

NOC

Brouillages

4996 676 **1798** § 1. Les administrations doivent coopérer à la recherche et à l'élimination des brouillages préjudiciables en utilisant, le cas échéant, les moyens décrits à l'article 20 et en suivant le procédure décrite à l'article 22.

SECTION I

NOC

Brouillages généraux

(MOD) **4997** 693 **1799** § 2. Sont interdites à toutes les stations:

1800 *a*) Les transmissions inutiles;

1801 *b*) La transmission de signaux et de correspondance superflus;

SUP **4997.1** 693.1

1802 *c*) La transmission de signaux faux ou trompeurs;
1803 *d*) La transmision de signaux dont l'identité n'est pas donnée (sauf dans les cas prévus à l'article 25).

NOC **4998** 694 **1804** § 3. Toutes les stations sont tenues de limiter leur puissance rayonnée au minimum nécessaire pour assurer un service satisfaisant.

MOD **4999** 695 **1805** § 4. Afin d'éviter les brouillages:

1806 *a*) Les emplacements des stations d'émission et, lorsque la nature du service le permet, ceux des stations de réception doivent être choisis avec un soin particulier;

1807 *b*) Le rayonnement dans des directions inutiles, de même que la réception de rayonnements provenant de directions inutiles doivent être réduits le plus possible en tirant le meilleur parti des propriétés des antennes directives, chaque fois que la nature du service le permet;

1808 *c*) Le choix et l'utilisation des émetteurs et des récepteurs doivent satisfaire aux dispositions de l'article 5;

1809 *d*) Les conditions spécifiées au numéro **2612** doivent être remplies.

ADD **4999A** **1810** § 5. Il faut particulièrement veiller à éviter les brouillages sur les fréquences de détresse et de sécurité, ainsi que sur les fréquences qui ont un rapport avec la détresse et la sécurité, qui sont indiquées dans l'article 38.

MOD **5000** 696 **1811** § 6. Il convient que la classe d'émission à utiliser par une station entraîne le minimum de brouillage et assure l'utilisation efficace du spectre. En général, cela implique qu'en choisissant à cet effet la classe d'émission, tous les efforts doivent être faits pour réduire le plus possible la largeur de bande occupée, compte tenu des considérations techniques et d'exploitation concernant le service à assurer.

ADD **5000A** **1812** § 7. Il convient que les émissions hors bande des stations d'émission ne causent pas de brouillage préjudiciable aux services qui fonctionnent dans des bandes adjacentes conformément aux dispositions du présent Règlement et qui utilisent des récepteurs conformes aux numéros **301, 309, 310, 311** et aux Avis pertinents du CCIR.

(MOD) **5001** 697 **1813** § 8. Si, tout en satisfaisant aux dispositions de l'article 5, une station cause des brouillages préjudiciables du fait de ses rayonnements nen essentiels, des mesures particulières doivent être prises afin d'éliminer ces brouillages.

SECTION II

(MOD)

Brouillages causés par des appareils et installations électriques de toute espèce à l'exception des appareils destinés aux utilisations industrielles, scientifiques et médicales

MOD **5002** 698 **1814** § 9. Les administrations doivent prendre toutes les mesures pratiques nécessaires pour que le fonctionnement des appareils et installations électriques de toute espéce, y compris les réseaux de distribution d'énergie ou de télécomunication, mais à l'exception des appareils destinés aux utilisations industrielles, scientifiques et médicales, ne puisse pas causer de brouillage préjudiciable à un service de radiocommunication, et en particulier aux services de radionavigation et autres services de sécurité, exploité conformément au présent Règlement (1).

SECTION III

ADD

Brouillages causés par les appareils destinés aux utilisations industrielles, scientifiques et médicales

ADD **5002A** **1815** § 10. Les administrations doivent prendre toutes les mesures pratiques nécessaires pour que les rayonnements provenant des appareils destinés aux utilisations industrielles, cientifiques et médicales soient réduits au minimum et que, en dehors des bandes utilisables par ces appareils, le niveau des rayonnements ne puisse pas causer de brouillage préjudiciable à un service de radiocommunication, et en particulier aux services de radionavigation et autres services de sécurité, exploité conformément au présent Règlement (1).

ADD **5002.1** **1814.1**
ADD **5002A.1** **1815.1**

(1) A cet égard, les administrations doivent se fonder sur les Avis pertinents du CCIR les plus récents.

SECTION IV

(MOD)

Cas particuliers de brouillage

MOD **5003** 699 **1816** § 11. Les administrations qui autorisent l'emploi de fréquences inférieures à 9 kHz doivent d'assurer qu'il n'en résulte pas de brouillage préjudiciable aux services auxquels sont atribuées les bandes de fréquences supérieures à 9 kHz.

1817 à 1841 *(Non attribués.)*

N17

ARTICLE 19

(MOD)

Essais

NOC **5029** 700 **1842** § 1. (1) Avant d'autoriser des essais et des expériences dans une station, chaque administration prescrit, afin d'éviter des brouillages préjudiciables, que toutes les précautions possibles soient prises telles que: choix de la fréquence et de l'horaire, réduction et, dans tous les cas où c'est possible, suppression du rayonnement. Tout brouillage préjudiciable résultant d'essais et d'expériences doit être éliminé dans les moindres délais.

MOD **5030** 701 **1843** (2) En ce qui concerne l'identification des émissions faites pendant les essais, les réglages ou les expériences, voir l'article 25.

ADD **5030A** **1844** (3) Dans les service de radionavigation aéronautique, il n'est pas souhaitable, pour des raisons de sécurité, de transmettre l'identification normale lorsqu'on effectue des émissions en vue de vérifications ou de réglagles du matériel déjà en service. Les émissions sans identification devraient toutefois être limitées à un minimum.

(MOD) **5031** 702 **1845** (4) Les signaux d'essai et de réglage doivent être choisis de manière à ne causer aucune confusion avec un signal, une abréviation, etc., d'une signification particulière définie dans le présent Règlement ou dans le Code international de signaux.

NOC **5032** 703 **1846** (5) En ce qui concerne les essais dans les stations su service mobile, voir les **3766, 3767** et **5058** à **5060.**

1847 à 1871 *(Non attribués.)*

N18

ARTICLE 20

NOC

Contrôle international des émissions

MOD **5058** 678 **1872** § 1. Pour faciliter dans la mesure pratiquement possible l'application des dispositions du présent Règlement, notamment pour tendre à une utilisation efficace et économique du spectre des fréquences radioélectriques et contribuer à l'élimination rapide des brouillages préjudiciables, ils administrations conviennent de continuer à étendre les moyens de contrôle des émissions et de coopérer, dans la mesure pratiquement possible au perfectionnement progressif d'un système de contrôle international des émissions.

MOD **5059** 679 **1873** § 2. Le système de contrôle international des émissions ne comprend que les stations de contrôle des émissions qui ont été désignées comme telles par les administrations dans les renseignements envoyés au Secrétaire général conformément au numéro **1879**. Ces stations peuvent être exploitées par une administration ou, en vertu d'une autorisation accordée par l'administration concernée, par une entreprise publique ou privée, par un service de contrôle établi en commun par plusieurs pays, ou par une organisation internationale.

(MOD) **5060** 680 **1874** §3. Les administrations effectuent, dans la mesure où elles l'estiment possible, les contrôles de caractère général ou particulier qui peuvent leur être demandés par le Comité international d'enregistrement des fréquences ou par d'autres administrations. En demandant des observations de contrôle, il convient que le Comité et les administrations tiennent compte des installations de contrôle mentionnées dans la Nomenclature des stations de contrôle international des émissions (Liste III voir l'article 26), et indiquent clairement, d'une part à quelle fin les observations sont demandées, d'autre part quels sont les paramètres (y compris les programmes appropriés) du contrôle désiré. Les résultats des contrôles de cette nature transmis à d'autres administrations peuvent également être communiqués au Comité, si une telle comunication paraît indiquée.

NOC **5062** 681 **1875** § 4. Chaque administration, chaque service de contrôle établi en commun par plusieurs pays et chaque organisation internationale qui participe au système de contrôle international des émissions désigne un bureau centralisateur auquel doivent être adressées

toutes les demandes de contrôle et par l'intermédiaire duquel les résultats de contrôle sont transmis au Comité ou aux bureaux centralisateus des autres administrations.

NOC **5062** 682 **1876** § 5. Les administrations conviennent que les demandes de contrôle émanant d'organisations internationales ne participant pas au système de contrôle international des émissions doivent être coordonnées par le Comité et transmises par lui aux administrations, s'il y a lieu.

NOC **5063** 683 **1877** § 6. Les dispositions du présent article n'affectent pas les accords de contrôle privés, conclus à des fins déterminées par des administrations, des organisations internationales ou des entreprises publiques ou privées.

(MOD) **5064** 684 **1878** § 7. Les normes techniques dont le CCIR recommande l'observation par les stations de contrôle sont reconnues par le Comité comme normes pratiques optimales pour les stations de contrôle international des émissions. Toutefois, pour répondre au besoin de certaines données, les stations qui observent des normes techniques moins élévées peuvent, si leur administration le désire, participer au système de contrôle international des émissions.

MOD **5065** 685 **1879** § 8. Après avoir déterminé si les normes techniques observées par les stations de contrôle sont suffisantes, les administrations notifient au Secrétaire général, les renseignements utiles concernant les bureaux centralisateurs et les stations qu'elles souhaitent faire inclure dans le Liste VIII, en identifiant clairement les stations susceptibles de participer au système de contrôle international des émissions (voir l'article 26 et l'appendice **9**).

NOC **5066** 686 **1880** § 9. (1) Les résultats de mesure transmis au Comité ou à d'autres administrations doivent comporter l'estimation de la précision obtenu au moment de la mesure.

NOC **5067** 687 **1881** (2) Lorsque le Comité estime douteux ou insuffisants pour ses besoins les résultats fournis par une station de contrôle, il en avise l'administration ou l'organisation internationale intéressée en donnant les détails utiles.

NOC **5068** 688 **1882** § 10. Lorsque des mesures urgentes sont requises, les communications entre le Comité et les bureaux centralisateurs, ainsi qu'entre les bureaux centralisateurs eux-mêmes, doivent être acheminées par les moyens de transmission le plus rapides.

MOD **5069** 689 **1883** § 11. Les administrations font tout leur possible pour que les observations de contrôle (voir l'appendice **21**) soient communiquées au Comité dans les moindres délais.

NOC **5070** 690 **1884** § 12. Les bureaux centralisateurs peuvent demander l'aide d'autres bureaux centralisateurs pour appliquer les dispositions du présent article et celles de l'article 22.

MOD **5071** 691 **1885** § 13. Le Comité tient un relevé des résultats qui lui sont transmis par les stations de contrôle qui participent au système de contrôle international des émissions et établit périodiquement, aux fins de publication par le Secrétaire général, des résumés des résultats de contrôle utiles reçus par lui, auxquels il joint une liste des stations qui ont fourni ces résultats.

ADD **5071A** **1886** § 14. Lorsqu'une administration, en fournissant des observations établies par une de ses stations de contrôle participant au système de contrôle international des émissions, déclare au Comité qu'une émission indetifiée sans ambiguïté n'est pas conforme aux dispositions du présent Règlement, le Comité attire l'attention de l'administration concernée sur ces observations.

SUP **5072** 692 (inclus dans **5071**)

1887 à **1914** *(Non attribués.)*

N19/16

ARTICLE 21

NOC

Rapports sur les infractions

(MOD) **5098** 719 **1915** § 1. Les infractions à la Convention ou au Règlement des radiocommunications sont signalées à leurs administrations respectives par les organismes de contrôle, les stations ou les inspecteurs qui les constatent. A cette fin, il est fait emploi d'états conformes au modèle reproduit à l'appendice **22**.

NOC **5099** 720 **1916** § 2. Dans le cas où une station commet des infractions importantes, les représentations y relatives doivent être faites à l'administration du pays dont dépende cette station, par les administrations qui les constatent.

(MOD) **5100** 721 **1917** § 3. Si une administration a connaissance d'une infraction à la Convention ou au Règlement des radiocommunications commise par une station relevant de son autorisé, elle constate les faits, fixe les responsabilités et prend les mesures nécessaires.

1918 à 1942 *(Non attribués.)*

N20/15

ARTICLE 22

NOC

Procédure contre les brouillages préjudiciables

(MOD) **5126** 704 **1943** § 1. Pour résoudre les problèmes de brouillages préjudiciables, el est essentiel que les Membres fassent preuve du maximum de bonne volonté et d'entraide dans l'application des dispositions de l'article 35 de la Convention et de celles du présent article.

NOC **5127** 705 **1944** § 2. pour résoudre ces problèmes, el est dûment tenu compte de tous les facteurs en cause, y compris les facteurs techniques et d'exploitation appropriés, par exemple: ajustement des fréquences, caractéristiques des antennes d'emission et de réception, partage dans le temps, changement de voie dans les transmissions muitivoies.

(MOD) **5128** 706 **1945** § 3. Lorsqu'un brouillage préjudiciable est signalé par une station de réception, elle communique à la station d'emission est brouillée tous les renseignements pouvant contribuer à identifier l'origine et les caractéristiques du brouillage.

MOD **5129** 707 **1946** § 4. Lorsque cela est possible en pratique, et sous réserve d'accord entre les administrations intéressées, les problèmes de brouillages préjudiciables peuvent être traités directement par leurs stations de contrôle spécialement désignées ou à l'échelon de leurs services d'exploitation.

ADD **5129A** **1947** § 5. Dans le présent article, le terme «administration» peut comprendre le bureau centralisateur désigné par l'administration conformément au numéro **1875**.

MOD **5130** 708 **1948** § 6. Si un cas de brouillage préjudiciable justifie semblable démarche, l'administration dont dépend la station de réception qui a constaté le brouillage en informe celle dont dépend la station d'émission dont l'émisson est brouillée, en lui communiquant le maximum de renseignements possible.

MOD **5131** 709 **1949** § 7. Si des Observations et des mesures complémentaires sont nécessaires peut déterminer l'origine et les caractéristiques du brouillage préjudiciable, l'administration dont dépend la station d'émission dont l'émission est brouillée peut demander à cet effet la collaboration d'autres administrations, et en particulier de celle dont dépend la station de réception qui a constaté le brouillage, ou d'autres organisations.

MOD **5132** 710 **1950** § 8. Après avoir déterminé l'origine et les caractéristiques du brouillage préjudiciable, l'administration dont dépend la station d'émission dont l'émission est brouillée communique à l'administration dont dépend la station brouilleuse tous les renseignements utiles pour que cette administration puisse prendre les mesures nécessaires en vue d'éliminer le brouillage.

MOD **5133** 711 **1951** § 9. Lorsqu'un brouillage préjudiciable est causé à un service de sécurite, l'administration dont dépend la station de réception qui a constaté le brouillage peut également intervenir directement auprès de l'administration dont dépend la station brouilleuse. Elle peut aussi le faire dans l'autres cas, sous réserve de l'approbation préalable de l'administration dont dépend la station d'émission dont l'émission est brouillée.

ADD **5133A** **1952** § 10. Une administration qui reçoit un avis aux termes duquel l'une de ses stations cause des brouillages préjudiciables à un service de sécurité doit étudier promptement l'affaire et s'il y a lieu prendre les mesures nécessaires qui s'imposent.

MOD **5134** 711A **1953** Lorsqu'un brouillage préjudiciable est causé au service assuré par une station terrienne, l'administration dont dépend la station de réception qui a constaté ce brouillage peut également intervenir directement auprès de l'administration dont dépend la station brouilleuse.

ADD **5134A** **1954** § 12. Une administration dont dépend une station qui est estimée avoir causé un brouillage préjudiciable doit, dès que possible, après en avoir été informée, accuser réception de cette information par télégramme, sans pour autant engager sa responsabilité.

MOD **5135** 711B **1955** § 13. Si les émissions de station spatiales causent des brouillages préjudiciables, les administrations dont dépendent ces stations brouilleuses doivent, à la demande de l'administration dont dépend la station brouillée, fournir les données des éphémérides nécessaires pour déterminer la position de ces stations spatiales quand cette position n'est pas connue par ailleurs.

MOD **5136** 712 **1956** § 14. Pour traiter des cas de brouillage préjudiciable qui exigent des décisions d'urgence, les administrations communiquent entre elles par le voies les plus rapides; sous réserve de l'autorisation préalable des administrations intéressées, les stations du système de contrôle des émissions spécialement désignées peuvent communiquer directement entre elles.

MOD **5136A** **1957** § 15. Reconnaissant aux émissions des fréquences de détresse et de sécurité (voir l'article 38) la nécessité d'une protection internationale absolue et que, par conséquent, l'élimination de tout brouillage préjudiciable affectant ces émissions est impérative, les administrations conviennent de traiter en priorité tout brouillage préjudiciable de cette nature porté à leur connaissance.

MOD **5137** **1958** § 16. Les renseignements détaillées relatifs au brouillage préjudiciable sont, chaque
713 fois que c'est possible, fournis sous la forme indiquée à l'appendice **23.**

(MOD) **5138** **1959** § 17. Si le brouillage préjudiciable persiste malgré la mise en oeuvre de la procédure
714 prévue ci-dessus, l'administration dont dépend la station d'émission dont l'émission est brouillée peut adresser à celle dont dépend la station d'émission brouilleuse un rapport sur l'irrégularité ou l'infraction conformément aux dispositions de l'article 21.

MOD **5139** **1960** § 18. Lorsqu'il existe une organisation international spécialisée pour un service
715 déterminé, les rapports concernant des irrégularités ou des infractions relatives à des brouillages préjudiciables causés ou subis par les stations de ce service peuvent être addressés á cette organisation en même temps qu'à l'administration intéressée.

NOC **5140** **1961** § 19. En cas de nécessité, en particulier si les interventions précédents n'ont pas
716 produit de résultat satisfaisant, l'administration intéressée communique, pour information, les détails de l'affaire au Comité internacional d'enregistrement des fréquences.

(MOD) **5141** **1962** (2) En pareil cas, l'administration intéressée peut aussi demander l'intervention du
717 Comité, conformément aux dispositions des sections VII et VIII de l'article 12 et des sections VII et VIII de l'article 13, mais elle doit alors porter à la connaissance du Comité tous les faits, y compris tous les détails techniques, les renseignements d'exploitation et des copies de la correspondance.

SUP **5142**
718

ADD **5143** **1963** § 20. (1) Lorsqu'une administration éprouve des difficultés à determiner l'origine d'une brouillage préjudiciable et désire d'urgence l'assistance du Comité, dans les cas où l'assignation affectée a été choisie par le Comité en réponse à une demande présentée aux termes du numéro **1218,** elle signale à bref délai le cas au Comité.

ADD **5144** **1964** (2) Au reçu de cette information, le Comtié sollicite immédiatement la coopération des administrations inéressées ou des stations spécialement désignées du système internacional de contrôle des émissions susceptibles de l'aider à déterminer l'origine du brouillage préjudiciable.

ADD **5145** **1965** (3) Le Comité réunit tous les rapports reçus en réponse aux demandes présentées aux termes du numéro **1964** et, utilisant toute autre renseignement à sa disposition, s'efforce rapidement de déterminer l'origine du brouillage préjudiciable.

ADD **5146** **1966** (4) Les Comité communique ensuite, par télégramme à l'administration avant signalé le cas de brouillage préjudiciable ses conclusions et recommandations. Celles-ci sont également communiquées par télégramme à l'administration supposée responsable de l'origine du brouillage préjudiciable, lui demandant en même temps de prendre rapidement des mesures appropriées.

1967 à 1991 *(Non attribués.)*

NVI

CHAPITRE VI

NOC

Dispositions administratives concernant les stations

N21/17

ARTICLE 23

NOC

Secret

(MOD) **5193** **1992** Lors de l'application des dispositions appropriées de la Convention, les administrations
722 s'engagent à prendre elles-mêmes les mesures nécessaires pour faire interdire et réprimer:

NOC **5194** **1993** *a*) L'interception, sans autorisation, de radiocommunications qui ne sont pas
723 destinées à l'usage général du public;

NOC **5195** **1994** *b*) La divulgation du contenu ou simplement l'existence, la publication ou
724 tout usage quelconque, sans autorisation, des renseignements de toute nature obtenus en interceptant les radiocommunications mentionées au número **1993.**

1995 à 2019 *(Non attribués.)*

N22/18

ARTICLE 24

NOC

Licences

MOD **5221** **2020** § 1. (1) Aucune station d'émission ne peut être établie ou exploitée par un particulier, ou par une entreprise quelconque, sans une licence délivrée sous une forme appropriée et en conformité avec les dispositions du présent Règlement par le gouvernement du pays dont relève la station en question (voir cependent les numéros **2021, 2027** et **2030.**
725

(MOD) **5222** **2021** (2) Cependent, le gouvernement d'un pays peut conclure, avec le ou les gouvernements d'un ou de plusieurs pays limitrophes, un accord particulier concernant une ou plusieurs stations de son service de radiodifussion ou de ses services mobiles terrestres, fonctionnant sur les fréquences supérieures à 41 MHz, situées sur le territoire d'un pays limitrophe et destinées à améliorer sa couverture nationale. Cet accord, qui doit être compatible avec les dispositions du présent Règlement ainsi qu'avec celles des accords régionaux dont le pays intéressés sont signataires, peut prévoir des exceptions aux dispositions du numéro **2020** et doit être communiqué au Secrétaire général afin d'être porté à la connaissance des administrations à titre d'information.
726

NOC **5223** **2022** (3) Les stations mobiles qui sont immatriculées dans un territoire ou groupe de territoires n'ayant pas l'entière responsabilité de ses relations internationales, peuvent être considérées, en ce qui concerne la délivrance des licences, comme dépendant de l'autorité de ce territoire ou groupe de territoires.
727

MOD **5224** **2023** § 2. Le titulaire d'une licence est tenu de garder le secret des télécommunications, comme il est prévu dans les dispositions pertinentes de la Convention. De plus, la licence doit mentionner expressément ou par référence que, si la station comporte un récepteur, il est interdit de capter les correspondances de radiocommunications autres que celles qu'elle est autorisée à recevoir et que, dans le cas où de telles correspondances sont involontairement reçues, elles ne doivent être ni reproduites, ni communiquées à des tiers, ni utilisées pour une fin quelconque, et leur existence même ne doit pas être révélée.
728

MOD **5225** **2024** § 3. Afin de faciliter la vérification des licences délivrées á des stations mobiles, il est ajouté, s'il y a lieu, au texte rédigé dans la langue nationale, une traduction dans l'une des langues de travail de l'Union.
729

MOD **5226** **2025** § 4. (1) Le gouvernement qui délivre une licence à une station mobile y mentionne de façon précise l'état signalétique de la station, y compris son nom, son indicatif d'appel et, s'il y a lieu, la catégorie dans laquelle est classée du point de vue de la correspondance publique, ainsi que les caractéristiques générales de l'installation.
730

MOD **5227** **2026** (2) Pour les stations mobiles terrestres, y compris les stations ne comportant qu'un ou plusieurs récepteurs, une disposition sera insérée dans la licence mentionnant expressément ou par référence que l'exploitation de ces stations sur les territoires de pays autres que celui dans lequel la licence est délivrée est interdite, sauf accord particulier entre les gouvernements des pays intéressés.
731

NOC **5228** **2027** § 5. (1) En cas de nouvelle immatriculation d'un navire ou d'un aéronef, dans des circonstances telles que la délivrance d'une licence par le pays dans lequel il sera immatriculé serait vraisembleblement de nature à causer un retard, l'administration du pays á partir duquel la station mobile désire entreprendre sa traversée ou son vol peut, à la demande de la compagnie exploitante, délivrer une attestation indiquant que la station satisfait aux stipulations du présent Règlement. Ce certificat, établi sous une forme déterminée par l'administration qui le délivre, doit comporter l'état signalétique mentionné au numéro **2025** et n'est valable que pour la traversée ou le vol à destination du pays où le navire ou l'aéronef sera immatriculé; en tout état de cause, sa validité expire au bout d'une période de trois mois.
732

ADD **5228A** (Devenu **5230A**)

NOC **5229** **2028** (2) L'administration qui délivre l'attestation doit aviser des mesures qu'elle a prises l'administration à laquelle il appartient de délivrer la licence.
733

MOD **5230** **2029** (3) Le titulaire de l'attestation doit satisfaire aux dispositions du présent Règlement applicables au titulaire d'une licence.
734

ADD **5230A** **2030** § 6. En cas le location, d'affrètement ou d'échange d'aéronef, l'administration dont dépend l'exploitant d'aeronef qui reçoit l'appareil lors d'opérations de cette nature peut, en accord avec l'administration du pays dans lequel l'aéronef est enregistré, délivrer une licence conforme à celle qui est définie au numéro **2025** et qui se substitue temporairement à la licence initiale.

2031 à **2054** *(Non attribués.)*

N23

ARTICLE 25

Identification des stations

SECTION I

Dispositions générales

ADD 5330 2055 § 1. Toutes les émissions doivent pouvoir être identifiées par des signaux d'identification ou par d'autres moyens (1).

MOD 5331 735 2056 § 2. (1) Il est interdit à toute station d'émettre en utilisant un signal d'identification faux ou trompeur.

ADD 5331A 2057 (2) Lorsque cela est possible pratiquement et dans les services appropriés, les signaux d'identification doivent être émis automatiquement, conformément aux Avis pertinents du CCIR.

ADD 5331B 2058 (3) Toutes les émissions des services suivants devraient, à l'exception des cas prévus aux numéros **2066** à **2068**, compreendre des signaux d'identification:

2059 *a*) Service d'amateur;

2060 *b*) Service de radiodiffusion;

2061 *c*) Service fixe dans les bandes inférieures á 28 000 kHz;

2062 *d*) Service mobile;

2063 *e*) Service des fréquences étalon et des signaux horaires.

ADD 5331C 2064 (4) Toutes les émissions opérationnelles par radiobalises doivent comprendre des signaux d'identification. Toutefois, il est admis que pour les radiobalises et pour certains autres services de radionavigation qui émettent normalement des signaux d'identification, pendant les périodes de fonctionnement défectueux ou non opérationnel, la suppression délibérée des signaux d'identification est un moyen convenu pour avertir les utilisateurs que les émissions ne peuvent être utilisées en toute sécurité aux fins de navigation.

ADD 5331D 2065 (5) Les signaux d'identification émis doivent être conformes aux dispositions du présent article.

ADD 5332 736 2066 (6) Cependant, l'obligation faite à certaines émissions de comprendre des signaux d'identification n'est imposée:

2067 *a*) Ni aux stations d'engin sauvetage lorsqu'elles émettent automatiquement le signal de détresse;

2068 *b*) Ni aux radiobalises de localisation des sinistres.

MOD 5333 737 2069 § 3. Dans le cas des émissions qui comprennent des signaux d'identification, une station est identifiée par un indicatif d'appel, par une identité du service mobile maritime conformément à l'appendice **43** (2) ou par tout outre procédé admis d'identification qui peut être une ou plusieurs des indications suivants: nom de la station, emplacement de la station, nom de l'exploitant, marques officielles d'immatriculation, numéro d'identification du vol, numéro ou signal d'appel sélectif, numéro ou signal d'identification pour l'appel sélectif, signal caractéristique, caractéristiques de l'émission, ou toute autre caractéristique distinctive susceptible d'être aisément identifiée internationalement.

SUP 5334

MOD 5335 738 2070 § 4. Dans le cas des émissions qui comprennent des signaux d'identification, pour pouvoir être aisément identifiée, chaque station doit transmettre son signal d'identification aussi souvent qu'il est possible en pratique, pendant ses émissions, y compris ses émissions d'essai, de réglage ou expérimentales. Cependent, pendant ces émissions, les signaux d'identification doivent être transmis au moins une fois par heure, de préference au cours de la période qui s'étend de cinq minutes avant á cinq minutes après chaque heure ronde (UTC), à moins qu'il n'en résulte une interruption inacceptable du trafic, auquel cas l'identification sera donnée au début et à la fin des émissions.

ADD 5330.1 2055.1 (1) Dans l'état actuel de la technique, il est reconnu néanmoins que la transmission de signaux d'identification n'est pas toujours possible pour certains systèmes radioélectriques (radiorepérage, faisceaux hertziens et systèmes spatiaux par exemple).

SUP 5331.1 735.1

ADD 5333.1 2069.1 (2) En ce qui concerne l'application de l'appendice **43**, voir la Résolution **313**.

ADD 5335A 2071 § 5. Les signaux d'identification doivent, lorsque c'est possible, avoir l'une des formes suivants:

2072 *a*) Signaux vocaux, utilisant la simple modulation d'amplitude ou de fréquence;

2073 *b*) Singaux du code Morse international transmis à vitesse manuelle;

2074 *c*) Signaux émis selon un code télégraphique compatible avec l'équipement d'impression conventionnel;

2075 *d*) Toute autre forme recommandée par le CCIR.

MOD 5336 739 2076 § 6. Dans le mesure du possible, le signal d'identification devrait être transmis conformément aux Avis pertinents du CCIR.

ADD 5336A 2077 § 7. Les administrations doivent veiller à ce que, lorsque c'est possible, les méthodes d'identification par superposition soient employées conformément aux Avis du CCIR.

SUP 5337

NOC 5338 2078 § 8. Lorsque plusieurs stations travaillent simultanément sur une même liaison, soit comme stations de relais, soit en parallèle sur différents fréquences, chacune d'elles doit, dans la mesure où c'est possible en pratique, émettre son propre signal d'identification ou bien ceux de toutes les stations intéressées.

ADD 5338A 2079 § 9. Les administrations doivent veiller à ce que, sauf dans les cas indiqués aux numéros **2066** à **2068,** toutes les émissions qui ne comprennent pas de signaux d'identification puissent être identifiées par d'autres moyens, quand elle peuvent causer des brouillages préjudiciables aux services d'une autre administration exploités selon les dispositions du présent Règlement.

ADD 5338B 2080 § 10. Les administrations doivent, compte tenu des dispositions du présent Règlement relatives à la notification d'assignations de fréquence pour inscription dans le Fichier de référence, adopter leurs propres mesures pour se conformer aux dispositions du numéro **2079**.

(MOD) 5339 742 2081 § 11. Chaque Membre se réserve le droit d'établir ses propes procédés d'identification pour les stations qu'il utilise pour les besoins de sa défense nationale. Néanmoins, il doit employer à cet effet, dans la mesure du possible, des indicatifs d'appel reconnaissables comme tels et contenant les caractères distinctifs de sa nationalité.

SECTION II

NOC

Atribution des séries internationales et assignation des indicatifs d'appel

(MOD) 5340 743 2082 § 12. (1) Toutes les stations ouvertes à la correspondance publique internationale, toutes les stations d'amateur et toutes les autres stations susceptibles de causer des brouillages préjudiciables au-delà des frontières des pays dont elles dépendent doivent être dotées des indicatifs d'appel de la série internationale attribuée à leur pays dans le tableau d'attribution des séries internationales d'indicatifs d'appel qui figure dans l'appendice **42**.

ADD 5340A 2083 (2) A toutes les stations de navire et à toutes les stations terriennes de navire auxquelles s'appliquent les dispositions du chapitre XI et à toutes les stations côtières ou stations terriennes côtières capables de communiquer avec ces stations de navire sont assignées des identités du service mobile maritime conformes à l'appendice 43 (1).

MOD 5341 744 2084 (3) Il n'est pas obligatoire d'assigner des indicatifs d'appel de la série internationale, aux stations identifiées par des identités du service mobile matitime ou qui peuvent être facilement identifiées par d'autres procédés (voir le numéro **2069**) et dont les signaux d'identification ou les caractéristiques d'émission sont publiés dans des documents internationaux.

MOD 5342 748 2085 § 13. Dans le cas où les disponibilités de l'appendice **42** seraient épuisées, de nouvelles séries d'inficatifs d'appel pourront être attribuées selon les principes énoncés dans la Résolution **13** relative à la formation des indicatifs d'appel et à l'attribution de nouvelles séries internationales.

NOC 5343 749 2086 § 14. Dans l'intervalle entre deux conférences administratives des radiocommunications, le Secrétaire général est autorisé à traiter, à titre provisoire et sous réserve de confirmation par la prochaine conférence, les questions relatives aux changements dans l'attribution des séries d'indicatifs d'appel (voir aussi le numéro **2085**).

ADD 5340A.1 2083.1 (1) En ce qui concerne l'application de l'appendice **43**, voir la Résolution **313**.

ADD 5343A 2087 § 15. Pour le système d'identification utilisé dans le service mobile maritime le Secrétaire général est chargé d'attribuer les séries de chiffres d'identification de nationalité aux pays qui ne figurent pas dans le tableau des chiffres d'identification de nacionalité [voir l'appendice **43** (1)].

MOD 5344 749A 2088 § 16. Le Secrétaire général est chargé, à la demande des administrations intéressées, de fournir des séries de numéros ou de signaux d'appel sélectif (voir les numéros **2143** à **2146.**

(MOD) 5345 750 2089 § 17. (1) Chaque pays choisit les indicatifs d'appel et, si le système d'appel sélectif utilisé est conforme aux dispositions de l'appendice **39,** les numéros d'appel sélectif de ses stations de navire et les numéros d'identification de ses stations côtières dans les séries internationales qui lui sont attribuées ou fournies: conformément à l'article 26, il notifie ces renseignements au Secrétaire général en les groupant avec les renseignements à faire figurer dans des listes I, II, IV, V, VI et VIII-A. Cette dernière disposition ne concerne pas les indicatifs d'appel assignés aux stations d'amateur et aux stations expérimentales.

ADD 5345A 2090 (2) Chaque pays assigne à ses stations des identités du service mobile maritime choisies dans les séries de chiffres d'identification de nationalité qui lui sont attribuées et notifie ces informations au Secrétaire général pour qu'elles figurent dans les listes pertinentes, comme prévu dans l'article 26.

MOD 5346 751 2091 (3) Le Secrétaire général veille à ce qu'un même indicatif d'appel, une même identité du service mobile maritime, un même numéro d'appel sélectif ou um même numéro d'identification ne soit pas assigné plus d'une fois et à ce que les indicatifs d'appel qui pourraient être confondus avec les signaux de détresse ou avec d'autres signaux de même nature ne soient pas assignés.

NOC 5347 752 2092 § 18. (1) Lorsqu'une station fixe emploie, dans le service international, plus d'une fréquence, chaque fréquence peut être identifiée par un indicatif d'appel distinct utilisé uniquement pour cette fréquence.

NOC 5348 753 2093 (2) Lorsqu'une station de radiodiffusion emploie, dans le service international, plus d'une fréquence, chaque fréquence peut être identifiée, soit par un indicatif d'appel distinct utilisé uniquement pour cette fréquence, soit par d'autres procédés appropriés, tels que l'énoncé du lieu géographique et de la fréquence employée.

NOC 5349 754 2094 (3) Lorqu'une station terrestre emploie, plus d'une fréquence, chaque fréquence peut, à titre facultatif, être identifiée par un indicatif d'appel distinct.

NOC 5350 755 2095 (4) Il convient que les stations côtières utilisent, lorsque cela est possible en pratique, un indicatif d'appel commun pour chaque série de fréquences (2).

SECTION III

NOC

Formation des indicatifs d'appel

NOC 5351 756 2096 § 19. (1) Les vingt-six lettres de l'alphabet ainsi que les chiffres dans les cas spécifiés ci-après peuvent être employés pour former les indicatifs d'appel. Les lettres accentuées sont exclues.

NOC 5352 757 2097 (2) Toutefois, les combinaisons indiquées ci-après ne doivent pas être employées comme indicatifs d'appel:

NOC 5353 758 2098 *a*) Les combinaisons qui pourraient être confondues avec des signaux de détresse ou avec d'autres signaux de même nature;

NOC 5354 759 2099 *b*) Les combinaisons réservées pour les abréviations à employer dans les services de radiocommunication (voir les appendices **13** et **14**);

(MOD) 5355 761 2100 *c*) Pour les stations d'amateur, les combinaisons commençant par un chiffre et dont le deuxième caractère est la lettre O ou la lettre I.

MOD 5356 762 2101 § 20. Les indicatifs d'appel des séries internationales sont formés comme il est indiqué aux numéros **2102** à **2122**. Les deux premiers caractères peuvent être deux lettres ou une lettre suivie d'un chiffre ou un chiffre suivi d'une lettre. Les deux premiers caractères ou, dans certains cas le premier caractère d'un indicatif d'appel, constituent l'indication de nationalité (3).

ADD 5343A.1 2087.1
NOC 5350.1 2095.1 755.1

(1) En ce qui concerne l'application de l'appendice **43**, voir la Résolution **313.**

(2) Par «série de fréquences», on entend un groupe de fréquences dont chacune appartient à l'une des différentes bandes comprises entre 4000 kHz et 27 500 kHz et attribuées en exclusivité au service mobile maritime.

ADD 5356.1 2101.1

(3) Pour les séries d'indicatifs d'appel commençant par B, F, G, I, K, M, N, R et W, seul le premier caractère est requis pour l'identification de nationalité. Dans le cas demi-séries, les trois premiers caractères sont requis pour l'indication de nationalité.

NOC 5357 **2102** *Stations terrestres et stations fixes:*
SUP 5358
763

MOD 5359 **2103** § 21. (1):
764

Deux caractères et une lettre; *ou*
Deux caractères et une lettre suivis de trois chiffres au plus (celui qui suit immédiatement les lettres n'étant ni 0 ni 1).

2104 (2) Toutefois il est recommandé que, dans toute la mesure du possible, les indicatifs d'appel des stations fixes soient composés de:

Deux caractères et une lettre suivis de deux chiffres (celui qui suit immédiatement les lettres n'etant ni 0 ni 1).

NOC 5360 **2105** *Stations de navire:*

MOD 5361 **2106** § 22. (1):
765

Deux caractères et deux lettres; *ou*
Deux caractères, deux lettres et un chiffre (autre que 0 ou 1).

MOD 5362 **2107** (2) Toutefois, les stations de navire faisant seulement usage de la radiotéléphonie
766 peuvent aussi employer un indicatif d'appel composé de:

Deux caractères (à condition que le second soit une lettre) suivis de quatre chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1); *ou*
Deux caractères et une lettre suivis de quatre chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1).

NOC 5363 **2108** *Stations d'aéronef:*

MOD 5364 **2109** § 23:
767

Deux caractères et trois lettres.

NOC 5365 **2110** *Stations d'engin de sauvetage de navire:*

NOC 5366 **2111** § 24:
768

Indicatif d'appel du navire de base suivi de deux chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1).

NOC 5367 **2112** *Stations de radiobalise de localisation des sinistres:*

NOC 5368 **2113** § 25:
768A

La lettre B en code Morse ou l'indicatif d'appel du navire auquel appartient la radiobalise, ou ces deux informations.

NOC 5369 **2114** *Stations d'engin de sauvetage d'aéronef:*

NOC 5370 **2115** § 26:
769

Indicatif d'appel complet de l'aéronef de base (voir le numéro **2109**) suivi d'un chiffre autre que 0 ou 1.

NOC 5371 **2116** *Stations mobiles terrestres.*

SUP 5372
770

MOD 5373 **2117** § 27:
771

Deux caractères (à condition que le second soit une lettre) suivis de quatre chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1), *ou*
Deux caractères et une ou deux lettres suivis de quatre chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1).

NOC 5374 **2118** *Stations d'amateur et stations expérimentales:*

MOD 5375 **2119** § 28. (1):
772

Un caractére (voir le numéro **2101.1** et un seul chiffre (autre que 0 ou 1) suivis d'un groupe de trois lettres au plus; *ou*

Deux caractères et un chiffre (autre que 0 ou 1), suivis d'un groupe de trois lettres au plus.

NOC **5376** **2120** (2) Toutefois, l'interdiction d'employer les chiffres 0 et 1 ne s'applique pas aux
773 stations d'amateur.

NOC **5377** **2121** *Stations du service spatial:*

MOD **5378** **2122** § 29. Lorsque des indicatifs d'appel sont employés par des stations du service
773A spatial, il est recommandé qu'ils soient composés de:

Deux caractères suivis de deux ou trois chiffres (celui qui suit immédiatement les lettres n'étant ni 0 ni 1).

SECTION IV

NOC **Identification des stations faisant usage de la radiotéléphonie**

NOC **5379** **2123** § 30. Les stations faisant usage de la radiotéléphonie sont identifiées comme il est
774 indiqué aux numéros **2124** à **2133.**

(MOD) **5380** **2124** § 31. (1) *Stations côtières:*
775

Soit par un indicatif d'appel (voir le numéro **2103**);
Soit par le nom géographique di lieu, tel qu'il figure dans la Nomenclature des stations côtières, suivi de préférence du mot RADIO ou de toute autre indication appropriée.

NOC **5381** **2125** (2) *Stations de navire:*
776

Soit par un indicatif d'appel (voir les numéros **2106** et **2107;**
Soit par le nom officiel du navire, précédé, si c'est nécessaire, du nom du propriétaire et à la condition qu'il n'en résulte aucune confusion possible avec des signaux de détresse, d'urgence et de sécurité;
Soit par son numéro ou signal d'appel sélectif.

NOC **5382** **2126** (3) *Stations d'engin de sauvetage de navire:*
777

Soit par un indicatif d'appel (voir le numéro **2111**);
Soit par un signal d'identification constitué du nom du navire de base suivi de deux chiffres.

NOC **5383** **2127** (4) *Stations de radiobalise de localisation des sinistres:*
777A

Dans le cas d'émissions vocales (voir le numéro **3265**):

Le nom ou l'indicatif d'appel du navire auquel appartient la radiobalise, ou ces deux informations.

NOC **5384** **2128** § 32. (1) *Stations aéronautiques:*
778

Par le nom de l'aéroport ou le nom géographique du lieu, suivi, si c'est nécessaire, d'un mot approprié précisant la fontion de la station.

NOC **5385** **2129** (2) *Stations d'aéronef:*
779

Soit par un indicatif d'appel (voir le número **2109**), que peut être précédé d'un mot désignant le propriétaire ou le type de l'aéronef;
Soit par une combinaison de caractéres correspondant à la marque d'immatriculation officiellement attribuées à l'aéronef;
Soit par un mot désignant l'entreprise de transport aérien, suivi du numéro d'identification du vol.

NOC **5386** **2130** (3) Dans les bandes attribuées en exclusivité ao service mobile aéronautique, les
780 stations d'aéronef faisant usage de la radiotéléphonie peuvent, après accord particulier entre les gouvernements, employer d'autres méthodes d'idenfication, sous réserve qu'elles soient connues internationalement.

NOC 5387 781 **2131** (4) *Stations d'engin de sauvatage d'aéronef:*

Par um indicatif d'appel (voir de numéro **2115**).

(MOD) 5388 782 **2132** § 33. (1) *Stations de base:*

Soit par um indicatif d'appel (voir le numéro **2103**);
Soit par le nom géographique du lieu suivi, le cas échéant, de toute autre indication nécessaire.

(MOD) 5389 783 **2133** (2) *Stations mobiles terrestres:*

Soit par un indicatif d'appel (voir le numéro **2117**);
Soit par l'indication de l'identité du véhicule ou toute autre indication appropriée.

SECTION V

NOC **Numéros d'appel sélectif dans le service mobile maritime**

NOC 5390 783A **2134** § 34. Lorsque les stations du service mobile maritime font usage de dispositifs d'appel sélectif conformes aux dispositions des appendices **38** et **39**, les numéros d'appel leur sont assignés conformément aux dispositions ci-dessous par les administrations dont elles dépendent.

NOC **5391** **2135** *Formation des numéros d'appel sélectif de station de navire et des numéros d'identification de station côtière:*

NOC 5392 783B **2136** § 35. (1) Les dix chiffres 0 à 9 inclus doivent être utilisés pour former les numéros d'appel sélectif.

NOC 5393 783C **2137** (2) Toutefois, les combinaisons qui commencent par les chiffres 00 (zéro, zéro) ne doivent pas être employées pour former les numéros d'identification des stations côtières.

NOC 5394 783D **2138** (3) Les numéros d'appel sélectif des stations de navire et les numéros d'identification des stations côtières, formés a partir des séries internationales, doivent être conformes aux dispositions des numéros **2139**, **2140** et **2141**.

NOC 5395 783E **2139** (4) *Numéros d'identification de station côtière:*

Quatre chiffres (voir le numéro **2137**).

NOC 5396 783F **2140** (5) *Numéros d'appel sélectif de station de navire:*

Cinq chiffres.

NOC 5397 783G **2141** (6) *Groupes prédéterminés de station de navire:*

Cinq chiffres:

Soit le même chiffre répété cinq fois;
Soit deux chiffres différents répétés alternativement.

NOC **5398** **2142** *Assignation des numéros d'appel sélectif de station de navire et des numéros d'identification de station côtière:*

MOD 5399 783H **2143** § 36. (1) Dans les cas où des numéros d'appel sélectif de station de navire et des numéros d'identification de station côtière sont requis, aux fins d'utilisation dans le service mobile maritime, pour le système d'appel sélectif conforme aux dispositions de l'appendice **39**, ces numéros d'appel sélectif et ces numéros d'identification seront fournis, sur demande, par le Secrétaire général. Lorqu'une administration notifiera l'introduction de l'appel sélectif aux fins d'utilisation dans le service mobile maritime:

2144 *a*) Les numéros d'appel sélectif de station de navire lui seront fournis, selon les besoins, par tranches de 100 (cent);

2145 *b*) Les numéros d'identification de station côtière lui seront fournis par tranches de 10 (dix), pour répondre aux besoins réels;

2146 *c*) Les numéros d'appel sélectif pour l'appel de groupes prédéterminés de stations de navire (voir le numéro **2141**) lui seront fournis dans les mêmes conditions que s'il s'agissait de numéros pour des stations individuelles.

NOC **5400** **2147** (2) Chaque administration choisi les numéros d'appel sélectif à assigner à ses stations
783I de navire dans les tranches de séries qui lui sont fournies.

NOC **5401** **2148** (3) Chaque administration choisit les numéros d'identification à assigner à ses sta-
783J tions côtières dans les tranches de séries qui lui sont fournies.

SECTION VI

ADD

Identités du service mobile maritime dans le service mobile maritime et le service mobile maritime par satellite

ADD **5401A** **2149** § 37. Quand une station du service mobile maritime ou du service mobile maritime par satellite doit utiliser une identité du service mobile maritime, l'administration responsable assigne à cette station une identité conforme aux dispositions contenues dans l'appendice **43** et la Résolution **313**, en tenant compte des Avis pertinents du CCIR et du CCITT.

SECTION VII

MOD

Dispositions particulières

NOC **5402** **2150** § 38. (1) Dans le service mobile aéronautique, après quie la communication a été
784 établie au moyen de l'indicatif d'appel complet, la station d'aéronef peut employer, si tout risque de confusion est exclu, un indicatif ou un signal d'identification abrégé constitué:

MOD **5403** **2151** *a*) En radiotélégraphie, par le premier caractère et les deux dernières lettres
785 de l'indicatif d'appel complet (voir le numéro **2109**);

MOD **5404** **2152** *b*) En radiotéléphonie:
786

Soit par le premier caractère de l'indicatif d'appel complet;
Soit par l'abréviation du nom du propriétaire de l'aéronef (compagnie ou particulier);
Soit par le type de l'aéronef;

suivi des deux dernières lettres de l'indicatif complet (voir le numéro **2109**) ou des deux derniers caractères de la marque d'immatriculation.

NOC **5405** **2153** (2) Les dispositions des numéros **2150**, **2151** et **2152** peuvent être complétées ou
787 modifiées par des accords entre administrations intéressées.

NOC **5406** **2154** § 39. Les signaux distinctifs alloués aux navires pour la signalisation par moyens
788 visuel ou sonore doivent, en général, concorder avec les indicatifs d'appel des stations de navire.

2155 à 2179 *(Non attribués.)*

NVII

CHAPITRE VII

N24/20

ARTICLE 26

NOC

Documents de service

SECTION I

ADD

Titres, contenu et publication des documents de service

MOD **5507** **2180** § 1. Les documents suivants sont publiés par le Secrétaire général. Pour faire face
789 aux circonstances et répondre aux demandes particulières des administrations, l'information publiée est disponible également sous les formes suivants: relevés imprimés par ordinateur, supports pouvant être lus par machine, films, microfiches ou par d'autres moyens appropriés.

MOD 5508 790 **2181** § 2. Liste I. *Liste internationale des fréquences*:

2182 (1) Cette list est basée sur les renseignements préparés par l'IFRB et contient:

MOD 5509 791 **2183** *a*) Les états signalétiques des assignations de fréquence inscrites dans le Fichier de référence international des fréquences;

MOD 5510 792 **2184** *b*) Les fréquences (par example 500 kHz ou 2182 kHz) prescrites dans le présent Règlement pour l'usage commun dans certains services;

MOD 5511 793 **2185** *c*) Les allotissements figurant dans les Plans d'allotissement qui font l'objet de l'appendice 25 Mar2 (voir le numéro **4212** ainsi que des appendices 26, 27 (*) et 27 Aer (*).

NOC 5512 794 **2186** (2) Une mention de l'emploi des fréquences et des allotissements mentionnés dans les numéros **2184** et **2185** est incluse dans les inscriptions correspondantes.

NOC 5513 795 **2187** (3) Les assignations de fréquence figurant dans la liste internationale des fréquences sont rangées dans l'ordre numérique croissant des fréquences assignées.

NOC 5514 796 **2188** (4) Au-dessus de 28 MHz, la liste internationale des fréquences est formée de quatre parties distinctes:

NOC 5515 797 **2189** *a*) Assignations de fréquence dans les bandes comprises entre 28 MHz et 50 MHz, à l'exclusion des stations de radiodiffusion;

MOD 5516 798 **2190** *b*) Assignations de fréquence de la Région 1 dans les bandes au-dessus de 50 MHz, et assignations de fréquence (1) aux stations de radiodiffusion de la Région 1 dans les bandes comprises entre 28 MHz et 50 MHz;

MOD 5517 799 **2191** *c*) Assignations de fréquence de la Région 2 dans les bandes au-dessus de 50 MHz;

MOD 5518 800 **2192** *d*) Assignations de fréquence de la Région 3 dans les bandes au-dessus de 50 MHz, et assignations de fréquence aux stations de radiodiffusion de la Région 3 dans les bandes comprises entre 28 MHz et 50 MHz.

ADD 5518A **2193** (5) La liste internationale des fréquences est rééditée à intervalles à déterminer par le Secrétaire général, mais ne dépassant pas deux ans. Elle est tenue à jour au moyen de suppléments récapitulatifs trimestriels publiés sous la même forme que la liste elle-même. Toute nouvelle inscription ou toute modification d'une inscription introduite dans le Fichier après la publication du dernier supplément récapitulatif et paraissant dans un nouveau supplément récapitulatif ou dans une nouvelle édition de la liste, doivent être indiquées de maniére appropriée.

ADD 5518B **2194** (6) Les suppléments récapitulatifs sont divisés en deux sections:

ADD 5518C **2195** *a*) La section A contient les nouvelles inscriptions et les modifications aux inscriptions qui figurent déjà dans la liste internationale des fréquences;

ADD 5518D **2196** *b*) La section B contient les inscriptions de la liste internationale des fréquences qui ont été entièrement annulées.

(MOD) 5519 **2197** Liste II. *Nomenclature des stations fixes qui assurent des liaisons internationales:*

801 **2198** (1) Cette liste contient les états signalétiques des stations fixes qui assurent des liaisons internationales dont les fréquences figurent dans la liste I.

ADD 5519A **2199** (2) La liste II est rééditée à des intervalles que détermine le Secrétaire général. Elle est tenue à jour au moyen de suppléments récapitulatifs trimestriels.

MOD 5520 802 **2200** § 4. Liste III. *(Disponible.)*

SUP 5521 803

SUP 5522 804

NOC 5523 805 **2201** § 5. Liste IV. *Nomenclature des stations côtières:*

2202 (1) A cette liste sont annexés un tableau et une carte indiquant, suivant les zones, les horaires de service à bord des navires dont les stations sont classées dans les deuxième et troisième catégories (voir l'appendice **12**) et un tableau des taxes télégraphiques intérieures et limitrophes, etc. Cette liste comprend une annexe donnant des renseignements sur les systèmes mobiles maritimes à satellites, qui pourront être communiqués au Secrétaire général par les administrations participantes.

(*) Note do Secrétariat général: voir le numéro **5189** et la Résolution **400**.

NOC 5516.1 798.1 **2190.1** (1) En ce qui concerne les stations de télévision de la Région 1, des inscriptions distinctes figurent dans la Liste I pour les fréquences des ondes porteuses du son et de l'image respectivement.

ADD 5523A 2203 (2) La liste IV est rééditée tous les deux ans. Elle est tenue à jour au moyen de suppléments récapitulatifs semestriels.

NOC 5524 806 2204 § 6. Liste V. *Nomenclature des stations de navire:*

2205 (1) Cette liste contient les états signalétiques:

2206 *a*) Des stations de navires pourvus d'installations radiotélégraphiques;

2207 *b*) Des stations des navires pourvus d'installations radiotélégraphiques et radiotéléphoniques;

2208 *c*) Des stations des navires pourvus uniquement d'installation radiotéléphoniques, lorsque ces stations communiquent avec des stations du service mobile maritime autres que celles de leur propre nationalité, ou lorsque ces navires effectuent des voyages internationaux;

2209 *d*) Des stations des navires équipés de stations terriennes mobiles.

2210 (2) Cette liste est complétée par un tableau et une carte indiquant, suivant les zones, les horaires de service à bord des navires dont les stations sont classées dans les deuxième et troisième catégories (voir l'appendice **12**), et par une annexe donnant des renseignements sur les systèmes mobiles maritimes à satellites, qui pourront être communiqués au Secrétaire général par les administrations participantes.

ADD 5524A 2211 (3) La liste V est rééditée chaque année. Elle est tenue à jour au moyen d'un supplément trimestriel publié en plus du supplément récapitulatif semestriel.

MOD 5525 807 2212 § 7. Liste VI. *Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux:*

2213 (1) Cette liste comprend les états signalétiques des stations radiogoniométriques et de radiophare du service de radionavegation maritime, y compris les stations de radiophare du service de radionavegation aéronautique susceptibles d'être utilisées pour la navigation maritime, ainsi que les états signalétiques des systèmes de radiorepérage par satellite, disponibles pour l'utilisation maritime, des navires-stations océaniques, des stations émettant des signaux pour l'étalonage des goniomètres ainsi que des stations émettant des fréquences étalon et des signaux horaires, des bulletins météorologiques réguliers, des avis aux navigateurs, des avis médicaux, des bulletins épidémiologiques et des ursigrammes. Dans cette liste, une section spéciale est consacrée à chaque classe de stations.

ADD 5525A 2214 (2) La liste VI est rééditée à des intervalles que détermine le Secrétaire général. Elle est tenue à jour au moyen de suppléments récapitulatifs semestriels.

MOD 5526 808 2215 § 8. Liste VII. *Liste alphabétique des indicatifs d'appel des séries internationales assignés aux stations figurant dans les listes I, II, IV, V, VI et VIII-A.*

Cette liste est publiée en deux volumes.

MOD 5527 809 2216 (1) Liste VII-A. *Liste alphabétique des indicatifs d'appel et ou tableau numérique des identités des stations utilisées dans le service mobile maritime et le service mobile maritime par satellite (stations côtières, stations côtières terriennes, stations de navire, stations terriennes de navire, stations de radiorepérage et stations effectuant des services spéciaux), des numéros ou signaux d'appel sélectif de station de navire et de station terrienne de navire, des identités du service mobile maritime pour les stations de navire et les stations terrienes de navire, des numéros ou signaux d'identifications de station côtière et de station côtière terrienne et des identités du service mobile maritime pour les stations côtières et les stations côtières terriennes:*

2217 *a*) Cette liste est précédée du tableau d'attribution des séries internationales d'indicatifs d'appel et du tableau des séries de chiffres d'identification de nationalité figurant dans les appendices **42** et **43** respectivement ainsi que d'un tableau des signaux caractérisant les émissions des radiophares utilisés dans le service mobile maritime;

ADD 5527A 2218 *b*) La liste VII-A est rééditée tous les deux ans. Elle est tenue à jour au moyen des suppléments récapitulatifs trimestriels.

(MOD) 5528 810 2219 (2) Liste VII-B. *Liste alphabétique des indicatifs d'appel des stations autres que les stations d'amateur, les stations expérimentales et les stations du service mobile maritime:*

a) Cette liste est précédée du tableau d'attribution des séries internationales d'indicatifs d'appel figurant à l'appendice **42** et d'un tableau indiquant la forme des indicatifs d'appel assignés par chaque administration à ses stations d'amateur et à ses stations expérimentales;

ADD **5528A** **2221** *b*) La liste VII-B est rééditée à des intervalles que détermine le Secrétaire général. Elle est tenue à jour au moyen de suppléments récapitulatifs trimestriels.

MOD **5529** **2222** § 9. Liste VIII. *Nomenclature des stations de contrôle international des émissions:*
811

2223 (1) Cette liste contient sous forme de tableaux, l'état signalétique des stations de contrôle qui participent au système de contrôle international des émissions.

ADD **5529A** **2224** (2) La liste VIII est publiée à des intervalles que détermine le Secrétaire général. Elle est tenue à jour au moyen de suppléments récapitulatifs publiés à des intervalles déterminés par le Secrétaire général.

(MOD) **5530** **2225** § 10. Liste VIII-A. *Nomenclature des stations des services de radiocommunication spatiale et du service de radioastronomie:*
811A

2226 (1) Cette liste comprend les états signalétiques des stations terriennes, des stations spatiales et des stations de radioastronomie. Le Comité établit et tient à jour le contenu de cette liste, en groupe ses rubriques de telle façon que les administrations puissent identifier plus facilement toutes les stations faisant partie d'un réseau à satellite donné. De plus, le Comité apporte les améliorations nécessaires à la présentation de la liste, sans modifier de quelque manière que ce soit les données fondamentales spécifiées dans le présent Règlement. Toutefois, les stations terriennes mobiles du service mobile maritime par satellite ne doivent pas y être inscrites. Mais un renvoi général à la Nomenclature des stations de navire doit figurer dans la liste VIII-A.

ADD **5530A** **2227** (2) La liste VIII-A est rééditée à des intervalles que détermine le Secrétaire général. Elle est tenue à jour au moyen de suppléments récapitulatifs semestriels.

MOD **5531** **2228** § 11. *Carte des stations côtières ouvertes à la correspondance publique ou participant au service des opérations portuaires:*
812

La Carte est rééditée sous une forme et à des intervalles que détermine le Secrétaire général.

NOC **5532** **2229** § 12. *Graphique en couleurs indiquant la répartition des bandes de fréquences*
813 telle qu'elle est spécifiée dans l'article 8.

SUP **5533**
814

ADD **5533A** **2230** § 13. *Manuel à l'usage des services mobile maritime et mobile maritime par satellite:*
814A

2231 (1) Ce Manuel doit contenir les extraits pertinents:

2232 *a*) De la Convention internationale des télécommunications en vigueur;

2233 *b*) Du Règlement des radiocommunications en vigueur;

2234 *c*) Du Règlement télégraphique en vigueur, de la version actuelle de l'«Instruction pour l'exploitation du service télégraphique public international» et des Résolutions et Avis du CCITT;

2235 *d*) Du Règlement téléphonique en vigueur, de la version actuelle de l'«Instruction sur le service téléphonique international» et des Résolutions et Avis du CCITT.

ADD **5533B** **2236** (2) Le Manuel devrait être révisé, si nécessaire, notamment après les conférences
814B administratives et les Assemblées plénières du CCITT ou du CCIR. De nouvelles éditions seront publiées à des intervalles que devra déterminer le Secrétaire général.

SECTION II

ADD **Établissement et modifications des documents de service**

MOD **5534** **2237** § 14. (1) Le Secrétaire général publie les modifications à apporter aux documents
815 énumérées dans la section I du présent article. Les administrations prennent les dispositions voulues pour notifier immédiatement au Secrétaire général les modifications apportées aux renseignements relatifs à l'exploitation qui figurent dans les listes IV, V et VI, étant donné l'intérêt que présentent ces renseignements particulièrement en ce qui concerne la sécurité. Une fois par mois au minimum, les administrations portent à la connaissance du Secrétaire général, dans la forme indiqué pour les listes elles-mêmes á l'appendice **9**, les additions, modifications et suppressions à apporter aux listes IV, V et VI en utilisant les symboles appropriés figurant à l'appendice **10**. Il utilise d'autre part, pour apporter aux

listes I, II et VIII-A les additions, modifications et suppressions nécessairs, les renseignements que lui fournit l'IFRB et qui proviennent des informations reçues en applications des dispositions des articles 11, 12, 13 et 17. Il apporte à la liste VII les modifications nécessaires en utilisant les renseignements qu'il reçoit à propos des listes I, II, IV, V, VI, et VIII-A. Les renseignements contenus dans les listes IV et V sont coordonées avec ceux qui figurent dans la liste I. Le Secrétaire général signale toute divergence aux administrations intéressées.

NOC **5535** **2238** (2) En ce qui concerne les modifications permanentes du fonctionnement des stations de radiorepérage (liste VI), voir le numéro **2833.**
816

5536 (deviant **5518A**)
817

5537 (deviant **5518B**)
818

5538 (deviant **5518C**)
819

5539 (deviant **5518D**)
820

5540 (deviant **5519A**)
821

SUP **5541**
822

SUP **5542**
823

5543 (deviant **5523A**)
824

5544 (deviant **5524A**)
825

5545 (deviant **5525A**)
826

5546 (deviant **5527A**)
827

5547 (deviant **5528A**)
828

5548 (deviant **5529A**)
829

5549 (deviant **5530A**)
829A

SUP **5550**
830

MOD **5551** **2239** § 15. (1) Les modèles d'après lesquels les listes II, IV, V, VI, VIII et VIII-A doivent être établies, sont indiqués à l'appendice **9**. Les préfaces à ces documents et à la liste I donnent toutes les indications nécessaires sur la façon de les utiliser. Chaque inscription doit comprendre le symbole approprié indiqué à l'appendice **10** pour désigner la catégorie de la station dont il s'agit. Le Secrétaire général peut choisir des symboles supplémentaires si nécessaire; il doit alors les notifier aux administrations.
831

MOD **5552** **2240** (2) Dans les documents de service, les noms des stations côtières, aéronautiques, radiogoniométriques et de radiophare sont suivis des mots:
832

NOC **5553** **2241** *a*) RADIO pour les stations côtières;
833

ADD **5553A** **2242** *b*) AERORADIO pour les stations aéronautiques;

NOC **5554** **2243** *c*) GONIO pour les stations radiogoniométriques maritimes;
834

NOC **5555** **2244** *d*) PHARE pour les stations de radiophare maritime;
835

NOC **5556** **2245** *e*) AEROPHARE pour les stations de radiophare aéronautique.
836

NOC **5557** **2246** § 16. En ce qui concerne les documents de service, il y a lieu d'entendre par le mot «pays» le territoire dans les limits duquel se trouve la station; un territoire n'ayant pas l'entiére responsabilité de ses relations internationales est également considéré à cet effet comme un «pays».
837

2247 à **2500** *(Non attribués.)*

PARTIE B

NVIII

CHAPITRE VIII

Dispositions relatives à des groupes de services, ainsi qu'à des stations et des services particuliers (*)

N25

ARTICLE 1

NOC

Services de radiocommunication de Terre partageant des bandes de fréquences avec les services de radiocommunication spatiale au-dessus de 1 GHz

SECTION I

NOC

Choix des emplacements et des fréquences

NOC **6001** 470A **2501** § 1. Les emplacements et les fréquences des stations de Terre fonctionnant dans les bandes de fréquences partagées, avec égalité des droits, entre les services de radiocommunication de Terre et les services de radiocommunication spatiale doivent être choisis conformément aux Avis pertinents du CCIR relatifs à la séparation géographique entre stations de Terre et stations terriennes.

MOD **6002** 470AA **2502** § 2. (1) Dans toute la mesure pratiquement possible, les emplacements des stations d'émission (1) du service fixe ou du service mobile dont les puissances isotropes rayonnées équivalentes (p. i. r. e.) ont des valeurs maximales supérieures à + 35 dBW dans les bandes de fréquences comprises entre 1 GHz et 10 GHz doivent être choisis de telle manière que la direction du rayonnement maximal d'une antenne quelconque s'écarte d'au moins 2° de l'orbite des satellites géostationnaires, compte tenu des effets de la réfraction atmosphérique (2).

MOD **6003** 470AB **2503** (2) Dans toute la mesure pratiquement possible, les emplacements des stations d'émission (3) du service fixe ou du service mobile dont les puissances isotropes rayonnées équivalents (p. i. r. e.) ont des valeurs maximales supérieures à + 45 dBW dans les bandes de fréquences comprises entre 10 GHz et 15 GHz doivent être choisis de telle manière que la direction du rayonnement maximal d'une antenne quelconque s'écarte d'au moins 1,5° de l'orbite des satellites géostationnaires, compte tenu des effects de la réfraction atmosphérique (4).

MOD **6004** 470AC **2504** (3) Dans les bandes de fréquences supérieurs à 15 GHz, il n'y a pas de restriction (5) quant à la direction du rayonnement maximal des stations du service fixe ou mobile.

(*) Pour les dispositions régissent les services mobiles et les services spéciaux intéressant la sécurité, voir:

Services spéciaux intéressant la sécurité — chapitre IX;
Service mobile aéronautique — chapitre X;
Service mobile maritime — chapitre XI;
Service mobile maritime par satellite — chapitre XI;
Service mobile terrestre — chapitre XII.

NOC **6002.1** 470AA.1 **2502.1** (1) Pour leur propre protection, il convient que les stations de réception du service fixe ou du service mobile qui fonctionnent dans des bandes partagées avec les services de radiocommunication spatiale (dans le sens espace vers Terre) évitent d'orienter leurs antennes dans la direction de l'orbite des satellites géostationnaires, si leur sensibilité est suffisamment élevée pour qu'il puisse en résulter des brouillages importants de la part des émissions des stations spatiales.

NOC **6002.2** 470AA.2 **2502.2** (2) Des renseignements sur ce sujet figurent dans la version la plus récente du Rapport 393 du CCIR.

NOC **6003.1** 470AB.1 **2503.1** (3) Pour leur propre protection, il convenient que les stations de réception du service fixe ou du service mobile qui fonctionnent dans des bandes partagées avec les services de radiocommunication spatiale (dans le sens espace vers Terre) évitent d'orienter leurs antennes dans la direction de l'orbite des satellites géostationnaires, si leur sensibilité est suffisamment élevée pour qu'il puisse en résulter des brouillages importants de la part des émissions des stations spatiales.

NOC **6003.2** 470AB.2 **2503.2** (4) Des renseignements sur ce sujet figurent dans la version la plus recent du Rapport 393 du CCIR.

ADD **6004.1** **2504.1** (5) Les dispositions du numéro **2504** sont applicabbles jusqu'à ce que le CCIR emette un Avis relatif à la nécessité d'appliquer des restrictions dans les bandes de fréquences spécifiées au numéro **2511**; tous ls systèmes mis en service aprés le 1er janvier 1982 devraient dés lors respecter, dans la mesure pratiquement possible, les restritions spécifiées.

SECTION II

Limites de puissance

NOC

MOD **6005** **2505**
470B

§ 3. (1) Le niveau maximal de la puissance isotrope rayonnée équivalent (p. i. r. e.) d'une station du service fixe ou du service mobile ne doit pas dépasser + 55 dBW.

MOD **6006** **2506**
470BA

(2) Dans le cas où il n'est pas pratiquement possible de se conformer aux dispositions du numéro **2502,** le niveau maximal de la puissance isotrope rayonnée équivalente (p. i. r. e.) d'une station du service fixe ou du service mobile ne doit pas dépasser:

+ 47 dBW dans toute direction d'écartant de moins de 0,5° de l'orbite des satellites géostationnaires, ou

+ 47 dBW à + 55 dBW, sel o n une variation linéaire en décibles (8 dB par degré), dans toute direction comprise entre 0,5 et 1,5° par rapport à l'orbite des satellites géostationnaires, compte tenu des effects de la réfraction athmosphérique (1).

NOC **6007** **2507**
470C

(3) Le niveau de la puissance fournie à l'antenne par un émetteur du service fixe ou du service mobile, dans les bandes de fréquences comprises entre 1 GHz et 10 GHz, ne doit pas dépasser + 13 dBW.

NOC **6008** **2508**
470CA

(4) Le niveau de la puissance fournie à l'antenne par un émetteur du service fixe ou du service mobile, dans les bandes de fréquences supérieures à 10 GHz, ne doit pas dépasser + 10 dBW.

MOD **6009** **2509**
470D

(5) Les limites spécifiées aux numéros **2502, 2505, 2506** et **2507** s'appliquent dans les bandes de fréquences ci-aprés qui sont attribuées au service fixe par satellite, au service de météorologie par satellite et au service mobile par satellite, pour la réception par les stations spatiales, lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

1626,5-1645,5 MHz (pour les pays énumérés au numéro **730**);
1646,5-1660 MHz (pour les pays énumérés au numéro **730**);
2665-2690 MHz (2) (pour les Régions 2 et 3);
5725-5755 MHz (2) (pour les pays de la Région 1 énumérés aux numéros **803** et **805**);
5755-5850 MHz (2) (pour les pays de la Région 1 énumérés aux numéros **803, 805** et **807**);
5850-7075 MHz;
7900-8400 MHz.

MOD **6010** **2510**
470DA

(6) Les limites spécifiées aux numéros **2503, 2505** et **2508** s'appliquent dans les bandes de fréquences ci-après qui sont attribuées, pour la réception par les stations spatiales, au service fixe par satellite lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

10,7-11,7 GHz (2) (3) (pour la Région 1);
12,5-12,75 GHz (2) (pour les pays énumérés aux numéros **848** et **850**);
12,7-12,75 GHz (2) (pour la Région 2);
12,75-13,25 GHz;
14,0-14,25 GHz (pour les pays énumérés au numéro **857**);
14,25-14,3 GHz (pour les pays énumérés aux numéros **857, 860** et **861**);
14,3-14,4 GHz (2) (pour les Régions 1 et 3);
14,4-14,5 GHZ;
14,5-14,8 GHZ (3).

MOD **6011** **2511**
470DB

(7) Les limites spécifiées aux numéros **2505** et **2508** s'appliquent dans les bandes de fréquences ci-après qui sont attribuées, pour la réception par les stations spatiales, au service fixe para satellite lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

17,7-18,1 GHz (3);

MOD **6006.** **2506.1**
470BA.1

(1) Voir le numéro **2503.2.**

ADD **6009.1** **2509.1**

ADD **6010.1** **2510.1**

(2) L'égalité des droits en matière d'exploitation des services, lorsqu'une bande de fréquences est attribuée à des services différents de même catégorie dans des Régions différents, est stipulée au numéro **346.** En ce qui concerne les brouillages entre Régions, il convient donc que les administrations respectent, dans la mesure pratiquement possible, toutes les limites qui peuvnet être spécifiées dans le Avis du CCIR.

ADD **6010.2** **2510.2**

ADD **6011.1** **2511.1**

(3) L'application des limites dans cette bande est provisoire (voir la Résolution **101**).

27,0-27,5 GHz (1) (pour les Régions 2 et 3);
27,5-29,5 GHz.

2512 à 2538 *(Non attribués.)*

N26

ARTICLE 28

NOC

Services de radiocommunication spatiale partageant des bandes de fréquences avec les services de radiocommunication de Terre au-dessus de 1 GHz

SECTION I

NOC

Choix des emplacements et des fréquences

NOC **6037** 470E **2539** § 1. Les emplacements et les fréquences des stations terriennnes fonctionnant dans des bandes de fréquences partagées, avec égalité des droits, entre les services de radiocommunication de Terre et les services de radiocommunication spatiale, doivent être choisis conformément aux Avis pertinents du CCIR relatifs à la séparation géographique entre stations terriennes et stations de Terre.

SECTION II

NOC

Limites de puissance

NOC **6038** 470F **2540** § 2. (1) Stations terriennes.

(MOD) **6039** 470G **2541** (2) Le niveau de la puissance isotrope rayonnée équivalent (p. i. r. e.) émise dans une direction quelconque vers l'horizon par une station terrienne fonctionnant dans les bandes de fréquences comprises entre 1 GHz et 15 GHz, ne doit pas dépasser les limites ci-après, sauf dans les cas ou les dispositions des numéros **2544** ou **2546** sont applicables:

+ 40 dBW dans une bande quelconque large de 4 kHz, pour $\theta \leq 0°$;
+ 40 + 3 θ dBW dans une bande quelconque large de 4 kHz, pour $0 < \theta \leq 5°$;

θ étant, en degrés, l'angel de site de l'horizon vu du centre de rayonnement de l'antenne de la station terrienne. Cet angle ext exprimé par une valeur positive au-dessus du plan horizonal et par une valeur négative au-dessous de ce plan.

MOD **6040** 470GA **2542** (3) Le niveau de la puissance isotrope rayonnée équivalent (p. i. r. e.) émise dans une direction quelconque vers l'horizon par une station terriennne fonctionnant dans les bandes de fréquences supérieures à 15 GHz, ne doit pas dépasser les limites ci-après, sauf dans les cas ou les dispositions des numéros **2545** ou **2546** sont applicables:

+ 64 dBW dans une bande quelconque large de 1 MHz, pour $\theta \leq 0°$;
+ 64 + 3 θ dBW dans une bande quelconque large de 1 MHz pour $0° < \theta \leq 5°$;

θ étant défini comme au numéro **2541.**

(MOD) **6041** 470GB **2543** (4) Pour les angles de site de l' horizon supérieurs a 5°, il n'y a pas de restriction quant à la valeur de la puissance isotrope rayonnée équivalent (p. i. r. e.) émise par une station terrienne en direction de l'horizon.

(MOD) **6042** 470GC **2544** (5) Par dérogation aux limites spécifiées au numéro **2541,** la puissance isotrope rayonnée équivalent (p. i. r. e.) émise vers l'horizon par une station terrienne du service de recherche spatiale (espace lointain) ne doit pas dépasser + 55 dBW dans une bande quelconque large de 4 kHz.

(MOD) **6043** 470GD **2545** (6) Par dérogation aux limites spécifiées au numéro **2542,** la puissance isotrope rayonnée équivalent (p. i. r. e.) émise vers l'horizon par une station terrienne du service de recherche spatiale (espace lointain) ne doit pas dépasser + 79 dBW dans une bande quelconque large de 1 MHz.

NOC **6044** 470H **2546** (7) Les limites spécifiées aux numéros **2541, 2542, 2544** et **2545,** selon le cas peuvent être dépassées d'une valeur maximale de 10 dB. Cependant, si la zone de coordination qui en résulte empiète sur le territorie d'un autre pays, ce dépassement doit être soumis à l'accord de l'administration de ce pays.

ADD **6011.2** **2511.2** (1) Voir le numéro **2509.1.**

MOD **6045** **2547** (8) Les limites spécifiées au numéro **2541** s'appliquent dans les bandes de fréquences ci-après, qui sont attribuées, pour l'émission par les stations terriennes au service fixe par satellite et au service d'exploration de la Terre par satellite, et en particulier au service de météorologie par satellite, au service mobile par satellite et au service de recherche spatiale, lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:
470J

5670-5725 MHz (pour les pays énumérés au numéro **804** vis-à-vis des pays énumérés aux numéros **803** et **805**);
5725-5755 MHz (1) (pour la Région 1 vis-à-vis des pays énumérés aux numéros **803** et **805**);
5755-5850 MHz (1) (pour la Région 1 vis-à-vis des pays énumérés aux numéros **803, 805** et **807**);
5850-7075 MHz;
7900-8400 MHz;
10,7-11,7 GHz (1) (Région 1);
12,5-12,75 GHz (1) (pour la Région 1 vis-à-vis des pays énumérés au numéro **848**);
12,7-12,75 GHz (1) (Région 2);
12,75-13,25 GHz;
14,0-14,25 GHz (par rapport aux pays énumérés au numéro **857**);
14,25-14,3 GHz (para rapport aux pays énumérés aux numéros **857, 860** et **861**);
14,3-14,4 GHz (1) (Régions 1 et 3);
14,4-14,8 GHz.

NOC **6046** **2548** (9) Les limites spécifiées au numéro **2542** s'appliquent dans les bandes de fréquences ci-après qui sont attribuées, pour le émission par les stations terrienne, au service fixe par satellite, service d'exploration de la Terre par satellite au service mobile par satellite et au service de recherche spatiale, lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:
470JA

17,7-18,1 GHz;
27,0-27,5 GHz (1) (Région 2 et 3),
27,5-29,5 GHz;
31,0-31,3 GHz (tous les pays énumérés au numéro **885**);
34,2-35,2 GHz (tous les pays énumérés aux numéros **895** et **896** par rapport aux pays énumérés au numéro **894**).

SECTION III

NOC

Angle minimal de site

NOC **6047** **2549** § 3. (1) Stations terriennes.
470K

MOD **6048** **2550** (2) Les antennes des stations terriennes ne doivent pas être employées, à l'émission, sous des angles de site inférieus à 3°, mesurés à partie du plan horizontal dans la direction du rayonnement maximal, sauf accord des administrations intéréssées et de celles dont les services peuvent être affectés. Dans les cas de la réception par une station terrienne, la valeur ci-dessus doit être utilisée aux fins de la coordination si l'angle de site de fonctionnement est inférieur à cette valeur.
470L

NOC **6049** **2551** (3) Par dérogation aux dispositions du numéro **2550,** les antennes des stations terriennes du service de recherche spatiale (au voisinage de la Terre) ne doivent pas être employées, à l'émission, sous des angles de site inférieus à 5°, et les antennes des stations terriennes du service de recherche spatiale (espace lointain) ne doivent pas être employées, à l'émission, sous des angles de site inférieurs à 10°, ces deux angles étant mesurés à partir du plan horizontal dans la direction du rayonnement maximal. Dans le cas de la réception par une station terrienne, les valeurs ci-dessus doivent être utilisées aux fins de la coordination si l'angle de site de fonctionnement est inférieur à ces valeurs.
470LA

ADD **6045.1** **2547.1**
ADD **6046.1** **2548.1**

(1) L'égalité des droits en matière d'exploitation des services lorsqu'une bande de fréquences est attribuée à des services différents de même catégorie dans des Régions différentes, est stipulée au numéro **346**. En ce qui concerne les brouillages entre Régions, il convient donc que les administrations respectent, dans la mesure pratiquement possible, toutes les limites qui peuvent être spécifiées dans les Avis du CCIR.

SECTION IV

NOC **Limites de puissance surfacique produite par les stations spatiales**

NOC **6050** **2552** 4. (1) Limites de la puissance surfacique entre 1670 MHz et 1700 MHz.
470N

MOD **6051** **2553** *a*) La puissance surfacique produite à la surface de la Terre par les émissions d'une station spatiale, y compris celles provenant d'un satellite réflecteur, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser — 133 dB (W/m^2) dans une bande quelconque large de 1,5 MHz. Cette limite s'applique à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.
470NA

NOC **6052** **2554** *b*) La limite spécifiée au numéro **2553** s'aplique dans la bande de fréquences indiquée au numéro **2555,** qui est attribuée, pour l'émission par les stations spatiales, au service d'exploitation de la Terre par satellite et en particulier au service de météorologie par satellite, lorsque ladite est partagée, avec égalité des droits, avec le service des auxiliaires de la météorologie:
470NB

MOD **6053** **2555** 1670-1700 MHz.
470NC

MOD **6054** **2556** (2) Limites de la puissance surfacique entre 1525 MHz et 2500 MHz.
470ND

MOD **6055** **2557** *a*) La puissance surfacique produite à la surface de la Terre pas les émissions d'une station spatiale, y compris celles provenant d'un satellite réflecteur, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:
470NE

— 154 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;
— 154 + 0,5 (δ – 5) dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivés δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 144 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

(MOD) **6056** **2558** *b*) Les limites spécifiées au número **2557** s'appliquent dans les bandes de fréquences énumérées au numéro **2559,** qui sont attribuées, pour l'émission par les stations spatiales aux services de radiocommunication spatiale suivants:
470NF

Service de météorologie par satellite (espace vers Terre);
Service de recherche spatiale (espace vers Terre);
Service d'exploitation spatiale (espace vers Terre);

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile.

MOD **6057** **2559** 1525-1530 MHz (1) (Régions 1 et 3);
470NG 1530-1535 MHz (1) (Régions 1 et 3, jusqu'au 1er janvier 1990);
1670-1690 MHz;
1690-1700 MHz (sur le territoire des pays énumérés aux numéros **740** et **741**);
1700-1710 MHz;
2290-2300 MHz.

(MOD) **6058** **2560** *c*) Les valeurs de la puissance surfacique spécifiées au numéro **2557** ont été calculées en prenant comme objectif la protection du service fixe fonctionnant en visibilité directe. Lorsque le service fixe utilise des techniques de diffusion troposphérique fonctionne dans les bandes énumérées au numéro **2559** et que la séparation de fréquence est insuffisante, il faut prévoir une séparation angulaire suffisante entre la direction de la station spatiale et celle du rayonnement maximal de l'antenne de la station réceptrice du service fixe
470NGA

ADD **6057.1** **2559.1** (1) L'égalité des droits en matière d'exploitation des services lorsqu'une bande de fréquences est attribuée à des services différents de même catégorie dans des Régions différentes, est stipulée au numéro **346**. En ce qui concerne les brouillages entre Régions, il convient donc que les administrations respectent, dans la mesure pratiquement possible, toutes les limites qui peuvent être spécifiées dans les Avis du CCIR.

utilisant les techniques de diffusion troposphérique, afin que la puissance de brouillage à l'entrée du récepteur de la station du service fixe ne dépasse pas — 168 dBW dans une bande qualconque large de 4 kHz.

NOC **6059** **2561**
470NH
(3) Limites de la puissance surfacique entre 2500 MHz et 2690 MHz.

MOD **6060** **2562**
470NI
a) La puissance surfacique produite à la surface de la Terre par les émissions d'une station spatiale du service de radiodiffusion par satellite ou du service fixe par satellite, dans toutes les conditions et pour les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 152 dB (W/m²) dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;
— 152 + 0,75 (δ – 5) dB (W/m²) dans une bande quelconque large de 4 kHz, pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 137 dB (W/m²) dans une bande quelconque large de 4 kHz pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

MOD **6061** **2563**
470NJ
b) Les limites spécifiées au numéro **2562** s'appliquent dans la bande de fréquences:

2500-2690 MHz;

qui est partagé entre, d'une part le service de radiodiffusion par satellite ou le service fixe par satellite, et d'autre part le service fixe ou le service mobile.

NOC **6062** **2564**
470NK
c) Les valeurs de la puissance surfacique spécifiées au numéro **2562** ont été calculées en prenant comme objectif la protection du service fixe fonctionnant en visibilité directe. Lorsque le service fixe utilisant les techniques de diffusion troposphérique fonctionne dans la bande indiquée au numéro **2563** et que la séparation de fréquence est insuffisante, il faut prévoir une séparation angulaire suffisante entre la direction de la station spatiale et celle du rayonnement maximal de l'antenne de la station réceptrice du service fixe utilisant les techniques de diffusion troposphérique, afin que la puissance de brouillage à l'entrée du récepteur de la station du service fixe ne dépasse pas — 168 dBW dans une bande quelconque large de 4 kHz

NOC **6063** **2565**
470NL
(4) Limites de la puissance surfacique entre 3400 MHz et 7750 MHz.

MOD **6064** **2566**
470NM
a) La puisance surfacique produite à la surface de la Terre par les émissions d'une station spatiale, y compris celles provenant d'un satellite réflecteur dans toutes les conditions et pour les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 152 dB (W/m²) dans une bande quelconque large de 4 kHz, pour le angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;
— 152 + 0,5 (δ –5) dB (W/m²) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 142 dB (W/m²) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé compris entre 25° et 90° au-dessus du plan horizontal;

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

MOD **6065** **2567**
470NN
b) Les limites spécifiées au numéro **2556** s'appliquent dans les bandes de fréquences énumérées au numéro **2568,** qui ont attribuées, pour l'émission par les stations spatiales, aux services de radiocommunication spatiale suivants:

Service fixe par satellite (espace vers Terre);
Service de mé[illegible] par satellite (espace vers Terre);
Service mobile par satellite;
Service de recherche spatiale;

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile.

NOC **6066** **2568**
470NO
3400-4200 MHz;
4500-4800 MHz;
5670-5725 MHz (sur le territorie des pays énumérés aux numéros **803** et **805**);
7250-7750 MHz.

NOC **6067** **2569** (5) Limites de la puissance surfacique entre 8025 MHz et 11,7 GHz.
470NP

MOD **6068** **2570** *a*) La puissance surfacique produite à la surface de la Terre par les émissions d'une
470NQ station spatiale, y compris celles provenant d'un satellite réflecteur, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les valeurs suivantes:

— 150 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angels d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;
— 150 + 0,5 (δ –5) dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 140 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angels d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

(MOD) **6069** **2571** *b*) Les limites spécifiées au numéro **2570** s'appliquent dans les bandes de fréquences
470NR énumérées au numéro **2572,** qui sont attribuées, pour l'émission par les stations spatiales, aux services de radiocommunication spatiale suivants:

Service d'exploration de la Terre par satellite (espace vers Terre);
Service de recherche spatiale (espace vers Terre);
Service fixe par satellite (espace vers Terre);

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile.

NOC **6070** **2572** 8025-8500 MHz;
470NS 10,7-11,7 GHz.

NOC **6071** **2573** (6) Limites de la puissance surfacique engre 12,2 GHz et 12,75 GHz,
470NT

NOC **6072** **2574** *a*) La puissance surfacique produite à la surface de la Terre pas les émissions d'une
470NU station spatiale, y compris celles provenant d'un satellite réflecteur, dans toutes les conditions et pour les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 148 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour le angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;
— 148 + 0,5 (δ –5) dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 138 dB (W/m^2) dans une bande quelconque large de 4 kHz, pour les angles d'arrivé compris entre 25° et 90° au-dessus du plan horizontal;

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

(MOD) **6073** **2575** *b*) Les limites spécifiées au numéro **2574** s'apliquent dans les bandes de fréquences
470NV indiqueés au numéro **2576,** qui sont attribuées, pour l'émisision par les stations spatiales au service fixe par satellite, lorsque lesdites bandes sont partagées avec égalité des droits, avec le service fixe ou la service mobile.

MOD **6074** **2576** 12,2-12,5 GHz (1) (Région 3);
470NW 12,5-12,75 GHz (2) (Région 3 et dans la Région 1 sur le territoire des pays énumérés aux numéros **848** et **850**).

NOC **6075** **2577** (7) Limites de la puissance surfacique entre 17,7 GHz et 19,7 GHz.
470NX

MOD **6076** **2578** *a*) La puissance surfacique produite à la surface de la Terre par les émissions d'une
470NY station spatiale, y compris celles provenant d'un satellite réflecteur, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 115 dB (W/m^2) dans une bande quelconque large de 1 MHz, pour le angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;

ADD **6074.1** **2576.1** (1) L'égalité des droits en matière d'exploitation des services lorsqu'une bande de fréquences est attribuée à des services différents de même catégorie dans des Régions différentes, est stipulée au numéro **346**. En ce qui concerne les brouillages entre Régions, il convient donc que les administrations respectent, dans la mesure pratiquement possible, toutes les limites qui peuvent être spécifiées dans les Avis du CCIR.

ADD **6074.2** **2576.2** (2) Voir le numéro **2576.1** et les Résolutions **31, 34** et **700.**

— 115 + 0,5 (δ –5) dB (W/m²) dans une bande quelconque large de 1 MHz, pour les angles d'arrivé δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;
— 105 dB (W/m²) dans une bande quelconque large de 1 MHz, pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal;

Ces limites s'appliquent à la puissance surfacique que l'on obtiendrait en supposant une propagation en espace libre.

(MOD) **6077** **2579** 470NZ *b*) Les limites spécifiées au numéro **2578** s'appliquent dans la bande de fréquences énumérée au numéro **2580,** qui est attribuée, pour l'émission par les stations spatiales, aux services de radiocommunication spatiale suivants:

Service fixe par satellite (espace vers Terre);
Service d'exploration de la Terre par satellite, y compris le service météorologique par satellite (espace vers Terre);

lorsque ladite bande est partagée, avec égalité des droits, avec le service fixe ou le service mobile.

MOD **6078** **2580** 470NZA 17,7-19,7 GHz (1).

SUP **6079** (devient **6079E**)

ADD **6079A** **2581** (8) Limites de la puissance surfacique entre 31,0 GHz et 40,5 GHz.

ADD **6079B** **2582** *a*) La puisance surfacique produite à la surface de la Terre par les émissions d'une station spatiale, y compris celles provenant d'un satellite réflecteur dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites spécifiées au numéro **2578** (2).

ADD **6079C** **2583** *b*) Les limites spécifiées au numéro **2582** s'appliquent dans les bandes de fréquences indiquées au numéro **2584** qui sont attribuées, pour l'émission par les stations spatiales, au service fixe par satellite, au service mobile, par satellite et au service de recherche spatiale, lorsque lesdites, lorsque lesdites bandes sont partagées, avec égalité des droits, avec les service fixe ou le service mobile.

ADD **6069D** **2584** 31,0-31,3 GHz.
34,2-35,2 GHz (pour les transmissions espace vers Terre selon les numéros **895** et **896** sur le territoire des pays énumérés au numéro **894**).
37,5-40,5 GHz.

MOD **6079E** **2585** 470NZB (9) Les limites spécifiées aux numéros **2553, 2557, 2562, 2566, 2570, 2574, 2578, 2582** et **2582.1** peuvent être dépassées sur le territoire de tour autre pays dont l'administration a donnée son accord à ce sujet.

2586 à 2611 *(Non attribués.)*

N27

ARTICLE 29

(MOD)

Dispositions spéciales relatives aux services de radiocommnication spatiale

SECTION I

NOC

Cessation des émissions

NOC **6015** **2612** 470V § 1. Les stations spatiales doivent être dotées de dispositifs permettant de faire immédiatemment, par télécommande, leurs émissions radioélectriques chaque fois que cette cessation est requise en vertu des dispositions du présent Règlement.

ADD **6078.1** **2580.1** (1) L'égalité des droits en matière d'exploitation des services lorsqu'une bande de fréquences est attribuée à des services différents de même catégorie dans des Régions différentes, est stipulée au numéro **346**. En ce qui concerne les brouillages entre Régions, il convient donc que les administrations respectent, dans la mesure pratiquement possible, toutes les limites qui peuvent être spécifiées dans les Avis du CCIR.

ADD **6079B.1** **2582.1** (2) Les dispositions du numéro **2582** s'appliquent jusqu'à ce que le CCIR adopte un Avis indiquant les limies de puissance surfacique qui doivent s'appliquer dans les bandes de fréquences spécifiées au numéro **2584,** tous les systèmes devant alors respecter les limites de puissance surfacique recommandés par le CCIR et approuvées par une conférence administrative mondiale de radiocommunication compétente.

SECTION II

MOD

Mesures contre les brouillages causés aux systèmes à satellites géostationnaires

MOD **6016** **2613**
470VA

§ 2. Les stations spatiales non géstationnaires doivent cesser leus émissions ou les réduire à un niveau négligeable, et les stations terriennes qui communiquent avec elles ne doivent plus émettre à leur intention, lorsqu'il n'y a pas une séparation angulaire suffisante entre satellites non géostationnaires et satellites géostationnaires, et que des brouillages inacceptables (1) sont causés à des systèmes spatiaux à satellites géostationnaires du service fixe par satellite fonctionnant conformément aux dispositions du présent Règlement.

ADD **6106A** **2614**

§ 3. Dans la bande de fréquences 29,95-30 GHz, les stations spatiales du service d'exploration de la Terre par satellite, installés à bord de satellites géostationnaires et fonctionnant avec des stations spatiales du même service installées à bord de satellites non géostationnaires, doivent observer la restrition suivante:

Chaque fois que les émissions provenant des satellites géostationnaires sont dirigées vers l'orbite des satellites géostationnaires et qu'elles causent des brouillages inacceptables (1) à un système spatial à satellites géostationnaries du service fixe par satellite, ces émissions doivent être réduites à un niveau égal ou inférieur au niveau de brouillage accepté (1).

SECTION III

NOC

Maintien en position des stations spatiales (2)

MOD **6107** **2615**
470VB

§ 4. (1) Les stations spatiales installées à bord de satellites géostationnaires qui utilisent une bande de fréquences quelconque attribuée au service fixe par satellite ou au service de radiodiffusion par satellite (3):

MOD **6108** **2616**
470VC

a) Doivent pouvoir être maintenues en position à moins de ± 0,1°de longitude de leur position nominale;

MOD **6109** **2617**
470VD

b) Doivent être maintenues en position à moins de ± 0,1° de longitude de leur position nominale;

ADD **6109A** **2618**

c) Cependant, les stations expérimentales installées à bord de satellites géostationnaires ne sont pas tenues d'observer les dispositions des numéros **2616** et **2617,** mais elles doivent être maintenues en position à moins de ± 0,5° de longitude de leur position nominale;

MOD **6110** **2619**
470VE

d) Les stations spatiales ne sont cependant pas tenues d'observer les dispositions du numéro **2617** ou au numéro **2618,** selon le cas, tant, que le réseau à satellite auquel elles appartiennent ne cause pas de brouillage inacceptable (4) à tout autre réseau à satellite sont la station spatiale respecte les limites fixées aux numéros **2617** et **2618.**

ADD **6110A** **2620**

(2) Les stations spatiales installées à bord de satellites géostationnaires qui n'utilisent aucune bande de fréquences attribuée au service fixe par satellite ou au service de radiodiffusion par satellite:

ADD **6110B** **2621**

a) Doivent pouvoir être maintenues en position à moins de ± 0,5° de longitude de leur position nominale;

ADD **6110C** **2622**

b) Doivent être maintenues en position à moins de ± 0,5° de longitude de leur position nominale;

ADD **6110D** **2623**

c) Cependant, elles ne sont pas tenues d'observer les dispositions du numéro **2622,** tant que le réseau à satellite auquel elles appartiennent ne cause pas de brouillage innaceptable (4) à toute autre réseau à satellite dont la station spatiale respecte les limites fixées au numéro **2622.**

ADD **6106.1** **2613.1**
ADD **6106A.1** **2614.1**

(1) Le niveau de brouillage accepté est fixé par accord entre les administrations intéressées, sur la base des Avis pertinents du CCIR.

NOC **A.N27** **A.29**
S.III S.III.1

(2) Dans le cas de stations spatiales installées à bord de satelites géosynchrones dont l'orbite a une inclinaison supérieure à 5°, les tolérances de position se rapportent au point nodal.

ADD **6107.1** **2615.1**

(3) Les stations spatiales du service de radiodiffusion par satellite installées à bord de satellites géostationnaires fonctionnant dans la bande 11,7-12,7 GHz ne sont pas tenues d'observer ces dispositions, mais elles doivent être maintenues en position conformément à l'appendice **30.**

MOD **6110.1** **2619.1**
470VE.1

ADD **6110D.1** **2623.1**

(4) Le niveau de brouillage accepté est fixé par accord entre les administrations intéressées, sur la base des Avis pertinents du CCIR.

ADD **6110E** **2624** (3) Les stations spatiales (1) installées à bord de satellites géostationnaires au sont mises en service avant le 1er janvier 1987, la publication anticipée des renseignements relatifs au réseau ayant été effectuée avant le 1er janvier 1982, ne sont pas tenues d'observer les dispositions des numéros **2615** à **2623;** cependant:

ADD **6110F** **2625** *a*) Elles doivent pouvoir être maintenues en position à moins de ± 1° de longitude de leur position nominale, mais on doit s'efforcer d'être en mesure de réduite cette tolérance à ± 0,5° au moins;

ADD **6110G** **2626** *b*) Elles doivent être maintenues en position à moins de ± 1° de longitude de leur position nominale;

ADD **6110H** **2627** *c*) Toutefois, elles ne sont pas tenues d'observer les dispositions du numéro **2626** ant que le réseau à satellite auquel elles appartiennent ne cause pas de brouillage inacceptable (2) à tout autre réseau à satellite dont la station spatiale respecte les limites fixées au numéro **2626.**

SECTION IV

NOC

Précision de pointage des antennes des satellites géostationnaires

MOD **6111** **2628** § 5. (1) On doit avoir la possibilité de maintenir la direction de pointage du rayonnement maximal d'un faisceau quelconque, dirigé vers la Terre, d'une antenne de satellite géostationnaire (3) à moins de:
470VF

a) 10 % de l'ouverture du faisceau à demi-puissance par rapport à la direction de pointage nominale; ou

b) 0,3° par rapport à la direction de pointage nominale;

la plus élévée de ces deux valeurs étant seule retenue. Cettre disposition s'applique uniquement lorsque le faisceau est destiné à une couverture inférieure à la couverture mondiale.

2629 (2) Au ces où le faisceau ne présente pas une symétrie de révolution autour de l'axe de rayonnement maximal, la tolérance dans un plan quelconque contenant cet axe doit être rapportée à l'ouverture du faisceau à demi-puissance dans ce plan.

2630 (3) Cette précision ne doit être maintenue que si cela nécessaire pour éviter de causer des brouillages inacceptables (4) à d'autres systèmes.

SECTION V

NOC

Puissance surfacique sur l'orbite des satellites géostationnaires

NOC **6112** **2631** § 6. Dans la bande de fréquences 8025-8400 MHz, que le service d'exploration de la Terre par satellite utilisant des satellites non géostationnaires partage avec le service fixe par satellite (Terre vers espace) ou avec le service de météorologie par satellite (Terre vers espace), la puissance surfacique maximale produite sur l'orbite des satellites géostationnaires par une station spatiale quelconque du service d'exploration de la Terre par satellite ne doit pas dépasser — 174 dB (W/m²) dans une bande quelconque large de 4 kHz.
470VG

ADD **6110E.1** **2624.1** (1) Voir le numéro **2615.1.**

ADD **6110H.1** **2627.1** (2) Le niveau de brouillage accepté est fixé par accord entre les administraions intéressées, sur la base des Avis prertinents du CCIR.

ADD **6111.1** **2628.1** (3) Les antennes d'émissions des stations spatiales du service de radiodiffusion par satellite fonctionnant dans la bande 11,7-12,7 GHz ne sont pas tenues d'observer ces dispositions, mais elles doivent conserver la précision de pointage spécifée au paragraphe 3.14.1 de l'annexe 8 à l'appendice **30.**

MOD **6111.2** **2630.1** (4) Voir le numéro **2627.1.**
470VF.1

SECTION VI

ADD **Radioastronomie dans la zone tranquile de la Lune**

ADD **6113** **2632** § 7. (1) Dans la zone tranquille de la Lune (1) les émissions causant un brouillage préjudiciable aux observations de la radioastronomie (2) ou à autres utilisateurs de services passifs sont interdites dans la totalité du spectre des fréquences à l'exception des bandes de fréquences suivantes:

2633 *a*) Les bandes de fréquences attribuées au service de recherche spatiale utilisant des détecteurs actifs;

2634 *b*) Les bandes de fréquences attribuées au service d'exploitation spatiale, au service d'exploration de la Terre par satellite utilisant des détecteurs actifs et au service de radiolocalisation utilisant des stations installées sur des engins spatiaux, qui sont nécessaires comme auxiliaires de la recherche spatiale, et pour les radiocommunications et les émissions de la recherche spatiale dans la zone tranquille de la Lune.

ADD **6114** **2635** (2) Dans les bandes de fréquences où les émissions ne sont pas interdites par les dispositions des numéros **2632** à **2634,** les observations de la radioastronomie et de la recherche spatiale (passive) dans la zone tranquille de la Lune peuvent être protégées des brouillages préjudiciables par accord entre les administrations intéressés.

SECTION VII

ADD **Limitations de la puissance des stations terriennes en dehors de l'axe du faisceau principal**

ADD **6115** **2636** § 8. Le niveau de puissance isotrope rayonnée équivalent (p. i. r. e.) émis par une station terrienne en dehors de l'axe du faisceau principal en direction de l'orbite des satellites géostationnaires exerce une influence significative sur les brouillages causés aux autres réseaux à satellite géostationnaire. La réduction à un minimum des rayonnements hors-axe assurerait une utilisation plus efficace de l'orbite des satellites géostationnaires et faciliterait le coordination; les administrations sont invitées à obtenir, à cet égard, les valeurs le plus faibles pratiquement possibles, compte tenu des Avis du CCIR les plus récents. La réduction à un minimum de ces niveaux est particulièrement importante dans les bandes de fréquences utililisées de façon intensive pour les liaisons montantes.

2637 à 2663 *(Non attribués.)*

N28/7

ARTICLE 30

NOC **Service de radiodiffusion et service de radiodiffusion par satellite**

SECTION I

Service de radiodiffusion

NOC **6213** **2664** *A*) Généralités

MOD **6214** **2665** § 1. (1) Il est interdit d'établir et d'exploiter des stations de radiodiffusion (radiodiffusion sonore et télévision) à bord de navires, d'aéronefs ou de tout object flottant ou aéroporté hors des territoires nationaux.
422

NOC **6215** **2666** (2) En principe, la puissance des stations de radiodiffusion qui utilisent des fréquences
423 inférieures à 5060 kHz ou supérieures à 41 MHz ne doit pas dépasser (excepté dans la bande 3900-400 kHz) la valeur nécessaire pour assurer économiquement un service national de bonne qualité à l'intérieur des frontières du pays considéré.

ADD **6113.1** **2632.1** (1) La zone tranquille de la Lune comprend la partie de la surface de la Lune et le volume d'espace adjacent qui sont protégés des émissions provenant d'un point situé à moins de 100 000 km du centre de la Terre.

ADD **6113.2** **2632.2** (2) Le niveau de brouillage préjudiciable est fixé par accord entre les administrations intéressées compte tenu des Avis pertinents du CCIR.

NOC **6216** **2667** *B*) Radiodiffusion dans la Zone tropicale

NOC **6217** **2668** § 2. (1) Dans le présent Règlement, l'expression «radiodiffusion dans la Zone tropicale» désigne un type particulier de radiodiffusion pour l'usage intérieur nationale les pays inclus dans la zone définie aux numéros **406** à **411** où l'on peut constater qu'en raison du niveau élevé des parasites atmosphériques et des difficultés de propagation il n'est pas possible de réaliser économiquement un service de meilleure qualité par l'emploi des ondes kilométriques, hectométriques ou métriques.
424

NOC **6218** **2669** (2) L'utilisation par le service de radiodiffusion des bandes de fréquences énumérées ci-après limitée à la Zone tropicale:
425

2300-2498 kHz (Région 1);
2300-2495 kHz (Régions 2 et 3);
3200-3400 kHz (toutes les Régions);
4750-4995 kHz (toutes les Régions);
5005-5060 kHz (toutes les Régions).

ADD **6218A** **2670** (3) La puissance de l'onde porteuse des émetteurs fonctionnant dans ce service, dans les bandes énumérées au numéro **2669,** ne doit pas dépasser 50 kW.

NOC **6219** **2671** (4) Dans la Zone tropicale, le service de radiodiffusion a priorité sur les autres services qui partagent avec lui les bandes de fréquences énumérées au numéro **2669.**
426

NOC **6220** **2672** (5) Toutefois, dans le partie de la Libye située au nord du parallèle 30° Nord, le service de radiodiffusion, dans les bandes énumérées au numéro **2669,** fonctionne sur la base de l'égalité des droits avec autres services avec lesquels il partage ces bandes dans la Zone tropicale.
427

NOC **6221** **2673** (6) Le service de radiodiffusion à l'intérieur de la Zone tropicale et les autres services à l'extérieur de cette doivent fonctionner conformément aux dispositions du numéro **346.**
428

SECTION II

NOC **Service de radiodiffusion par satellite**

NOC **6222** **2674** § 3. Lorsqu'on définit les caractéristiques d'une station spatiale du service de radiodiffusion par satellite, tous les moyens techniques disponibles sont utilisées pour réduire au maximum le rayonnement sur le territoire d'autres pays, sauf accord préalable de ces derniers.
428A

2675 à **2669** *(Non attribués.)*

N29 ARTICLE 31

NOC **Service fixe**

SECTION I

NOC **Généralités**

MOD **6323** **2700** § 1. (1) Les administrations sont instamment invitées à abandonner l'emploi, dans les service fixe, des émissions radiotéléphoniques à double bande latérale (classe A3E).
465

NOC **6324** **2701** (2) Les émissions de la classe F3E ou G3E ne sont pas autorisées dans le service fixe dans ls bandes inférieures à 30 MHz.
466

SECTION II

NOC **Fréquences pour l'échange international des informations de police**

(MOD) **6325** **2702** § 2. (1) Les fréquences nécessaires pour l'échange international des renseignements ayant pour but d'aider à l'arrestation des criminels sont choisies dans les bandes attribuées au service fixe, si nécessaire par accords particuliers conclus par les administrations concernées dans le cadre de l'article 31 de la Convention relatif aux arrangements particuliers.
467

NOC **6326** **2703** (2) Afin d'économiser le plus possible les fréquences, il convient que le Comité international d'enregistrement des fréquences soit consulté par les administrations intéressées chaque fois que de tels accords sont à discuter sur une base régionale ou mondiale.
468

NOC

SECTION III

Fréquences pour l'échange international des informations météorologiques synoptiques

MOD **6327** **2704** § 3. (1) Les fréquences nécessaires pour l'echange international des informations
469 concernant la météorologie synoptique sont choisies dans les bandes attribuées au service fixe, si nécessaire par accords particuliers conclus par les administrations concernées dans le cadre de l'article 31 se la Convention relatif aux arrangements particuliers.

NOC **6328** **2705** (2) Afin d'économiser le plus possible les fréquences, il convient que le Comité
470 international d'enregistrement des fréquences soit consulté par les administrations intéressées chaque fois que de tels accords sont à discuter sur une base régionale ou mondiale.

2706 à **2730** *(Non attribués.)*

N30/41

ARTICLE 32

MOD

Service d'amateur et service d'amateur par satellite

SECTION I

MOD

Service d'amateur

MOD **6354** **2731** § 1. Les radiocommunications entre stations d'amateur de pays différents sont
1560 interdites lorsque l'administration de l'un des pays intéressés a notifié son opposition.

MOD **6355** **2732** § 2. (1) Lorsqu'elles sont permises, les transmissions entre stations d'amateur de
1561 pays différents doivent se faire en langage clair et se limiter á des messages d'ordre technique ayant trait aux essais et á des remarques d'un caractère purement personnel qui, en raison de leur faible importance, ne justifient pas le recours au service public de télécommunications.

ADD **6355A** **2733** (2) Il est absolument interdit d'utiliser les stations d'amateur pour transmettre des communications internationales en provenance ou à destination de tierces personnes.

NOC **6356** **2734** (3) Les dispositions qui précèdent peuvent être modifiées par des arrangements
1562 particuliers entre les administrations des pays intéressés.

MOD **6357** **2735** § 3. (1) Toute personne qui souhaite obtenir une licence pour manœuvrer les
1563 appareils d'une station d'amateur doit prouver qu'elle est apte à la transmission manuelle correcte et à la réception auditive correcte de textes en signaux du code Morse. Cependant, les administrations intéressées peuvent ne pas exiger l'application de cette prescription lorsqu'il s'agit de stations utilisant exclusivement des fréquences supérieures à 30 MHz.

MOD **6358** **2736** (2) Les administrations prennent les mesures qu'elles jugent nécessaires pour vérifier
1564 les aptitudes opérationnelles et techniques de toute personne qui souhaite manœuvrer les appareils d'une station d'amateur.

MOD **6359** **2737** § 4. La puissance maximale des stations d'amateur est fixée par les administrations
1565 intéressées, en tenant compte des aptitudes techniques des opérateurs et des conditions dans lesquelles ces stations doivent fonctionner.

MOD **6360** **2738** § 5. (1) Toutes les règles générales fixées dans la Convention et dans le présent
1566 Règlement s'appliquent aux stations d'amateur. En particulier, la fréquence émise doit être aussi stable et aussi exempte de rayonnements non essentiels que l'état de la technique le permet pour les stations de cette nature.

MOD **6361** **2739** (2) Au cours de leurs émissions, les stations d'amateur doivent transmettre leur
1567 indicatif d'appel à de courts intervalles.

SECTION II

(MOD)

Service d'amateur par satellite

ADD **6361A** **2740** § 6. Les dispositions de la section I du présent article s'appliquent, s'il y a lieu, de la même manière au service d'amateur par satellite.

NOC 6362 1567A **2741** § 7. Les stations spatiales du service d'amateur par satellite qui fonctionnent dans les bandes partagées avec d'autres services sont équipées de dispositifs appropriés à la commande de leurs émissions, pour le cas où des brouillages préjudiciables seraient signalés conformément à la procédure spécifiée à l'article **22**. Les administrations qui autorisent de telles stations spatiales en informent l'IFRB et font en sorte que des stations terriennes de commande suffisantes soient installées avant le lancement, afin de garantir que tout brouillage préjudiciable qui serait signalé puisse être éliminé par lesdites administrations (voir le numéro **2612**).

2742 à 2766 *(Non attribués.)*

N31

ARTICLE 33

MOD

Service des fréquences étalon et des signaux horaires

MOD 6389 1623 **2767** § 1. (1) Pour permettre une utilisation plus efficace du sprectre des fréquences radioeléctriques et pour favoriser d'autres activités techniques et scientifiques, les administrations qui assurent ou envisagent d'assurer un service de fréquences étalon et de signaux horaires doivent coordonner, conformément aux dispositions du présent article, l'établissement et l'exploitation de ce service au plan mondial, en veillant à l'étendre aux régions du monde qui sont insuffisamment desservies.

NOC 6390 1624 **2768** (2) A cet effet, les administrations prennent les mesures voulues pour coordonner avec le concours du Comité international d'enregistrement des fréquences toute nouvelle émission de fréquences étalon ou de signaux horaires ou toute modification apportée aux émissions existantes dans les bandes des fréquences étalon. Elles échangent entre elles et communiquent au Comité tous renseignements utiles à ce sujet. Le Comité consulte en cette matière le Directeur du CCIR, qui continue lui-même à s'assurer l'avis et la coopération du Bureau international de l'heure (BIH), de l'Union radio-scientifique internationale (URSI) et des autres organisations internationales ayant un intérêt direct et essential dans ce domaine.

(MOD) 6391 1625 **2769** (3) Autant que possible, aucune nouvelle fréquence n'est assignée dans les bandes du service des fréquences étalon, ni notifiée au Comité avant qu'ait été effectuée la coordination dont il est fait état ci-dessus.

NOC 6392 1626 **2770** § 2. En vue de réduire les brouillages dans les bandes du service des fréquences étalon, les administrations coopèrent entre elles en se conformant aux Avis du CCIR.

NOC 6393 1627 **2771** § 3. Les administrations qui assurent ce service coopèrent entre elles, par l'intermédiaire du CCIR, pour rassembler et distribuer les résultats des mesures de fréquences étalon et de signaux horaires, ainsi que les valeurs des ajustements des fréquences et des signaux horaires.

NOC 6394 1628 **2772** § 4. En choisissant les caractéristiques techniques des émissions de fréquences étalon et des signaux horaires, les administrations s'inspireront des Avis pertinents du CCIR.

2773 à 2797 *(Non attribués.)*

N32/42

ARTICLE 34

NOC

Stations expérimentales

NOC 6420 1568 **2798** § 1. (1) Une station expérimentale ne peut entrer en communication avec des stations expérimentales d'autres pays qu'avec l'accord de l'administration dont elle relève. Chaque administration notifie aux administrations intéressées les autorisations ainsi délivrées.

NOC 6421 1569 **2799** (2) Les administrations intéressées fixent par des arrangements particuliers les conditions dans laquelles les communications peuvent être établies.

NOC 6422 1570 **2800** § 2. (1) Dans les stations expérimentales, toute personne manœuvrant des appareils radiotélégraphiques, pour son propre compte ou pour celui de tiers, doit avoir prouvé qu'elle est apte à la transmission manuelle et à la réception auditive de textes en signaux du code Morse.

MOD 6423 1571 **2801** (2) Les administrations prennent les mesures qu'elles jugent nécessaires pour vérifier les aptitudes opérationnelles et techniques de toute personne qui souhaite manœuvrer les appareils d'une station expérimentale.

MOD 6424 1572 2802 § 3. La puissance maximale des stations expérimentales est fixée par les administrations intéressées en tenant compte du but pour lequel leur création a été autorisée et des conditions dans lesquelles ces stations doivent fonctionner.

MOD 6425 1573 2803 § 4. (1) Toutes le règles générales fixées dans la Convention et dans le présent Règlement s'appliquent aux stations expérimentales. De plus, ces stations doivent satisfaire aux conditions techniques imposées aux émetteurs qui travaillent dans les mêmes bandes de fréquences, sauf lorsque le principe technique même des expériences s'y oppose. Dans ce cas, l'administration qui autorise l'exploitation de ces stations peut accorder une dispense sous une forme appropriée.

MOD 6426 1574 2804 (2) Au cours de leurs émissions, les stations expérimentales doivent transmettre à de courts intervalles leuf indicatif d'appel ou toute autre forme d'identification reconnue (voir l'article **25**).

NOC 6427 1575 2805 § 5. Pour une station expérimentale non susceptible de créer un brouillage préjudiciable à un service d'un autre pays, l'administration intéressée peut, si elle l'estime désirable, adopter des dispositions différentes de celles qui sont contenues dans le présent article.

2806 à 2830 *(Non attribués.)*

N33

ARTICLE 35

NOC

Service de radiorepérage et service de radiorepérage par satellite

SECTION I

NOC

Dispositions générales

NOC 6453 1576 2831 § 1. Les administrations qui ont organisé un service de radiorepérage prennent toutes les dispositions nécessaires pour en assurer l'efficacité et la régularité. Cependant, elles n'acceptent aucune responsabilité quant aux conséquences éventuelles tant de l'inexactitude des informations fournies que du fonctionnement défectueux ou de l'arrêt du fonctionnement de leurs stations.

NOC 6454 1577 2832 § 2. En cas de mesure douteuse ou inexploitable, la station qui détermine un relèvement ou une position doit, si possible, aviser de cette incertitude la station mobile à laquelle fournir cette information.

NOC 6455 1578 2833 § 3. Les administrations notifient au Secrétaire général les caractéristiques de chaque station de radiorepérage assurant un service international intéressant le service mobile maritime, et notamment, si c'est nécessaire, pour chaque station ou groupe de stations, les secteurs dans lesquels les informations fournies sont normalement sûres. Ces renseignements sont publiés dans la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux et tout changement de caractère permanent est notifié au Secrétaire général.

NOC 6456 1579 2834 § 4. Les procédés d'identification des stations de radiorepérage doivent être choisis de façon à éviter toute incertitude lorsqu'il s'agit de reconnaître une station.

NOC 6457 1580 2835 § 5. Les signaux émis par les stations de radiorepérage doivent permettre des mesures exactes et précises.

NOC 6458 1581 2836 § 6. Toute information concernant une modification ou une irrégularité du fonctionnement d'une station de radiorepérage doit être diffusée sans délai. A cet effet:

NOC 6459 1582 2837 *a)* Les stations terrestres des pays où fonctionne une service de radiorepérage émettent chaque jour, en cas de besoin, des avis de modification ou d'irrégularité de fonctionnement jusqu'au moment où le fonctionnement normal a repris ou, si une modification permanente est survenue, jusqu'au moment où l'on peut raisonnablement admettre que tous les navigateurs intéressés en ont été avisés;

NOC 6460 1583 2838 *b)* Les modifications permanentes ou les irrégularités de longue durée sont publiées dans les avis aux navigateurs dans le délai le plus bref.

SUP 6461 1584

SECTION II

MOD

Dispositions relatives au service de radiorepérage par satellite

SUP **6462**
1584A

ADD **6462A** **2839** § 7. (1) Les dispositions des numéros **2831** à **2838** à l'exception du numéro **2832** s'appliquent au service de radionavigation maritime par satellite.

ADD **6462B** **2840** (2) Les dispositions des numéros **2831** à **2838** à l'exception des numéros **2832** et **2833** s'appliquent au service de radionavegation aéronautique par satellite.

SECTION III

NOC

Stations radiogoniométriques

NOC **6463** **2841** § 8. (1) Dans le service de radionavigation maritime, la fréquence 410 kHz est la
1585 fréquence normale de radiogoniométrie en radiotélégraphie. Toutes les stations radiogoniométriques du service de radionavigation maritime faisant usage de la radiotélégraphie doivent pouvoir l'utiliser. Elles doivent, de plus, être en mesure de prendre des relèvements sur la fréquence de 500 kHz, notamment pour relever les stations émettant des signaux de détresse, d'alarme et d'urgence.

NOC **6464** **2842** (2) Lorsqu'il existe un service de radiogoniométrie dans les bandes autorisées entre
1586 1605 kHz et 2850 kHz, il convient que les stations radiogoniométriques soient en mesure de prendre des relèvements sur la fréquence d'appel et de détresse radiotéléphonique 2182 kHz.

NOC **6465** **2843** § 9. La procédure à suivre par les stations radiogoniométriques et définie à
1587 l'appendice **41**.

(MOD) **6466** **2844** § 10. En l'absence d'accord préalable, une station d'aéronef qui s'adresse à une
1588 station radiogoniométrique pour obtenir un relèvement doit faire usage à cette fin d'une fréquence sur laquelle veille normalement la station appelée.

NOC **6467** **2845** § 11. Dans le service de radionavigation aéronautique, la procédure visée dans la
1589 présente section pour la radiogoniométrie est applicable, sauf lorsque des procédures particulières résultant d'arrangements conclus par les administrations intéressées sont en vigueur.

SECTION IV

NOC

Stations de radiophare

NOC **6468** **2846** A) Généralités

NOC **6469** **2847** § 12. Lorsqu'une administration juge utile, dans l'intérêt de la navigation, d'organiser
1590 un service de stations de radiophare, elle peut employer à cette fin:

(MOD) **6470** **2848** *a*) Des radiophares proprement dits, établis sur la terre ferme ou sur des
1591 navires amarrés de façon permanente ou, exceptionnellement, sur des navires naviguant dans une zone restreinte dont les limites sont connues et publiées. Le diagramme de l'émission de ces radiophares peut être directif ou non directif;

NOC **6471** **2849** *b*) Des stations fixes, des stations côtières ou des stations aéronautiques
1592 désignées pour fonctionner comme radiophares à la demande des stations mobiles.

NOC **6472** **2850** § 13. (1) Les radiophares proprement dits emploient les fréquences des bandes qui
1593 leur sont attribuées aux termes du chapitre III.

NOC **6473** **2851** (2) Les autres stations notifiées comme radiophares utilisent, à cet effet, leur
1594 fréquence normale de travail et leur classe normale d'émission.

NOC **6474** **2852** (3) La puissance rayonnée par chaque radiophare proprement dit doit être réglée à
1595 la valeur nécessaire pour que l'intensité de champ ait la valeur stipulée à la limite de portée requise (voir les numéros **2855** et **2860**).

NOC **6475** **2853**

B) Radiophares aéronautiques

MOD **6476** **2854**
433

§ 14. (1) L'assignation des fréquences de radiophares aéronautiques fonctionnant dans les bandes comprises entre 160 kHz et 435 kHz est fondée sur un rapport de protection contre les brouillages d'au moins 15 dB dans toute la zone de service de chaque radiophare.

MOD **6477** **2855**
434

(2) Il convient que la puissance rayonnée soit maintenue à la valeur minimale nécessaire pour que le champ ait la valeur voulue à la limite de portée.

(MOD) **6478** **2856**
435

(3) La limite de portée de jour des radiophares visés au numéro **2854** est définie par les valeurs de champ spécifiées ci-après:

NOC **6479** **2857**
436

(4) Régions 1 et 2:

70 microvolts par mètre pour les radiophares situés au nord du parallèle 30° N;
120 microvolts par mètre pour les radiophares situés entre les parallèles 30° N et 30° S;
70 microvolts par mètre pour les radiophares situés au sud du parallèle 30° S.

NOC **6480** **2858**
437

(5) Région 3:

70 microvolts par mètre pour les radiophares situés au nord du parallèle 40° N;
120 microvolts par mètre pour les radiophares situés entre les parallèles 40° N et 50° S;
70 microvolts par mètre pour les radiophares situés au sud du parallèle 50° S.

NOC **6481** **2859**

C) Radiophares maritimes

NOC **6482** **2860**
458

§ 15. (1) Les valeurs des rapports de protection applicables aux radiophares maritimes fonctionnant dans les bandes comprises entre 283,5 kHz et 335 kHz sont déterminées en admettant que la puissance rayonnée et maintenue à la valeur nécessaire pour obtenir l'intensité de champ voulue à la limite de portée.

(MOD) **6483** **2861**
459

(2) La limite de portée de jour des radiophares visés au numéro **2860** est définie par la condition qu'à cette limite, des champs soient les suivants:

NOC **6484** **2862**
460

(3) Région 1:

50 microvolts par mètre pour les radiophares situés au nord du parallèle 43° N;
75 microvolts par mètre pour les radiophares situés entre les parallèles 43° N et 30° N;
100 microvolts par mètre pour les radiophares situés entre les parallèles 30° N et 30° S;
75 microvolts par mètre pour les radiophares situés entre les parallèles 30° S et 43° S;
50 microvolts par mètre pour les radiophares situés ao sud du parallèle 43° S.

NOC **6485** **2863**
461

(4) Région 2:

50 microvolts par mètre pour les radiophares situés au nord du parallèle 40° N;
75 microvolts par mètre pour les radiophares situés entre les parallèles 40° N et 31° N;
100 microvolts par mètre pour les radiophares situés entre les parallèles 31° N et 30° S;
75 microvolts par mètre pour les radiophares situés entre les parallèles 30° S et 43° S;
50 microvolts par mètre pour les radiophares situés au sud du parallèle 43° S.

NOC **6486** **2864**
462

(5) Région 3:

75 microvolts par mètre pour les radiophares situés au nord du parallèle 40° N;

100 microvolts par mètre pour les radiophares situés entre les parallèles 40° N et 50° S;
75 microvolts par mètre pour les radiophares situés au sud du parallèle 50° S.

NOC **6487** **2865** (6) Dans la Région 1, l'assignation de fréquences aux radiophares maritimes est établie sur la base d'un espacement de 2,3 kHz entre fréquences adjacentes utilisées pour des émissions de classe A2A.
463

NOC **6488** **2866** (7) Dans la Région 1, il convient que le taux de modulation des émissions des radiophares maritimes soit d'au moins 70 %.
464

2867 à **2891** *(Non attribués.)*

N33A

ARTICLE 36

ADD

Service de radioastronomie

SECTION I

ADD

Dispositions générales

ADD **6579** **2892** § 1. Les administrations coopèrent pour protéger le service de radioastronomie contre les brouillages, en tenant compte:

2893 *a*) De la sensibilité exceptionnellement élevée des stations de radioastronomie;

2894 *b*) De la nécessité fréquente de longues périodes d'observation exemples de brouillages préjudiciables;

2895 *c*) Du fait que le petit nombre de stations de radioastronomie dans chaque pays et la connaissance de leur emplacement permettent souvent d'accorder une attention particulière à la manière d'éviter les brouillages.

ADD **6580** **2896** § 2. Les emplacements des stations de radioastronomie à protéger et les fréquences d'observation qu'elles utilisent sont notifiés à l'IFRB conformément au numéro **1492** et publiés par le Secrétaire général conformément au numéro **2237** pour communication aux Membres.

SECTION II

ADD

Mesures à prendre dans le service de radioastronomie

ADD **6581** **2897** § 3. Les emplacements des stations de radioastronomie sont choisis en tenant compte des possibilités de brouillages préjudiciables à ces stations.

ADD **6582** **2898** § 4. Tous les moyens techniques pratiquement réalisables sont adoptés dans les stations de radioastronomie pour réduire leur susceptibilité aux brouillages. Le développement de techniques améliorées pour réduire la susceptibilité aux brouillages doit être poursuivi, y compris la participation à des études en commun par l'entremise du CCIR.

SECTION III

ADD

Protection du service de radioastronomie

ADD **6583** **2899** § 5. Les statut du service de radioastronomie dans les diverses bandes de fréquences est spécifié au tableau d'attribution des bandes de fréquence (article **8**). Les administrations assurent la protection des stations du service de radioastronomie contre les brouillages sur la base du statut de ce service dans les bandes considérées (voir aussi les numéros **344, 2632** à **2634** et **2635**).

ADD **6584** **2900** § 6. Lorsqu'elles assurant la protection du service de radioastronomie contre les brouillages à titre permanent ou temporaire, les administrations utilisent, selon le cas, des moyens tels que la séparation géographique, l'effet d'écran du terrain, la directivité de l'antenne, l'utilisation du partage dans le temps et de la plus faible puissance d'émission pratiquement réalisable.

ADD 6585 2901 § 7. En assignant des fréquences aux stations des autres services dans les bandes adjacentes à celles que le service de radioastronomie utilise pour ses observations conformément aux dispositions du présent Règlement les administrations sont instamment priées de prendre toutes des mesures pratiquement réalisables pour protéger le service de radioastronomie contre les brouillages préjudiciables conformément au numéro **343**. Outre les mesures mentionnées au numéro **2900**, il convient d'examiner particulièrement les moyens techniques permettant de ramener au minimum la puissance rayonnée aux fréquences comprises dans la bande utilisée pour la radioastronomie (voir aussi le número **344**).

ADD 6586 2902 § 8. En assignant des fréquences à des stations dans d'autres bandes, les administrations sont instamment priées, dans la mesure pratiquement possible, de tenir compte de la nécessité d'éviter les rayonnements non essentiels susceptibles de causer des brouillages préjudiciables au service de radioastronomie exploité conformément au présent Règlement (voir aussi le numéro **344**).

ADD 6587 2903 § 9. En appliquant les dispositions définies dans la présente section, les administrations sont instamment priées de ne pas perdre de vue que le service de radioastronomie est extrêmement sensible aux brouillages causés par les émissions provenant de stations spatiales ou d'aéronef.

ADD 6588 2904 § 10. Les administrations doivent prendre note des Avis pertinents du CCIR afin de limiter les brouillages causés par d'autres services au service de radioastronomie.

2905 à 2929 *(Non attribués.)*

NIX

CHAPITRE IX

NOC

Communications de détresse et de sécurité

N34

ARTICLE 37

NOC

Dispositions générales

MOD 6589 1380 2930 § 1. La procédure fixée dans le présent chapitre est obligatoire dans le service mobile maritime ainsi que pour les communications entre stations d'aéronef et stations du service mobile maritime. Les dispositions du présent chapitre sont également applicables dans le service mobile aéronautique, sauf en cas d'arrangements particuliers conclus par les gouvernements intéressés.

MOD 6590 1380A 2931 § 2. La procédure fixée dans le présent chapitre est obligatoire dans le service mobile maritime par satellite ainsi que pour les communications entre les stations à bord des aéronefs et les stations du service mobile maritime par satellite dans tous les cas où ce service ou ces stations sont expressément mentionnés. Les dispositions des numéros **3086, 3090, 3095, 3096, 3097, 3098, 3200, 3203** et **3223** s'appliquent également.

NOC 6591 1381 2932 § 3. (1) Aucune disposition du présent Réglement ne peut faire obstacle à l'emploi, par une station mobile ou une station terrienne de navire en détresse, de tous les moyens dont elle dispose pour attirer l'attention, signaler sa situation et obtenir de secours.

(MOD) 6592 1381A 2933 (2) Aucune disposition du présent Réglement ne peut faire obstacle à l'emploi, par des stations à bord des aéronefs ou de navires participant à des opérations de recherche et de sauvetage, dans les circonstances exceptionnelles, de tous le moyens dont elles disposent pour assistir une station mobile en détresse.

MOD 6593 1382 2934 (3) Aucune disposition du présent Règlement ne peut faire obstacle à l'emploi, par une station terrestre, dans les circonstances exceptionnelles, de tous les moyens dont elles dispose pour assister une station mobile en détresse (voir également le numéro **959**).

NOC 6594 1384 2935 § 4. Dans les cas de détresse, d'urgence ou de sécurité, les transmissions:

NOC 6595 1385 2936 *a)* En radiotélégraphie, ne doivent en général pas dépasser le vitesse de seize mots par minute;

NOC 6596 1386 2937 *b)* En radiotéléphonie, doivent être effectuées lentement et distinctement, chaque mot étant prononcé nettement afin de faciliter sa transcription.

NOC **6597** **2938** § 5. Il convient d'utiliser, le cas échéant, les abréviations et les signaux de l'appendice **14** ainsi que les tables d'épellation des lettres et de chiffres de l'appendice **24**; de plus, en cas de difficultés de langage, l'utilisation du Code international de signaux est recommandée.
1386A

NOC **6598** **2939** § 6. (1) La Convention internationale pour la sauvegarde de la vie humaine en mer
965 détermine les navires et ceux de leurs engins de sauvetage qui doivent être équipés d'installations radioeléctriques ainsi que les navires qui doivent être équipés d'appareils radioeléctriques portatifs à utiliser par les engins de sauvatage. Elle prescrit également les conditions que doivent remplir de tels appareils.

NOC **6599** **2940** (2) Les annexes à la Convention relative à l'aviation civile internationale définissent
966 les aéronefs qu'il convient d'équiper d'installations radioélectriques ainsi que les aéronefs qu'il convient d'équiper d'appareils radioélectriques portatifs à utiliser par les engins de sauvatage. Elles définissent également les conditions qu'il convient que de tels appareils remplissent.

NOC **6600** **2941** § 7. Cependant, les prescriptions du présent Règlement doivent être observées par
967 tous les appareils de cette nature.

NOC **6601** **2942** § 8. Les stations mobiles du service mobile maritime peuvent communiquer à des
968 fins de sécurité avec les stations du service mobile aéronautique.

(MOD) **6602** **2943** § 9. Toute station établie à bord d'un aéronef et astreinte par une réglementation
992 nationale ou internationale à entrer en communication pour des raisons de détresse, d'urgence ou de sécurité avec les stations du service mobile maritime doit être en mesure, ou bien de faire des émissions de préférence de la classe A2A ou H2A et de recevoir des émissions de préférence des classes A2A et H2A sur la fréquence porteuse 500 kHz, ou bien de faire des émissions de la classe A3E ou H3E et de recevoir des émissions des classes A3E et H3E sur la fréquence porteuse 2182 kHz, ou bien de faire et de recevoir des émisssions de la classe G3E sur la fréquence 156,8 MHz.

2944 à 2968 *(Non attribués.)*

N35

ARTICLE 38

Fréquences pour la détresse et la sécurité

SECTION I

Fréquences disponibles

NOC **6629** **2969** *A)* 500 kHz

MOD **6630** **2970** § 1. (1) La fréquence 500 kHz est la fréquence internationale de détresse en radiotélé-
1107 graphie (voir également le numéro **472**; elle doit être utilisée à cet effet par les stations de navire, d'aéronef et d'engin de sauvetage qui font usage des fréquences comprises entre 405 kHz et 535 kHz, lorsque ces stations demandent l'assistence des services maritimes. Elle est utilisée pour l'appel et le trafic de détresse ainsi que pour le signal et les messages d'urgence, pour le signal de sécurité et en dehors des régions à trafic intense, pour de brefs messages de sécurité. Lorsque cela est possible en pratique, les messages de sécurité sont émis sur la fréquence de travail, après une annonce préliminaire sur la fréquence 500 kHz (voir aussi le numéro **4236**).

(MOD) **6631** **2971** (2) Il convient toutefois que les stations de navire et d'aéronef qui ne peuvent pas
1108 émettre sur la fréquence 500 kHz utilisent toute autre fréquence disponible sur laquelle elles pourraient attirer l'attention.

NOC **6632** **2972** *B)* 2182 kHz

MOD **6633** **2973** § 2. (1) La fréquence 2182 kHz (1) est la fréquence internationale de détresse en
1323 radiotéléphonie (voir également les numéros **500** et **501**): elle doit être employée à cet

---

NOC **6633.1** **2973.1** (1) Lorsque les administrations font assurer par leurs stations côtières une veille sur 2182 kHz pour
1323.1 recevoir des émissions des classes R3E et J3E ainsi que des émissions des classes A3E et H3E, les stations de navire se trouvant au-delà de la distance à laquelle elles pourraient communiquer avec ces stations côtières au moyen d'émissions des classes A3E ou H3E peuvent appeler, aux fins de sécurité, les stations côtières en utilisant les classes d'émission R3E ou J3E. Cette utilisation n'est autorisée que lorsque les appels effectués avec des émisssions des classes A3E et H3E ont été infructeux.

effet par les stations de navire, d'aéronef et d'engin de sauvetage et par les radiobalises de localisation des sinistres qui font usage des bandes autorisées comprises entre 1605 kHz lorsque ces stations demandent l'assistance des services maritimes. Elle est employée et 4000 kHz pour l'appel et le trafic de détresse, pour les signaux de radiobalise de localisation des sinistres, pour le signal et les messages d'urgence ainsi que pour le signal de sécurité. Les messages de sécurité doivent être transmis, lorsque c'est possible en pratique, sur une fréquence de travail après une annonce préalable sur la fréquence 2182 kHz. La classe d'émission à utiliser en radiotéléphonie sur la fréquence 2182 kHz est la classe A3E ou H3E (voir le numéro **4127**. La classe d'émission à utiliser par les radiobalises de localisation des sinistres est celle qui est spécifiée à l'appendice **37** (voir également le numéro **3265**).

MOD **6634** **2974** (2) Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, si un message de détresse transmis sur la fréquence porteuse 2182 kHz n'a pas fait l'objet d'un accusé de réception, on peut, lorsque c'est possible, transmettre de nouveau le signal d'alarme radiotéléphonique suivi de l'appel et du message de détresse sur l'une ou l'autre, selon de cas, des deux fréquences porteuses 4125 kHz ou 6215,5 kHz (voir les numéros **2982, 2986** et **3054**).
1323A

MOD **6635** **2975** (3) Il convient cependant que les stations de navire et d'aéronef qui ne peuvent pas émettre sur la fréquence porteuse 2182 kHz ni, dans les conditions du numéro **2974**, sur les fréquences porteuses 4125 kHz ou 6215,5 kHz, utilisent toute autre fréquence disponible sur laquelle elles pourraient attirer l'attention.
1324

NOC **6636** **2976** (4) Des appels sélectifs régis par le dispositions de l'article 62 peuvent être émis sur la fréquence porteuse 2182 kHz dans les sens côtière vers navire et navire vers côtière et entre navires: ils doivent être limités sur cette fréquence aux cas de détresse et d'urgence et aux avis d'une grande importance pour la navigation. Cette procédure ne peut en aucun cas se substituer à celles qui sont décrites aux numéros **3101, 3102, 3116, 3117** et **3270.**
1325A

NOC **6637** **2977** (5) Toute station côtière faisant usage de la fréquence porteuse 2182 kHz à des fins de détresse doit pouvoir transmettre le signal d'alarme radiotéléphonique décrit au numéro **3270** (voir aussi les numéros **3277, 3278** et **3279**).
1326

NOC **6638** **2978** (6) Il convient que toute station côtière autorisée à émettre des avis pour la navigation puisse transmettre le signal d'avis aux navigateurs décrit aux numéros **3284, 3285** et **3286.**
1326AA

NOC **6639** **2979** *C)* 3023 kHz

MOD **6640** **2980** § 3. La fréquence porteuse (fréquence de référence) aéronautique 3023 kHz peut être utilisée pour établir des communications entre les stations mobiles qui participent à des opérations de recherche et de sauvetage coordonnées, ainsi que des communications entre ces stations et les stations terrestres participantes, conformément aux dispositions des appendices 27 (*) et 27 Aer2 (*) (voir également les numéros **501** et **505**.
1326C

SUP **6641**
969A

MOD **6642** **2981** *D)* 4125 kHz

MOD **6643** **2982** § 4. Dans la zone des Règions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, la fréquence porteuse 4125 kHz est désignée, en plus de la fréquence porteuse 2182 kHz, pour la détresse et la sécurité ainsi que pour l'appel et la réponse (voir également le numéro **520**). Les stations qui utilisent cette fréquence 4125 kHz peuvent continuer à utiliser la classe d'émission H3E jusqu'au 1er janvier 1984.
1351E

SUP **6644**
1351l

NOC **6645** **2983** *E)* 5680 kHz

MOD **6646** **2984** § 5. La fréquence porteuse (fréquence de référence) aéronautique 5680 kHz peut être utilisée pour établir des communications entre les stations mobiles qui participent à
1353B

(*) Note du Secrétariat général: voir de numéro **5189** et la Résolution **400.**

des opérations de recherche et de sauvatage coordonnées, ainsi que des communications entre ces stations et les stations terrestres participantes, conformément aux dispositions des appendices 27 (*) et 27 Aer2 (*) (voir également les numéros **501** et **505**).

MOD **6647** **2985** *F)* 6215,5 kHz

MOD **6648** **2986** § 6. Dans la zone de la Région 3 située au sud du parallèle 25° N, la fréquence porteuse 6215,5 kHz est désignée, en plus de la fréquence porteuse 2182 kHz, pour la détresse et la sécurité ainsi que pour l'appel et la réponse (voir également le numéro **523**). Les stations qui utilisent cette fréquence 6215,5 kHz peuvent continuer à utiliser la classe d'émission H3E jusqu'au 1er janvier 1984.
1351F

NOC **6649** **2987** *G)* 8364 kHz

MOD **6650** **2988** § 7. La fréquence 8364 kHz est désignée pour être utilisée par les stations d'engin de sauvetage, si elles sont équipées pour émettre sur les fréquences des bandes comprises entre 4000 kHz et 27 500 kHz et si elles désirent établir avec les stations des services mobiles maritime et aéronautique des communications relatives aux opérations de recherche et de sauvetage (voir également le numéro **501**).
1179

NOC **6651** **2989** *H)* 121,5 MHz et 123,1 MHz

NOC **6651A** **2990** § 8. (1) Les stations mobiles du service mobile maritime peuvent communiquer à des fins de sécurité avec les stations du service mobile aéronautique.
968

MOD **6652** **2991** (2) C'est seulement dans ces occasions qu'elles peuvent utiliser la fréquence aéronautique d'urgence 121,5 MHz et la fréquence aéronautique auxiliaire 123,1 MHz en émission de classe A3E pour les deux fréquences (voir également les numéros **501** et **593**). Elles doivent alors se conformer aux arrangements particuliers conclus par les gouvernements intéressés et régissant le service mobile aéronautique.
969

MOD **6653** **2992** *I)* 156,3 MHz et 156,8 MHz

MOD **6654** **2993** § 9. Les fréquences 156,3 MHz et 156,8 MHz peuvent être utilisées par les stations d'aéronef, mais uniquement à des fins relatives à la sécurité (voir également la remarque *h)* de l'appendice **18**).
953

SUP **6655**

MOD **6656** **2994** § 10. (1) La fréquence 156,8 KHz est la fréquence internationale de détresse, de sécurité et d'appel en radiotéléphonie pour les stations du service mobile maritime lorsqu'elles font usage de fréquences des bandes autorisées comprises entre 156 MHz et 174 MHz (voir également les numéros **501** et **613**). Elle est employée pour le signal, les appels et le trafic de détresse, pour le signal et le trafic d'urgence et pour le signal de sécurité (voir également le numéro **2993**). Les messages de sécurité doivent être transmis, lorsque c'est possible en pratique, sur une fréquence de travail après annonce préliminaire sur la fréquence 156,8 MHz. La classe d'émission à utilisar pour la radiotéléphonie sur la fréquence 156,8 MHz est la classe G3E (voir l'appendice **19**).
1359

NOC **6657** **2995** (2) Toutefois, il convient que les stations de navire qui ne peuvent pas émettre sur la fréquence 156,8 MHz utilisent toute autre fréquence disponible sur laquelle elles pourraient attirer l'attention.
1359AA

MOD **6658** **2996** *J)* 243 MHz

(Voir les numéros **501** et **642**.)

MOD **6659** **2997** *K)* Bande 406-406,1 MHz

(Voir le numéro **649**.)

(*) Note du Secrétariat général: voir de numéro **5189** et la Résolution **400**.

ADD **6659A** **2998** *L)* Bande 1544-1545 MHz et bande 1645,5-1646,5 MHz

(Voir le numéro **728**.)

NOC **6660** **2999** *M)* Aéronef en détresse
SUP **6661**
1208

MOD **6662** **3000** § 11. Tout aéronef en détresse transmet l'appel de détresse sur la fréquence sur laquelle les stations terrestres ou mobiles susceptibles de lui porter secours assurent la veille. Si cet appel est destiné à des stations du service mobile maritime, les dispositions des numéros **2970** et **2971** ou des numéros **2973** et **2975** ou **2994** et **2995** doivent être observées.
1321

NOC **6663** **3001** *N)* Station d'engin de sauvetage

NOC **6664** **3002** § 12. Les appareils à utiliser dans les stations d'engin de sauvetage doivent, s'ils peuvent employer des fréquences:
994

NOC **6665** **3003** *a) Dans les bandes comprises entre 405 kHz et 535 kHz*, pouvoir faire des émissions des classes A2A et A2B (*) ou H2A et H2B (*) sur la fréquence porteuse 500 kHz. Si l'installation comporte um récepteur pour l'une de ces bandes, celui-ci doit pouvoir recevoir des émissions des classes A2A et H2A sur la fréquence porteuse 500 kHz;
995

NOC **6666** **3004** *b) Dans les bandes comprises entre 1605 kHz et 2850 kHz*, pouvoir faire des émissions de la classe A3E ou H3E sur la fréquence porteuse 2182 kHz. Si l'installation comporte un récepteur pour l'une de ces bandes, celui-ci doit pouvoir recevoir des émissions des classes A3E et H3E sur la fréquence porteuse 2182 kHz;
996

NOC **6667** **3005** *c) Dans les bandes comprises entre 4000 kHz et 27 500 kHz*, pouvoir faire des émissions de la classe A2A ou H2A sur la fréquence porteuse 8364 kHz. Si l'installation comporte un récepteur pour l'une de ces bandes, celui-ci doit pouvoir recevoir des émissions des classes A1A, A2A et H2A dans toute la bande 8341,75-8728,5 kHz;
997

MOD **6668** **3006** *d) Dans les bandes comprises entre 118 MHz et 136 MHz*, pouvoir faire des émissions sur la fréquence 121,5 MHz, en utilisant de préférence la modulation d'amplitude. Si l'installation comporte un récepteur pour l'une de ces bandes, celui-ci doit pouvoir les émissions de la classe A3E sur 121,5 MHz;
998

NOC **6669** **3007** *e) Dans les bandes comprises entre 156 MHz et 174 MHz*, pouvoir faire des émissions sur la classe G3E sur la fréquence 156,8 MHz. Si l'installation comporte um récepteur pour l'une de ces bandes, celui-ci doit pouvoir recevoir des émissions de la classe G3E sur la fréquence 156,8 MHz;
998A

NOC **6670** **3008** *f) Dans les bandes comprises entre 1235 MHz et 328,6 MHz*, pouvoir faire des émissions sur la fréquence 243 MHz.
999

SECTION II

NOC **Protection des fréquences de détresse**

NOC **6671** **3009** *A)* Généralités

NOC **6672** **3010** § 13. Toute émission susceptible de produire des brouillages préjudiciables aux communications de détresse, d'alarme, d'urgence ou de sécurité sur les fréquences internationales de détresse 500 kHz ou 2182 kHz est interdite (voir les numéros **472, 500, 3018** et **3023.** Toute émission causant des brouillages préjudiciables aux communications de détresse, de sécurité et d'appel sur la fréquence 156,8 MHz est interdite (voir les numéros **613, 3033** et **4414.**
421

MOD **6673** **3011** § 14. (1) Les émissions d'essai doivent être réduites au minimum en particulier:
1295

3012 *a)* Sur la fréquence porteuse 2182 kHz;

(*) Ceci pourvoit à la réception automatique de signaux radiotélégraphiques d'alarme.

3013 *b*) Sur la fréquence 156,8 MHz;

3014 *c*) Sur la fréquence porteuse 4125 kHz dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord;

3015 *d*) Sur la fréquence porteuse 6215,5 kHz dans la zone de la Région 3 située au sud du parallèle 25° Nord.

NOC **6674** 1295A **3016** (2) Il est interdit de faire des émissions d'essai du signal d'alarme radiotéléphonique sur la fréquence porteuse 2182 kHz et sur la fréquence 156,8 MHz, sauf s'il s'agit d'un matérial de secours qui ne peut émetre que sur ces fréquences: dans ce cas, il y a lieu de prendre les mesures qui s'imposent pour éviter le rayonnement. Il faut également prendre des mesures visant à empêcher le rayonnement provenant des essais du signal d'alarme radiotéléphonique sur les fréquences autres que les fréquences 2182 kHz et 156,8 MHz

NOC **6675** **3017** *B*) 500 kHz

NOC **6676** 1112 **3018** § 15. (1) Exception faite des émissions autorisées sur la fréquence 500 kHz, et sous réserve des dispositions du numéro **4226**, toute émission est interdite dans la bande 490-510 kHz (voir numéro **471** et Recommandation **200**).

NOC **6677** 1113 **3019** (2) Afin de faciliter la réception des appels de détresse, les autres émissions sur la fréquence 500 kHz doivent être réduites au minimum et leur durée ne doit pas dépasser une minute.

NOC **6678** 1113A **3020** (3) Avant d'émettre sur la fréquence 500 kHz, une station du service mobile doit écouter sur cette fréquence pendant un laps de temps suffisant, afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **3702** ou **4713**).

NOC **6679** 1113B **3021** (4) Les dispositions du numéro **3020** ne s'appliquent pas aux stations en détresse.

NOC **6680** **3022** *C*) 2182 kHz

NOC **6681** 1325 **3023** § 16. (1) Exception faite des émissions autorisées sur la fréquence porteuse 2182 kHz, toute émission est interdite sur les fréquences comprises entre 2173,5 kHz et 2190,5 kHz.

NOC **6682** 1326A **3024** (2) Avant d'émettre sur la fréquence porteuse 2182 kHz, une station du service mobile doit écouter sur cette fréquence pendant un laps de temps suffisant, afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**).

NOC **6683** 1326B **3025** (3) Les dispositions du numéro **3024** ne s'appliquent pas aux stations en détresse.

NOC **6684** 1331 **3026** (4) Afin de faciliter la réception des appels de détresse, toutes les émissions sur la fréquence 2182 kHz doivent être réduites au minimum.

NOC **6685** 1466B **3027** (5) Pour limiter les émissions inutiles de signaux d'alarme, les essais du signal d'alarme radiotéléphonique sur la fréquence porteuse 2182 kHz sont interdits (voir le numéro **3016**).

NOC **6686** 1466C **3028** (6) A titre d'exception, ces essais sont autorisés pour les appareils radiotéléphoniques de secours qui disposent uniquement de la fréquence internationale de détresse 2182 kHz à condition que soit utilisée une antenne artificielle appropriée.

MOD **6687** **3029** *D*) 4125 kHz et 6215,5 kHz

MOD **6688** 1351G **3030** § 17. (1) Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, avant d'émettre sur la fréquence porteuse 4125 kHz ou 6215,5 kHz les stations écoutent sur cette fréquence pendant un laps de temps suffisant afin d'être certaines qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**.

NOC **6689** 1351H **3031** (2) Les dispositions du numéro **3030** ne s'appliquent pas aux stations en détresse.

NOC **6690** **3032** *E*) 156,8 MHz

NOC **6691** 1363 **3033** § 18. (1) Toute émission dans la bande 156,725-156,875 MHz (1) pouvant causer des brouillages préjudiciables aux émissions autorisées des stations du service mobile maritime sur 156,8 MHz est interdite.

NOC **6691.1** 1363.1 **3033.1** (1) A partir du 1er janvier 1983, cette bande deviendra: 156,7625-156,8375 MHz (voir la Résolution **308**.

NOC 6692 3034 (2) Avant d'émettre sur la fréquence 156,8 MHz, il convient que les stations du service mobile écoutent sur cette fréquence pendant un laps de temps suffisant afin d'être certaines qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**).
1363A

NOC 6693 3035 (3) Les dispositions du numéro **3034** ne s'appliquent pas aux stations en détresse.
1363B

NOC 6694 3036 (4) Afin de faciliter la réception des appels de détresse, toutes les émissions sur la fréquence 156,8 MHz doivent être réduites au minimum et ne pas dépasser une minute.
1363C

SECTION III

NOC

Veille sur les fréquences de détresse

NOC 6695 3037 *A)* 500 kHz

(MOD) 6696 3038 § 19. (1) En vue d'augmenter la sécurité de la vie humaine sur mer et au-dessus de la mer, toutes les stations du service mobile maritime qui écoutent normalement sur les fréquences des bandes autorisées entre 405 kHz et 535 kHz doivent, pendant leurs vacations, prendre les mesures utiles pour que la veille sur la fréquence de détresse 500 kHz soit assurée, deux fois par heure, pendant trois minutes commençant à X h 15 et X h 45, temps universel coordonné (UTC), par un opérateur utilisant un casque ou un haut-parleur.
1130

MOD 6697 3039 (2) Pendant les intervalles de temps indiqués ci-dessus, à lexception des émissions prévues au présent chapitre:
1131

NOC 6698 3040 *a)* Les émissions doivent cesser dans les bandes comprises entre 485 kHz et 515 kHz;
1132

NOC 6699 3041 *b)* Hors de ces bandes, les émissions des stations du mobile peuvent continuer. Les stations du service mobile maritime peuvent les écouter, à la condition expresse d'assurer d'abord la veille sur la fréquence de détresse, comme il est prescrit au numéro **3038.**
1133

NOC 6700 3042 § 20. (1) Les stations du service mobile maritime ouvertes ou service de la correspondance publique et utilisant les fréquences des bandes autorisées entre 405 kHz et 535 kHz doivent, pendant leurs vacations, rester à l'écoute sur la fréquence 500 kHz. Cette veille n'est obligatoire que pour les émissions des classes A2A et H2A.
1134

NOC 6701 3043 (2) Ces stations, tout en observant les prescriptions du numéro **3038,** ne sont autorisées à abandonner cette veille que lorsqu'elles sont engagées dans une communication sur d'autres fréquences.
1135

NOC 6702 3044 (3) Pendant qu'elles sont engagées dans une telle communication:
1136

3045 *a)* Les stations de navire peuvent maintenir la veille sur la fréquence 500 kHz au moyen d'un opérateur utilisant un casque ou un haut-parleur, ou au moyen de tout autre dispositif convenable, tel qu'un récepteur automatique d'alarme;

3046 *b)* Les stations côtières peuvent maintenir la veille sur la fréquence 500 kHz au moyen d'un opérateur utilisant un casque ou un haut-parleur; dans ce dernier cas, une mention peut être portée dans la Nomenclature des stations côtières.

NOC 6703 3047 *B)* 2182 kHz

NOC 6704 3048 § 21. (1) Toutes les stations côtières qui sont ouvertes à la correspondance publique et qui constituent um élément essentiel de la protection en cas de détresse dans leur zone, doivent assurer la veille sur la fréquence 2182 kHz pendant leurs vacations.
1332

NOC 6705 3049 (2) Ces stations assurent cette veille grâce à un opérateur utilisant des moyens auditifs: casque, casque à deux écouteurs indépendants ou haut-parleur.
1333

NOC 6706 3050 (3) Il convient, en outre, que les stations de navire assurent une veille aussi étendue que possible sur la fréquence porteuse 2182 kHz pour pouvoir recevoir, par tous les moyens appropriés, le signal d'alarme radiotéléphonique décrit au numéro **3270** et le signal d'avis aux navigateurs décrit aux numéros **3284, 3285** et **3286,** ainsi que les signaux de détresse, d'urgence et de sécurité.
1334

NOC 6707 3051 § 22. Il convient que les stations de navire ouvertes à la correspondance publique assurent autant que possible la veille sur la fréquence 2182 kHz pendant leurs vacations.
1335

NOC 6708 3052 § 23. En vue d'accroitre la sécurité de la vie humaine en mer et au-dessus de la mer, toutes les stations du service mobile maritime qui écoutent normalement sur les
1335A

fréquences des bandes autorisées comprises entre 1605 kHz et 2850 kHz prennent, autant que possible, les mesures utiles pour assurer pendant leurs vacations la veille sur la fréquence internationale de détresse 2182 kHz deux fois par heure, pendant trois minutes commençant à X h 00 et X h 30, temps universel coordonné (UTC).

MOD **6709** **3053** *C)* 4125 kHz et 6215,5 kHz

MOD **6710** **3054** 1354A § 24. (1) Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, toutes les stations côtières qui sont ouvertes à la correspondance publique et qui constituent um élément essentiel de la protection en cas de détresse dans la zone desservie peuvent maintenir une veille, pendant leurs vacations, sur les fréquences porteuses 4125 kHz et ou 6215,5 kHz (voir les numéros **2982** et **2986**). Il convient que cette veille soit mentionnée dans la Nomenclature des stations côtières.

NOC **6711** **3055** 1354B (2) Il convient que les stations assurent cette veille grâce à un opérateur utilisant des moyens auditifs: casque, casque à deux écouteurs indépendants ou haut-parleur.

NOC **6712** **3056** *D)* 156,8 MHz

NOC **6713** **3057** 1364 § 25. (1) Il convient que toute station côtière du service mobile maritime international radiotéléphonique dans la bande 156-174 MHZ, lorqu'elle constitue un élément essenciel de la protection en cas de détresse dans la zone desservie, assure, pendant ses vacations dans cette bande, une veille efficace par des moyens auditifs sur la fréquence 156,8 MHz (voir la Recommandation **306**).

NOC **6714** **3058** 1367 (2) Lorsqu'elles se trouvent dans la zone de service de stations côtières du service mobile maritime radiotéléphonique dans les bandes comprises entre 156 MHz et 174 MHz, et lorsque c'est possible en pratique, il convient que les stations de navire assurent la veille sur la fréquence 156,8 MHz. Il convient que celles qui ne sont pourvues que d'appareils radiotéléphoniques fonctionnant dans les bandes autorisées comprises entre 156 MHz et 174 MHz, assurent, lorsqu'elles sont en mer, une veille sur la fréquence 156,8 MHz.

NOC **6715** **3059** 1367A (3) Lorsqu'elles sont en liaison avec une station portuaire, les stations de navire peuvent, à titre exceptionnel et sour réserve de l'accord de l'administration intéressée, continuer à maintenir la veille seulement sur la fréquence prévue pour les opérations portuaires, à condition que la station portuaire maintienne la veille sur la fréquence 156,8 MHz.

NOC **6716** **3060** 1367B (4) Lorsqu'elles sont en liaison avec une station côtière du service du mouvement des navires, les stations de navire peuvent, sous réserve de l'accord des administrations intéressées, continuer à maintenir la veille seulement sur la fréquence appropriée du service du mouvement des navires, à condition que cette station côtière maintienne la veille sur la fréquence 156,8 MHz.

3061 à 3085 *(Non attribués.)*

N36/36

ARTICLE 39

NOC **Communications de détresse**

SECTION I

NOC **Généralités**

NOC **6767** **3086** 1394 § 1. L'appel de détresse a priorité absolue sur toutes les autres communications. Toutes les stations qui l'entendent doivent cesser immédiatement toute émission susceptible de troubler le trafic de détresse et continuer d'écouter sur la fréquence d'émission de l'appel de détresse. Cet appel ne doit pas être adressé à une station déterminée, et il ne doit pas en être accusé réception avant que le message de détresse qui le suit ait été transmis.

NOC **6768** **3087** 1383 § 2. L'appel et le message de détresse ne sont émis que sur ordre du commandant ou de la personne responsable du navire, de l'aéronef ou de toute autre véhicule portant la station mobile ou la station terrienne de navire.

SECTION II

NOC

Signal de détresse

NOC 6769 1389 **3088** § 3. (1) Le signal de détresse radiotélégraphique est constitué par le groupe ...— — —... symbolisé par SOS émis comme un seul signal dans lequel les traits sont accentués de manière à être distingués nettement des points.

NOC 6770 1390 **3089** (2) Le signal de détresse radiotéléphonique est constiué par le mot MAYDAY prononcé comme l'expression française «m'aider».

NOC 6771 1391 **3090** (3) Ces signaux de détresse indiquent qu'un navire, un aéronef ou tout autre véhicule est sous la menace d'un danger grave et imminent et demande une assistance immédiate.

SECTION III

NOC

Appel de détresse

NOC 6772 1392 **3091** § 4. (1) L'appel de détresse émis en radiotélégraphie comprend:

Le signal de détresse SOS (émis trois fois);
Le mot DE;
L'indicatif d'appel de la station mobile en detrésse (émis trois fois).

NOC 6773 1393 **3092** (2) L'appel de détresse émis en radiotéléphonie comprend:

Le signal de détresse MAYDAY (prononcé trois fois);
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
L'indicatif d'appel ou toute autre forme d'identification de la station mobile en detrésse (prononcé trois fois).

SECTION IV

NOC

Messages de detrésse

NOC 6774 1395 **3093** § 5. (1) Le message de détresse radiotélégraphique comprend:

Le signal de détresse SOS;
Le nom ou toute autre forme d'identification de la station mobile em détresse;
Les renseignements relatifs à sa position;
La nature de la détresse et la nature du secours demandé;
Tout autre renseignement qui pourrait faciliter ce secours.

NOC 6775 1396 **3094** (2) Le message de détresse radiotéléphonique comprend:

Le signal de détresse MAYDAY;
Le nom ou toute autre forme d'identification de la station mobile en détresse;
Les renseignements relatifs à sa position;
La nature de la détresse et la nature du secours demandé;
Tout autre renseignement qui pourrait faciliter ce secours.

NOC 6776 1397 **3095** § 6. (1) En règle générale, un navire signale sa position en latitude et longitude (Greenwich), en employant des chiffres pour les degrés et les minutes, accompagnés de l'un des mots NORTH ou SOUTH et de l'un des mots EAST ou WEST. En radiotélégraphie, le signal . — . — . — sépare les degrés des minutes; toutefois cela ne doit pas nécessairement s'appliquer au service mobile maritime par satellite. Lorsque c'est possible en pratique, le relèvement vrai et la distance em milles marins par rapport à un point géographique connu peuvent être indiqués.

(MOD) 6777 1398 **3096** (2) En règle générale, un aéronef transmet dans son message de détresse, s'il en a le temps, les renseignements suivants:

Position estimée et heure de l'estimation;
Cap en degrés (en indiquant s'il s'agit du cap magnétique ou du cap vrai);

Vitesse à l'indicateur par rapport à l'air;
Altitude;
Type de l'aéronef;
Nature de la détresse et genre d'assistance désirée;
Tous autres renseignements pouvant faciliter le sauvetage (notamment l'intention du commandant de bord faire, par exemple, un amérissage forcé ou un atterrissage à tous risques).

NOC 6778 1399 **3097** (3) En règle générale, un aéronef en vol signale sa position en radiotéléphonie ou en radiotélégraphie:

Soit par sa latitude et sa longitude (Greenwich), en employant des chiffres pour les dégrés et minutes, accompagnés de l'un des mots NORTH ou SOUTH et de l'un des des mots EAST ou WEST;
Soit par le nom de la localité la plus proche et sa distance approximative par rapport à celle-ci, accompagnée, selon le cas, de l'un des mots NORTH, SOUTH, EAST ou WEST, ou éventuellement, lorsque c'est possible en pratique, les mots indiquant les directions intermédiaires.

NOC 6779 1400 **3098** (4) Cependent, en radiotéléghaphie, les mots NORTH ou SOUTH et EAST ou WEST indiqués aux números **3095** et **3097** peuvent être rempláces par les lettres N ou S et E ou W.

SECTION V

NOC **Procédures**

NOC 6780 **3099** *A) Radiotélégraphie*

NOC 6781 1401 **3100** § 7. (1) La procédure de détresse radiotélégraphique comprend:

NOC 6782 1402 **3101** Le signal d'alarme suivi, dans l'ordre, de;

NOC 6783 1403 **3102** L'appel de détresse et un intervalle de deux minutes;

NOC 6784 1404 **3103** L'appel de détresse;

NOC 6785 1405 **3104** Le message de détresse;

NOC 6786 1406 **3105** Deux traits de dix à quinze secondes chacun;

NOC 6787 1407 **3106** L'indicatif d'appel de la station en détresse.

NOC 6788 1408 **3107** (2) Cependent, quand le temps a une importance vitale, la deuxiéme étape de cette procédure (numéro **3102** ou même la première et la deuxième étape (numéros **3101** et **3102**) peuvent être omises ou raccourcies. La première et la deuxième étape peuvent également omises dans las circonstances où la transmission du signal d'alarme n'est pas jugée nécessaire.

NOC 6789 1409 **3108** § 8. (1) Le message de détresse, précédé de l'appel de détresse, est répété à intervalles, notamment pendant les périodes de silence prévues au numéro **3038** pour la radiotélégraphie, jusqu'à ce qu'une réponse soit reçue.

NOC 6790 1410 **3109** (2) Toutefois, les intervalles doivent être suffisamment longs pour que les stations qui se préparant á répondre aient le temps de mettre en marche leurs appareils émetteurs.

NOC 6791 1411 **3110** (3) Le signal d'alarme peut également être répété si c'est nécessaire.

NOC 6792 1412 **3111** § 9. Les transmissions indiqueés aux numéros **3105** et **3106**, dont le but est de permettre aux stations radiogoniométriques de déterminer la position de la station en détresse, peuvent être répétées à des intervalles fréquents en cas de nécessité.

NOC 6793 1413 **3112** § 10. Dans le cas où la station mobile en détresse ne reçoit pas de réponse à un message de détresse transmis sur la fréquence de détresse, le message peut être répété sur toute autre fréquence disponible à l'aide de laquelle l'attention pourrait être attirée.

NOC 6794 1414 3113 § 11. Immédiatement avant un atterrissage à tous risques ou avant un atterrissage ou un amerrissage forcé d'un aéronef, ainsi qu'avant l'abandon total d'un navire ou d'un aéronef, ill convient que les appareils radioélectriques soient, si cela semble nécessaire et si les circonstances le permettent, placés en position d'émission continue.

NOC 6795 3114 *B)* Radiotéléphonie

NOC 6796 1415 3115 § 12. La procédure de détresse radiotéléphonique comprend:

NOC 6797 1416 3116 Le signal d'alarme (chaque fois que possible) suivi, dans l'ordre;

NOC 6798 1417 3117 De l'apple de détresse;

NOC 6799 1418 3118 Du message de détresse.

NOC 6800 1419 3119 § 13. Aprés la transmission de son message de détresse en radiotéléphonie, la station mobile peut être invitée à émettre des signaux appropriès suivis de son indicatif d'appel ou de toute autre forme d'identification, afin de permettre aux stations radiogoniométriques de déterminer sa position. Cette demande peut être répétée à des intervalles rapprochés en cas de nécessité.

NOC 6801 1420 3120 § 14. (1) Le message de détresse, précédé de l'appel de détresse, est répété à intervalles, notamment pendant les périodes de silence prévues au numéro **3052** pour la radiotéléphonie, jusqu'à ce qu'une réponse soit reçue.

NOC 6802 1421 3121 (12) Toutefois, les intervalles doivent être suffisamment longs pour que les stations qui se préparent à répondre aient le temps de mettre en marche leurs appareils émetteurs.

NOC 6803 1422 3122 (3) Cette répétition est précédée, chaque fois que possible, du signal d'alarme.

NOC 6804 1423 3123 § 15. Dans le cas où la station mobile en détresse ne reçoit pas de réponse à un message de détresse transmis sur la fréquence de détresse, le message peut être répété sur toute autre fréquence disponible à l'aide de laquelle l'attention pourrait être attirée.

NOC 6805 1424 3124 § 16. Immédiatement avant un atterrissage à tous risques ou avant un atterrissage ou un amerrissage forcé d'un aéronef, ainsi qu'avant l'abandon total d'un navire ou d'un aéronef, il convient que les appareils radioélectriques soient, si cela semble nécessaire et si les circonstances le permettent, placés en position d'émission continue.

NOC

SECTION VI

Accusé de réception d'un message de détresse

NOC 6806 1425 3125 § 17. (1) Les stations du service mobile qui reçoivent un message de détresse d'une station mobile se trouvant, sans soute possible, dans leur voisinage, doivent en accuser réception immédiatement.

NOC 6807 1426 3126 (2) Cependant, dans les zones ou des liaisons sûres peuvent être établies avec une ou plusieurs stations côtières, il convient que les stations de navire laissent s'écouler un court intervalle de temps avant d'accuser réception, de sorte qu'une stations côtière puisse transmettre son accusé de réception.

NOC 6808 1427 3127 (3) Les stations du service mobile qui reçoivent un message de détresse d'une station mobile qui, sans doute possible, n'est pas dans leur voisinage, doivent laisser s'écouler un court intervalle de temps avant d'en accuser réception, afin de permettre à des stations plus proches de la station mobile en détresse d'accuser réception sans brouillage.

NOC 6809 1427A 3128 (4) Cependant, les stations du service mobile maritime qui reçoivent un message de détresse d'une station mobile qui, sans aucun doute possible, est très éloignée, ne sont pas tenues d'accuser réception, sauf dans le cas prévu au numéro **3160.**

NOC 6810 1428 3129 § 18. L'accusé de réception d'un message de détresse est donnée sous la forme suivante:

NOC 6811 1429 3130 *a)* En radiotélégraphie:

Le signal de détresse $\overline{\text{SOS}}$;
L'indicatif d'appel de la station qui émet le message de détresse (émis trois fois);
Le mot DE;

L'indicatif d'appel de la station qui accuse réception (émis trois fois);
Le groupe RRR;
Le signal de détresse SOS;

NOC **6812** **3131** *b*) En radiotéléphonie:
1430

Le signal de détresse MAYDAY;
L'indicatif d'appel ou toute autre identification de la station qui émet le message de détresse (prononcé trois fois);
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de language);
L'indicatif d'appel ou toute autre identification de la station qui accuse réception (prononcé trois fois);
Le mot REÇU (ou RRR épelé à l'aide des mots de code ROMEO ROMEO ROMEO en cas de difficultés de langage);
Le signal de détresse MAYDAY.

NOC **6813** **3132** § 19. (1) Toute station mobile qui accuse réception d'un message de détresse doit, sur l'ordre du commandant ou de la personne responsable du navire, de l'aéronef ou du véhicule, donner aussitôt que possible les renseignements suivants, dans l'ordre indiqué:
1431

Son nom;
Sa position dans la forme prescrite aux numéros **3095, 3097** et **3098,** la vitesse avec laquelle elle dirige vers station mobile en détresse et le délai approximatif qui lui sera nécessaire pour la rejoindre;
De plus, si la position du navire en détresse semble douteuse, il convient que les stations de navire transmettent également, si elles le connaissent, le relèvement vrai du navire en détresse, précédé de l'abréviation QTE (pour la classification du relèvement, voir l'appendice **41**).

NOC **6814** **3133** (2) Avant de transmettre le message décrit au numéro **3132,** la station doit s'assurer
1432 qu'elle ne brouillera pas les émissions d'autres stations mieux placées pour porter un secours immédiat à la station en détresse.

NOC

SECTION VII

Trafic de détresse

NOC **6815** **3134** § 20. Le trafic de détresse comprend tous les messages concernant le secours
1433 immédiat nécesssaire à la station mobile en détresse.

NOC **6816** **3135** § 21. Dans un trafic de détresse, le signal de détresse est transmis avant l'appel et
1434 au début du préambule de tout radiotélégramme.

MOD **6817** **3136** § 22. La direction du trafic de détresse appartient à la station mobile en détresse ou
1435 à la station qui, par application des dispositions de la section VIII du présent article, a émis le message de détresse. Ces stations peuvent toutefois céder à une autre station la direction du trafic de détresse.

NOC **6818** **3137** § 23. La station en détresse ou la station qui dirige le trafic de détresse peut imposer
1436 le silence soit à toutes les stations du service mobile de la région, soit à une station qui brouillerait le trafic de détresse. Suivant le cas, elle adresse ces instructions «à tous» (CQ) ou à une station seulement. Dans les deux cas, elle fait usage:

NOC **6819** **3138** *a*) En radiotélégraphie, de l'abréviation QRT, suivie du signal de détresse
1437 SOS;

(MOD) **6820** **3139** *b*) En radiotéléphonie, du dignal SILENCE MAYDAY, prononcé comme
1438 les mots français «silence, m'aider».

NOC **6821** **3140** § 24. Lorsqu'elle le juge indispensable, toute station du service mobile proche du
1439 navire, de l'aéronef ou du véhicule en détresse peut également imposer le silence. Elle emploie à cet effet:

NOC **6822** **3141** *a*) En radiotélégraphie, l'abréviation QRT, suivie du mot DÉTRESSE et de
1440 son propre indicatif d'appel:

(MOD) **6823** **3142** *b*) En radiotéléphonie, le mot SILENCE, prononcé comme le mot français
1441 «silence», suivi du mot DÉTRESSE et de son propre indicatif d'appel.

NOC 6824 1442 **3143** § 25. (1) En radiotélégraphie, l'emploi du signal QRT $\overline{SOS}$ dot être réservé à la station mobile en détresse et à la station qui exerce la direction du trafic de détresse.

NOC 6825 1443 **3144** (2) En radiotéléphonie, l'emploi du signal SILENCE MAYDAY est réservé à la station mobile en détresse et à la station qui exerce la direction du trafic de détresse.

NOC 6826 1444 **3145** § 26. (1) Toute station du service mobile qui a connaissance d'un trafic de détresse et qui ne peut elle-même porter secours à la station en détresse doit néanmoins suivre ce trafic jusqu'au ce qu'elle acquière la certitude qu'un secours a été assuré.

NOC 6827 1445 **3146** (2) Tant qu'elles n'ont pas reçu un message leur indiquant qu'elles peuvent reprendre le travail normal (voir le numéro **3150**), il est interdit à toutes les stations qui ont connaissance de ce trafic, mais qui n'y participent pas, d'émettre sur les fréquences sur lesquelles a lieu le trafic de détresse

NOC 6828 1446 **3147** § 27. Une station du service mobile qui, tout en suivant un trafic de détresse, est en mesure de continuer son service normal, peut le faire lorsque le trafic de détresse est bien établi, et à condition d'observer les dispositions du numéro **3146** et de ne pas troubler le trafic de détresse.

NOC 6829 1447 **3148** § 28. Dans des cas tout à fait exceptionnels et à condition qu'il n'en résulte aucun brouillage ou retard dans l'écoulement du trafic de détresse, des messages d'urgence et de sécurité peuvent être annoncés pendant en temps mort du trafic de détresse, de préference par des stations côtières, et cela sur une fréquence de détresse. Cette annonce doit être accompagnée de l'indication de la fréquence de travail sur laquelle sera transmis le messsage d'urgence ou de sécurité; dans ce cas, il convient que les signaux prévus aux numéros **3196, 3197, 3221** et **3222** ne soient transmis qu'une fois (exemple: XXX DE ABC QSW ...).

NOC 6830 1448 **3149** § 29. Une station terrestre ou une station terrienne du service mobile maritime par satellite située en un point fixe déterminé et qui reçoit un message de détresse, doit prendre sans délai les mesures nécessaires pour aviser les autorités compétentes responsables de la mise en œuvre des moyens de sauvetage.

NOC 6831 1449 **3150** § 30. (1) Lorsque le trafic de détresse est terminé sur une fréquence qui a été utilisée pour le trafic de détresse, la station qui a exercé la direction de ce trafic transmet sur cette même fréquence un message adressé «à tous» (CQ) indiquant que le travail normal peut être repris.

NOC 6832 1449A **3151** (2) Lorsqu'il n'est plus nécessaire d'observer un silence complet surt une fréquence qui est utilisée pour le trafic de détresse, la station qui exerce la direction de ce trafic transmet sur cette même fréquence un message adressé «à tous» (CQ) indiquant qu'un travail restreint peut être repris.

NOC 6833 1450 **3152** (3):

a) En radiotélégraphic, le message mentionnée au numéro **3150** présente la forme suivante:

Le signal de détresse $\overline{SOS}$;
L'appel «à tous» CQ (émiss trois fois);
Le mot DE;
L'indicatif d'appel de la station qui émet le message;
L'heure de dépôt du message;
Le nom et l'indicatif d'appel de la station mobile qui était en détresse;
L'abreviation réglementaire QUM.

3153 *b*) En radiotélégraphie, le message mentionnée au numéro **3151** présente la forme suivante:

Le signal de détresse $\overline{SOS}$;
L'appel «à tous» CQ (émis trois fois);
Le mot DE;
L'indicatif d'appel de la station qui émet le message;
L'heure de dépôt du message;
Le nom et indicatif d'appel de la station mobile qui est en détresse;
L'abréviation réglementaire QUZ.

NOC 6834 1451 **3154** (4):

a) En radiotéléphonie, le message mentionnée au numéro **3150** présente la forme suivante:

Le signal de détresse MAYDAY;
L'appel «à tous» ou CQ (épelé à l'aide des mots de code CHARLIE QUEBEC) prononcé trois fois;

Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage;
L'indicatif d'appel ou toute autre identification de la station qui émet le message;
L'heure de dépôt du message;
Le nom et indicatif d'appel de la station mobile qui était en détresse;
Les mots SILENCE FINI prononcés comme les mots français «silence fini».

3155 *b*) En radiotéléphonie le message mentionné au numéro **3151** présente la forme suivante:

Le signal de détresse MAYDAY;
L'appel «à tous » ou CQ (épelé à l'aide des mots de code CHARLIE QUEBEC) prononcés trois fois;
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
L'indicatif d'appel ou toute autre identification de la station qui émet le message;
L'heure de dépôt du message;
Le nom et l'indicatif d'appel de la station mobile qui est en détresse;
Le mot PRUDENCE prononcé comme le mot français «prudence».

NOC 6835 1451A **3156** § 31. Si la personne responsable d'une station en détresse qui a cedé à une autre station la direction du trafic de détressse considére que la observation du silence n'est plus justifiée, elle doit immédiatement en informer la station qui dirige le trafic de détresse, laquelle agira alors conformément aux dispositions du numéro **3150.**

SECTION VIII

NOC **Transmissions d'un message de détresse par une station qui n'est pas elle-même en détresse**

NOC **6836** 1452 **3157** § 32. Une station mobile ou une station terrestre qui apprend qu'une station mobile est en détresse doit transmettre un message de détresse dans chacun de cas suivants:

NOC **6837** 1453 **3158** *a*) La station en détresse n'est pas en mesure de transmettre elle-même le message de détresse;

NOC **6838** 1454 **3159** *b*) Le commandant ou la personne responsable du navire, de l'aéronef ou de tout autre véhicule non en détresse, ou encore la personne responsable de la station terrestre estime que d'autres secours sont nécessaires;

NOC **6839** 1455 **3160** *c*) Bien que n'étant pas mesure d'apporte du secours, ellle a entendu un message de détresse dont il n'a pas été accusée réception.

NOC **6840** 1456 **3161** § 33. (1) La transnission d'un message de détresse dans les conditions décrites aux numéros **3158** à **3160** a lieu sur une ou plusieurs des fréquences internationales de détressse (500 kHz, 2182 kHz, 156,8 MHz) ou sur toute fréquences pouvant être utilisée en cas de détresse (voir les numéros **2970, 2971, 2973, 2975, 2994, 2995** et **3000**).

NOC **6841** 1457 **3162** (2) La transmission du message de détresse est toujours précédée de l'appel défini ci-après. En outre, chaque fois que c'est possible, cet appel est lui-même précédé du signal d'alarme radiotélégraphique ou radiotéléphonique.

NOC **6842** 1458 **3163** (3) Cet appel comprend:

NOC **6843** 1459 **3164** *a*) En radiotélégraphie:

Le signal $\overline{\text{DDD}}$ $\overline{\text{SOS}}$ $\overline{\text{SOS}}$ $\overline{\text{SOS}}$ $\overline{\text{DDD}}$;
Le mot DE;
L'indicatif d'appel de la station qui transmet (émis trois fois);

NOC **6844** 1460 **3165** *b*) En radiotéléphonie:

Le signal MAYDAY RELAY, prononcé comme l'expression française «m'aider relais» (prononcé trois fois);
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
L'indicatif d'appel ou toute autre identification de la station qui transmet (prononcé trois fois).

NOC 6845 1461 **3166** § 34. Lorqu'il est fait usage du signal d'alarme radiotélégraphique, un intérvalle de deux minutes sépare, quand cela est jugé nécessaire, l'appel mentionné au numéro **3164** du signal d'alarme.

NOC **6846** 1462 **3167** § 35. Lorsqu'une station du service mobile transmet un message de détresse dans les conditions spécifiées au numéro **3160,** elle doit prendre toute disposition afin d'en informer les autorités susceptibles d'apporter du secours.

NOC **6847** 1462A **3168** § 36. Une station de navire ne doit pas accuser réception d'un message de détresse transmis par une station côtière dans les conditions indiquées aux numéros **3157** à **3160,** avant que le commandant ou la personne responsable ait confirmé que cette station de navire est en mesure d'apporter du secours.

3169 à 3195 *(Non attribués.)*

N37

ARTICLE 40

MOD

Transmission d'urgence et de sécurité, et transports sanitaires

SECTION I

NOC

Signal et messages d'urgence

NOC **6873** 1477 **3196** § 1. (1) En radiotélégraphie, le signal d'urgence consiste en trois répétitions du groupe «XXX», transmis en séparant bien les lettres de chaque groupe et les groupes successifs. Il est transmis avant l'appel.

NOC **6874** 1478 **3197** (2) En radiotéléphonie, le signal d'urgence consiste en trois répétitions du groupe «PAN PAN», le not PAN étant prononcé comme le mot français «panne». Il est transmis avant l'appel.

NOC **6875** 1479 **3198** § 2. (1) Le sinal d'urgence ne peut être transmis qu'avec l'autorisation du commandant ou de la personne responsable du navire, de l'aéronef et de tout autre véhicule portant la station mobile ou la station terrienne mobile du service mobile maritime par satellite.

NOC **6876** 1480 **3199** (2) Le signal d'urgence ne peut être transmis par une station terrestre ou une station terrienne du service mobile maritime par satellite située en un point fixe déterminé qu'avec l'approbation de l'autorité responsable.

NOC **6877** 1481 **3200** § 3. (1) Le signal de urgence indique que la station appelante a un message très urgent à transmettre concernant la sécurité d'un navire, d'un aéronef, d'un autre véhicule ou d'une personne.

NOC **6878** 1482 **3201** (2) Le signal d'urgence et le message qui le suit sont transmis sur one ou plusieurs des fréquences internationales de détresse (500 kHz, 2182 kHz, 156,8 MHz) ou sur toute autre fréquence pouvant être utilisée en cas de détresse.

NOC **6879** 1482A **3202** (3) Toutefois, dans le service mobile maritime, le message est transmis sur une fréquence de travail:

a) S'il d'agit d'un message long ou d'un avis médicale: *ou bien,*

b) Dans les zones à trafic intense, s'il s'agit de la répétition d'un message transmis conformément aux dispositions du numéro **3201.**

Une indication à cet effect est donnée à la fin de l'appel.

NOC **6880** 1483 **3203** (4) Le signal d'urgence a la priorité sur toutes les autres communications, sauf sur celles de détresse. Toutes les stations qui entendent le signal d'urgence doivent prendre soin de ne pas brouiller la transmission du message qui le suit.

NOC **6881** 1483A **3204** (5) Dans le service mobile maritime, les messages d'urgence peuvent être adressés, soit à toutes les stations, soit à une station déterminée.

NOC **6882** 1484 **3205** § 4. Les messages que précède le signal d'urgence doivent, en règle générale, être émis en langage clair.

NOC **6883** 1485 **3206** § 5. (1) Les stations mobiles qui entendent le signal d'urgence doivent rester à l'écoute pendant trois minutes au moins. Passé ce délai, si aucun message d'urgence n'a été entendu, une station terrestre doit, si possible, être avisée de la réception du signal d'urgence. Le service normal peut reprendre ensuite.

NOC **6884** 1486 **3207** (2) Toutefois, les stations terrestres et mobiles qui sont en communication sur des fréquences autres que celles utilisées pour la transmission du signal d'urgence et de l'appel qui le suit peuvent continuer sans arrêt leur travail normal, à moins qu'il ne s'agisse d'un message «à tous» (CQ).

(MOD) 6885 1487 3208 § 6. Lorsque le signal d'urgence a précédé l'émission d'un message «à tous» (CQ) comportant des mesures à prendre par les stations recevant ce message, la station responsable de l'émission doit l'annuler dès qu'elle sait qu'il n'est plus, nécessaire d'y donner suite. Ce message d'annulation est également un messsage «à tous» (CQ).

SECTION II

ADD **Transports sanitaires**

ADD 6885A 3209 § 7. L'expression «transports sanitaires», définie dans les Conventions de Génève de 1949 et les Protocoles Additionnels, recouvre tout moyen de transport, par terre, par eau ou par air, militaire ou civil, permanent ou temporaire, affecté exclusivement au transport sanitaire placé sous la direction d'une autorité compétente d'une Partie à un conflit.

ADD 6885B 3210 § 8. Aux fins d'annonce et d'identification de transports sanitaires qui sont protégées conformément aux Conventions susmentionnées, une transmission complète des signaux d'urgence décrits aux numéros **3196** et **3197** est suivie par l'adjonction du seul groupe «YYY» en radiotélégraphie et par l'adjonction du seul mot «MEDICAL» prononcé comme en français, en radiotéléphonie.

ADD 6885C 3211 § 9. Les fréquences spécifiées au numéro **3201** peuvent être utilisées par les transports sanitaires aux fins d'auto-identification et d'établissement des communications. La communication doit, dès que possible en pratique, être transférée sur une fréquence de travail appropriée.

ADD 6885D 3212 § 10. L'utilisation des signaux décrits dans le numéro **3210** indique que le message qui suit concerne un transport sanitaire protégé. Le messsage doit contenir les données suivants:

3213 *a*) L'indicatif d'appel ou tout autre moyen reconnu d'identification du véhicule de transport sanitaire;

3214 *b*) La position du véhicule de transport sanitaire;

3215 *c*) Le nombre et le type de véhicules de transport sanitaire;

3216 *d*) L'itinéraire prévu;

3217 *e*) La durée estimée du déplacement, et les heures de départ et d'arrivée prévues, selon le cas;

3218 *f*) Toute autre information, telle que l'atitude de col, les fréquences radioélectriques de veille, langues utilisées, modes et codes des systèmes de radar secondaires de surveillance.

ADD 6885E 3219 § 11. Les dispositions de la section I du présent article s'appliquent, s'il y a lieu, à l'utilisation des signaux d'urgence par des transports sanitaires.

ADD 6885F 3220 § 12. L'utilisation des radiocommunications pour annoncer et identifier les transports sanitaires est facultative; cependant, si elles sont employées, les dispositions du présent Règlement et, en particulier, celles de la présente section et des articles **37** et **38** s'appliquent.

SECTION III

NOC **Signal et messages de sécurité**

NOC 6886 1488 3221 § 13. (1) En radiotélégraphie, le signal de sécurité consiste en trois répétitions du groupe TTT. Les lettres de chaque groupe et les groupes sucessifs sont nettement séparés les uns des autres. Le signal de sécurité est transmis avant l'appel.

NOC 6887 1489 3222 (2) En radiotéléphonie, le signal de sécurité consiste en trois répétitions du mot SECURITÉ prononcé distinctement comme en français. Il est transmis avant l'appel.

NOC 6888 1490 3223 § 14. (1) Le signal de sécurité annonce que la station va transmettre un avis important aux navigateurs ou un avertissement météorologique important.

NOC 6889 1491 3224 (2) Le signal de sécurité et l'appel sont transmis sur une ou plusieurs des fréquences internationales de détresse (500 kHz, 2182 kHz, 156,8 MHz) ou sur toute autre fréquence pouvant être utilisée en cas de détresse.

NOC 6890 1492 3225 (3) Il convient que le message de sécurité qui suit l'appel soit transmis sur une fréquence de travail, une indication appropriée doit être donnée à cet effet à la fin de l'appel.

NOC 6891 1492A 3226 (4) Dans le service mobile maritime, les messages de sécurité sont, en règle générale, adressés à toutes les stations. Ils peuvent cependant, dans certains cas, être adressés à une station déterminée.

NOC **6892** 1493 **3227** § 15. (1) A l'éxception des messages transmis à heure fixe, le signal de sécurité, lorsqu'il est employé dans le service mobile maritime, doit être transmis vers la fin de la première période de silence qui se présente (voir le numéro **3038** pour la radiotélégraphie et le numéro **3052** pour la radiotéléphonie); le message est transmis immédiatement après la période de silence.

NOC **6893** 1494 **3228** (2) Dans les cas prévus aux numéros **3328, 3331** et **3335,** le signal de sécurité et le message qui le suit doivent être transmis dans le plus bref délai possible, mais ils doivent être répétés à la fin de la première période de silence suivante.

NOC **6894** 1495 **3229** § 16. Toutes les stations qui perçoivent le signal de sécurité doivent écouter le message de sécurité jusqu'à ce qu'elles aient acquis la certitude que ce message ne les concerne pas. Elles ne doivent faire aucune émission susceptible de brouiller le message.

3230 à **3254** *(Non attribués.)*

N38

ARTICLE 41

NOC

Signaux d'alarme et d'avertissement

SECTION I

NOC

Signaux des radiobalises de localisation des sinistres

SUP **6920** 1388A

NOC **6921** 1476A **3255** § 1. Le signal d'une radiobalise de localisation des sinistres se compose:

NOC **6922** 1476B **3256** *a*) En ondes hectométriques, c'est-à-dire sur la fréquence 2182 kHz (1):

3257 1) D'une émission modulée par la fréquence acoustique 1300 Hz, manipulée de façon que la rapport entre la durée d'émission et la durée de silence soit égal ou supérieur à l'unité; la durée d'émission est comprise entre une et cinq secondes; *ou*

NOC **6923** 1476C **3258** 2) Du signal d'alarme radiotélephonique (voir le numéro **3270**) suivi de la lettre B en code Morse, ou de l'indicatif d'appel du navire auquel appartient la radiobalise, ou des deux informations, transmis par manipulation d'une porteuse modulée par la fréquence acoustique 1300 Hz ou 2200 Hz;

(MOD) **6924** 1476D **3259** *b*) Em ondes métriques, c'est-à-dire sur les fréquences 121,5 MHz et 243 MHz, d'un signal dont les caractéristiques, doivent être conformes à celles qui sont recommandées para les organisations mentionnées dans la Résolution **601.**

NOC **6925** 1476H **3260** § 2. (1) Les signaux des radiobalises de localisatiom des sinistres ont pour but essentiel de faciliter le repérage de la position de naufragés au cours des opérations de recherche et de sauvetage.

NOC **6926** 1476I **3261** (2) Ces signaux indiquent qu'une ou plusieurs personnes sont en détresse qu'elles ne se trouvent peut-être plus à bord d'un navire ou d'un aéronef et qu'elles ne disposent peut-être plus d'appareil récepteur.

NOC **6927** 1476J **3262** (3) Toute station du service mobile qui reçoit l'un de ces signaux alors qu'aucun trafic de détresse ou d'urgence n'est en cours considère que les dispositions des numéros **3157** et **3158** sont applicables.

(MOD) **6928** 1476E **3263** § 3. (1) Les radiobalises de faible puissance (Type L) n'utilisent que le signal défini au numéro **3257,** qu'elles émettent continuellement.

NOC **6929** 1476F **3264** (2) Les radiobalises de grand puissance (Type H) peuvent émettre soit le signal défini au numéro **3257,** soit celui défini au numéro **3258,** selon un cycle de manipulation constitué par un signal de manipulation d'une durée comprise entre trente et cinquante secondes, suivi d'une période de silence d'une durée de trente à soixante secondes.

NOC **6922.1** 1476B.1 **3256.1** (1) Au Japon, il existe des radiobalises de localisation des sinistres qui utilisent des émissions de la classe A1A pour émettre des signaux de détresse et l'identification sur des fréquences comprises entre 2089,5 kHz et 2092,5 kHz.

NOC 6930 1476G 3265 (3) Toutefois les cycles de manipulation spécifiés aux numéros **3263** et **3264** peuvent, si les administrations le désirent, être interrompus pour permetre des émissions vocales.

NOC 6931 1476K 3266 § 4. (1) Le matériel destiné à transmettre des signaux des radiobalises de localisation des sinistres sur la fréquence porteuse 2182 kHz doit être conforme aux spécifications données à l'appendice **37.**

NOC 6932 1476L 3267 (2) Le matériel destiné à émettre sur les fréquences 121,5 MHz et 243 MHz les signaux des radiobalises de localisation des sinistres doit être conforme aux recommandations et normes des organisations mentionnées dans la Résolution **601.**

SECTION II

NOC

Signaux d'alarme radiotélégraphique et radiotéléphonique

SUP 6933 1387

NOC 6934 1463 3268 § 5. (1) Le signal d'alarme radiotélégraphique se compose d'une série de douze traits transmis en une minute, la durée de chaque trait étant de quatre seconds et l'intervalle entre deux traits consécutifs d'une second. Il peut être transmis à la main, mais sa transmission à l'aide d'un appareil automatique est recommandée.

NOC 6935 1464 3269 (2) Toute station de navire fonctionnant dans les bandes comprises entre 405 kHz et 535 kHz, qui ne dispose pas d'un appareil automatique pour l'émission du signal d'alarme radiotélégraphique, doit être pourvue en permanence d'une pendule indiquant nettement la second, de préférence au moyen d'une aiguille trotteuse faisant un tour par minute. Cette pendule doit être placée en un point suffissamment visible de la table d'exploitation pour que l'opérateur puisse, en la suivant du regard, donner sans difficulté aux différents signaux élémentaires du signal d'alarme leur durée normale.

SUP 6936 1388

NOC 6937 1465 3270 § 6 (1) Le signal d'alarme radiotéléphonique se compose de deux signaux sensiblement sinusoïdaux à fréquence audible transmis alternativement, L'un d'eux a une fréquence de 2200 Hz, l'autre une fréquence de 1300 Hz. Chacun d'eux est émis pendant une durée de 250 millisecondes.

NOC 6938 1466 3271 (2) Lorsqu'il est produit automatiquement, le signal d'alarme radiotéléphonique doit être émis d'une façon continue pendant une durée de trente secondes au moins et d'une minute au plus; s'il est produit par d'autres moyens, ce signal doit être émis d'une façon aussi continue que pratiquement possible pendant une durée de l'ordre d'une minute.

NOC 6939 1466AA 3272 (3) Le signal d'alarme radiotéléphonique émis par une station côtière doit être celui qui est décrite aux numéros **3270** et **3271,** il peut être suivi par un signal unique à 1300 Hz d'une durée de dix secondes.

SUP 6940 1466A

SUP 6941 1473A

NOC 6942 1467 3273 § 7. Ces signaux spéciaux ont pour but:

NOC 6943 1468 3274 *a*) En radiotélégraphie, de faire fonctionnner les dispositifs automatiques d'alarme, dont l'objet est d'attirer l'attention de l'opérateur lorsque l'écoute sur la fréquence de détresse n'est pas assurée;

NOC 6944 1469 3275 *b*) En radiotélégraphie, d'attirer l'attention de la personne qui assure la veille ou de faire fonctionner les dispositifs automatiques donnant l'alarme ou mettant en marche un haut-parleur silencieux pour lui permettre de diffuser le message qui doit suivre.

NOC 6945 1470 3276 § 8. (1) Ces signaux doivent être employés uniquement pour annoncer:

NOC 6946 1471 3277 *a*) Soit qu'un apple ou un message de détresse va suivre;

NOC 6947 1472 3278 *b*) Soit l'émission d'un avis urgent de cyclone, lequel doit être précedé du signal de sécurité (voir les numéros **3221** et **3222**). Dans ce cas, ils ne peuvent être employés que par les stations côtières dûment autorisées par leur gouvernement;

NOC 6948 1473 3279 *c*) Soit qu'une ou plusieurs personnes sont tombées par-dessus bord. Dans ce cas, ils ne peuvent être employés qui si l'aide d'autres navires est nécessaire et si l'emploi du seul signal d'urgence ne permet pas d'obtenir

cette aide dans les conditions satisfaisantes, mais le signal d'alarme ne doit pas être répété par d'autres stations. Le message doit être précédé du signal d'urgence (voir les numéros **3196** et **3197**).

NOC **6949** 1474 **3280** (2) Dans les cas prévus aux numéros **3278** et **3279,** il convient qu'un intervalle de deux minutes sépare, si possible, la fin du signal d'alarme radiotélégraphique du début de l'avis ou du message.

NOC **6950** 1475 **3281** § 9. Les dispositifs automatiques destinés à la réception des signaux d'alarme radiotélégraphique et radiotéléphonique doivent satisfaire aux conditions spécifiées dans l'appendice **36.**

NOC **6951** 1476 **3282** § 10. Avant qu'un tel dispositif automatique soit approuvé pour l'usage des navires, l'administration dont relèvent ces navires doit s'assurer, par des essais pratiques faits dans des conditions équivalentes à celles qui se présentent dans la pratique (brouillage, vibrations, etc.), que le appareil satisfait aux prescriptions du présent Règlement.

SECTION III

NOC

Appel sélectif à tous les navires

NOC **6952** 1388AA **3283** § 11. Les caractéristiques de l'«appel à tous les navires» dans le système d'appel sélectif, qui est réservé exclusivement pour l'alarme, sont données à l'appendice **39.**

SECTION IV

NOC

Signal d'avis aux navigateurs

NOC **6953** 1476AA **3284** § 12. (1) Le signal d'avis navigateurs est constitué d'une fréquence acoustique sensiblement sinusoïdale de 2200 Hz interrompue de telle sorte que les durées du signal acoustique et de l'intervalle sont, chacune, de 250 millisecondes.

NOC **6954** 1476AB **3285** (2) Il convient que ce signal soit transmis par les stations côtières de façon continue pendant une durée de 15 secondes pour précéder la transmission des avis d'une grande importance pour la navigation dans les bandes d'ondes hectométriques du service mobile maritime radiotéléphonique.

NOC **6955** 1476AC **3286** (3) Ce signal a pour objet d'attirer l'attention de la personne qui assure la veille au moyen d'un haut-parleur ou d'un haut-parleur à filtres, ou de faire fonctionner un dispositif automatique mettant en marche un haut-parleur silencieux pour lui permettre de diffuser le message qui doit suivre.

3287 à **3311** *(Non attribués.)*

N39

ARTICLE 42

Services spéciaux relatifs à la sécurité

SECTION I

NOC

Messages météorologiques

NOC **6981** 1596 **3312** § 1. (1) Les messages météorologiques comprennent:

NOC **6982** 1597 **3313** *a*) Des messages destinés aux services de météorologie qui sont chargés officiellement de la prévision du temps utilisée plus particulièrement pour la protection des navigations maritime et aéronautique;

NOC **6983** 1598 **3314** *b*) Des messages émanant de ces services météorologiques et destinés spécialement:

NOC **6984** 1599 **3315** Aux stations de navire;

NOC **6985** 1600 **3316** À la protection des aéronefs;

NOC **6986** 1601 **3317** Au public.

NOC 6987 3318 (2) Les renseignements contenus dans ces messages peuvent être:
1602

NOC 6988 3319 *a*) Des observations à heure fixe;
1603

NOC 6989 3320 *b*) Des avis de phénomènes dangereux;
1604

NOC 6990 3321 *c*) Des prévisions et avertissements;
1605

NOC 6991 3322 *d*) Des exposés de la situation météorologique générale.
1606

NOC 6992 3323 § 2. (1) Les différents services météorologiques nationaux s'entendent pour établir
1607 des programmes communs d'émissions, de manière à utiliser les émetteurs les mieux placés pour desservir les régions intéressées.

MOD 6993 3324 (2) Il convient que les observations météorologiques comprises dans les catégories
1608 mentionées aux numéros **3313** à **3316** soient rédigées dans un code météorologique international, qu'elles soient transmises par des stations mobiles ou qu'elles leur soient destinées.

MOD 6994 3325 § 3. Pour la transmission des messages d'observation destinés à un service officiel
1609 de météorologie, il doit être fait usage des fréquences mises à sa disposition pour les besoins de la météorologie, conformément aux accords régionaux établis par les services intéressés pour l'emploi de ces fréquences.

NOC 6995 3326 § 4. (1) Les messages météorologiques destinés spécialement à l'ensemble des
1610 stations de navire sont émis, en principe, d'après un horaire déterminé et, autant que possible, aux heures où ils peuvent être reçus par les stations de navire pourvues d'un seul opérateur. En radiotélégraphie, la vitesse de transmission ne doit pas dépasser seize mots par minute.

NOC 6996 3327 (2) Pendant les transmissions «à tous» des messages météorologiques destinés aux
1611 stations du service mobile maritime, toutes les stations de ce service dont les transmissions brouilleraient la réception de ces messages doivent observer le silence, afin de permettre à toutes les stations qui le désirent de recevoir lesdits messages.

MOD 6997 3328 (3) Les messages d'avertissements météorologiques à l'intention du service mobile
1612 maritime sont transmis immédiatement. Ils doivent être répétés à la fin de la première période de silence qui suit leur réception (voir les numéros **3038** et **3052**), ainsi qu'au cours de la période de diffusion suivante prévue dans la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux. Ils sont précédés du signal de sécurité et sont transmis sur les fréquences appropriées (voir le numéro **3224**).

NOC 6998 3329 (4) En plus des services réguliers d'information prévus dans les alinéas précédents,
1613 les administrations prennent les dispositions nécessaires pour que certaines stations communiquent, sur demande, des messages météorologiques aux stations du service mobile maritime.

NOC 6999 3330 (5) Les dispositions des numéros **3326** à **3329** sont applicables au service mobile
1614 aéronautique, dans la mesure où elles ne sont pas en contradiction avec des accords particuliers plus précis assurant à la navigation aérienne une protection au moins égale.

NOC 7000 3331 § 5. (1) Les messages provenant de stations mobiles et contenant des renseignements
1615 sur la présence de cyclones doivent être transmis, dans le plus bref délai possible, aux autres stations mobiles voisines et aux autorités compétentes du premier point de la côte avec lequel le contact peut être établi. Leur transmission est précédée du signal de sécurité.

NOC 7001 3332 (2) Toute station mobile peut écouter son propre usage, les messages d'observations
1616 météorologiques émis par d'autres stations mobiles, même lorsqu'ils sont adressés à un service météorologique national.

NOC 7002 3333 (3) Les stations des services mobiles qui transmettent des observations
1617 météorologiques adressées à un service météorologique national ne sont pas tenues de les répéter à d'autres stations. Cependant, l'échange, sur demande, de renseignements relatifs à l'état du temps est autorisé entre stations mobiles.

SECTION II

NOC

Avis aux navigateurs maritimes

NOC 7003 3334 § 6. Les prescriptions des numéros **3326** à **3330** inclus sont applicables aux avis
1618 aux navigateurs maritimes.

NOC 7004 3335 § 7. Les messages contenant des reinseignements sur la présence de glaces
1619 dangereuses, d'épaves dangereuses, ou de tout autre danger imminent pour la navigation

maritime doivent être transmis, dans le plus bref délai possible, aux autres stations de navire voisines et aux autorités compétentes du premier point de la côte avec lequel le contact peut être établi. Ces transmissions doivent être précédées du signal de sécurité.

NOC **7005** 1620 **3336** § 8. Lorsqu'elles le jugent utile, et à condition que l'expéditeur y consente, les administrations peuvent autoriser leurs stations terrestres à communiquer des renseignements concernant les avaries ou sinistres maritimes, ou présentant un intérêt général pour la navigation, aux agences d'information maritime agrées par elles, et suivant des contitions fixées également par elles.

SECTION III

NOC

Avis médicaux

NOC **7006** 1621 **3337** § 9. Les stations mobiles qui désirent recevoir un avis médical peuvent l'obtenir par l'intermédiaire des stations terrestres indiquées comme assurant un tel service dans la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux.

NOC **7007** 1622 **3338** § 10. Les radiotélégrammes et les conversations radiotéléphoniques relatifs aux avis médicaux peuvent être précédés du signal d'urgence approprié (voir les numéros **3198** à **3208**).

3339 à **3363** *(Non attribués.)*

NX

CHAPITRE X

Service mobile aéronautique

N40/22

ARTICLE 43

MOD

Autorité de la personne responsable des stations mobiles dans le service mobile aéronautique

MOD **7108** 845 **3364** § 1. Le service d'une station mobile est placé sous l'autorité supérieure de la personne responsable de l'aéronef ou de tout autre véhicule portant la station mobile.

NOC **7109** 846 **3365** § 2. Celui qui détient cette autorité doit exiger que chaque opérateur observe le présent Règlement et que la station mobile placée sous la responsabilité d'un opérateur soit toujours utilisée conformément aux stipulations de ce Règlement.

MOD **7110** 847 **3366** § 3. La personne responsable ainsi que toutes les personnes qui peuvent avoir connaissance du texte ou simplement de l'existence de radiotélégrammes, ou de tout autre renseignement obtenu au moyen du service de radiocommunication, sont soumises à l'obligation de garder et d'assurer le secret des correspondances.

3376 à **3391** *(Non attribués.)*

N41

ARTICLE 44

NOC

Certificats des opérateurs des stations d'aéronef

SECTION I

NOC

Dispositions générales

MOD **7136** 848 **3392** § 1. (1) Le service de toute station radiotélégraphique d'aéronef doit être assuré par un opérateur titulaire d'un certificat délivré ou reconnu par le gouvernement dont dépend cette station.

MOD **7137** 849 **3393** (2) Le service de toute station radiotéléphonique d'aéronef doit être dirigé par un opérateur titulaire d'un certificat délivré ou reconnu par le gouvernement dont dépend cette station. Sous réserve de cette disposition, d'autres personnes que le titulaire du certificat peuvent utiliser l'installation radiotéléphonique.

MOD **7138** 850 **3394** (3) Le service des appareils automatiques de télécommunication (1) installés dans une station d'aéronef doit être dirigé par un opérateur titulaire d'un certificat délivré ou reconnu

---

NOC **7138.1** 850.1 **3394.1** (1) Le terme «appareils automatiques de télécommunication» comprend les appareils tels que les téléimprimeurs, les appareils de transmission de données, etc.

par le gouvernement dont dépend cette station. Sous réserve de cette disposition, d'autres personnes que le titulaire du certificat peuvent utiliser ces appareils. Si le fonctionnement de ces appareils repose essentiellement sur l'utilisation des signaux du code Morse décrits dans l'Instruction pour l'exploitation du service télégraphique public international, le service doit être assuré par un opérateur titulaire d'un certificat d'opérateur radiotélégraphiste. Toutefois, cette dernière condition ne s'applique pas aux appareils automatiques qui peuvent utiliser les signaux du code Morse uniquement à des fins d'identification.

NOC **7139** **3395** (4) Toutefois, pour le service des stations radiotéléphoniques opérant uniquement
851 sur des fréquences supérieures à 30 MHz, chaque gouvernement détermine lui-même si un certificat est nécessaire et, cas échéant, définit les conditions à remplir pour son obtention.

MOD **7140** **3396** (5) Les dispositions du número **3395** ne sont pas applicables aux stations d'aéronef
852 fonctionnant sur des fréquences assignées pour une utilisation internationale.

MOD **7141** **3397** § 2. (1) Dans le cas d'indisponibilité absolue de l'opérateur au cours d'un vol, la
853 personne responsable de la station peut autoriser, mais à titre temporaire seulement, un opérateur titulaire d'un certificat délivré par le gouvernement d'un autre Membre de l'Union à assurer le service des radiocommunications.

MOD **7142** **3398** (2) Lorsqu'il est nécessaire d'employer comme opérateur provisoire une personne
854 ne possédant pas de certificat, ou un opérateur n'ayant pas de certificat suffisant, son intervention doit se limiter uniquement aux signaux de détresse, d'urgence et de sécurité, aux messages qui s'y rapportent, aux messages intéressant directement la sécurité de la vie humaine et aux messages essentiels relatifs à la navigation et à la sécurité de la marche de l'aéronef. Les personnes ainsi employées sont astreintes au secret des correspondances prévu au numéro **3402**.

NOC **7143** **3399** (3) Dans tous les cas, l'opérateur provisoire doit être remplacé aussitôt que possible
855 par un opérateur titulaire du certificat prévu au paragraphe 1 du présent article.

NOC **7144** **3400** § 3. (1) Chaque administration prend les dispositions nécessaires pour éviter,
856 dans la plus grande mesure possible, l'emploi frauduleux des certificats. A cet effet, ceux-ci portent la signature du titulaire et sont authentifiés par l'administration qui les a délivrés. Les administrations peuvent employer, à leur gré, d'autres moyens d'identification, tels que photographies, empreintes digitales, etc.

(MOD) **7145** **3401** (2) Afin de faciliter la vérification des certificats, ceux-ci portent, s'il y a lieu, en
857 plus du texte rédigé dans la langue nationale, une traduction de ce texte dans l'une des langues de travail de l'Union.

NOC **7146** **3402** § 4. Chaque administration prend les mesures nécessaires pour soumettre les
858 operateurs à l'obligation du secret des correspondances prévue au numéro **2023.**

SECTION II

NOC

Classes et catégories de certificats

NOC **7147** **3403** § 5. (1) Il existe deux classes de cetificats, ainsi qu'un certificat spécial, pour les
859 opérateurs radiotélégraphistes (1).

(MOD) **7148** **3404** (2) Il y a deux catégories de certificats pour les opérateurs radiotéléphonistes, le
860 certificat général et le certificat restreint (1).

NOC **7149** **3405** § 6. (1) Le titulaire d'un certificat d'opérateur radiotélégraphiste de première ou
861 deuxième classe peut assurer le service radiotélégraphique ou radiotéléphonique de toute station d'aéronef.

NOC **7150** **3406** (2) Le titulaire d'un certificat général de radiotéléphoniste peut assurer le service
862 radiotéléphonique de toute station d'aéronef.

NOC **7151** **3407** (3) Le titulaire d'un certificat restreint de radiotéléphoniste peut assurer le service
863 radiotéléphonique de toute station d'aéronef lorsqu'elle fonctionne sur les fréquences attribuées au service mobile maritime à condition:

3408 *a*) Que la puissance en crête de l'émetteur ne dépasse pas 200 watts, *ou bien*

3409 *b*) Que la commande de l'émetteur comporte seulement la manœuvre d'organes de commutation externes et simples, sans qu'il soit nécessaire d'effectuer aucun réglage manuel des éléments qui déterminent la fréquence, l'émetteur lui-même maintenant la stabilité des fréquences dans les limites des tolérances spécifiées à l'appendice **7** et la puissance en crête de l'émetteur ne dépassant pas 1 kilowatt.

NOC **7147.1** **3403.1**
859.1

(MOD) **7148.1** **3404.1**
860.1

(1) Pour l'emploi des opérateur titulaires des différents certificats, voir l'article 45.

NOC 7152 3410 (4) Le titulaire d'un certificat restreint de radiotéléphoniste peut assurer le service radiotéléphonique de toute station d'aéronef fonctionnant sur des fréquences attribués exclusivement au service mobile aéronautique, à condition que la commande de l'émetteur comporte seulement la manœuvre d'organes de commutation externes et simples, sans qu'il soit nécessaire d'effectuer aucun réglage manuel des éléments qui déterminent la fréquence, l'émetteur lui-même maintenant la stabilité des fréquences dans les limites des tolérances spécifiées à l'appendice **7**.
864

NOC 7153 3411 (5) Le service radiotéléphonique des stations d'aéronef pour lesquelles le certificat restreint de radiotéléphoniste est seul exigé peut être assuré par un opérateur titulaire du certificat spécial de radiotélégraphiste.
865

NOC 7154 3412 § 7. Exceptionnellement, le certificat d'opérateur radiotélégraphiste de deuxième classe ainsi que le certificat spécial d'opérateur radiotélégraphiste peuvent être limités exclusivement au service radiotélégraphique. Dans ce cas, mention de cette limitation doit être portée sur le certificat.
866

SECTION III

(MOD)

Conditions d'obtention des certificats d'opérateur

NOC 7155 3413

A) Généralités

NOC 7156 3414 § 8. (1) Les conditions à imposer pour l'obtention des différents certificats sont spécifiées dans les paragraphes suivants. Elles doivent être considérées comme des conditions minima.
867

NOC 7157 3415 (2) Chaque administration reste libre de fixer le nombre des examens qu'elle juge nécessaires pour l'obtention de chaque certificat.
868

MOD 7158 3416 § 9. (1) L'administration qui délivre un certificat peut, avant d'autoriser son titulaire à assurer le service à bord d'un aéronef, exiger que cet opérateur remplisse d'autres conditions (par exemple: connaissance des appareils automatiques de télécommunication; connaissances techniques et professionelles complémentaires, relatives notamment à la navigation; aptitudes physiques; avoir accompli comme opérateur un certain nombre d'heures de vol, etc.).
869

NOC 7159 3417 (2) Il convient que les administrations prennent toutes les mesures qu'elles jugent nécessaires pour contrôler les aptitudes des opérateurs lorsque ceux-ci n'ont pas exercé leurs fonctions pendant une durée prolongée.
870

NOC 7160 3418

B) Certificat d'opérateur radiotélégraphiste de première classe

NOC 7161 3419 § 10. Le certificat de première classe est délivré aux candidats qui ont fait preuve des connaissances et aptitudes techniques et professionnelles énumérées ci-après:
871

NOC 7162 3420 *a*) La connaissance tant des principes généraux de l'électricité que de la théorie de la radioélectricité, la connaissance du réglage et du fonctionnement pratique des différents types d'appareils radiotélégraphiques et radiotéléphoniques utilisés dans le service mobile, y compris les appareils utilisés pour la radiogoniométrie et la prise des relèvements radiogoniométriques, ainsi que la connaissance générale des principes du fonctionnement des autres appareils habituellement employés pour la radionavigation;
872

NOC 7163 3421 *b*) La connaissance théorique et pratique du fonctionnement et de l'entretien des appareils tels que les groupes électrogènes, les accumulateurs, etc., qui sont utilisés pour la mise en œuvre et le règlage des appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques mentionnés au numéro **3420**;
873

MOD 7164 3422 *c*) Les connaissances pratiques nécessaires pour réparer par les moyens du bord les avaries susceptibles de survenir aux appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques en cours de vol;
874

NOC 7165 3423 *d*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de vingt groupes par minute, et d'un texte en langage clair à la vitesse de vingt-cinq mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque chiffre ou signe de ponctuation comptant pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères. La durée de chaque épreuve de transmission et de réception est, en général, de cinq minutes;
875

NOC 7166 876 3424 *e*) L'aptitude à la transmission correcte et à la réception correcte en radio--téléphonie;

NOC 7167 877 3425 *f*) La connaissance détaillée des Règlements applicables aux radiocommunications, la connaissance des documents relatifs à la taxation des radiocommunications, la connaissance des dispositions de la Convention pour la sauvegarde de la vie humaine en mer qui se rapportent à la radioélectricité, et, dans le cas de la navigation aérienne, la connaissance des dispositions spéciales qui régissent les services fixe et mobile aéronautiques ainsi que la radionavigation aéronautique. Dans ce dernier cas, le certificat stipule que le titulaire a subi avec succés les épreuves portant sur ces dispositions spéciales;

NOC 7168 878 3426 *g*) Des connaissances suffisantes de la géographie du monde, notamment des principales lignes de navigation maritime et aérienne et des voies de télécommunication les plus importantes;

NOC 7169 879 3427 *h*) La connaissance suffisante de l'une des langues de travail de l'Union. Les candidats doivent être capables de s'exprimer dans cette langue d'une manière convenable tant verbalement que par écrit. Chaque administration indique elle-même la ou les langues qui sont imposées.

NOC 7170 3428 *C*) Certificat d'opérateur radiotélégraphiste de deuxième classe

NOC 7171 880 3429 § 11. Le certificat de deuxième classe est délivré aux candidats qui ont fait preuve des connaissances et aptitudes techniques et profissionnelles énumérées ci-après:

NOC 7172 881 3430 *a*) La connaissance élémentaire théorique et pratique de l'électricité et de la radioélectricité, la connaissance du réglage et du fonctionnement pratique des différents types d'appareils radiotélégraphiques et radiotéléphoniques utilisés dans le service mobile, y compris les appareils utilisés pour la radiogoniométrie et la prise des relèvements radiogoniométriques, ainsi que la connaissance élémentaire des principes du fonctionnement des autres appareils habituellement employés pour la radionavigation;

NOC 7173 882 3431 *b*) La connaissance élémentaire théorique et pratique du fonctionnement et de l'entretien des appareils tels que les groupes électrogénes, les accumulateurs, etc., qui sont utilisés pour la mise en oeuvre et le réglage des appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques mentionnés au numéro **3430**;

MOD 7174 883 3432 *c*) Les connaissances pratiques suffisantes pour pouvoir réparer les petites avaries susceptibles de survenir aux appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques en cours de vol;

NOC 7175 884 3433 *d*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte, en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation à la vitesse de seize groupes par minute, et d'un texte en langage clair à la vitesse de vingt mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque chiffre ou signe de ponctuation comptant pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères. La durée de chaque épreuve de transmission et de réception est, en général, de cinq minutes;

NOC 7176 885 3434 *e*) L'aptitude à la transmission correcte et à la réception correcte en radiotéléphonie, sauf dans le cas prévu au numéro **3412**;

NOC 7177 886 3435 *f*) La connaissance des Règlements applicables aux radiocommunications, la connaissance des documents relatifs à la taxation des radiocommunications, la connaissance des dispositions de la Convention pour la sauvegarde de la vie humaine em mer qui se rapportent à la radioélectricité, et, dans le cas de la navigation aérienne, la connaissance des dispositions spéciales qui régissent les services fixe et mobile aéronautiques ainsi que la radionavigation aéronautique. Dans ce dernier cas, le certificat stipule que le titulaire a subi avec succès les épreuves portant sur ces dispositions spéciales;

NOC 7178 887 3436 *g*) Des connaissances suffisantes de la géographie du monde, notamment des principales lignes de navigation maritime et aérienne et des voies de télécommunication les plus importantes;

NOC 7179 888 3437 *h*) S'il y a lieu, la connaissance élémentaire d'une des langues de travail de l'Union. Les canditats doivent être capables de s'exprimer dans cette langue d'une manière convenable, tant verbalement que par écrit. Chaque administration indique elle-même la ou les langues qui sont imposées.

NOC 7180 3438 *D)* Certificat spécial d'opérateur radiotélégraphiste

NOC 7181 889 3439 § 12. (1) Le certificat spécial de radiotélégraphiste est délivré aux candidats qui ont fait preuve des connaissances et aptitudes professionnelles énumérées ci-après:

NOC 7182 890 3440 *a)* L'aptitude à la transmission manuelle correcte et à la réception auditive correcte, en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de seize groupes par minute, et de texte en langege clair à la vitesse de vingt mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque signe de ponctuation étant compté pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères;

NOC 7183 891 3441 *b)* La connaissance du réglage et du fonctionnement des appareils radiotélégraphiques;

NOC 7184 892 3442 *c)* La connaissance des Règlements applicables aux radiocommunications télégraphiques et notamment de la partie de ces Règlements relative à la sécurité de la vie humaine en mer.

NOC 7185 893 3443 (2) Il appartient à chaque administration intéressée de fixer les autres conditions pour l'obtention de ce certificat. Cependant, sauf dans le cas prévu au numéro **3412**, les conditions fixées aux numéros **3450, 3451, 3452** et **3453** ou **3454**, selon le cas, doivent être satisfaites.

NOC 7186 3444 *E)* Certificat d'opérateur radiotéléphoniste

MOD 7187 894 3445 § 13. Le certificat général d'opérateur radiotéléphoniste est délivré aux candidats qui ont fait preuve des connaissances et aptitudes professionelles énumérées ci-après (voir également les numéros **3405** et **3406**):

NOC 7188 895 3446 *a)* La connaissance des principes élémentaires de la radiotéléphonie;

NOC 7189 896 3447 *b)* La connaissance détaillée du réglage et du fonctionnement pratique des appareils de radiotéléphonie;

NOC 7190 897 3448 *c)* L'aptitude à la transmission correcte et à la réception en radiotéléphonie;

NOC 7191 898 3449 *d)* La connaissance détaillée des Règlements applicables aux radiocommunications téléphoniques et notamment de la partie de des Règlements relative à la sécurité de la vie humaine.

NOC 7192 899 3450 § 14. (1) Le certificat restreint de radiotéléphoniste est délivré aux candidats que ont fait preuve des connaissances et aptitudes professionnelles énumérées ci-après:

NOC 7193 900 3451 *a)* La connaissance pratique de l'exploitation et de la procédure radiotéléphoniques;

NOC 7194 901 3452 *b)* L'aptitude à la transmission correcte et à la réception correcte en radiotéléphonie;

NOC 7195 902 3453 *c)* La connaissance générale des Règlements applicables aux radiocommunications téléphoniques et notamment de la partie de ces Règlements relative à la sécurité de la vie humaine.

MOD 7196 903 3454 (2) Pour les stations radiotéléphoniques d'aéronef fonctionnant sur des fréquences attribuées en exclusivité au service mobile aéronautique, chaque administration peut fixer elle-même les conditions d'obtention d'un certificat restreint de radiotéléphoniste, sous réserve que le fonctionnement de l'émetteur n'exige que l'emploi de dispositifs extérieurs de commutation de conception simple, à l'exclusion de tout réglage manuel des éléments déterminant la fréquence, et que la stabilité des fréquences soit maintenue par l'émetteur lui-même dans les limites des tolérences fixées à l'appendice **7**. Toutefois, en fixant ces conditions, les administrations s'assurent que l'opérateur possède une connaissance suffisante de l'exploitation et des procédures du service radiotéléphonique, notamment en ce qui concerne la détresse, l'urgence et la sécurité. Les dispositions ci-dessus ne contredisent en rien celles du numéro **3457**.

NOC 7197 904 3455 (3) Les administrations des pays de la Région 1 ne délivrent pas de certificats correspondant aux dispositions du numéro **3454**.

NOC 7198 905 3456 § 15. Dans un certificat de radiotéléphoniste, il doit être indiqué si celui-ci est un certificat général ou un certificat restreint et, dans ce dernier cas, s'il a été délivré conformément aux dispositions du numéro **3454**.

(MOD) 7199 906 3457 § 16. Pour satisfaire à des besoins spéciaux, des accords particuliers entre administrations peuvent fixer les conditions à remplir pour l'obtention d'un certificat de

radiotéléphoniste destiné à être utilisé dans des stations radiotéléphoniques remplissant certaines conditions techniques et certaines conditions d'exploitation. De tels accords ne peuvent être conclus que sous réserve qu'aucun brouillage préjudiciable aux services internationaux ne résulte de leur application. Ces conditions et ces accords sont mentionnés sur les certificats ainsi délivrés.

3458 à 3482 *(Non attribués.)*

N42 ARTICLE 45

MOD **Personnel des stations aéronautiques**

SUP SECTION I

MOD **7225** 948 **3483** Les administrations prennent les mesures nécessaires pour garantir que, dans les sations aéronautiques, le personnel possède les aptitudes professionelles lui permettant d'assurer efficacement le service de ces stations.

SUP SECTION II

SUP **7226** 912

SUP **7227** 913

SUP **7228** 919

SUP **7229** 920

3484 à 3508 *(Non attribués.)*

N43/21 ARTICLE 46

MOD **Inspection des stations d'aéronef**

MOD **7255** 838 **3509** § 1. (1) Les gouvernements ou les administrations compétentes des pays où une station d'aéronef fait escale peuvent exiger le production de la licence pour l'examiner. L'opérateur de la station, ou la personne responsable de la station, doit se prêter à cette vérification. La licence doit être conservée de façon à pouvoir être produite sur demande. Dans toute la mesure du possible, la licence, ou une copie certifiée conforme par l'autorité qui l'a délivrée, doit être affichée à demeure dans la station.

MOD **7256** 839 **3510** (2) Les inspecteurs doivent être en possession d'une carte ou d'un insigne d'identité délivré par les autorités compétentes, qu'ils doivent montrer à la demande de personne responsable de l'aéronef.

NOC **7257** 840 **3511** (3) Lorsque la licence ne peut pas être produite, ou lorsque des anomalies manifestes sont constatées, les gouvernements ou administrations peuvent faire procéder à l'inspection des installations radioélectriques, afin de s'assurer qu'elles répondent aux stipulations du présent Règlement.

NOC **7258** 841 **3512** (4) De plus, les inspecteurs sont en droit d'exiger la production des certificats des opérateurs, mais ils ne peuvent demander aucune justificaction de connaissances professionnelles.

SUP **7229.1** 920.1

MOD **7259** **3513** § 2. (1) Lorsqu'un gouvernement ou une administration s'est trouvé dans l'obligation
842 de recourir à la mesure prévue au numéro **3511,** ou lorsque les certificats d'opérateur n'ont pas pu être produits, le gouvernement ou l'administration dont dépend la station d'aéronef en cause doit être informé sans retard. De plus, il est fait application, le cas échéant, des dispositions de l'article 21.

MOD **7260** **3514** (2) Avant de quitter l'aéronef, l'inspecteurs doit faire part de ses constatations à
843 la personne responsable. En cas d'infraction aux stipulations du présent Règlement, l'inspecteur présente son rapport par écrit.

MOD **7261** **3515** § 3. Les Membres d'engagent à ne pas imposer aux stations d'aéronef étrangères
843 qui se trouvent temporairement dans leurs limites territoriales ou s'arrêtent temporairement sur leur territoire, des conditions techniques et d'exploitation plus rigoureuses que celles prévues dans le présent Règlement. Cette prescription n'affecte en rien les dispositions qui relèvent d'accords internationaux relatifs à la navigation aérienne et qui ne sont pas prévues dans le présent Règlement.

3516 à 3540 *(Non attribués.)*

N44

ARTICLE 47

NOC

Vacations des stations du service mobile aéronautique

SECTION I

NOC

Généralités

MOD **7287** **3541** § 1. Afin de permettre l'application des règles suivantes relatives aux heures de
921 veille, toute station du service mobile aéronautique doit être munie d'une montre précise correctement réglée sur le Temps universel coordonné (UTC).

SECTION II

NOC

Stations aéronautiques

NOC **7288** **3542** § 2. Une station aéronautique assure un service continu pendant toute la période
928 durant laquelle elle porte la responsabilité du service des radiocommunications avec les aéronefs en vol.

SECTION III

NOC

Stations d'aéronef

NOC **7289** **35** § 3. Pour le service international de la correspondance publique, les stations d'aéronef
947 constituent une seule catégorie. Elles assurent un service dont la durée n'est pas fixée dans le présent Règlement.

3544 à 3568 *(Non attribués.)*

N45

ARTICLE 48

NOC

Conditions de fonctionnement du service mobile aéronautique

SECTION I

NOC

Généralités

(MOD) **7315** **3569** § 1. Sauf dispositions contraires du présent Règlement, le service mobile aéro-
949 nautique peut être régi par des accords particuliers conclus par les gouvernements intéressés dans le cadre des dispositions de l'article 31 de la Convention (Malaga-Torremolinos, 1973) concernant les arrangements particuliers.

MOD **7316** **3570** § 2. Sauf accords particuliers, les dispositions du présent Règlement concernant
950 l'écoulement et le comptabilité de la correspondance publique sont applicables aux stations du service mobile aéronautique (voir aussi le numéro **3633**).

SECTION II

NOC

Communications avec des stations du service mobile maritime et du service mobile maritime par satellite

MOD 7317 951 **3571** § 3. Les stations à bord d'aéronefs peuvent communiquer avec les stations du service mobile maritime ou du service mobile maritime par satellite. Elles doivent alors, se conformer aux dispositions du présent Règlement relatives à ces services (voir le chapitre XI, particulièrement l'article 59, section III).

3572 à 3596 *(Non attribués.)*

N46

ARTICLE 49

NOC

Conditions à remplir par les stations mobiles du service mobile aéronautique

MOD 7343 955 **3597** § 1. Les stations mobiles doivent être établies de manière à être conformes aux dispositions des chapitres III et X en ce qui concerne les fréquences et les classes d'émission.

NOC 7344 957 **3598** § 2. Les fréquences d'émission des stations mobiles doivent être vérifiées le plus soivent possible par le service d'inspection dont ces stations relèvent.

NOC 7345 958 **3599** § 3. L'énergie rayonnée par les appareils récepteurs doit être aussi réduite que possible et ne doit pas causer de brouillage préjudiciables aux autres stations.

NOC 7346 959 **3600** § 4. Les administrations prennent toutes les mesures pratiques nécessaires pour que le fonctionnement des appareils électriques ou électroniques de toute nature installés dans les stations mobiles ne cause pas de brouillage préjudiciable aux services radioélectriques essentiels de ces stations lorsque'elles fonctionnent conformément aux dispositions du présent Règlement.

NOC 7347 960 **3601** § 5. (1) Les changements de fréquence dans les appareils émetteurs et récepteurs de toute station mobile doivent pouvoir être effectués aussi rapidement que possible.

NOC 7348 961 **3602** (2) Les installations de toute station mobile doivent permettre, une fois la communication établie, de passer de l'émission à la réception, et vice versa, dans un temps aussi court que possible.

MOD 7349 962 **3603** § 6. Il est interdit aux stations d'aéronef en mer ou au-dessus de la mer d'effectuer un service de radiodiffusion (voir le numéro **36**). (Voir également le numéro **2665.**)

MOD 7350 963 **3604** § 7. Les stations mobiles autres que les stations d'engin de sauvetage doivent être pourvues des documents énumérés à la section pertinente de l'appendice **11** (section VI, «Stations d'aéronef»).

3605 à 3629 *(Non attribués.)*

N47

ARTICLE 50

NOC

Dispositions spéciales relatives à l'emploi des fréquences dans les service mobile aéronautique

(MOD) 7376 429 **3630** § 1. Les fréquences de toutes les bandes attribuées au service mobile aéronautique (R) sont réservées aux communications entre tous les aéronefs et les stations aéronautiques principalement chargées d'assurer la sécurité et la régularité des vols le long des routes nationales ou internationales de l'aviation civile.

NOC 7377 430 **3631** § 2. Les fréquences de toutes les bandes attribués au service mobile aéronautique (OR) sont réservées aux communications entre tous les aéronefs et les stations aéronautiques autres que celles principalement chargées du service mobile aéronautique le long des routes nationales ou internacionales de l'aviation civile.

MOD 7378 431 **3632** § 3. Les fréquences des bandes attribuées au service mobile aéronautique entre 2850 kHz et 22 000 kHz (voir l'article 8) sont assignées conformément aux dispositions des appendices 26, 27 (*) et 27 Aer2 (*) et aux autres dispositions pertinentes du présent Règlement.

(*) Note du Secrètariat général: voir le numéro **5189** et la Résolution **400.**

MOD 7379 3633 § 4. Les administrations ne doivent pas autoriser le correpondance publique dans les bandes de fréquences attribuées en exclusivité au service mobile aéronautique, à moins qu'il n'en soit disposé autrement dans des règlements particuliers au service aéronautique, approuvés par une conférence de l'Union à laquelle tous les Membres intéressés sont invités. Ces réglements doivent reconnaître une priorité absolue aux communications de sécurité et de contrôle.
432

MOD 7380 3634 § 5. Afin de réduire les brouillages, les stations d'aéronef doivent, dans la mesure des moyens dont elles disposent, s'efforcer de choisir pour l'appel la bande dont les fréquences présentent les caractéristiques de propagation les plus favorables pour établir une communication satisfaisante. En l'absence de données plus précises, toute station d'aéronef doit, avant d'émettre un appel, écouter les signaux de la station avec laquelle elle désire entrer en communication. La force et l'intelligibilité des signaux reçus donnent des renseignement utilies sur les conditions de propagation et indiquent dans quelle bande il est préférable de faire l'appel.
1162

(MOD) 7381 3635 § 6. Les gouvernements peuvent, par voir d'accords, décider des fréquences à utiliser pour l'appel et pour la réponse dans le service mobile aéronautique.
1207

3636 à 3650 *(Non attribués.)*

N48/37

ARTICLE 51

MOD

Ordre de priorité des communications dans le service aéronautique

MOD 7408 3651 L'ordre de priorité des communications (1) dans le service mobile aéronautique doit être l'ordre donné ci-après, sauf impossibilité pratique dans un système entièrement automatisé, cependant, même dans ce cas, la priorité doit être donnée aux communications de la première catégorie:
1496

1) Appels de détresse, messages de détresse et trafic de détresse;
2) Communications précédées du signal d'urgence;
3) Communications précédées du signal de sécurité;
4) Communications relatives aux relèvements radiogoniométriques;
5) Communications relatives à la navigation et à la sécurité des mouvements des aéronefs participant à des opérations de recherche et de sauvetage;
6) Communications relatives à la navigation, aux mouvements et aux besoins des aéronefs et des navires, et messages d'observation météorologique destinés à un service météorologique officiel;
7) ETATPRIORITENATIONS — Radiotélégrammes relatifs à l'application de la Charte des Nations Unies;
8) ETATPRIORITE — Radiotélégrammes d'État avec priorité et communications d'État pour lesquelles le droit de priorité a été expressément demandé;
9) Communications de service relatives au fonctionnement du service de télécommunication ou à des communications précédemment écoulées;
10) Communications d'État autres que celles indiquées à l'alinéa 8 ci-dessus, communications privées ordinaires, radiotélégrammes RTC (2) et radiotélégrammes de presse.

3652 à 3676 *(Non attribués.)*

ADD 7408.1 3651.1 (1) Le terme *communications* employé dans le présent article englobe les radiotélégrammes, les conversations radiotéléphoniques ainsi que les communications radiotélex.

ADD 7408.2 3651.2 (2) RCT (Red Cross Telegrams): Télégrammes concernant les personnes protégées en temps de guerre para les Conventions de Génève du 12 août 1949.

N49

ARTICLE 52

NOC

Procédure générale radiotélégraphique dans le service mobile aéronautique

NOC

SECTION I

Dispositions générales

MOD **7434** **3677**
1000

§ 1. La procédure détaillée dans le présent article est obligatoire, sauf dans le cas de détresse, d'urgence ou de sécurité, auxquells sont applicables les dispositions du chapitre IX.

MOD **7435** **3678**
1001

(2) La procédure fixée dans les sections IV, V et VI du présent article n'est applicable qu'en l'absence d'arrangements particuliers prévoyant des dispositions contraires et conclus par les gouvernements intéressés.

MOD **7436** **3679**
1003

§ 2. L'emploi des signaux du code Morse figurant sans l'Instruction pour l'exploitation du service télégraphique public international est obligatoire dans le service mobile aéronautique. Toutefois pour les radiocommunications d'un caractère spécial, l'usage d'autres signaux n'est pas exclu.

MOD **7437** **3680**
1004

§ 3. Pour faciliter les radiocommunications, les stations utilisent les abréviations reglementaires définies à l'appendice **13.**

SECTION II

NOC

Appels

NOC **7438** **3681**

A) Généralités

NOC **7439** **3682**
1063

§ 4. Les dispositions du présent article ne sont pas applicables au service mobile aéronautique lorsque des accords particuliers ont été conclus par les gouvernements intéressés.

MOD **7440** **3683**
1065

§ 5. (1) Em règle générale, il incombe à la station d'établir la communication avec la station aéronautique. A cet effect, la station d'aéronef ne peut appeler la station aéronautique qu'aprés être arrivée dans sa zone de service, c'est-à-dire dans la zone où, en utilisant une fréquence appropriée, la station d'aéronef peut être entendue par la station aéronautique.

MOD **7441** **3684**
1066

(2) Toutefois, une station aéronautique qui a du trafic pour une station d'aéronef peut appeler cette station si elle a des raisons de croire que ladite station d'aéronef se trouve dans sa zone de service et assure l'écoute.

MOD **7442** **3685**
1076

§ 6. Lorsqu'une station aéronautique reçoit pratiquement em même temps des appels de plusieurs stations d'aéronef, elle décide de l'ordre dans lequel ces stations pourront lui transmettre leur trafic. Sa décision est fondée sur l'ordre de priorité (voir le numéro **3651)** des radiotélégrammes en instance dans les stations d'aéronef et sur la nécessité de permettre à chacune des stations appelantes d'écouler le plus grand nombre possible de communications.

NOC **7443** **3686**
1077

§ 7. (1) Lorsqu'une station appelée ne répond pas à l'appel émis trois fois à des intervalles de deux minutes, l'appel doit cesser il ne doit pas être renouvelé avant quinze minutes.

NOC **7444** **3687**
1079

(2) Avant de renouveler l'appel, la station appelante doit s'assurer que la station appelée n'est pas en communication avec une autre station.

MOD **7445** **3688**
1080

(3) S'il n'y a pas de raison de craindre que des brouillages préjucidiables n'affectent des communications en cours, les dispositions du numéro **3686** ne sont pas applicables. Dans ce cas, l'appel émis trois fois à des intervalles de deux minutes peut être renouvelé après un intervalle de durée inférieure à quinze minutes mais au moins égale à trois minutes.

MOD **7446** **3689**
1081

§ 8. Les stations d'aéronef ne doivent pas émettre leur onde porteuse entre les appels.

MOD **7447** **3690**
1082

§ 9. Lorsque le nom et l'adresse de l'administration ou de l'exploitation privée dont dépend une station d'aéronef ne sont pas mentionnnés dans la nomenclature appropriée ou ne sont plus en concordance avec les indications de celle-ci, la station d'aéronef a le devoir de donner d'office à la station aéronautique à laquelle elle transmet du trafic tous les reseignements nécessaires à cet égard.

MOD 7448 3691 § 10. (1) La station aéronautique peut, au moyen de l'abréviation TR, demander à
1083 la station d'aéronef de lui fournir les renseignements suivants:

MOD 7449 3692 *a*) Position et, autant que possible, cap et vitesse;
1084

MOD 7450 3693 *b*) Prochaine destination.
1085

MOD 7451 3694 (2) Il convient que les renseignements indiqués aux numéros **3691 à 3693,** précédés
1086 de l'abreviation TR, soient fournis par les stations d'aéronef, chaque fois que cela semble approprié, sans demande préalable de la station aéronautique. Ces renseignements ne sont fournis qu'après autorisation de la personne responsable de l'aéronef.

NOC 7452 3695 *B*) Appels à plusieurs stations

NOC 7453 3696 § 11. Deux types de signaux d'appel «à tous» sont reconnus:
1088

MOD 7454 3697 *a*) Appel CQ suivi de la lettre K (voir le numéro **3699**);
1089

NOC 7455 3698 *b*) Appel CQ non suivi de la lettre K (voir le numéro **3700**).
1090

NOC 7456 3699 § 12. Les stations qui désirent entrer en communication avec des stations du service
1091 mobile, sans toutefois connaître le nom de celles de ces stations qui sont dans leur zone de service, peuvent employer le signal de recherche CQ pour remplacer dans l'appel l'indicatif de la station appelée. L'appel doit alors être suivi de la lettre K (appel général à toutes les staions du service mobile, avec demande de réponse).

NOC 7457 3700 § 13. L'appel CQ non suivi de la lettre K (appel général à toutes les stations sans
1093 demande de réponse) est employé avant le transmission des renseignements de toute nature destinés à être lus ou utilisés par quiconque peut les capter.

NOC 7458 3701 § 14. L'appel CP suivi de deux ou plusieurs indicatifs d'appel ou d'un mot con-
1094 ventionnel (appel à certaines stations réceptrices sans demande de réponse) n'est employé que pour la transmission des renseignements de toute nature destinés à être lus ou utilisés par les personnes autorisées.

Section III

NOC **Opérations préliminaires**

NOC 7459 3702 § 15. (1) Avant d'émettre, une station prend les précautions voulues pour s'assurer
1007 que ses émissions ne brouilleront pas des transmissions en cours: su un tel brouillage est probable, la station attend un arrêt opportun de la transmission qu'ele pourrait brouiller. Cette obligation ne s'applique pas aux stations qui peuvent fonctionner sans surveillance par des moyens automatiques (voir le numéro **3394**) sur des fréquences destinées aux systèmes à bande étroite de télégraphie à impression directe.

NOC 7460 3703 (2) Dans le cas ou, même en opérant ainsi, l'émission de cette station vient à
1008 brouiller une transmission déjà en cours, on applique les règles suivantes:

MOD 7461 3704 *a*) La station d'aéronef dont l'émission brouille la communication entre une
1009 station mobile d'une part, et une station terrestre d'autre part, doit cesser d'émettre à la première demande de la station terrestre intéressée;

MOD 7462 3705 *b*) La station d'aéronef dont l'émission brouille les communications entre
1010 des stations mobiles doit cesser d'émettre à la première demande de l'une quelconque de ces stations;

(MOD) 7463 3706 *c*) La station qui demande cette cessation doit indiquer la durée approximative
1011 de l'attente imposée à la station dont elle fait suspendre l'émission.

Section IV

NOC **Forme de l'appel, réponse à l'appel et signaux préparatoires au trafic**

NOC 7464 3707 *A*) Forme de l'appel

NOC 7465 3708 § 16. (1) L'appel est constitué comme suit:
1012

Trois fois, au plus, l'indicatif d'appel de la station appelée;
Le mot DE;
Trois fois, au plus, l'indicatif d'appel de la station appelante.

NOC **7466** **3709** (2) Toutefois, dans les bandes comprises entre 4000 kHz et 27 500 kHz, les indicatifs d'appel peuvent, lorsque les conditions d'établissement du contact sont difficiles, être émis plus de trois fois, mais pas plus de dix. Dans ce cas, les indicatifs d'appel de la station appelée et de la station appelante doivent être émis à tour de rôle (exemple ABC ABC de WXYZ WXYZ ... ou ABC ABC ABC de WXYZ WXYZ WXYZ ...) jusqu'au concurrence d'un maximun de vingt indicatifs. Cet appel peut être émis trois fois à des intervalles de deux minutes. Il ne peut être repris ensuite que quinze minutes plus tard.
1013

NOC **7467** **3710** § 17. Pour faire l'appel, ainsi que pour transmettre les signaux préparatoires, la station appelante utilise une fréquence sur laquelle veille la station appelée.
1014

NOC **7468** **3711** *B*) Indication de la fréquence à utiliser pour le trafic

MOD **7469** **3712** § 18. (1) L'appel tel qui'il des défini aux numéros **3708** et **3709** doit être suivi de l'abréviation réglementarie indiquant la fréquence de travail, et, si c'est utile, la classe d'émission que la station appelante se propose d'utiliser pour transmettre son trafic.
1016

MOD **7470** **3713** (2) Lorsque, par exception à cette règle, l'appel n'est pas suivi de l'indication de la fréquence à utiliser pour le trafic, cela signifie que:
1017

MOD **7471** **3714** *a*) Si la station appelante est une station aéronautique, elle se propose d'utiliser pour le trafic sa fréquence normale de travail indiquée dans le document approprié;
1018

MOD **7472** **3715** *b*) Si la station appelante est une station d'aéronef, la fréquence à utiliser pour le trafic est à choisir par la station appelée parmi les fréquences sur lesquelles la station appelante peut émettre.
1019

NOC **7473** **3716** *C*) Indication de priorité du motif de l'appel et de la transmission des radiotélégrames par séries

MOD **7474** **3717** § 19. (1) Lorsque la station appelante a plusieurs radiotélégrammes à transmettre à la station appélée, les signaux préparatoires précédents sont suivis de l'abréviation réglementaire et du chiffre spécifiant le nombre de ces radiotélégrammes.
1020

NOC **7475** **3718** (2) De plus, lorsque la station appelante désire transmettre ses radiotélégrammes par séries, elle l'indique en ajoutant l'abréviation réglementaire pour demander le consequentement de la station appelée.
1021

NOC **7476** **3719** *D*) Forme de la réponse à l'appel

MOD **7477** **3720** § 20. La réponse à l'appel est constituée comme suit:
1022

Trois fois, au plus, l'indicatif d'appel de la station appelante;
Le mot DE;
Une fois seulement, l'indicatif d'appel de la station appelée.

NOC **7478** **3721** *E*) Fréquence de réponse

NOC **7479** **3722** § 21. Sauf indication contraire dans le présent Règlement, pour transmettre la réponse aux appels et aux signaux préparatoires, la station appelée emploie la fréquence sur laquelle veille la station appelante, à moins que la station appelante n'ait désigné une autre fréquence pour la réponse.
1023

NOC **7480** **3723** *F*) Accord sur la fréquence à utiliser pour le trafic

NOC **7481** **3724** § 22. (1) Si la station appelée est d'accord avec la station appelante, elle transmet:
1027

NOC **7482** **3725** *a*) La réponse à l'appel;
1028

NOC **7483** **3726** *b*) L'abréviation réglementaire indiquant qu'à partir de ce moment elle écoute sur la frequênce de travail annoncé par la station appelante;
1029

NOC **7484** **3727** *c*) Éventuellement, les indications prévues au numéro **3736**;
1030

NOC **7485** **3728** *d*) Si c'est utile, l'abréviation réglementaire et le chiffre indiquant la force et ou l'intelligibilité des signaux reçus (voir l'appendice **13**);
1031

NOC **7486** **3729** *e*) La lettre K, si la station appelée est prête à recevoir le trafic de la station appelante.
1032

NOC 7487 1033 3730 (2) Si la station appelée n'est pas d'accord avec la station appelante sur la fréquence de travail à employer, elle transmet:

NOC 7488 1034 3731 *a*) La réponse à l'appel;

NOC 7489 1035 3732 *b*) L'abréviation réglementaire indiquant la fréquence de travail à utiliser par la station appelante et, s'il y a lieu, la classe d'émission;

NOC 7490 1036 3733 *c*) Éventuellement, les indications prévues au numéro **3736.**

NOC 7491 1037 3734 (3) Lorsque l'accord est réalisé sur la fréquence de travail que la station appelante doit employer pour son trafic, la station appelée transmet la lettre K à la suite des indications contenues sans sa réponse.

NOC 7492 3735 *G*) Réponse à la demande de transmission par séries

NOC 7493 1038 3736 § 23. La station appelée, répondant à une station appelante qui a demandé à transmettre ses radiotélégrammes par séries (voir le numéro **3718**) indique, au moyen de l'abréviation réglementaire, son acceptation ou son refus. Dans le premier cas, elle spécifie, s'il y a lieu, le nombre des radiotélégrammes quLelle est prête à recevoir en une série.

NOC 7494 3737 *H*) Difficultés de réception

NOC 7495 1039 3738 § 24. (1) Si la station appelée n'est pas en mesure de recevoir le trafic immédiatement, elle réponde à l'appel comme il est indiqué aux numéros **3724** à **3729,** mais elle replace la lettre K par le signal . — ... (attente) suivi d'un nombre indiquant en minutes la durée probable de l'attente. Si cette durée probable dépasse dix minutes (cinq minutes dans le cas d'une station d'aéronef communiquant avec une station du service mobile maritime) l'attente doit être motivée.

NOC 7496 1040 3739 (2) Lorsqu'une station reçoit un appel sans être qu'il lui est destiné, elle ne doit pas répondre avant que cet appel ait été répété et compris. Lorsque, d'autre part, une station reçoit un appel qui lui est destiné, mais a des doutes sur l'indicatif d'appel de la station appelante, elle doit répondre immédiatement en utilisant l'abréviation réglementaire au lieu de l'indicatif d'appel de cette dernière station.

Section V

NOC **Ecoulement du trafic**

NOC 7497 3740 *A*) Fréquence de trafic

MOD 7498 1041 3741 § 25. (1) En règle générale, une station du service mobile aéronautique transmet son trafic en employant l'une de ses fréquences de travail de la bande dans laquelle l'appel a eu lieu.

MOD 7499 1043 3742 (2) A l'exception du trafic de détresse (voir le chapitre IX), l'emploi des fréquences réservées à l'appel est interdit pour le trafic.

NOC 7500 1044 3743 (3) Si la transmission d'un radiotélégramme a lieu sur une autre fréquence et ou autre classe d'émission que celles utilisées pour l'appel, cette transmission est précédée:

De, deux fois au plus, l'indicatif d'appel de la station appelée;
Du mot DE;
De l'indicatif d'appel de la station appelante, une fois seulement.

NOC 7501 1045 3744 (4) Si la transmission a lieu sur les mêmes fréquence et classe d'émission que l'appel, la transmission du radiotélégramme est précédée, si c'est nécessaire:

De l'indicatif d'appel de la station appelée;
Du mot DE;
De l'indicatif d'appel de la station appelante.

NOC 7502 3745 *B*) Numérotage par séries quotidiennes

MOD 7503 1046 3746 § 26. (1) En règle générale, les radiotélégrammes de correspondence publique transmis par les stations d'aéronef sont numérotés par séries quotidiennes, en donnant le numéro **1** au premier radiotélégramme transmis chaque jour à chaque station différente.

NOC **7504** **3747** (2) Il convient qu'une série de numéros commencée en radiotélégraphie soit
1047 continuée en radiotéléphonie et inversement.

(MOD) **7505** **3748** *C*) Radiotélégrammes longs

NOC **7506** **3749** § 27. (1) Dans le cas où deux stations sont pourvues de dispositifs leur permettant
1048 de passer de l'émission à la réception sans manœuvre de commutation, la station transmettrice peut poursuivre sa transmission jusqu'à la fin du message ou jusqu'à ce que la station réceptrice l'interrompe au moyen de l'abréviation réglementaire BK. Au préalable, les deux statins se mettent généralement d'accord sur une telle méthode de travail au moyen de l'abréviation réglementaire QSK.

(MOD) **7507** **3750** (2) Si cette méthode de travail ne peut pas être employée, les radiotélégrammes
1049 longs, tant ceux en langage clair que ceux en langage secret sont, en règle générale, transmis par tranches, chaque tranche contenant cinquante mots dans les cas du langage clair vingt mots ou groupes dans le cas du langage secret.

NOC **7508** **3751** (3) A la fin de chaque tranche, le signal . . __ __ . . (?) signifiant «Avez-vous bien
1050 reçu le radiotélégramme jusqu'ici?» est transmis. Si la tranche a été correctement reçue, la station réceptrice répond en transmettant la lettre K, et la transmission du radiotélégramme est poursuivie.

NOC **7509** **3752** *D*) Suspension du trafic

MOD **7510** **3753** § 28. Lorsqu'une station d'aéronef transmet sur une fréquence de travail d'une
1051 station aéronautique et brouille la transmission de ladite station aéronautique, elle doit suspendre son travail à la premiére demande de cette dernière.

SECTION VI

NOC **Fin du trafic et du travail**

NOC **7511** **3754** *A*) Signal de fin de transmission

NOC **7512** **3755** § 29. (1) La transmission d'un radiotélégramme se termine par le signal . __ . __ .
1052 (fin de transmission), suivi de la lettre K.

NOC **7513** **3756** (2) Dans le cas d'une transmission par séries, la fin de chaque radiotélégramme est
1053 indiquée par le signal . __ . __ . (fin de transmission) et la fin de chaque série par la lettre K.

NOC **7514** **3757** *B*) Accusé de réception

NOC **7515** **3758** § 30. (1) L'accusé de réception d'un radiotélégramme ou d'une série de radio-
1054 télégrammes est donée sous la forme suivante:

L'indicatif d'appel de la station transmettrice;
Le mot DE;
L'indicatif d'appel de la station réceptrice;
La lettre R suivie du numéro du radiotélégramme; ou
La lettre R suivie du numéro du dernier radiotélégramme d'une série.

MOD **7516** **3759** (2) L'accusé de réception est transmis par la station réceptrice sur la fréquence de
1055 trafic (voir le numéro **3741**).

NOC **7517** **3760** *C*) Fin du travail

NOC **7518** **3761** § 31. (1) La fin du travail entre deux stations est indiquée par chacune d'elles au
1056 moyen du signal . . . __ . __ (fin du travail).

NOC **7519** **3762** (2) Le signal . . . __ . __ (fin du travail) est aussi utilisé:
1057

À la fin de toute transmission de radiotélégrammes d'information générale, d'avis généraux de sécurité et d'informations météorologiques;
À la fin de la transmission dans le service des radiocommunications à grande distance avec accusé de réception différé ou sans accusé de réception.

SECTION VII

Direction du travail

(MOD)	**7520** 1058	**3763**	§ 32. Les dispositions de la présente section ne s'appliquent pas aux cas de détresse, d'urgence o de sécurité (voir le numéro **3677**).
MOD	**7521** 1059	**3764**	§ 33. Dans le communications entre station aéronautique et station d'aéronef, la station d'aéronef se conforme aux instrutions données par la station aéronautique pour tout ce que a trait à l'ordre et à l'heure de transmission, au choix de la fréquence et de la classe d'émission, à la durée et à la suspension du travail.
MOD	**7522** 1060	**3765**	§ 34. Dans le communications entre stations d'aéronef, la station appelée a la direction du travail selon les indications du numéro **3764**. Cependent, si une station aéronautique estime nécessaire d'intervenir, ces stations se conforment aux instructions qui leur sont données par la station aéronautique.

SECTION VIII

Essais

MOD	**7523** 1061	**3766**	§ 35. Lorsqu'il est nécessaire pour une station d'aeronef d'émettre des signaux d'essai ou de réglage susceptibles de brouiller le travail des stations côtières ou aéronautiques voisines, le consentement de ces stations doit être obtenu avant d'effectuer de telles émissions.
MOD	**7524** 1062	**3767**	§ 36. Lorsqu'il est nécessaire pour une station du service mobile aéronautique d'émettre des signaux d'essai, soit pour le réglage d'un émetteur avant de transmettre un appel, soit pour le réglage d'un récepteur, ces signaux ne doivent pas durer plus de dix secondes. Ils doivent être constitués par une série de VVV suivie de l'indicatif d'appel de la station qui émet pour essais.
		3768 à **3792**	*(Non attribués.)*

N50

ARTICLE 53

Procédure radiotéléphonique dans le service mobile aéronautique — Appels

NOC	**7550** 1296	**3793**	§ 1. Les dispositions du présent article ne sont pas applicables au service mobile aéronautique lorsque des accords particuliers ont été conclus par les gouvernements intéressés.
MOD	**7551** 1298	**3794**	§ 2. (1) En règle générale, il incombe à la station d'aéronef d'établir la communication avec la station aéronautique. A cet effet, la station d'aéronef ne peut appeler la station aéronautique qu'après être arrivée dans sa zone de service, c'est-à-dire dans la zone où, en utilisant une fréquence appropriée, la station d'aéronef peut être entendue par la station aéronautique.
MOD	**7552** 1299	**3795**	(2) Toutefois, une station aéronautique qui a du trafic pour une station d'aéronef peut appeler cette station si elle a des raisons de croire que ladite station d'aéronef se trouve dans sa zone de service et assure l'écoute.
MOD	**7553** 1307	**3796**	§ 3. Lorsqu'une station aéronautique reçoit pratiquement en même temps des appels de plusiers stations d'aéronf, elle décide de l'ordre dans lequel ces stations pourront lui transmettre leur trafic. Sa décision est fondée sur l'ordre de priorité (voir le numéro **3651**) des radiotélégrammes ou des conversations radiotéléphoniques en instance dans les stations d'aéronef, et sur la nécessité de permettre à chacune des stations appelantes d'écouler le plus grand nombre possible de communications.
NOC	**7554** 1308	**3797**	§ 4. (1) Lorsqu'une station appelée ne répond pas à l'appel émis trois fois à des intervalles de deux minutes, l'appel doit cesser et il ne doit pas être renouvelé avant quinze minutes.
NOC	**7555** 1310	**3798**	(2) Avant le renouveler l'appel, la station appelante doit s'assurer que la station appelée n'est pas en communication avec une autre station.

MOD 7556 1311 3799 (3) S'il n'y a pas de raison de craindre que des brouillages préjudiciables n'affectent des communcations en cours, les dispositions du numéro **3797** ne sont pas applicables. Dans ces cas, l'appel émis trois fois à des intervalles de deux minutes, peut être renouvelé après un intervalle de durée inférieure à quinze minutes mais ou moins égale à trois minutes.

MOD 7557 1312 3800 § 5. Les stations d'aéronef ne doivent pas émettre leur onde porteuse entre les appels.

MOD 7558 1313 3801 § 6. Lorsque le nom et l'adresse de l'administration ou de l'exploitation privée dont dépend une station d'aéronef ne sont pas mentionnés dans la nomenclature appropriée ou ne sont plus en concordance avec les indications de celle-ci, la station d'aéronef a le devoir de donner d'office à la station aéronautique à laquelle elle transmet du trafic touts les renseignements nécessaires à cet égard.

MOD 7559 1314 3802 § 7. (1) La station aéronautique peut, au moyen de l'abréviation TR (épelée à l'aide des mots de code TANGO ROMEO), demander à la station d'aéronef de lui fournir les renseignements suivants:

MOD 7560 1315 3803 *a*) Position et, autant que possible, cap et vitesse;

MOD 7561 1316 3804 *b*) Prochaine destination.

MOD 7562 1317 3805 (2) Il convient que les renseignements visés aux numéros **3802** à **3804,** précédés de l'abréviation TR, soient fournis par les stations d'aéronef, chaque fois que cela semble approprié, sans demande préalable de la station aéronautique. Ces renseignements ne sont fournis qu'après de la personne responsable de l'aéronef.

3806 à 3830 *(Non attribués.)*

NXI

CHAPITRE XI

NOC

Service mobile maritime et mobile par satellite

N51

ARTICLE 54

NOC

Autorité du commandant

MOD 7663 845 3831 § 1. Le service d'une station de navire est placé sous l'autorité supérieure du commandant ou de la personne responsable du navire, ou de tout autre bâtiment portant cette station.

MOD 7664 846 3832 § 2. Celui qui détient cette autorité doit exiger que chaque opérateur observe le présent Règlement et que la station de navire placée sous la responsabilité d'un opérateur soit toujours utilisée conformément aux stipulations de ce Règlement.

NOC 7665 847 3833 § 3. Le commandant ou la personne responsable ainsi que toutes les personnes qui peuvent avoir connaissance du texte ou simplement de l'existence de radiotélégrammes, ou de toute autre renseignement obtenu au moyen du service de radiocommunication, sont soumis à l'obligation de garder et d'assurer le secret des correspondances.

MOD 7666 847A 3834 § 4. Les dispositions des numéros **3831, 3832** et **3833** s'aplliquent également au personnel des stations terriennes de navire.

3835 à 3859 *(Non attribués.)*

N52

ARTICLE 55

MOD

Certificats des opérateurs des stations de navire et des stations terriennes de navire

SECTION I

NOC

Dispositions générales

MOD 7692 848 3860 § 1. (1) Le service de toute station radiotélégraphique de navire doit être assuré par un opérateur titulaire d'un certificat délivré ou reconnu par le gouvernement dont dépende cette station.

MOD 7693 3861 (2) Le service de toute station radiotéléphonique de navire doit être dirigé par un
849 opérateur titulaire d'un certificat délivré ou reconnu par le gouvernement sont dépend cette station. Sous réserve de cette disposition, d'autres personnes que le titulaire du certificat peuvent utiliser l'installation radiotéléphonique.

MOD 7694 3862 (3) Le service de toute station terrienne de navire doit être dirigé par une personne
849A titulaire d'un certificat délivré ou reconnu par le gouvernemnt dont dépend cette station. Sous réserve de cette disposition, d'autres personnes que le titulaire du certificat peuvent utiliser l'installation.

MOD 7695 3863 (4) Le service des appareils automatiques de télécommunication (1) installés dans une
850 station de navire doit être dirigé par un opérateur titulaire d'un certificat délivré ou reconnu par le gouvernement dont dépend cette station. Sous réserve de cette disposition, d'aures personnes que le titulaire du certificat peuvent utiliser ces appareils. Sil le fonctionnement de ces appareils repose essentiellement sur l'utilisation des signaux du code Morse décrits dans l'Instruction pour l'exploitation du service télégraphique public international, le service doit être assuré par un opérateur titulaire d'un certificat d'opérateur radiotélégraphiste.Toutefois, cette dernière condition ne s'applique pas aux appareils automatiques qui peuvent utiliser les signaux du code Morse uniquement à des fins d'identification.

NOC 7696 3864 (5) Toutefois, pour le service des stations radiotéléphoniques opérant uniquement
851 sur des fréquences supérieures à 30 MHz, chaque gouvernement détermine lui-même si un certificat est nécessaire et, le cas échéant, définit les conditions à remplir pour son obtention.

MOD 7697 3865 (6) Les dispositions du numéro **3864** ne sont applicables aux stations de navire
852 fonctionnent sur des fréquences assignées pour une utilisation internationale.

MOD 7698 3866 § 2. (1) Dans le cas d'indisponibilité absolue de l'opérateur au cours d'une traversée,
853 le commandant ou la personne responsable de la station peut autoriser, mais à titre temporaire seulement, un opérateur titulaire d'un certificate délivré par le gouvernement d'un autre Membre à assurer le service de radicommunication.

MOD 7699 3867 (2) Lorsqu'il est nécessaire d'employer comme opérateur provisoire une personne
854 ne possédant pas de certificat, ou un opérateur n'ayant pas de certificat suffisant, son intervention doit se limiter uniquement aux signaux de détresse, d'urgence et de sécurité, aux messages qui s'y rapportent, aux messages intéressant directement la sécurité de la vie humanie et aux messages urgents relatifs à la marche du navire. Les personnes ainsi employées astreintes au secret des correpondances prévu au numéro **3877.**

NOC 7700 3868 (3) Dans tous le cas, l'opérateur provisoire doit être remplacé aussitôt que possible
855 par un opérateur titulaire du certificat prévu au paragraphe 1 du présent article.

NOC 7701 3869 § 3. (1) Chaque administration prend les dispositions nécessaires pour éviter, dans
856 la plus grande mesure possible, l'emploi frauduleux des certificats. A cet effect, ceux-ci portent la signature du titulaire et sont authentifiés par l'administration qui les a délivrés. Les administrations peuvent employer, à leur gré, d'autres moyens d'identification, tels que photographies, empreintes digitales, etc.

MOD 7702 3870 (2) Dans le service mobile maritime, les certificats délivrés aprés le 1er janvier
856A 1978 doivent porter la photographie et la date de naissance du titulaire.

MOD 7703 3871 (3) Afin de faciliter la vérification des certificats, ceux-ci portent, s'il y a lieu, en
857 plus du texte rédigé dans la langue nationale, une traduction de ce texte dans l'une des langues de travail de l'Union.

MOD 7704 3872 (4) Dans le service mobile maritime, tous les certificats qui ne sont pas rédigés
857A dans l'une des langues de travail de l'Union et qui ont été délivrés, après le 1er janvier 1978 doivent comporter au moins les renseignements suivants, rédigés dans l'une de ces langues de travail:

3873 *a*) Nom et date de naissance du titulaire;
3874 *b*) Titre du certificat et date à laquelle il a été délivré;
3875 *c*) Le cas échéant, numéro et durée de validité du certificat;
3876 *d*) Nom de l'administration qui a délivré le certificat.

NOC 7705 3877 § 4. Chaque administration prend les mesures nécessaires pour soumettre les
858 opérateurs à l'obligation du secret des correspondances prévue au numéro **2023.**

NOC 7695.1 3863.1 (1) Le terme «appareils automatiques de télécommunication» comprend els appareils tels que les
850.1 téléimprimeurs, les appareils de transmission de données, etc.

SECTION II

Catégories de certificats pour les opérateurs des stations de navire

NOC **7706** **3878** § 5. (1) Il existe quatre catégories de certificats pour les opérateurs radiotélégraphistes (1), à savoir:
866A

3879 *a*) Le certificat général d'opérateur des radiocommunications;
3880 *b*) Le certificat d'opérateur radiotélégraphiste de première classe;
3881 *c*) Le certificat d'opérateur radiotélégraphiste de deuxième classe;
3882 *d*) Le certificat spécial d'opérateur radiotélégraphiste.

NOC **7707** **3883** (2) Il existe deux catégories de certificats pour les opérateurs radiotéléphonistes (1), le certificat général et le certificat restreint.
866B

NOC **7708** **3884** § 6. (1) Le titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe peut assurer le service radiotélégrahique ou radiotéléphonique de toute station de navire.
866C

NOC **7709** **3885** (2) Le titulaire d'un certificat général d'opérateur radiotélephoniste peut assurer le service radiotéléphonique de toute station de navire.
866D

NOC **7710** **3886** (3) Le titulaire d'un certificat restreint d'opérateur radiotéléphoniste peut assurer le service radiotéléphonique de toute station de navire, à condition que la commande de l'émetteur comporte seulement la manœuvre d'organes de commutation externes et simples, sans qu'il soit nécessaire d'effectuer aucun réglage manuel des éléments qui déterminent le fréquence, l'émetteur lui-même maintenant la stabilité des fréquences dans les limites des tolérances spécifiées à l'appendice 7 et la puissance en crête de l'émetteur ne dépassant pas 1,5 kilowatt.
866E

NOC **7711** **3887** (4) Le certificat d'opérateur radiotélephoniste peut être limité exclusivement à une ou plusieurs des bandes de fréquences du service mobile maritime. Dans ce cas, mention de cette limitation doit être portée sur le certificat.
866F

NOC **7712** **3888** (5) Le service radiotélégraphique des navires auxquels une installation radiotélégraphique n'est pas imposé par des accords internationaux, ainsi que le service radiotéléphonique des stations de navire pour lesquelles le certificat restreint de radiotéléphoniste est seul exigé, peuvent être assurés par le titulaire d'un certificat spécial d'opérateur radiotélegraphiste.
866G

NOC **7713** **3889** (6) Toutefois, lorsque les conditions précisées au numéro **3934** son remplies le service radiotélegraphique des navires auxquels une installation radiotélégraphique n'est pas imposée par des accords internationaux, ainsi que le service radiotéléphonique de toute station de navire, peuvent être assurés par le titulaire d'un certificat spécial d'opérateur radiotélégraphiste.
866H

NOC **7714** **3890** § 7. Exceptionnellement, le certificat d'opérateur radiotélégraphiste de deuxième classe ainsi que le certificat spécial d'opérateur radiotélégraphiste peuvent être limités exclusivement au service radiotélegraphique. Dans ce cas, mention de cette limitation doit être portée sur le certificat.
866I

SECTION III

Conditions d'obtention des certificats d'opérateur

MOD

NOC **7715** **3891** *A*) Généralités

NOC **7716** **3892** § 8. (1) Le conditions à imposer pour l'obtention des différents certificats sont spécifiées dans les paragraphes suivants. Elles doivent être considérées comme des conditions minima.
867

NOC **7717** **3893** (2) Chaque administration reste libre de fixer le nombre des examens qu'elle juge nécessaire pour l'obtention de chaque certificat.
868

NOC **7706.1** **3878.1**
866A.1
NOC **7707.1** **3883.1**
866B.1

(1) Pour l'emploi des opérateurs titulaires des différentes certificats, voir le article 56.

MOD 7718 869 3894 § 9. (1) L'administration qui délivre un certificat peut, avant d'autoriser son titulaire à assurer le service à bord d'un navire, exiger que cet opérateur remplisse d'autres conditions (par example: connaissance des appareils automatiques de télécommunication; connaissances techniques et professionelles complémentaires, relatives notamment à la navigation; aptitudes physiques, etc.).

NOC 7719 870 3895 (2) Il convient que les administrations prennent toutes les mesures qu'elles jugent nécessaires pour contrôler les aptitudes des opérateurs lorsque ceux-ci n'ont par exercé leurs fonctions pendant une durée prolongée.

NOC 7720 870A 3896 (3) Toutefois, en ce qui concerne le service mobile maritime, il convient que les administrations prennent également toutes les mesures qu'elles jugent nécessaires pour contrôler les aptitudes des opérateurs en cours de service.

NOC 7721 3897 *B*) Certificat général d'opérateur des radiocommunications du service mobile maritime

NOC 7722 870B 3898 § 10. Le certificat général d'opérateur des radiocommunications du service mobile maritime est délivré aux candidats qui ont fait preuve des connaissances et aptitudes techniques et professionnelles énumérées ci-après:

NOC 7723 870C 3899 *a*) La connaissance tant des principes généraux de l'électricité que de la théorie de la radioélectricité et de l'électronique permettant de satisfaire aux conditions stipulées aux numéros **3900, 3901** et **3902;**

NOC 7724 870D 3900 *b*) La connaissance théorique des équipements modernes de radiocommunication, notamment des émetteurs, des récepteurs et des systèmes d'antennes utilisés dans le service mobile maritime radiotélégraphique et radiotéléphonique, des appareils automatiques d'alarme, des appareils radioélectriques des embarcations et autres engins de sauvetage, des appareils utilisés pour la radiogoniométrie et de tout le matériel auxiliaire, y compris le dispositifs d'alimentation en énergie électrique (moteurs, alternateurs, générateurs, convertisseurs, redresseurs et accumulateurs), ainsi que des connaissances générales de tout autre équipement habituellement utilisé pour la radionavigation, particulièrement en vue d'assurer la maintenance des appareils;

NOC 7725 870E 3901 *c*) La connaissance pratique du fonctionnement, du réglage et de l'entretien des appareils mentionnés au numéro **3900,** y compris les connaissances pratiques nécessaires pour la prise de relèvements radiogoniométriques et la connaissance des principes de l'étalonnage des radiogoniomètres;

(MOD) 7726 870F 3902 *d*) Les connaissances pratiques nécessaires pour localiser et réparer, au moyen des appareils de mesure et des outils appropriés, les avaries suceptibles de survenir en cours de traversé aux appareils mentionnés au numéro **3900;**

NOC 7727 870G 3903 *e*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de seize groupes par minute, et d'un texte en langage clair à la vitesse de vingt mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque chiffre ou signe de ponctuation comptant pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères. La durée de chaque épreuve de transmission et de réception est, en général, de cinq minutes;

NOC 7728 870H 3904 *f*) L'aptitude à la transmission correcte et à la réception correcte radiotéléphonie;

NOC 7729 870I 3905 *g*) La connaissance des Règlements applicables aux radiocommunications, des documents relatifs à la taxation des radiocommunications et des dispositions de la Convention pour la sauvegarde de la vie humaine en mer qui se rapportent à la radioélectricité;

NOC 7730 870J 3906 *h*) Des connaissances suffisantes de la géographie du monde, notamment des principales lignes de navigation maritime et des voies de télécommunication les plus importantes;

NOC 7731 870K 3907 *i*) La connaissance de l'une des langues de travail de l'Union. Les canditats devraient être capables de s'exprimer dans cette langue d'une manière convenable tant verbalement que par écrit. Chaque administration indique elle-même la ou les langues qui sont imposées.

NOC **7732** **3908** *C*) Certificat d'opérateur radiotélégraphiste de première classe

NOC **7733** 871 **3909** § 11. Le certificat de première classe est délivré aux candidats qui ont fait preuve des connaissances et aptitudes techniques et professionnelles énumérées ci-après:

NOC **7734** 872 **3910** *a*) La connaissance tant des principes généraux de l'électricité que de la théorie de la radioélectricité, la connaissance du réglage et du fonctionnement pratique des différentes types d'appareils radiotélégraphiques et radiotéléphoniques utilisés dans les service mobile, y compris les appareils utilisés pour la radiogoniométrie et la prise des relèvements radiogoniométriques, ainsi que la connaissance générale des principes du fonctionnement des autres appareils habituellement employés, pour la radionavigation;

NOC **7735** 873 **3911** *b*) La connaissance théorique et pratique du fonctionnement et de l'entretien des appareils tels que les groupes électrogènes, les accumulateurs, etc., qui sont utilisés pour la mise en œuvre et le réglage des appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques mentionnés au numéro **3910;**

(MOD) **7736** 874 **3912** *c*) Les connaissances pratiques nécessaires pour réparer par les moyens du bord les avaries susceptibles de survenir aux appareils radiotélégraphiques, radiotéléphoniques et radigoniométriques en cours de traversée;

NOC **7737** 875 **3913** *d*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de vingt groupes par minute, et d'un texte em langage clair à la vitesse de vingt-cinq mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque chiffre ou signe de pontuation comptant pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères. La durée de chaque épreuve de transmission et de réception est, en général, de cinq minutes;

NOC **7738** 876 **3914** *e*) L'aptitude à la transmission correcte et à la réception correcte en radiotéléphonie;

MOD **7739** 877 **3915** *f*) La connaissance détaillée des Règlements applicables aux radiocommunications, la connaissance des documents relatifs à la taxation des radiocommunications et la connaissance des dispositions de la Convention pour la sauvegarde de la vie humaine en mer qui se rapportent à la radioélectricité;

NOC **7740** 878 **3916** *g*) Des connaissances suffisantes de la géographie du monde, notamment des principales lignes de navigation maritime et aérienne et des voies de télécommunication le plus importantes;

NOC **7741** 879 **3917** *h*) La connaissance suffisante de l'une des langues de travail de l'Union. Les candidats doivent être capables de s'exprimer dans cette langue d'une manière convenable tant verbalement que par écrit. Chaque administration indique elle-même la ou les langues qui sont imposées.

NOC **7742** **3918** *D*) Certificat d'opérateur radiotélégraphiste de deuxième classe

NOC **7743** 880 **3919** § 12. Le certificat de deuxième classe est délivré aux candidats qui ont fait preuve des connaissances et aptitudes techniques et professionnelles énumérées ci-après:

NOC **7744** 881 **3920** *a*) La connaissance élémentaire théorique et pratique de électricité et de la radioélectricité, la connaissance du réglage et du fontionnement pratique des différentes types d'appareils radiotélégraphiques et radiotéléphoniques utilisés dans le service mobile, y compris les appareils utilisés pour la radiogoniométrie et la prise des relévements radiogoniométriques, ainsi que la connaissance elémentaire des principes du fonctionnemnt des autres appareils habituellement employés pour la radionavigation;

NOC **7745** 882 **3921** *b*) La connaissance élémentaire théorique et pratique du fonctionnment et de l'entretien des appareils tels que les groupes électrogènes, les accumulateurs, etc., qui sont utilisés pour la mise en œuvre et le réglage des appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques mentionnés au numéro **3920;**

(MOD) **7746** 883 **3922** *c*) Les connaissances pratiques suffisantes pour pouvoir réparer les petites avaries susceptibles de survenir aux appareils radiotélégraphiques, radiotéléphoniques et radiogoniométriques en cours de traversée;

NOC **7747** 884 **3923** *d*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte, en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de seize groupes par minute, et d'un text en langage clair à la vitesse de vingt mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque chiffre ou signe de ponctuation comptant pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères. La durée de chaque épreuve de transmission et de réception est, en général, de cinq minutes;

MOD **7748** 885 **3924** *e*) L'aptitude à la transmission correcte et à la réception correcte en radiotéléphonie, sauf dans le cas prévu au numéro **3890**;

MOD **7749** 886 **3925** *f*) La connaissance des Règlements applicables aux radiocommunications, la connaissance des documents relatifs à la taxation des radiocommunications et la connaissance des dispositions de la Convention pour la sauvegarde de la vie humanie en mer qui se rapportent à la radioélectricité;

NOC **7750** 887 **3926** *g*) Des connaissances suffissantes de la géographie du monde, notamment des principales lignes de navigation maritime et aérienne et des voies de télécommunication le plus importantes;

NOC **7751** 888 **3927** *h*) S'il y a lieu, la connaissance élémentaire d'une des langues de travail de l'Union. Les candidats doivent être capables de s'exprimer dans cette langue d'une manière convenable, tant verbalement que par écrit. Chaque administration indique elle-même la ou les langues qui sont imposés.

NOC **7752** **3928** *E*) Certificat spécial d'opérateur radiotélégraphiste

NOC **7753** 889 **3929** § 13. (1) Le certificat spécial de radiotélégraphiste est délivré aux candidats qui ont fait preuve des connaissances et aptitudes professionnelles énumérées ci-après:

NOC **7754** 890 **3930** *a*) L'aptitude à la transmission manuelle correcte et à la réception auditive correcte, en code Morse, de groupes de code (mélange de lettres, de chiffres et de signes de ponctuation) à la vitesse de seize groupes par minute, et de texte en langage clair à la vitesse de vingt mots par minute. Chaque groupe de code doit comprendre cinq caractères, chaque signe de ponctuation étant compté pour deux caractères. Le mot moyen du texte en langage clair doit comporter cinq caractères;

NOC **7755** 891 **3931** *b*) La connaissance du réglage et du fonctionnement des appareils radiotélégraphiques;

NOC **7756** 892 **3932** *c*) La connaissance des Règlements applicables aux radiocommunications télégraphiques et notamment de la partie de ces Règlements relative à la securité de la vie humaine en mer.

MOD **7757** 893 **3933** (2) Il appartient à chaque administration intéressée de fixer les autres conditions pour l'obtention de ce certificat. Cependant, les conditions fixées aux numéros **3941, 3942, 3943** et **3944** ou **3945**, selon le cas, doivent être satisfaites.

NOC **7758** 893A **3934** (3) Dans le service mobile maritime, il appartient à chaque administration intéressée de fixer les autres conditions pour l'obtention de ce certificat. Cependant sauf dans le cas prévus au numéro **3890**, les conditions fixées aux numéros **3936, 3937, 3938, 3939** et **3940** doivent être satisfaites pour un tel certificat délivré aux opérateurs de station de navire après le 1er janvier 1976.

NOC **7759** **3935** *F*) Certificats d'opérateur radiotéléphoniste

MOD **7760** 894 **3936** § 14. Le certificat général d'opérateur radiotéléphoniste est délivré aux candidats qui ont fait preuve des connaissances et aptitudes professionnelles énumérées ci-après (voir également les numéros **3884, 3885, 3888** et **3889**):

NOC **7761** 895 **3937** *a*) La connaissance des principes élémentaires de la radiotéléphonie;

NOC **7762** 896 **3938** *b*) La connaissance détaillée du réglage et du fonctionnement pratique des appareils de radiotéléphonie;

NOC **7763** 897 **3939** *c*) L'aptitude à la transmission correcte et à la réception correcte en radiotéléphonie;

NOC **7764** 898 **3940** *d*) La connaissance détaillée des Règlements applicables aux radicommunications téléphoniques et notamment de la partie de ces Règlemens relative à la sécurité de la vie humaine.

NOC **7765** 899 **3941**

§ 15. (1) Le certificat restreint de radiotéléphoniste est délivré aux candidats qui ont fait preuve des connaissances et aptitudes professionnelles énumérées ci-aprés:

NOC **7766** 900 **3942**

a) La connaisance pratique de l'exploitation et de la procédure radiotéléphoniques;

NOC **7767** 901 **3943**

b) L'aptitude à la transmission correcte et à la réception correcte téléphoniques;

NOC **7768** 902 **3944**

c) La connaissance générale des Règlements applicables aux radiocommunications téléphoniques et notamment de la partie de ces Règlements relative à la sécurité de la vie humaine.

MOD **7769** 903 **3945**

(2) Pour les stations radiotéléphoniques de navire dont la puissance de crête de l'émetteur ne dépasse pas 400 watts, chaque administration peut fixer ell-même les conditions d'obtention d'un certificat restreint de radiotéléphoniste, sous réserve que le fonctionnement de l'émetteur n'exige que l'emploi de dispositifs extérieures de commutation de conception simple, à l'exclusion de tout réglage manuel des éléments déterminant la fréquence et que la stabilité des fréquences soit maintenue par l'émetteur lui-même dans les limites des tolérances fixées à l'appendice **7.** Toutefois, en fixant ces conditions, les administrations s'assurent quie l'opérateur possède une connaissance suffisante de l'exploitation et des procédures du service radiotélephonique, notamment en ce qui concerne la détresse, l'urgence et la sécurité. Les dispositions ci-dessus ne contredisent en rien celles du numéro **3949.**

NOC **7770** 904 **3946**

(3) Les administrations des pays de la Règion 1 ne délivrent pas de certificats correspondant aux dispositions du numéro **3945.**

NOC **7771** 905 **3947**

§ 16. Dans un certificat de radiotéléphoniste, il doit être indiqué si celui-ci est un certificat général ou un certificat restreint et, dans ce dernier cas, s'il a été délivré conformément aux dispositions du numéro **3945.**

MOD **7772** 905A **3948**

§ 17. Dans le service mobile maritime, un certificat restreint d'opérateur radiotéléphoniste doit, s'il y a lieu, faire mention également de la limitation prévue au numéro **3887.**

(MOD) **7773** 906 **3949**

§ 18. Pour satisfaire à des besoins spéciaux, des accords particuliers entre administrations peuvent fixer les conditions à remplir pour l'obtention d'un certificat de radiotéléphoniste destiné à être utilisé dans des stations radiotéléphoniques remplissant certaines conditions techniques et certaines conditions d'exploitation. De tels accords ne peuvent être conclus que sous réserve qu'aucun brouillage préjudiciable aux services internatiaux ne résulte de leur application. Ces conditions et ces accords sont mentionnés sur les certificats ainsi délivrés.

SECTION IV

NOC

Stages professionnels

NOC **7774** 907 **3950**

§ 19. (1) Le titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe est autorisé à embarquer comme chef de poste sur un navire dont la station est classée dans la quatrième catégorie (voir le numéro **4056**).

NOC **7775** 907A **3951**

(2) Toutefois, avant de pouvoir embarquer comme chef de poste ou comme seul opérateur sur un navire dont la station est classée dans la quatrième catégorie (voir le numéro **4056**) et qui, aux termes des accords internationaux, doit compter un opérateur radiotélégraphiste, le titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe doit avoir une expérience suffisante comme opérateur à bord d'un navire en mer.

NOC **7776** 908 **3952**

(3) Avant de pouvoir embarquer comme chef de post d'une station de navire de la deuxième ou de la troisième catégorie (voir les numéros **4054** et **4055**), le titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe doit avoir au moins six mois d'experience comme opérateur à bord d'un navire ou dans une station côtière, dont trois mois au moins à bord d'un navire.

NOC **7777** 909 **3953**

(4) Avant de pouvoir embarquer comme chef de poste d'une station de navire de la première catégorie (voir le numéro **4053**), le titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première classe doit avoir au moins une année d'expérience comme opérateur à bord d'un navire ou dans une staion côtière, dont six mois au moins à bord d'un navire.

3954 à 3978

(Non attribués.)

N53

ARTICLE 56

NOC

Personnel des stations du service mobile maritime

SECTION I

NOC

Personnel des stations côtières

MOD 7803 948 **3979** § 1. Les administrations prennnet les mesures nécessaires pour garantir que, dans les stations côtières, le personnel possède les aptitudes professionnelles lui permettant d'assurer efficacement le service de ces stations.

SECTION II

NOC

Classe et nombre minimum d'opérateurs dans les stations à bord des navires

MOD 7804 912 **3980** § 2. Du point de vue du service de la correpondance publique, il appartient à chaque gouvernement du prendre les mesures nécessaires pour que les stations à bord des navires de sa nationalité soient pourvues du personnel suffisant pour assurer un service efficace.

MOD 7805 913 **3981** § 3. Compte tenu des dispositions de l'article 55, le personnel des stations de navire du service de correpondance publique doit comporter au moins:

NOC 7806 914 **3982** *a*) Pour les stations de navire de la première catégorie, sauf dans le cas prévu au numéro **3986:** un chef de poste titulaire du certificat général d'opérateur des radiocommunications ou du certificat d'opérateur radiotélégraphiste de première classe;

NOC 7807 915 **3983** *b*) Pour les stations de navire des deuxième et troisième catégories, sauf dans les cas prévus au numéro **3986:** un chef de poste titulaire du certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe;

NOC 7808 916 **3984** *c*) Pour les stations de navire de la quatrième catégorie, sauf dans les cas prévus aux numéros **3985** et **3986:** un opérateur titulaire d'un certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe;

NOC 7809 917 **3985** *d*) Pour les stations de navire pourvues d'une installation radiotélégraphique qui ne leur est pas imposée par des accords internationaux: un opérateur titulaire du certificat général d'opérateur des radiocommunications ou d'un certificat d'opérateur radiotélégraphiste de première ou de deuxième classe ou d'un certificate spécial d'opérateur radiotélégraphiste;

NOC 7810 918 **3986** *e*) Pour les stations de navire munies uniquement d'une installation radiotéléphonique: um opérateur titulaire soit d'un certificat de radiotélephoniste soit d'un certificat de radiotélégraphiste.

3987 à 4011 *(Non attribués.)*

N54/21

ARTICLE 57

MOD

Inspection des stations de navire et des stations terriennes de navire

MOD 7836 838 **4012** § 1. (1) Les gouvernements ou les administrations compétentes des pays ou une station de navire ou une station terrienne de navire fait escale peuvent exiger la production de la licence pour examiner. L'opérateur de la station, ou la personne responsable de la station, doit se prêter à cette vérification. La licence doit être conservée de façon à pouvoir être produite sur demande: Dans toute la mesure du possible, la licence, ou une copie certifiée conforme par l'autorité qui l'a délivrée, doit être affichée à demeure dans la station.

MOD 7837 939 **4013** (2) Les inspecteurs doivent être, en posssession d'une carte ou d'un insigne d'identité délivré par les autorités compétentes, qu'ils doivent montrer à la demande du commandant ou de la personne responsable du navire ou de toute autre bâtiment portant la station de navire ou la station terrienne de navire.

NOC 7838 840 **4014** (3) Lorsque la licence ne peut pas être produite, ou lorsque des anomalies manifestes sont constatées, les gouvernements ou administrations peuvent faire procéder à l'inspection des installations radioélectriques, afin de s'assurer qu'elles répondent aux stipulations du présent Règlement.

NOC 7839 841 **4015** (4) De plus, les inspecteurs sont en droit d'exiger la production des certificats des opérateurs, mais ils ne peuvent demander aucune justification de connaissances professionnelles.

MOD 7840 842 **4016** § 2. (1) Lorsqu'un gouvernement ou une administration s'est trouvé dans l'obligation de recourir à la mesure prévue au numéro **4014,** ou lorsque les certificats d'opérateur n'ont pas pu être produits, le gouvernement ou l'administration dont dépend la station de navire ou la station terrienne de navire en cause doit être informé sans retard. De plus, il est fait application, le cas échéant, des dispositions de l'article 21.

MOD 7841 843 **4017** (2) Avant de quitter le navire, ou tout autre bâtiment portant la station de navire ou la station terrienne de navire, l'inspecteur doit faire part de ses constatations au commandant ou à la personne responsable. En cas d'infraction aux stipulations du présent Règlement, l'inspecteur présente son rapport par écrit.

MOD 7842 844 **4018** § 3. Les Membres de l'Union s'engagent à ne pas imposer aux stations de navire étrangères ou aux stations terriennes de navire étrangères qui se trouvent temporairement dans leurs eaux territoriales ou s'arrêtent temporairement sur leur territoire, des conditions techniques et d'exploitation plus rigoureuses que celles prèvues dans le présent Règlement. Cette prescription n'affecte en rien les dispositions qui relèvent d'accords internationaux relatifs à la navigation maritime et qui ne sont pas prévues dans le présent Règlement.

4019 à 4043 *(Non attribués.)*

N55

ARTICLE 58

NOC

Vocations du service mobile maritime

SECTION I

NOC

Généralités

MOD 7866 921 **4044** § 1. Afin de permettre l'application des règles suivantes relatives aux heures de veille, toute station du service mobile maritime doit être munie d'une montre précise correctement réglée sur le Temps universel coordonné (UTC).

MOD 7867 922 **4045** § 2. Le Temps universel coordonné (UTC), compté de 00.00 à 23.59 heures à partir de minuit, doit être employé pour toutes les inscriptions dans le journal du service de radiocommunication et dans tous les autres documents analogues des navires obligatoirement munis d'appareils de radiocommunication en exécution d'un accord international. Il en est, autant que possible, de même pour les autres navires.

SECTION II

NOC

Stations côtières

NOC 7868 923 **4046** § 3. (1) Le service des stations côtières est, autant que possible, permanent de jour et de nuit. Toutefois, le service de certaines stations côtières peut être de durée limitée. Chaque administration ou exploitation privée reconnue dûment autorisée à cet effet fixe les vacations des stations placées sous son autorité.

NOC 7869 924 **4047** (2) Ces vocations sont notifiées au Secrétaire général qui publie dans la Nomenclature des stations côtières.

(MOD) 7870 925 **4048** § 4. Les stations côtières dont le service n'est pas permanent ne peuvent pas clore une vacation avant d'avoir:

(NOC) 7871 926 **4049** *a*) Terminé toutes les opérations motivées par un appel de détresse ou un signal d'urgence ou de sécurité;

MOD 7872 927 **4050** *b*) Écoulé tout le trafic originaire ou à destination des stations de navire qui se trouvent dans leur zone de service et qui ont signalé leur présence avant la cessation effective du travail;

NOC 7873 927A **4051** *c*) Adressé un appel général à toutes les stations pour annoncer la fermeture du service et indiquer l'heure de la réouverture, si elle diffère de leurs heures normales de service.

SECTION III

Stations de navire

NOC

NOC 7874 929 4052 § 5. (1) Pour le service international de la correspondance publique, les stations de navire sont classées en quatre catégories:

NOC 7875 930 4053 *a*) Stations de première catégorie: ces stations assurent un service permanent;

NOC 7876 931 4054 *b*) Stations de deuxième catégorie: ces stations assurent un service de 16 heures par jour;

NOC 7877 931A 4055 *c*) Stations de troisième catégorie: ces stations assurent un service de 8 heures par jour;

NOC 7878 932 4056 *d*) Stations de quatrième catégorie: ces stations assurent un service de durée plus limitée que celui des stations de troisième catégorie ou un service dont la durée n'est pas fixée dans le présent Règlement.

NOC 7879 933 4057 (2) Chaque administration détermine elle-même les règles suivant lesquelles les stations de navire placées sous son autorité sont réparties entre les quatre catégories ci-dessus définies.

NOC 7880 934 4058 § 6. (1) Les stations de navire classées dans le deuxième catégorie assurent le service pendant les heures suivantes:

00.00-04.00
08.00-12.00
16.00-18.00
20.00-22.00 } heure locale du navire ou heure du fuseau horaire;

et pendant quatre heures fixées par l'administration, le commandant ou la personne responsable, afin de répondre aux besoins essentiels du navire en matière de communications et de tenir compte des conditions de propagation et des besoins du trafic.

NOC 7881 934A 4059 (2) Les stations de navire classées dans la troisième catégorie assurent le service pendant les heures suivantes:

08.00-12.00 — heure locale du navire ou heure du fuseau horaire;

et deux heures de suite entre 18.00 heures et 22.00 heures, heure locale du navire ou du fuseau horaire, fixées par l'administration, le commandant ou la personne responsable, ainsi que pendant deux heures fixées par l'administration, le commandant ou la personne responsable, afin de répondre aux besoins essentiels du navire en matière de communications et de tenir compte des conditions de propagation et des besoins du trafic.

NOC 7882 934B 4060 (3) Chaque administration décide si l'heure locale du navire observée par ses navires doit être ou non l'heure du fuseau horaire, comme indiqué dans l'appendice **12** (voir les numéros **4058** et **4059**).

NOC 7883 935 4061 (4) Dans le cas de courtes traversées, ces stations assurent le service suivant l'horaire fixé par les administrations dont elles dépendent.

NOC 7884 935A 4062 § 7. Il est recommandé aux stations de navire de la quartième catégorie d'assurer le service de 08.30 à 09.30 heure locale du navire ou heure du suseau horaire.

MOD 7885 939 4063 § 8. (1) Les stations de navire dont le service n'est pas permanent ne peuvent clore une vacation qu'après avoir:

NOC 7886 940 4064 *a*) Terminé toutes les opérations motivées par un appel de détresse ou un signal d'urgence ou de sécurité;

MOD 7887 941 4065 *b*) Écoulé, autant qu'il soit possible en pratique, tout le trafic originaire ou à destination des stations côtières qui se trouvent dans leur zone de service, et des stations de navire qui, se trouvant dans leur zone de service, ont signalé leur présence avant la cessation effective du travail.

NOC 7888 942 4066 (2) Une station de navire qui n'a pas de vacations déterminées doit informer la ou les stations côtières avec lesquelles elle est en communication des heures de clôture et de réouverture de son service.

MOD 7889 943 4067 § 9. (1) Toute station de navire arrivant dans un port et dont le service est, par suite, sur le point de cesser, doit:

NOC 7890 944 4068 *a*) En avertir la station côtière la plus proche et, si c'est utile, les autres stations côtières avec lesquelles elle correspond en général;

(MOD) 7891 945 4069 *b*) Ne clore sa vacation qu'aprés liquidation du trafic en instance, à moins que les dispositions en vigueur dans le pays où elle fait escale ne le permettent pas.

NOC 7892 946 4070 (2) Lorsqu'elle quitte un port, la station de navire doit informer de sa réouverture la ou les stations côtières intéréssées, dès que cette réouverture lui est permise par les dispositions en vigueur dans le pays du port de départ. Toutefois, une station de navire dont les vacations ne sont pas fixées dans le présent Règlement, peut attendre le moment même de sa réouverture après son départ du port pour en informer la ou les stations côtières intéressées.

4071 à 4095 (*Non attribués.*)

N56

ARTICLE 59

NOC

Conditions à remplir dans le service mobile maritime et dans le service mobile maritime par satellite

SECTION I

NOC

Service mobile maritime

NOC 7918 4096 *A*) Dispositions générales

MOD 7919 955 4097 § 1. Les stations de navire doivent être établies de manière à être conformes aux dispositions des chapitres III et XI em ce qui concerne les fréquences et les classes d'émission.

MOD 7920 957 4098 § 2. Les fréquences d'émission des stations de navire doivent être vérifiées le plus souvent possible par le service d'inspection dont ces stations relèvent.

NOC 7921 958 4099 § 3. L'énergie rayonnée par les appareils récepteur doit être aussi réduite que possible et ne doit pas causer de brouillage préjudiciable aux autres stations.

MOD 7922 959 4100 § 4. Les administrations prennent les mesures pratiques nécessaires pour que le fonctionnement des appareils électriques ou électroniques de toute nature installés dans les stations de navire ne cause pas de brouillage préjudiciable aux services radioélectriques assentiels des stations fonctionnant conformément aux dispositions du présent Règlement.

MOD 7923 960 4101 § 5. (1) Les changements de fréquence dans les appareils émetteurs et récepteurs de toute station de navire doivent pouvoir être effectués aussi rapidement que possible.

MOD 7924 961 4102 (2) Les installations de toute station de navire doivent permettre, une fois la communication établie, de passer de l'émission à la réception, et vice versa, dans un temps aussi court que possible.

MOD 7925 962 4103 § 6. Il est interdit aux stations de navire en mer d'effectuer un service de radiodiffusion (voir le numéro **36**). (Voir également le numéro **2665**.)

MOD 7926 963 4104 § 7. Les stations de navire autres que les stations d'engin de sauvetage doivent être pourvues des documents énumérés à la section pertinent de l'appendice **11**.

NOC 7927 964 4105 § 8. Lorsqu'un émetteur d'une station de navire n'est pas susceptible d'être réglé de façon que sa fréquence satisfasse à la tolérance dans l'appendice **7**, la station de navire doit munie d'un dispositif lui permettant de mesurer la fréquence d'émission avec une précision au moins égale à la moitié de cette tolérance.

NOC 7928 4106 *B*) Stations de navire utilisant la radiotélégraphie

NOC 7929 970 4107 § 9. Les stations de navire pourvues d'appareils radiotélégraphiques destinés à être utilisés pour le trafic normal en télégraphie Morse doivent être équipées de dispositifs permettant de passer de l'émission à la réception et vice versa sans manœuvre de commutation. Il convient, de plus, que les stations de navire puissent écouter sur la fréquence de réception au cours des périodes d'émission.

NOC 4108 **B1) Bandes comprises entre 405 kHz et 535 kHz**

NOC 7930 972 4109 § 10. Les émetteurs utilisés par les stations de naviore fonctionnant dans les bandes autorisées comprises entre 405 kHz et 535 kHz doivent être pourvus de dispositifs permettant, d'une manière facile, d'en réduire notablement la puissance.

NOC 7931 973 4110 § 11. Toute station de navire pourvue d'appareils radiotélégraphiques destinés à fonctionner dans le bandes autorisées comprises entre 405 kHz et 535 kHz doit pouvoir:

NOC 7932 974 4111 *a*) Faire des émissions des classes soit A2A et A2B (*) ou H2A et H2B (*) et recevoir des émissions des classes A2A, A2B (*) sur la fréquence porteuse 500 kHz;

NOC 7933 975 4112 *b*) Faire en outre des émissions de la classe A1A et de la classe A2A ou H2A sur deux fréquences de travail au moins;

NOC 7934 976 4113 *c*) Recevoir en outre des émissions des classes A1A, A2A et H2A sur toutes les autres fréquences nécessaires à lexécution de son service.

NOC 7935 977 4114 § 12. Les dispositions des numéros **4112** et **4113**, ne s'appliquent pas aux appareils prévues uniquement pour les cas de détresse, d'urgence et de sécurité.

NOC 4115 **B2) Bandes comprises entre 1605 kHz et 2850 kHz**

NOC 7936 978 4116 § 13. Dans la Région 2, toute station radiotélégraphique installée à bord d'un navire utilisant la bande 2089,5-2092,5 kHz pour l'appel et la réponse doit disposer d'au moins une autre fréquence dans les bandes autorisées comprises entre 1605 kHz et 2850 kHz.

NOC 4117 **B3) Bandes comprises entre 4000 kHz et 27 500 kHz**

NOC 7937 979 4118 § 14. Tous les appareils de station de navire utilisant les émissions de la classe A1A sur les fréquences des bandes autorisées comprises entre 4000 kHz et 27 500 kHz doivent satisfaire aux conditions suivantes:

NOC 7938 980 4119 *a*) Dans chacune des bandes nécessaires à l'exécution de leur service, ils doivent permettre l'emploi, en plus d'une fréquence de la bande d'appel, de deux fréquences de travail au moins (voir le numéro **4306**);

NOC 7939 981 4120 *b*) Les changements de fréquence des appareils émetteurs doivent pouvoir être effectués aussi rapidement que possible et, en tout état de cause, en moins de quinze secondes;

NOC 7940 982 4121 *c*) Les appareils récepteurs doivent présenter les mêmes qualités que les appareils émetteurs en matière de changement de fréquence.

NOC 7941 4122 *C)* Stations de navire utilisant la télégraphie à impression directe à bande étroite

NOC 7942 999G 4123 § 15. Les caractéristiques des appareils de télégraphie à impression directe à bande étroite doivent être conformes aux dispositions de l'appendice **38**.

NOC 7943 4124 *D)* Stations de navire utilisant la radiotéléphonie

NOC 4125 **D1) Bandes comprises entre 1605 kHz et 4000 kHz**

NOC 7944 983 4126 § 16. Toute station de navire pourvue d'appareils radiotéléphoniques destinés à fonctionner dans les bandes autorisées comprises entre 1605 kHz e 2850 kHz doit pouvoir:

NOC 7945 948 4127 *a*) Faire des émissions de la classe A3E sur la fréquence porteuse 2182 kHz, et recevoir des émissions des classes A3E et H3E sur la fréquence porteuse 2182 kHz. Cependant, à partir du 1er janvier 1982, les émissions de la classe A3E ne sont plus autorisées sur la fréquence porteuse 2182 kHz, sauf pour les appareils dont il est question au numéro **4130**;

NOC 7946 985 4128 *b*) Faire, en outre, des émissions des classes:

1) A3E; *ou*
2) H3E, R3F et J3E (1),

sur deux fréquences de travail au moins (2). Cependant, à partir du 1er janvier 1982, les émissions des classes A3E et H3E ne sont plus autorisées sur les fréquences de travail;

(*) Ceci pourvoit à la réception automatique de signaux radiotélégraphiques d'alarme.

NOC 7946.1 985.1 4128.1 (1) Jusqu'au 1er janvier 1982, les administrations peuvent, dans certains zones, restreindre cette clause aux émissions des classes H3E et J3E sur les fréquences de travail.

NOC 7946.2 985.2 4128.2 (2) Dans certaines zones, les administrations peuvent restreindre cette clause à une seule fréquence de travail.

NOC **7947** **4129** *c*) Recevoir, en outre, des émissions des classes:
986

1) A3E et H3E, *ou*
2) A3E, H3E, R3E et J3E,

sur toutes les fréquences nécessaires à l'exécution de son service. Cependant, après le 1er janvier 1982 l'aptitude à recevoir des émissions des classes A3E et H3E n'est plus exigée.

NOC **7948** **4130** § 17. Les dispositions des numéros **4128** et **4129** ne s'appliquent pas aux appareils
987 prévus uniquement pour les cas de détresse, d'urgence et de sécurité.

NOC **4131** **D2) Bandes comprises entre 4000 kHz et 23 000 kHz**

MOD **7949** **4132** § 18. Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y
987A compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, il convient que toutes les stations de navire pourvues d'appareils radiotéléphoniques destinés à fonctionner dans les bandes autorisées comprises entre 4000 kHz et 23 000 kHz puissent émettre et recevoir sur les fréquences porteuses 4125 kHz et 6215,5 kHz (voir les numéros **2982** et **2986**).

NOC **4133** **D3) Bandes comprises entre 156 MHz et 174 MHz**

NOC **7950** **4134** § 19. Toute station de navire pourvue d'appareils radiotéléphoniques destinés à
988 fonctionner dans les bandes autorisées comprises entre 156 MHz et 174 MHz (voir le numéro **613** et l'appendice **18**) doit pouvoir faire et recevoir des émissions de la classe G3E (voir la Résolution **308**):

NOC **7951** **4135** *a*) Sur la fréquence de détresse, de sécurité et d'appel 156,8 MHz;
989

NOC **7952** **4136** *b*) Sur la première fréquence «navire-navire» 156,3 MHz;
990

NOC **7953** **4137** *c*) Sur toutes les fréquences nécessaires à l'exécution de son service.
991

SECTION II

MOD **Conditions à remplir par les stations terriennes de navire**

MOD **7954** **4138** § 20. Les stations terriennes de navire doivent être établies de manière à être
1379AA conformes aux dispositions du chapitre III en ce qui concerne les fréquences.

MOD **7955** **4139** § 21. Les fréquences des émissions des stations terriennes de navire doivent être
1379AB vérifiées aussi souvent que cela est pratiquement possible par le service d'inspection dont elles relèvent.

NOC **7956** **4140** § 22. L'énergie rayonnée par les appareils récepteurs doit être aussi réduite que
1379AC cela est pratiquement possible et ne doit pas causer de brouillage préjudiciable aux autres stations.

MOD **7957** **4141** § 23. Les administrations prennent toutes les mesures pratiques nécessaires pour
1379AD que le fonctionnement des appareils électriques ou électroniques de toute nature installés dans les stations terriennes de navire ne cause pas de brouillage préjudiciable aux services radioélectriques essentiels de ces stations lorsqu'elles fonctionnent conformément aux dispositions du présent Règlement.

SECTION III

NOC **Communications des aéronefs avec des stations du service mobile maritime et du service mobile maritime par satellite**

NOC **7958** **4142** *A*) Dispositions générales

NOC **7959** **4143** § 24. (1) Les stations à bord d'aéronefs peuvent communiquer avec les stations du
951 service mobile maritime ou du service mobile maritime par satellite. Elles doivent alors se conformer aux dispositions du présent Règlement relatives à ces services.

MOD **7959A** **4144**
952

(2) Il convient qu'à cette occasion les stations à bord d'aéronefs utilisent les fréquences attribuées au service mobile maritime ou au service mobile maritime par satellite.

MOD **7960** **4145**
954

(3) Lorsqu'elles transmettent ou reçoivent de la correspondance publique par l'intermédiaire des stations du service mobile maritime ou du service mobile maritime par satellite, les stations à bord des aéronefs doivent se conformer à toutes les dispositions applicables à la transmission de la correspondance publique dans le service mobile maritime ou le service mobile maritime par satellite (voir notamment les articles **61, 62, 63, 65** et **66**).

SUP **7961**
(devenu **7959A**)

SUP **7962**
993

SUP **7963**
1002

SUP **7964**
1064

MOD **7965** **4146**
1078

§ 25. Lorsqu'il s'agit d'une communication entre une station du service mobile maritime et une station d'aéronef, l'appel peut être repris cinq minutes plus tard, nonobstant les dispositions du numéro **4735**.

SUP **7966**
1106

SUP **7967**
1159

SUP **7968**
1210

SUP **7969**
1232

SUP **7970**
1297

SUP **7971**
1320

MOD **7972** **4147**

B) Dispositions relatives à l'emploi des fréquences comprises entre 156 MHz et 174 MHz

MOD **7973** **4148**
952

§ 26. (1) En raison des brouillages que peuvent causer les stations d'aéronef à des altitudes élevées, les fréquences du service mobile maritime comprises dans les bandes supérieures à 30 MHz ne doivent pas être utilisées par les stations d'aéronef à l'exception des fréquences comprises entre 156 MHz et 174 MHz qui sont spécifiées dqans l'appendice **18** et dont l'emploi est soumis aux conditions suivantes:

NOC **7974** **4149**
952A

a) L'altitude des stations d'aéronef ne doit pas dépasser 300 mètres (1000 pieds), sauf pour les aéronefs de reconnaissance participant aux opérations des brise-glace, auxquels une altitude de 450 mètres (1500 pieds) est autorisée;

NOC **7975** **4150**
952B

b) La puissance moyenne des émetteurs des stations d'aéronef ne doit pas dépasser 5 watts; toutefois, une puissance au plus égale à un watt doit être utilisée dans la mesure du possible;

NOC **7976** **4151**
952C

c) Les stations d'aéronef doivent utiliser les voies désignées à cet effet dans l'appendice **18;**

NOC **7977** **4152**
952D

d) Sauf pour ce qui est prévu au numéro **4150**, les émetteurs des stations d'aéronef doivent satisfaire aux caractéristiques techniques figurant à l'appendice **19;**

NOC **7978** **4153**
952E

e) Les communications d'une station d'aéronef doivent être brèves et se limiter aux opérations où les stations du service mobile maritime jouent de rôle principal et où il est nécessaire d'établir des communications directes entre l'aéronef et la station de navire ou la station côtière.

NOC **7979** **4154**
953

(2) Les fréquences 156,3 MHz et 156,8 MHz peuvent être utilisées par les stations d'aéronef, mais uniquement à des fins relatives à la sécurité.

4155 à **4179**

(*Non attribués.*)

N57

ARTICLE 60

NOC

Dispositions spéciales relatives à l'emploi des fréquences dans le service mobile maritime

SECTION I

NOC

Dispositions générales

NOC **8031** **4180**

A) Emissions radiotélégraphiques à bande latérale unique

NOC **8032** **4181**
437A

§ 1. Les stations qui font des émissions radiotélégraphiques à bande latérale unique utilisent à cette fin la bande latérale supérieure. Les fréquences spécifiées dans le présent Règlement pour des émissions des classes H2A et H2B (*) telles que les fréquences 410 kHz, 425 kHz, 454 kHz, 468 kHz, 480 kHz, 500 kHz, 512 kHz, et 8364 kHz, sont utilisées comme fréquences porteuses.

NOC **8033** **4182**

B) Bandes comprises entre 505 kHz et 535 kHz

MOD **8034** **4183**
438

§ 2. Les stations de navire autorisées à fonctionner dans les bandes comprises entre 415 kHz et 535 kHz doivent émettre sur les fréquences indiquées dans le présent article (voir le numéro **4237**), sauf dans les cas prévus au numéro **961**.

NOC **8035** **4184**
438A

§ 3. En règle générale, l'espacement minimal entre fréquences adjacentes utilisées respectivement par des stations côtières d'une part et des stations de navire d'autre part est de 4 kHz.

NOC **8036** **4185**
439

§ 4. Dans la Région 1, aucune fréquence de la bande 405-415 kHz n'est assignée aux stations côtières, afin de protéger la fréquence 410 kHz désignée pour le service de radionavigation maritime (radiogoniométrie).

NOC **8037** **4186**
440

§ 5. Dans la Zone africaine de la Région 1, l'assignation des fréquences aux stations côtières fonctionnant dans les bandes 415-490 kHz et 510-525 kHz est établie, en règle générale, sur la base d'un espacement de 3 kHz entre fréquences adjacentes. Cependant, afin que les fréquences puissent coincider avec celles qui sont utilisées dans la Zone européenne dans les mêmes bandes, cet espacement est réduit dans certains cas.

NOC **8038** **4187**

C) Bandes comprises entre 1605 kHz et 4000 kHz

MOD **8039** **4188**
442

§ 6. (1) Dans la Région 1, il convient que les fréquences assignées aux stations fonctionnant dans les bandes comprises entre 1606,5 kHz et 3800 kHz (voir l'article 8) soient choisies, dans la mesure du possible, dans les bandes suivantes:

1606,5-1625 kHz: radiotélégraphie exclusivement;
1625-1670 kHz: radiotéléphonie à faible puissance;
1670-1950 kHz: stations côtières;
1950-2053 kHz: emissions des stations de navire à destination des stations côtières;
2053-2065 kHz: communications des navires entre eux;
2065-2170 kHz: emissions des stations de navire à destination des stations côtières;
2170-2173,5 kHz: appel des stations de navire par les stations côtières (y compris l'appel sélectif) et, à titre exceptionnel, transmission de messages de sécurité par les stations côtières;
2173,5-2190,5 kHz: *bande de garde de la fréquence de détresse et d'appel 2182 kHz.*
2190,5-2194 kHz: appel des stations côtières par les stations de navire;
2194-2440 kHz: communications des navires entre eux;
2440-2578 kHz: emissions des stations de navire à destination des stations côtières;
2578-2850 kHz: stations côtières;
3155-3340 kHz: emissions des stations de navire à destination des stations côtières;
3340-3400 kHz: communications des navires entre eux;
3500-3600 kHz: communications des navires entre eux;
3600-3800 kHz: stations côtières.

(*) Ceci pourvoit à la réception automatique de signaux radiotélégraphique d'alarme.

MOD **8040** **4189**
443

(2) Dans toute la mesure du possible, les fréquences de ces bandes assignées dans la Région 1 sont espacées de:

7 kHz, lorsque les deux fréquences adjacents sont utilisées pour la radiotéléphonie à double bande latérale;
3 kHz, lorsque les deux fréquences adjacents sont utilisées pour la radiotélégraphie;
5 kHz, lorsque les deux fréquences adjacents sont utilisées l'une pour radiotéléphonie à double bande latérale, l'autre pour la radiotélégraphie.

NOC **8041** **4190**
444

(3) Cependent, dans les bandes attribuées dans la Région 1 aux communications entre navires, l'espacement entre fréquences adjacentes utilisées pour la radiotéléphonie à double bande latérale est ramené à 5 kHz.

NOC **8042** **4191**
444A

(4) Lorsque ces bandes sont utilisées pour la radiotéléphonie à bande latérale unique, une station fonctionnnant dans la moitié inférieure d'une voie à double bande latérale utilise la bande latérale supérieure avec une fréquence porteuse inférieure de 3 kHz à la fréquence centrale de cette voie.

NOC **8043** **4192**
444B

(5) Cependent, dans les bandes attribuées aux communications entre navires, la fréquence porteuse d'une station fonctionnant dans la moitié inférieure d'une voie à double bande latérale est inférieure de 2,5 kHz seulement à la fréquence centrale de cette voie.

NOC **8044** **4193**
445

§ 7. Dans le Régions 2 et 3, les fréquences porteuses 2635 kHz (fréquence assignée 2636,4 kHz) et 2638 kHz (fréquence assignée 2639,4 kHz) sont utilisées, en plus des fréquences prescrites pour l'usage commun dans certains services, comme fréquences de travail navire-navire par les stations radiotéléphoniques de navire à bande latérale unique. La fréquence porteuse 2635 kHz peut être utilisée seulement pour des émissions des classes R3E et J3E. La fréquence porteuse 2638 kHz peut être utilisée pour des émissions des classes A3E, H3E, R3E et J3E. Cependent, les émissions des classes A3E et H3E ne sont plus autorisées après le 1er janvier 1982. Dans la Région 3, ces fréquences sont protégées par une bande de garde comprise entre 2634 kHz et 2642 kHz.

MOD **8045** **4194**
445A

§ 8. La fréquence assignée d'une voie radiotéléphonique à bande latérale unique est supérieure de 1400 kHz á la fréquence porteuse.

NOC **8046** **4195**

D) Bandes comprises entre 4000 kHz et 27 500 kHz

NOC **8047** **4196**
446

§ 9. (1) Les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 27 500 kHz (voir l'article 8) sont subdivisées comme suit:

MOD **8048** **4197**
447

a) *Stations de navire*, téléphonie, exploitation duplex (voies à deux fréquences):

4063- 4143,6 kHz;
6200- 6218,6 kHz;
8195- 8291,1 kHz;
12 330-12 429,2 kHz;
16 460-16 587,1 kHz;
22 000-22 124 kHz;

MOD **8049** **4198**
448

b) *Stations côtières*, téléphonie, exploitation duplex (voies à deux fréquences):

4357,4- 4438 kHz;
6506,4- 6525 kHz;
8718,9- 8815 kHz;
13 100,8-13 200 kHz;
17 232,9-17 360 kHz;
22 596 -22 720 kHz;

MOD **8050** **4199**
449

c) *Stations de navire et stations côtières*, téléphonie, exploitation simplex (voies à une fréquence) et exploitation à bandes croisées entre navires (deux fréquences):

4143,6- 4146,6 kHz;
6218,6- 6224,6 kHz;
8291,1- 8297,3 kHz;
12 429,2-12 439,5 kHz;
16 587,1-16 596,4 kHz;
22 124 -22 139,5 kHz;

NOC **8051** **4200**
451

d) Stations de navire, télégraphie á large bande, fac-similé et systèmes spéciaux de transmission:

4146,6- 4162,5 kHz;
4166 - 4170 kHz;
6224,6- 6244,5 kHz;
6248 - 6256 kHz;
8300 - 8328 kHz;
8331,5- 8343,5 kHz;
12 439,5-12 479,5 kHz;
12 483 -12 491 kHz;
16 596,4-16 636,5 kHz;
16 640 -16 600 kHz;
22 139,5-22 160,5 kHz;
22 164 -22 192 kHz;

MOD **8052** **4201**
451A

e) Stations de navire, transmission de données océanographiques [voir le renvoi *c*) de l'appendice **31**]:

4162,5- 4166 kHz;
6244,5- 6248 kHz;
8328 - 8331,5 kHz;
12 479,5-12 483 kHz;
16 636,5-16 640 kHz;
22 160,5-22 164 kHz;

MOD **8053** **4202**
451B

f) Stations de navire, systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation de dépassant pas 100 bauds (fréquences appariées avec celles indiquées au numéro **4207**);

4170 - 4177,25 kHz;
6256 - 6267,75 kHz;
8343,5- 8357,25 kHz;
12 491 -12 519,75 kHz;
16 660 -16 694,75 kHz;
22 192 -22 225,75 kHz;

NOC **8054** **4203**
451C

g) Stations de navire, systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds (fréquences non appariées):

4177,25- 4179,75 kHz;
6267,75- 6269,75 kHz;
8297,3 - 8300 kHz;
8357,25- 8357,75 kHz;
12 519,75-12 526,75 kHz;
16 694,75-16 705,8 kHz;
22 225,75-22 227 kHz;
25 076 -25 090,1 kHz;

NOC **8055** **4204**
452

h) Stations de navire, télégraphie Morse de classe A1A, appel:

4179,75 - 4187,2 kHz;
6269,75 - 6280,8 kHz;
8359,75 - 8374,4 kHz;
12 539,6 -12 561,6 kHz;
16 719,8 -16 748,8 kHz;
22 227 -22 247 kHz;
25 070 -25 076 kHz;

NOC **8056** **4205**
452A

i) Stations de navire, appel séléctif numérique:

4187,2- 4188 kHz;
6280,8- 6282 kHz;

8374,4- 8376 kHz;
12 561,6-12 564 kHz;
16 748,8-16 752 kHz;
22 247 -22 250 kHz;

MOD **8057** **4206**
452B

j) Stations de navire, télégraphie Morse de classe A1A, travail:

4188 - 4219,4 kHz;
6282 - 6325,4 kHz;
8357,75- 8359,75 kHz;
8376 - 8435,4 kHz;
12 526,75-12 539,6 kHz;
12 564 -12 652,2 kHz;
16 705,8 -16 719,8 kHz;
16 752 -16 859,4 kHz;
22 250 -22 310,5 kHz;
25 090,1 -25 110 kHz;

NOC **8058** **4207**
452C

k) Stations côtières, systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds (fréquences appariées avec celles indiquées au numéro **4202**):

4349,4- 4356,75 kHz;
6493,9- 6505,75 kHz;
8704,4- 8718,25 kHz;
13 070,8-13 099,75 kHz;
17 196,9-17 231,75 kHz;
22 561 -22 594,75 kHz;

NOC **8059** **4208**
452D

l) Stations côtières, appel sélectif numérique:

4356,75- 4357,4 kHz;
6505,75- 6506,4 kHz;
8718,25- 8718,9 kHz;
13 099,75-13 100,8 kHz;
17 231,75-17 232,9 kHz;
22 594,75-22 596 kHz;

NOC **8060** **4209**
453

m) Stations côtières, télégraphie Morse de classe A1A et télégraphie à large bande, fac-similé, systèmes spécieux de transmission, transmission de données et télégraphie à impression directe:

4219,4- 4349,4 kHz;
6325,4- 6493,9 kHz;
8435,4- 8704,4 kHz;
12 652,3-13 070,8 kHz;
16 859,4-17 196,9 kHz;
22 310,5-22 561 kHz;

NOC **8061** **4210**
453A

(2) Les fréqueces des bandes 25 010-25 070 kHz, 25 110-25 600 kHz et 26 100-27 500 kHz peuvent être assignées aux stations côtières.

MOD **8062** **4211**
456

§ 10. (1) L'appendice **16** indique les voies radiotéléphoniques dans les bandes de fréquences définies aux numéros **4197, 4198** et **4199.**

MOD **8063** **4212**
457

(2) Le Plan d'allotissement de fréquences aux stations côtières radiotéléphoniques à ondes décamétriques fait l'object de l'appendice 25 Mar2.

NOC **8064** **4213**

E) Bandes comprises entre 156 MHz et 174 MHz

NOC **8065** **4214**
457A

§ 11. Il convient que le service du mouvement des navires soit exploité uniquementsur les fréquences attribuées au service mobile maritime dans la bande 156-174 MHz.

SECTION II

NOC

Emploi des fréquences en radiotélégraphie

NOC **8066** **4215**

A) Généralités

NOC **8067** **4216**
1094A

§ 12. Chaque fois qu'il est question dans le présent Règlement, en ce qui concerne le service mobile maritime, de la classe d'émission A2A, A2B (*), H2A ou H2B (**) le type de transmission considéré est, sauf aux fins d'appel sélectif, la télégraphie par manipulation par tout ou rien de l'émission modulée, à l'exclusion de la manipulation par tout ou rien des seules fréquences acoustiques de modulation.

NOC **8068** **4217**

B) Bandes comprises entre 405 kHz et 535 kHz

NOC

B1) Appel et réponse

(MOD) **8069** **4218**
1107

§ 13. (1) La fréquence 500 kHz et la fréquence internationale de détresse en radiotélégraphie (voir le numéro **2970** pour les détails de son utilisation pour les communications de détresse, de sécurité et d'urgence).

NOC **8070** **4219**
1109

(2) En dehors de cet usage, la fréquence 500 kHz ne peut être employée que:

NOC **8071** **4220**
1110

a) Pour l'appel et la réponse (voir les numéros **4225** et **4229**);

NOC **8072** **4221**
1111

b) Par les stations côtières pour annoncer l'émission de leurs listes d'appels, dans le conditions prévues aux numéros **4727, 4728** et **4729.**

NOC **8073** **4222**
1113

(3) Afin de faciliter la réception des appels de détresse, les autres émissions sur la fréquence 500 kHz doivent être réduites au minimum et leur durée ne doit pas dépasser une minute.

MOD **8074** **4223**
1113A

(4) Avant d'émettre sur la fréquence 500 kHz, une station doir écouter sur cette fréquence pendant un laps de temps suffisant, afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **4713**).

NOC **8075** **4224**
1113B

(5) Les dispositions du numéro **4223** ne s'appliquent pas aux stations en détresse.

NOC **8076** **4225**
1114

§ 14. (1) La fréquence générale d'appel qui doit, sauf dans le cas visé au numéro **4849,** être employée par toute station de navire ou toute station côtière fonctionnant en radiotélégraphie dans les bandes autorisées entre 405 kHz et 535 kHz, ainsi que par les aéronefs qui désirent entrer en communication avec une station du service mobile maritime faisant usage de fréquences de ces bandes, est la fréquence 500 kHz.

NOC **8077** **4226**
1115

(2) Cependent, afin de réduire les brouillages dans le régions à trafic intense, les administrations peuvent considérer comme satisfaites les dispositions du numéro **4225** lorsque les fréquences d'appel assignées aux stations côtières ouvertes à la correspondance publique ne s'écartent pas de plus de 3 kHz de la fréquence générale d'appel 500 kHz.

NOC **8078** **4227**
1115A

§ 15. (1) Une station de navire qui appelle une station côtière doit, chaque fois que cela est possible, et notamment dans les zones à trafic intense, indiquer à la station côtière qu'elle est prête à recevoir sur la fréquence de travail de cette station.

NOC **8079** **4228**
1115B

(2) La station ne navire doit s'assurer au préalable que cette fréquence n'est pas déjà utilisée par la station côtière.

NOC **8080** **4229**
1116

§ 16. (1) La fréquence de réponse à un appel émis sur la fréquence générale d'appel (voir le numéro **4225**) est:

Soit la fréquence 500 kHz;
Soit la fréquenc indiquée par la station appelante (voir les numéros **4227** et **4769**).

NOC **8081** **4230**
1117

(2) Dans les régions à trafic intense, une station côtière peut répondre aux appels des navires de sa propre nationalité conformément à des arrangements spéciaux faits par l'administration intéressée (voir le numéro **4769**).

NOC **8082** **4231**
1117A

§ 17. Des appels sélectifs régis par les dispositions de l'article 62 peuvent être émis sur la fréquence 500 kHz dans les sens côtière-navire et navire-côtière et entre navires.

(*) Ceci pourvoit à la réception automatique de signaux rafiotélégraphiques d'alarme.

(**) Ceci pourvoit à la réception automatique de signaux rafiotélégraphiques d'alarme et à l'appel sélectif.

NOC

B2) Trafic

NOC **8083** **4232** § 18. (1) Les stations côtières fonctionnant dans les bandes autorisées entre 405 kHz
1118 et 535 kHz doivent être en mesure de faire usage d'au moins une fréquence en plus de la fréquence 500 kHz. L'une de ces fréquences additionnelles, imprimée en caractères gras dans la Nomenclature des stations côtières, et la fréquence normale de travail de la station.

MOD **8084** **4233** (2) En plus de leur fréquence normale de travail, les stations côtières peuvent
1119 employer, dans les bandes autorisées, des fréquences supplémentaires mentionnées en caractères ordinaires dans la Nomenclature des stations côtières. Toutefois, la bande 405-415 kHz est attibuée à la radiogoniométrie et ne peut être utilisée par le service mobile maritime que dans les conditions fixées au chapitre III.

NOC **8085** **4234** (3) Les fréquences de travail des stations côtières doivent être choisies de maniére
1120 à éviter de brouiller les stations voisines.

NOC **8086** **4235** (4) Il convient que, dans les régions à trafic intense, les stations côtières et les
1121 stations de navire fassent usage d'émissions de la classe A1A sur leurs fréquences de travail.

NOC **8087** **4236** § 19. Par exception aux dispositions des numéros **2970, 4219, 4220** et **4221** et à
1122 conditions de ne pas brouiller les signaux de détresse, d'urgence, de sécurité, d'appel et de réponse, la fréquence 500 kHz peut être utilisée avec discrétion pour la radiogoniométrie en dehors des régions à trafic intense.

NOC **8088** **4237** § 20. (1) Les stations de navire qui fonctionnent dans les bandes autorisées entre
1123 405 kHz et 535 kHz doivent utiliser des fréquences de travail choisies parmi les suivantes: 425 kHz, 454 kHz, 468 kHz, 480 kHz et 512 kHz, sauf dans les cas où les conditions spécifiés au número **961** remplies.

NOC **8089** **4238** (2) Aucune station côtière n'est autorisée à émettre sur les fréquences de travail
1124 réservées à l'usage des stations de navire dans le monde entier.

NOC **8090** **4239** (3) Les stations de navire peuvent utiliser la fréquence 512 kHz comme fréquence
1125 d'appel supplémentaire lorsque la fréquence 500 kHz est employée pour la détresse.

NOC **8091** **4240** (4) Durant ces périodes, les stations côtières peuvent:
1126

NOC **8092** **4241** *a*) Utiliser la fréquence 512 kHz comme fréquence supplémentaire d'appel
1127 et de réponse; *ou*

NOC **8093** **4242** *b*) Appliquer, pour l'appel et la réponse, d'autres arrangements qui doivent
1128 être spécifiés dans la Nomenclature des stations côtières.

NOC **8094** **4243** (5) Lorsque la fréquence 500 kHz est utilisée pour la détresse, les stations de navire
1129 ne doivent pas employer la fréquence 512 kHz comme fréquence de travail dans les zones où elle est utilisée comme fréquence d'appel supplémentaire.

NOC **8095** **4244**

C) Bandes comprises entre 2605 kHz et 4000 kHz

NOC

C1) Région 2

(MOD) **8096** **4245** § 21. Dans la Région 2, les fréquences de la bande 2068,5-2078,5 kHz sont assignées
1138 aux stations de navire munies de systèmes télégraphiques à large bande, fac-similé et systèmes spéciaux de transmission. Les dispositions du numéro **4254** sont applicables.

NOC

C2) Dispositions supplémentaires applicables seulement dans les zones de la Région 3 situées au nord de l'equateur

MOD **8097** **4246** § 22. (1) La bande 2089,5-2092,5 kHz est la bande des fréquences d'appel et de
1139 sécurité en radiotélégraphie dans les bandes comprises entre 1605 kHz et 2850 kHz dans lesquelles la radiotélégraphie est admise.

NOC **8098** **4247** (2) Les fréquences de la bande 2089,5-2092,5 kHz peuvent être utilisées pour l'appel,
1140 la réponse et la sécurité. Ces fréquences peuvent aussi être utilisées pour la transmission de messages précédés des signaux d'urgence ou de sécurité.

NOC **8099** **4248** (3) Toute station côtière faisant usage de la bande d'appel 2089,5-2092,5 kHz doit,
1141 autant que possible, assurer la veille dans cette bande pendant ses vacations.

NOC **8100** **4249** (4) Les stations côtières qui utilisent des fréquences de la bande 2089,5-2092,5 kHz
1142 pour l'appel doivent être en mesure de faire usage d'au moins une autre fréquence choisie dans les bandes comprises entre 1605 kHz et 2850 kHz dans lesquelles la radiotélégraphie est admise.

NOC **8101** **4250** (5) L'une de ces fréquences, imprimée en caractères gras dans la Nomenclature des
1143 stations côtières, est la fréquence normale de travail de la station. Les fréquences supplémentaires éventuelles figurent en caractères ordinaires.

NOC **8102** **4251** (6) Les fréquences de travail des stations côtières doivent être choisies de manière
1144 à éviter de brouiller d'autres stations.

NOC **8103** **4252** D) Bandes comprises entre 4000 kHz et 27 500 kHz

NOC D1) Généralités

MOD **8104** **4253** § 23. (1) Les stations de navire équipées pour fonctionner en radiotélégraphie dans
1145 les bandes spécifiées aux numéros **4204** et **4206** doivent faire uniquement des émissions de télégraphie Morse de classe A1A avec une rapidité de modulation ne dépassant pas 40 bauds. Les stations d'engin de sauvetage peuvent employer dans ces bandes des émissions de la classe A2A ou H2A (voir les numéros **3002** et **3005**).

MOD **8105** **4254** (2) Les stations de navire équipées de systèmes télégraphiques à large bande, de
1146 fac-similé ou de systèmes spéciaux de transmission peuvent employer, dans les bandes réservées à cet effet, n'importe quelle classe d'émission, pourvu que leurs émissions puissent être contenues dans les voies à large bande spécifiées dans l'appendice **31**. Toutefois, elles ne peuvent faire usage ni de la télégraphie Morse de classe A1A ni de la téléphonie, sauf pour permettre le réglage des circuits.

NOC **8106** **4255** (3) Sous réserve des dispositions du numéro **4376,1**, les stations côtières radioté-
1147 légraphiques qui fonctionnent dans les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 27 500 kHz ne doivent pas faire de transmissions du type 2 (voir le numéro **4216**).

NOC **8107** **4256** (4) Les stations côtières radiotélégraphiques qui utilisent des émissions de la classe
1148 A1A ou FIB à une seule voie et que fonctionnent dans les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 27 500 kHz ne doivent en aucun cas utiliser une puissance moyenne supérieure aux valeurs suivantes:

Bandes	Puissance moyenne maximum
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
22 MHz	15 kW

NOC **8108** **4257** (5) Les stations côtières radiotélégraphiques qui utilisent des émissions télégraphiques
1148A multivoies et qui fonctionnent dans les bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 27 500 kHz ne doivent en aucun cas utiliser une puissance moyenne supérieure à 2,5 kW par largeur de bande de 500 Hz.

MOD **8109** **4258** § 24. Les numéros **4200** à **4209** et les colonnes correspondantes de l'appendice **31**
1149 indiquent celles des parties des bandes attribuées en exclusivité au service mobile maritime entre 4000 kHz et 27 500 kHz qui sont à utiliser pour la radiotélégraphie par les stations côtières et les stations de navire.

NOC D2) Appel et réponse

MOD **8110** **4259** § 25. (1) Pour entrer en communication avec une station côtière, toute station de
1160 navire emploie une fréquence d'appel appropriée de l'une des bandes énumérées au numéro **4204**.

MOD **8111** **4260** (2) Les fréquences des bandes d'appel en télégraphie Morse de classe A1A sont
1161 assignées à chaque station de navire conformément aux dispositions des numéros **4277** à **4285**.

MOD **8112** **4261** § 26. Afin de réduire les brouillages, les stations de navire doivent, dans la mesure
1162 des moyens dont elles disposent, s'efforcer de choisir pour l'appel la bande dont les fréquences présentent les caractéristiques de propagation les plus favorables pour établir une communication satisfaisante. En l'absence de données plus précises, toute station de navire doit, avant d'émettre un appel, écouter les signaux de la station avec laquelle elle désire entrer en communication. La force et l'intelligibilité des signaux reçus donnent alors des renseignements utiles sur les conditions de propagation et indiquent dans quelle bande il est préférable de faire l'appel.

NOC **8113** **4262** § 27. Afin de réduire les brouillages sur le voies communes d'appel, celles-ci ne
1162A doivent être utilisées que lorsqu'un navire ne peut pas employer une fréquence d'appel du groupe approprié dèsigné comme voie de réception pour la station côtière avec laquelle le navire désire entrer en communication, ou lorsque la station côtière a indiqué qu'elle n'assure l'écoute que sur les voies d'appel communes.

MOD 8114 4263 § 28. (1) Dans chacune des bandes dans lesquelles son équipement lui permet de travailler, une station côtière utilise pour l'appel sa fréquence normale de travail indiquée en caractères gras dans la Nomenclature des stations côtières (voir les numéros **4207** et **4209**).
1163

NOC 8115 4264 (2) Une station côtière, lorsque c'est possible en pratique, transmet ses appels à des heures déterminées, sous forme de listes d'appels, sur la ou les frèquences indiquées dans la Nomenclature des stations côtières (voir les numéros **4722** et **4726**).
1164

SUP 8116
1164A

MOD 8117 4265 § 29. Les fréquences exclusives pour l'appel sélectif numérique comprises dans les bandes indiquées au numéro **4208** (voir le numéro **4684**) peuvent être assignées à une station côtière quelconque: ces fréquences sont à utiliser conformément aux dispositions du numéro **4681.**
1164B

MOD 8118 4266 § 30. A moins que la station appelante n'en ait désigné une autre, la fréquence de réponse à un appel est:
1165

MOD 8119 4267 *a*) Pour une station de navire, l'une des fréquences d'appel qui lui ont été assignées dans la même bande, compte tenu des dispositions du numéro **4262;**
1166

NOC 8120 4268 *b*) Pour une station côtière, sa fréquence normale de travail de la bande dans laquelle elle a été appelée.
1167

NOC 8121 4269 § 31. Pour chaque station côtière, les administrations indiquent quelles sont les bandes d'appel de navires et les voies de réception de stations côtières sur lesquelles cette station fait l'écoute, et, autant que possible, l'horaire approximatif de cette écoute en Temps universel coordonné (UTC). Ces renseignements sont insérés dans la Nomenclature des stations côtières.
1168

NOC 8122 4270 § 32. Exceptionnellement, une station côtière peut indiquer qu'elle fait l'écoute sur les fréquences d'appel autres que celles qui sont définies comme étant ses propres fréquences de réception.
1168A

NOC 8123 4271 § 33. Afin de réduire les brouillages sur les fréquences d'appel, les stations côtières doivent prendre les mesures voulues pour assurer, dans des conditions normales, la réception rapide des appels (voir le numéro **4755**).
1168B

NOC

D3) Trafic

MOD 8124 4272 § 34. (1) Une station de navire, après avoir établi la communication sur une fréquence d'appel (voir le numéro **4259**), passe sur l'une de ses fréquences de travail pour transmettre son trafic. Les fréquences des bandes d'appel ne doivent pas être utilisées pour d'autres émissions que pour l'appel.
1169

MOD 8125 4273 (2) Les fréquences de travail sont assignées aux stations de navire conformément aux dispositions des numéros **4288** à **4306** inclus.
1170

NOC 8126 4274 § 35. (1) Toute station côtière transmet son trafic sur sa fréquence normale de travail ou sur les autres fréquences de travail qui lui sont assignées.
1171

NOC 8127 4275 (2) Il convient que les pays qui partagent une voie dans l'une des bandes exclusives attribuées au service mobile maritime entre 4000 kHz et 27 500 kHz, accordent une attention spéciale à ceux d'entre eux qui ne disposeraient pas d'une autre voie dans cette bande et s'efforcent d'utiliser leur voie principale dans la plus large mesure possible, afin de permettre à ces derniers de satisfaire aux besoins minimums de leur exploitation.
1172

SUP 8128
1173

SUP 8129
1173A

SUP 8130
1173B

MOD 8131 4276 *E*) Assignation des fréquences aux stations de navire

NOC

E1) Fréquences d'appel des stations de navire

SUP 8132
1174

MOD 8133 4277 § 36. Chacune des bandes d'appel comprises entre 4000 kHz et 23 000 kHz et indiquées au numéro **4204** est divisée en quatre groupes de voies et deux voies communes. La bande des 25 MHz est divisée en trois voies, dont l'une est une voie commune (voir l'appendice **34**).
1176A

NOC **8134** **4278** § 37. (1) Lorsqu'elles assurent un service international indiqué dans la Nomenclature des stations côtières, les stations côtières assurent la veille sur les voies d'appel communes de chaque bande pendant toute la durée de leur vacation dans cette bande, et sur la ou les voies correspondant à leur groupe pendant les heures chargées. Les périodes pendant lesquelles l'écoute est faite sur la ou les voies du groupe sont indiquées, pour chaque pays, dans la Nomenclature des stations côtières.
1176B

NOC **8135** **4279** (2) Si c'est nécessaire, les stations côtières indiquent dans leurs émissions les voies sur lesquelles elles assurent la veille.
1176C

NOC **8136** **4280** § 38. Dans les bandes comprises entre 4000 kHz et 23 000 kHz, l'administration dont relève une station de navire lui assigne au moins deux fréquences d'appel dans chacune des bandes que la station peut utiliser (1). Dans chaque bande, l'une des fréquences d'appel doit être comprise dans l'une des voies communes de réception des stations côtières dont la liste figure à l'appendice **34;** une autre doit être choisie parmi les autres voies dont la liste figure à l'appendice **34,** compte tenu de la ou des voies de réception de la station côtière avec laquelle la station de navire entre le plus fréquemment en communication. Dans la bande des 25 MHz, les administrations assignent aux stations de navire relevant de leur juridiction une fréquence dans la voie commune. Dans cette bande, une autre fréquence d'appel doit être choisie dans la voie A ou B de l'appendice **34**, compte tenu de la voie de réception de la station côtière avec laquelle la station de navire entre le plus fréquemment en communication.
1177

NOC **8137** **4281** § 39. Chaque fois que c'est possible, il convient d'assigner à une station de navire des fréquences d'appel supplémentaires (voir le numéro **4262**).
1177A

NOC **8138** **4282** § 40. Afin d'obtenir une répartition uniforme des appels, les administrations qui n'ont pas l'intention de faire assurer la veille sur toutes voies de réception de leur groupe fixent la ou les voies sur lesquelles elles feront assurer la veille, mais seulement après coordination, dans toute la mesure du possible, avec les autres administrations faisant partie du même groupe (voir la Résolution **312**).
1177B

NOC **8139** **4283** § 41. Les administrations qui assignent à leurs station de navire des fréquences dans plusieurs voies d'appel de leur groupe, prennent les mesures nécessaires pour répartir ces assignations de manière uniforme dans l'ensemble des voies qu'elles utilisent.
1177C

(MOD) **8140** **4284** § 42. Afin d'assurer une répartition uniforme des appels sur les voies d'appel communes, il convient que les administrations autant que pratiquement possible assignent des fréquences de chacune des deux voies à un nombre égal de stations de navire.
1177D

NOC **8141** **4285** § 43. Les administrations doivent autant que possible faire en sorte que les stations de navire relevant de leur juridiction soient capables de maintenir leurs émissions dans les limites de la voie qui leur est assignée (voir l'appendice **7**).
1177E

SUP **8142**
1179A

MOD **8143** **4286** § 44. Les fréquences exclusives pour l'appel sélectif numérique, comprises dans les bandes indiquées au numéro **4205** (voir le numéro **4683**), peuvent être assignées à une station de navire quelconque; ces fréquences sont à utiliser conformément aux dispositions du numéro **4681**.
1179B

MOD **E2) Fréquences de travail des stations de navire**

NOC **4287** *a) Espacement des voies et assignation des fréquences:*

MOD **8144** **4288** § 45. Dans toutes les bandes, les fréquences de travail des stations de navire équipées de systèmes télégraphiques à large bande, de fac-similé ou de systèmes spéciaux de transmission sont espacées de 4 kHz. Les fréquences à assigner sont spécifiées à l'appendice **31**.
1180

NOC **8136.1** **4280.1** (1) Jusqu'au 1er janvier 1980, les stations de navire dont les émetteurs ne peuvent utiliser que trois fréquences dans chacune des bandes comprises entre 4000 kHz et 23 000 kHz peuvent exceptionnellement se voir assigner une seule fréquence d'appel dans chacune des bandes dans lesquelles elles peuvent émettre. Cette exception ne peut être faite que si l'administration intéressée considère que l'assignation à la station de navire, d'au moins deux fréquences de travail dans chaque bande est nécessaire pour assurer son service.
1177.1

MOD **8145** **4289**
1180A

§ 46. Dans toutes les bandes, les fréquences à assigner pour les transmissions de données océanographiques sont espacées de 0,3 kHz. Les fréquences à assigner sont spécifiées à l'appendice **31**.

MOD **8146** **4290**
1180B

§ 47. Dans toutes les bandes, les fréquences de travail des stations de navire qui utilisent des systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds, y compris les fréquences appariées avec les fréquences de travail à assigner aux stations côtières (voir le numéro **4207**), sont espacées de 0,5 kHz. Les fréquences à assigner aux stations de navire et qui sont appariées avec les fréquences utilisées par les stations côtières, sont spécifiées à l'appendice **32** (voir aussi le numéro **4202**). Les fréquences à assigner aux stations de navire, et qui ne sont pas appariées avec les fréquences utilisées par les stations côtières, sont spécifiées à l'appendice **33** (voir aussi le numéro **4203**).

MOD **8147** **4291**
1182

§ 48. Dans toutes les bandes, sauf dans celle des 6 MHz, les fréquences de travail des stations de navire qui utilisent la télégraphie Morse de classe A1A à des rapidités de modulation ne dépassant pas 40 bauds, sont espacées de 0,5 kHz: dans la bande des 6 MHz, elles sont espacées de 0,75 kHz. [Voir aussi la note *e*) de l'appendice **31**.] Les fréquences extrêmes à assigner dans chacune de ces bandes sont spécifiées à l'appendice **31**.

NOC **8148** **4292**
1183

§ 49. Dans les bandes des 4, 6, 8, 12 et 16 MHz, un certain nombre de fréquences sont en relation harmonique, ainsi qu'il est indiqué à l'appendice **35**.

NOC **4293**

b) Fréquences de travail des stations de navire qui sont équipées de systèmes télégraphiques à large bande, de fac-similé ou de systèmes spéciaux de transmission:

SUP **8149**
1188

MOD **8150** **4294**
1189

§ 50. (1) Chaque administration assigne à chacune des stations de navire qui relèvent de son autorité et qui emploient des systèmes spéciaux de transmission, de fac-similé ou des systèmes télégraphiques à large bande, au moins une série des fréquences de travail réservées à cet effet (voir l'appendice **31**). Le nombre des séries à assigner à chaque navire doit être déterminé en fonction des besoins de son trafic.

NOC **8151** **4295**
1190

(2) Aux stations de navire équipées de systèmes spéciaux de transmission, de fac-similé ou de systèmes télégraphiques à large bande, auxquelles toutes les fréquences de travail d'une bande ne sont pas assignées, les administrations intéressées assignent des fréquences de travail selon un système ordonné de permutation tel que toutes les fréquences soient assignées approximativement le même nombre de fois.

MOD **8152** **4296**
1191

(3) Toutefois, dans les limites des bandes spécifiées au numéro **4200** les administrations peuvent, pour satisfaire les besoins de systèmes déterminés, assigner des fréquences différentes de celles qui sont spécifiées à l'appendice **31**. Cependant, les administrations tiennent alors compte, dans la mesure du possible, des dispositions de l'appendice **31** qui concernent la distribution des voies et l'espacement de 4 Hz.

NOC **4297**

c) Fréquences de travail des stations de données océanographiques:

SUP **8153**
1191A

MOD **8154** **4298**
1191B

§ 51. Les bandes de fréquences spécifiées au numéro **4201** peuvent également être utilisées par les stations de bouée pour les transmissions de données océanographiques et par les stations qui interrogent ces bouées.

MOD **8155** **4299**
1191C

§ 52. Chaque administration peut assigner à chacune des stations des types enumérés aux numéros **4201** et **4298** qui relèvent de son autorité, une ou plusieurs des fréquences à assigner qui sont spécifiées à l'appendice **31**.

NOC **4300**

d) Fréquences de travail (appariées avec celles qui sont indiquées au numéro **4207***) des stations de navire qui utilisent des systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds:*

SUP **8156**
1191D

NOC **8157** **4301**
1191DA

§ 53. Les fréquences appariées à assigner aux stations côtières et aux stations de navire qui utilisent des systèmes à bande étroite de télégraphie à impression directe et de transmission de données, sont indiquées à l'appendice **32**.

NOC **8158** **4302**
1191E

§ 54. Lorsqu'elles assignent les fréquences énumérées à l'appendice **32** pour la télégraphie à impression directe à bande étroite et la transmission de données, les administrations appliquent la procédure décrite dans la Résolution **300**.

NOC **4303** *e) Fréquences de travail (non appariées) des stations de navire qui utilisent des systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds:*

SUP **8159** 1191F

NOC **8160** 1191G **4304** § 55. Lorsqu'elles assignent les fréquences énumérées à l'appendice **33** pour des systèmes à bande étroite de télégraphie à impression directe et de transmission de données, les administrations doivent tenir dûment compte des renseignements inscrits au Fichier de référence en application de la procédure de notification décrite dans la Résolution **301.**

NOC **4305** *f) Fréquences de travail des stations de navire qui utilisent la télégraphie Morse de classe A1A:*

SUP **8161** 1196

NOC **8162** 1200 **4306** § 56. Chaque administration assigne à chacune des stations de navire qui relèvent de son autorité des fréquences de travail choisies dans les bandes des 4, 6, 8, 12, 16, 22 et 25 MHz, en nombre suffisant pour répondre aux besoins du navire. Dans chaque bande ainsi utilisée, il convient d'assigner de préférence au moins deux fréquences de travail à chaque navire. Les administrations doivent assurer une répartition uniforme des assignations dans l'ensemble des bandes.

MOD **8163** 1200A **4307** § 57. Aux fins exclusives des communications avec des stations du service mobile maritime, une ou plusieurs fréquences de travail peuvent être assignées à une station d'aéronef dans les bandes indiquées au numéro **4206**. L'assignation de ces fréquences s'effectue selon le même principe de répartition uniforme que pour les stations de navire.

NOC **4308** *g) Abreviations pour l'indication des fréquences de travail:*

NOC **8164** 1203 **4309** § 58. Dans les bandes comprises entre 4000 kHz et 27 500 kHz, on peut, pour désigner une fréquence de travail, utiliser les abréviations suivantes:

NOC **8165** 1204 **4310** *a)* Si la fréquence, exprimée en kHz, ne comporte pas de décimales, on en transmet les trois derniers chiffres;

NOC **8166** 1204A **4311** *b)* Si la fréquence, exprimée en kHz, comporte des décimales, on transmet les trois derniers chiffres de sa partie entière, suivis du premier chiffre décimal.

SECTION III

NOC **Emploi des fréquences en télégraphie à impression directe à bande étroite**

NOC **8167** **4312** *A)* Généralités

NOC **8168** 999H **4313** § 59. Les fréquences assignées aux stations côtières sont indiquées dans la Nomenclature des stations côtières (Liste IV). Cette Nomenclature contient en outre tous les renseignements utiles concernant le service assuré par chacune de ces stations.

NOC **8169** **4314** *B)* Bandes comprises entre 405 kHz et 535 kHz

NOC **8170** 999I **4315** § 60. (1) Toute station de navire pourvue d'appareils de télégraphie à impression directe à bande étroite destinés à fonctionner dans les bandes autorisées comprises entre 405 kHz et 535 kHz doit pouvoir faire et recevoir des émissions de la classe F1B sur au moins deux fréquences de travail (voir le numéro **4237**) (1).

NOC **8171** 999J **4316** (2) La télégraphie à impression directe à bande étroite est interdite dans la bande 490-510 kHz.

NOC **8170.1** 999I.1 **4315.1** (1) Dans la Zone européenne maritime, l'emploi de ces émissions de la classe F1B est subordonné à des arrangements particuliers entre les administrations intéressées et celles dont les services sont susceptibles d'être défavorablement influencés.

NOC **8172** **4317** *C*) Bandes comprises entre 1605 kHz et 4000 kHz

NOC **8173** **4318** § 61. (1) Toute station de navire pourvue d'appareils de télégraphie à impression directe à bande étroite destinés à fonctionner dans les bandes autorisées comprises entre 1605 kHz et 4000 kHz doit pouvoir faire et recevoir des émissions de la classe F1B sur au moins deux fréquences de travail.
999K

NOC **8174** **4319** (2) La télégraphie à impression directe à bande étroite est interdite dans la bande 2170-2194 kHz.
999L

NOC **8175** **4320** *D*) Bandes comprises entre 4000 kHz et 27 500 kHz

NOC **8176** **4321** § 62. Toute station de navire pourvue d'appareils de télégraphie à impression directe à bande étroite destinées à fonctionner dans les bandes autorisées comprises entre 4000 kHz et 27 500 kHz doit pouvoir faire et recevoir des émissions de la classe F1B sur au moins deux fréquences de chaque bande nécessaire à l'exécution de son service. Les fréquences à assigner sont indiquées aux appendices **32** et **33.**
999M

NOC **8177** **4322** *E*) Bandes comprises entre 156 MHz et 174 MHz

NOC **8178** **4323** § 63. Toute station de navire pourvue d'appareils de télégraphie à impression directe à bande étroite peut fonctionner dans les bandes autorisées comprises entre 156 MHz et 174 MHz en se conformant aux dispositions de l'appendice **18.**
999N

SECTION IV

NOC

Emploi des fréquences en radiotélégraphie

NOC **8179** **4324** *A*) Généralités

SUP **8180**
1319

NOC **8181** **4325** § 64. Sauf en ce qui concerne les dispositions de l'article 12 relatives à la notification et l'enregistrement des fréquences, les fréquences destinées aux émissions radiotéléphoniques à bande latérale unique doivent toujours être désignées par la fréquence porteuse. La fréquence assignée est déterminée conformément aux dispositions du numéro **4194.**
1321A

MOD **8182** **4326** § 65. Les stations côtières ne doivent pas occuper de voies radiotéléphoniques libres en émettant des signaux d'identification produits, par exemple, par des boucles ou des bandes d'appel. A titre exceptionnel et à la demande d'une station de navire, une station côtière peut, en vue d'établir une communication radiotéléphonique, émettre des signaux de réglage de récepteur pendant une durée maximale de dix secondes.
1321B

NOC **8183** **4327** § 66. La Nomenclature des stations côtières mentionne les fréquences d'émission (et de réception lorsque ces fréquences sont associées par paires comme dans le cas de la radiotéléphonie duplex) assignées à chaque station côtière. Elle donne, de plus, toutes les autres informations utiles sur le service assuré par chaque station côtière.
1322

NOC **8184** **4328** § 67. Les appareils à bande latérale unique des stations radiotéléphoniques du service mobile maritime qui fonctionnent dans les bandes attribuées à ce service entre 1605 kHz et 4000 kHz et dans les bandes attribuées en exclusivité à ce service entre 4000 kHz et 23 000 kHz doivent satisfaire aux conditions techniques et d'exploitation spécifiées à l'appendice **17** et à la Résolution **307.**
1322A

NOC **8185** **4329** § 68. Lorsqu'il est fait usage de systèmes à compresseurs et extenseurs couplés, leurs caractéristiques doivent être conformes aux spécifications du paragraphe *a*) de l'appendice **40.**
1322AA

NOC **8186** **4330** § 69. Les caractéristiques des appareils à bande latérale unique associés à des systèmes à compresseurs et extenseurs couplés doivent être conformes aux spécifications de l'appendice **17**; il convient qu'ils soient en outre conformes à celles du paragraphe *b*) de l'appendice **40.**
1322AB

NOC **8187** **4331** *B*) Bandes comprises entre 1605 kHz et 4000 kHz

NOC

B1) Mode de fonctionnement des stations

MOD **8188** **4332** § 70. (1) Excepté dans les cas spécifiés aux numéros **2973, 4127** et **4342,** les classes d'émission à utiliser dans les bandes comprises entre 1605 kHz et 4000 kHz sont:
1322B

4333 *a*) La classe A3E; *ou*
4334 *b*) Les classes H3E, R3E et J3E.

4335 Cependant, sauf spécifications contraires contenues dans le présent Réglement (voir les numéros **2973, 3004, 4127, 4342** et **4354**):

4336 La classe d'émission A3E ne doit pas être utilisée par les stations côtières; *et*

4337 Après le 1er janvier 1982, la classe d'émission H3E n'est plus autorisée pour les stations côtières et les classes d'émission A3E et H3E ne sont plus autorisées pour les stations de navire.

(MOD) **8189** 1322BA **4338** (2) La puissance en crête des stations côtières radiotéléphoniques qui fonctionnent dans bandes autorisées comprises entre 1605 kHz et 4000 kHz ne doit pas dépasser les valeurs suivantes:

4339 5 kW pour les stations situées au nord du parallèle 32° Nord;

4340 10 kW pour les stations situées au sud du parallèle 32° Nord.

NOC **8190** 1322C **4341** (3) Le mode normal de fonctionnement de chaque station côtière est indiqué dans la Nomenclature des stations côtières.

NOC **8191** 1322D **4342** (4) Les émissions dans les bandes 2170-2173,5 kHz et 2190,5-2194 kHz faites respectivement sur les fréquences porteuses 2170,5 kHz et 2191 kHz sont limitées aux classes d'émission R3E et J3E et à une puissance en crête de 400 watts. Cependant, la fréquence 2170,5 kHz est également utilisée, avec la même limite de puissance, par les stations côtières, pour des émissions de classe H2B, lorsqu'on utilise le système d'appel sélectif défini à l'appendice **39** et, de plus, à titre exceptionnel, dans les Régions 1 et 3 et au Groenland pour des émissions de classe H3E afin de transmettre des messages de sécurité.

NOC

B2) Appel et réponse

MOD **8192** 1323 **4343** § 71. (1) La fréquence 2182 kHz (1) est la fréquence internationale de détresse en radiotéléphonie (voir le numéro **2973** pour les détails de son utilisation pour les communications de détresse, d'urgence, de sécurité et pour les appels des radiobalises de localisation des sinistres). La classe d'émission à utiliser en radiotéléphonie sur la fréquence 2182 kHz est la classe A3E ou H3E (voir le numéro **4127**).

NOC **8193** 1327 **4344** (2) La fréquence 2182 kHz peut également être utilisée:

NOC **8194** 1328 **4345** *a*) Pour l'appel et la réponse conformément aux dispositions de l'article **65**;

NOC **8195** 1329 **4346** *b*) Par les stations côtières pour annoncer l'émission de leurs listes d'appels sur une autre fréquence (voir les numéros **4925** à **4929**).

SUP **8196** 1329A

NOC **8197** 1330 **4347** (3) De plus, toute administration peut assigner à ses stations d'autres fréquences à utiliser pour l'appel et la réponse.

NOC **8198** 1331 **4348** § 72. Afin de faciliter la réception des appels de détresse, toutes les émissions sur la fréquence 2182 kHz doivent être réduites au minimum.

NOC **8199** 1335 **4349** § 73. Il convient que les stations de navire ouvertes à la correspondance publique assurent autant que possible da veille sur la fréquence 2182 kHz pendant leurs vacations.

MOD **8200** 1326A **4350** § 74. (1) Avant d'émettre sur la fréquence porteuse 2182 kHz, une station doit écouter sur cette fréquence pendant um laps de temps suffisant, afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**).

NOC **8201** 1326B **4351** (2) Les dispositions du numéro **4350** ne s'appliquent pas aux stations en détresse.

SUP **8191.1** 1322D.2

NOC **8192.1** 1323.1 **4343.1** (1) Lorsque les administrations font assurer par leurs stations côtières une veille sur 2182 kHz pour recevoir des émissions des classes R3E et J3E ainsi que des émissions des classes A3E et H3E, les stations de navire se trouvant au-delà de la distance à laquelle elles pourraient communiquer avec ces stations côtières au moyen d'émission des classes A3E ou H3E peuvent appeler, aux fins de sécurité, les stations côtières en utilisant les classes d'émission R3E ou J3E. Cette utilisation n'est autorisée que lorsque les appels effectués avec des émissions des classes A3E et H3E ont été infructueux.

NOC

B3) Trafic

NOC **8202** **4352** § 75. (1) Les stations côtières qui utilisent pour l'appel la fréquence 2182 kHz
1336 doivent être en mesure de faire usage d'au moins une autre fréquence clhoisie dans les bandes autorisées comprises entre 1605 kHz et 2850 kHz.

MOD **8203** **4353** (2) Les satations côtières à faire des émissions radiotéléphoniques sur une ou
1336A plusieurs fréquences autres que la frequence 2182 kHz dans les bandes autorisées comprises entre 1605 kHz et 2850 kHz doivent être en mesure de faire, sur ces fréquences, des émissions de la classe A3E ou des émissions des classes H3E, R3E et J3E. Cependant, après le 1er janvier 1982, les émissions de la classe H3E ne sont plus autorisées, sauf sur la fréquence 2182 kHz (voir le également le numéro **4342**).

NOC **8204** **4354** (3) Les stations côtières ouvertes au service de la correspondance publique sur
1337 une ou plusieurs fréquences comprises entre 1605 kHz et 2850 kHz doivent pouvoir, de plus, faire des émissions de la classe H3E sur la fréquences porteuse 2182 kHz et recevoir des émissions des classes A3E et H3E sur la fréquence porteuse 2182 kHz.

NOC **8205** **4355** (4) L'une des fréquences que les stations côtières doivent être en mesure
1338 d'utiliser conformément au numéro **4352** est imprimée en caractères gras dans la Nomenclature des stations côtières pour indiquer qu'ele est la fréquence normale de travail de la station. Les fréquences supplémentaires éventuelles sont indiquées en caractères ordinaires.

NOC **8206** **4356** (5) Les fréquences de travail des stations côtières doivent être choisies de
1339 manière à éviter des brouillages avec les autres stations.

NOC

B4) Dispositions additionnelles applicables à la Région 1

SUP **8207**
1340

MOD **8208** **4357** § 76. La puissance en crête des émetteurs des stations radiotéléphoniques de
1341 navire qui fonctionent dans les bandes autorisées comprises entre 1605 kHz et 2850 kHz ne doit pas dépasser 400 watts.

NOC **8209** **4358** § 77. (1) Il convient que toutes les stations de navire effectuant des voyages
1343 internationaux soient en mesure d'utiliser:

NOC **8210** **4359** *a*) Les fréquences de travail navire-côtière suivantes, si les nécessités de leur service l'exigent:

4360 La fréquence porteuse 2046 kHz (fréquence assignée 2047,4 kHz et la fréquences porteuse 2049 kHz (fréquence assigné 2050,4 kHz) pour des émissions des classes R3E et J3E;

4361 La fréquence porteuse 2049 kHz également pour des émissions des classes A3E et H3E jusqu'au 1er janvier 1982;

NOC **8211** **4362** *b*) Les fréquences navire-navire suivantes, si les nécessités de leur service l'exigent:

4363 La fréquence porteuse 2053 kHz (fréquence assignée 2054,4 kHz) et la fréquence porteuse 2056 kHz (fréquence assignée 2057,4 kHz) pour des émissions des classes R3E et J3E;

4364 La fréquence porteuse 2056 kHz également pour des émissions des classes A3E et H3E jusqu'au 1er janvier 1982.

4365 Ces fréquences peuvent être utilisées comme fréquences supplémentaires navire--côtière.

NOC **8212** **4366** (2) Ces fréquences ne sont pas utilisées pour le trafic entre stations de même
1346 nationalité.

NOC **8213** **4367** § 78. (1) Les navires qui échangent fréquemment de la correspondance avec une
1348 station côtière d'une nationalité autre que la leur peuvent utiliser les mêmes fréquences que les navires ayant la nationalité de cette station lorsque les administrations intéressés en sont ainsi convenues.

NOC **8214** **4368** (2) Dans des circonstances exceptionnelles, si l'utilisation des fréquences
1348A conformément aux dispositions des numéros **4358** à **4365** ou du numéro **4367** se révèle impossible, une station de navire peut utiliser l'une des fréquences navire-côtière qui lui sont assignées à l'échelon national pour communiquer avec une station côtière d'une autre nationalité, sous la réserve expresse que la station côtière aussi bien que la station de navire, en appliction des dispositions du numéro **4915,** prennent les précautions voulues pour que l'utilisation de ladite fréquence ne cause pas de brouillage préjudiciable au service pour lequel l'emploi de cette fréquences est autorisé.

NOC

B5) Dispositions additionnelles applicables aux Régions 2 et 3

NOC **8215** **4369** § 79. Il convient que toutes les stations de navire effectuant des voyages
1351 internationaux soient en mesure d'utiliser, si les nécessités de leur service l'exigent, les fréquences porteuses navire-navire:

NOC 2635 kHz (fréquence assignée 2636,4 kHz);
2638 kHz (fréquence assignée 2639,4 kHz).

Les conditions d'utilisation de ces fréquences sont spécifiée au numéro **4193**.

NOC **8216** **4370** *C)* Bandes comprises entre 4000 kHz et 23 000 kHz

NOC

C1) Mode de fonctionnement des stations

NOC **8217** **4371** § 80. (1) Les classes d'émission à utiliser pour la radiotéléphonie dans les
1351A bandes comprises entre 4000 kHz et 23 000 kHz sont les classes H3E (1), R3E et J3E.

NOC **8218** **4372** (2) Le mode de fonctionnement normal de chaque station côtière est indiqué
1351B dans la Nomenclature des stations côtières.

NOC **8219** **4373** (3) Les stations côtières radiotéléphoniques qui utilisent les classes d'émission
1351C H3E (1), R3E ou J3E dans les bandes comprises entre 4000 kHz et 23 000 kHz doivent avoir la puissance minimale nécessaire pour couvrir leur zone de service et ne doivent en aucun cas avoir une puissance en crête dépassant 10 kW par voie.

NOC **8220** **4374** (4) Les stations radiotéléphoniques de navire qui utilisent les classes d'émission
1351D H3E (1), R3E ou J3E dans les bandes comprises entre 4000 kHz et 23 000 kHz ne doivent en aucun cas avoir une puissance en crête dépassant 1,5 kW par voie.

NOC

C2) Appel et réponse

NOC **8221** **4375** § 81. (1) Les stations de navire peuvent utiliser pour l'appel en radiotéléphonie
1352 les fréquences porteuses suivantes:

4125 kHz (2) (3);
6215,5 kHz (4);
8257 kHz;
12 392 kHz;
16 522 kHz;
22 062 kHz.

SUP **8217.1**
1351A.1

MOD **8217.2** **4371.1**
1351A.2

MOD **8219.1** **4373.1**
1351C.1

MOD **8220.1** **4374.1**
1351D.1

(1) Pour l'utilisation de la classe d'émission H3E voir les numéros **2982** et **2986**.

MOD **8221.1** **4375.1**
1352.1

(2) Aux États-Unis et au Canada, l'utilisation en commun de la fréquence porteuse 4125 kHz par les stations côtières et les stations de navire pour la radiotéléphonie simplex à bande latérale unique est également autorisée sous réserve que la puissance en crête de ces stations ne dépasse par 1 kW (voir aussi le numéro **4376.2**).

MOD **8221.2** **4375.2**
1352.2

(3) Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, l'utilisation en commun de la fréquence porteuse 4125 kHz par les stations côtières et les stations de navire pour la radiotéléphonie simplex à bande latérale unique pour l'appel, la réponse et la sécurité est également autorisées, sous réserve que la puissance en crête de ces stations ne dépasse pas 1 kW. Dans ces zones, l'utilisation de la fréquence porteuse 4125 kHz comme fréquence de travail n'est pas autorisée (voir aussi les numéros **2982, 3030** et **4375.1**).

MOD **8221.3** **4375.3**
1352.3

(4) Dans la zone de la Région 3 située au sud du paralléle 25° Nord, l'utilisation en commun de la fréquence porteuse 6215,5 kHz par les stations côtières et les stations de navire pour la radiotéléphonie simplex à bande latérale unique por l'appel, la réponse et la sécurité est également autorisée, sous réserve que la puissance en crête de ces stations ne dépasse pas 1 kW. Dans cette zone, l'utilisation de la fréquence porteuse 6215,5 kHz comme fréquence de travail n'est pas autorisée (voir aussi le numéro **2986**).

NOC **8222** **4376** (2) Les stations côtières peuvent utiliser pour l'appel en radiotéléphonie les
1352A fréquences porteuses suivantes (1):

4419,4 kHz (2);
6521,9 kHz (2);
8780,9 kHz;
13 162,8 kHz;
17 294,9 kHz;
22 658 kHz.

NOC **8223** **4377** § 82. Les stations de navire et les staions côtières qui emploient l'appel sélectif
1352AA numérique mentionné au numéro **4681** peuvent utiliser les fréquences indequées respectivement aux numéros **4683** et **4684.**

NOC **8224** **4378** § 83. Les vacations des stations côtières ouvertes à la correspondance publique
1354 et la ou les fréquences sur lesquelles une veille est maintenue sont indiquées dans la Nomenclature des stations côtières.

NOC **8225** **4379** § 84. (1) Dans la zone des Régions 1 et 2 située au sud du parallèle Nord, y
1351G compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, avant d'émettre sur la fréquence porteuse 4125 kHz ou 6215,5 kHz, une station doit écouter sur cette fréquence pendant en laps de temps suffisant afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**).

NOC **8226** **4380** (2) Les dispositions du numéro **4379** ne s'applequent pas aux stations en
1351H détresse.

NOC

C3) Trafic

NOC **8227** **4381** § 85. (1) Pour l'exploitation en radiotéléphonie duplex, les fréquences d'émission
1355 des stations côtières et des stations de navire qui correspondent avec elles sont appariées, ainsi qu'il est indiqué dans l'appendice **16** sauf, provisoirement, lorsque les conditions de travail interdisent l'utilisation de fréquences appariées pour répondre aux besoins d'exploitation.

MOD **8228** **4382** (2) La section B de l'appendice **16** indique les fréquences à utiliser pour
1356 l'exploration en radiotéléphonie simplex. Dans ce cas, la puissance en crête des émetteurs des stations côtières ne doit pas dépasser 1 kW.

MOD **8229** **4383** (3) Les fréquences indiquées dans l'appendice **16** pour l'émission des stations
1357 de navire peuvent être utilisées par les navires de toutes catégories selon des besoins du trafic.

MOD **8230** **4384** (4) Les carectéristiques techniques des émetteurs utilisés pour la radiotéléphonie
1358 dans les bandes comprises entre 4000 kHz et 23 000 kHz sont spécifiées à l'appendice **17**.

NOC **8231** **4385** *D*) Bandes comprises entre 156 MHz et 174 MHz

NOC

D1) Appel et réponse

MOD **8232** **4386** § 86. (1) La fréquence 156, 8 MHz esta la fréquence internationale de détresse,
1359 de sécurité et d'appel en radiotéléphonie pour les stations qui font usage de fréquences des bandes autorisés comprises entre 156 MHz et 174 MHz (voir le munéro **2994** pour les détails de son utilisation). La classe d'emission utiliser pour la radiotéléphonie sur la fréquence 156,8 MHz esta la classe G3E (voir l'appendice **19**).

NOC **8223** **4387** (2) La fréquence 156,8 MHz peut aussi être utilisée:
1359A

4388 *a*) Par les stations côtières et les stations de navire pour l'appel et la réponse, conformémente aux dispositions des articles 62 et 65;

4389 *b*) Par les stations côtières pour annoncer l'émission, sur une autre fréquence, de leurs listes d'appels et de renseignements maritimes importants (voir les numéros **4925** à **4929**).

NOC **8222.1** **4376.1** (1) Ces fréquence peuvent, de plus être utilisées par les stations côtières pour des émissions
1352A.1 de la classe H2B, lorsqu'on utilise le système d'appel sélectif défini à l'appendice **39**.

MOD **8222.2** **4376.2** (2) Dans les Régions 2 et 3, l'utilisation en commun des fréquences porteuses 4419,4 kHz et
1352A.2 6521,9 kHz par les stations côtières et les stations de navire pour la radiotéléphonie simplex à bande latérale unique est également autorisée sous réserve que la puissance en crête de ces stations ne dépasse pas 1 kW. Il convient que l'utilisation à cet effet de la fréquence porteuse 6521,9 kHz soit limitée aux heures de jour (voir aussi le numéro **4375.1**).

NOC 8234 4390 (3) La fréquence 156,8 MHz peut être utilisée par les sations de navire et les
1359B stations côtières pour l'appel sélectif.

NOC 8235 4391 (4) Les administrations peuvent, si elles le désirent, utiliser pour l'appel une des
1361 voies de correspondance publique désignées à l'appendice **18**. Il en est alors fait mention dans la Nomenclature des stations côtières.

MOD 8236 4392 (5) Les stations côtières et de navire du service de la correspondance publique
1362 peuvent utiliser, pour l'appel, une fréquence de travail dans les conditions prescrites aux articles 62 et 65.

NOC 8237 4393 (6) Toute émission dans la bande 156,725-156,875 MHz (1) pouvant causer
1363 des brouillages préjudiciables aux émissions autorisées des stations du service mobile maritime sur 156,8 MHz est interdite.

NOC 8238 4394 (7) Afin de faciliter la réception des appels de détresse, toutes les émissions sur
1363C la fréquence 156,8 MHz, doivent être réduites au minimum et ne pas dépasser une minute.

MOD 8239 4395 (8) Avant d'émettre sur la fréquence 156,8 MHz, une station doit écouter sur
1363A cette fréquence pedant un laps de temps suffisant afin d'être certaine qu'aucun trafic de détresse n'est en cours (voir le numéro **4915**).

NOC 8240 4396 (9) Les dispositions du numéro **4395** ne s'appliquent pas aux stations em détresse.
1363B

NOC

D2) Veille

NOC 8241 4397 § 87. (1) Il convient qu'en plus de la veille prescrite au numéro **3057**, les stations
1365 côtières ouvertes au service international de correspondance publique asurent, pendante leurs vacations, la veille sur leur fréquence de réception ou sur les fréquences qui sont indiquées dans la Nomenclature des stations côtières.

NOC 8242 4398 (2) La veille sur la ou les fréquences de travail ne doit pas être moins efficace
1366 que la veille assurée par un opérateur.

NOC 8243 4399 (3) Lorsqu'elles se trouvent dans la zone de service de stations côtières du
1367 service mobile maritime radiotéléphonique dans les bandes comprises entre 156 MHz et 174 MHz, et lorsque c'est possible en pratique, il convient que les stations de navire assurent la veille sur la fréquence 156,8 MHz. Il convient que celles qui ne sont pourvues que d'appareils radiotéléphoniques fonctionnant dans des bandes autorisées comprises entre 156 MHz et 174 MHz assurent, lorsqu'elles sont en mer, une veille sur la fréquence 156,8 MHz.

NOC 8244 4400 (4) Lorqu'elles sont en liaison avec une station portuaire, les stations de navire
1367A peuvent, à titre exceptionnel et sous réserve de l'accord de l'administration intéressée, continuer à maintenir la veille seulement sur la fréquence prévue por les opérations portuaires, à condition que la station portuaire maintienne la veille sur la fréquence 156,8 MHz.

NOC 8245 4401 (5) Lorsqu'elles sont en liaison avec une station côtière du service du mou-
1367B vement des navires, les stations de navire peuvent, sous réserve de l'accord des administrations intéressées, continuer à maintenir la veille seulement sur la fréquence appropriée du service du mouvement des navires, à condition que cette station côtière maintienne la veille sur la fréquence 156,8 MHz.

NOC 8246 4402 § 88. Les stations côtières du service des opérations portuaires situées dans une
1368 zone où la fréquence 156,8 MHz est temporairement utilisée pour les communications de détresse, d'urgence ou de sécurité, assurent pendant leurs vacations une veille supplémentaire des appels émis sur la fréquence 156,6 MHz ou sur toute autre fréquence du service des opérations portuaires figurant en caractères gras dans la Nomenclarure des stations côtières.

NOC 8247 4403 § 89. Les stations côtières du service du mouvement des navires situées dans
1368A une zone où la fréquence 156,8 MHz, est utilisée pour la détresse, l'urgence et la sécurité, assurent, pendent leurs vacations, une veille supplémentaire sur les fréquences du service du mouvement des navires figuram en caractères gras dans da Nomenclature des stations côtières.

NOC

D3) Trafic

NOC 8248 4404 § 90. (1) Lorsque c'est possible en pratique, les stations côtières ouvertes au
1369 service international de correspondance publique doivent pouvoir fonctionner en duplex ou en semi-duplex avec les stations de navires équipées à cet effet.

NOC 8237.1 4393.1 (1) A partie du 1er janvier 1983, cette bande deviendra 156,7625-156,8375 MHz (voir la Résolu-
1363.1 tion **308**).

NOC **8249** **4405**
1370

(2) Il convient que le mode de fonctionnement (à une fréquence ou à deux fréquences) spécifié pour chaque vie dans l'appendice **18** soit employé dans les services internationaux (voir la Résolution **308**).

NOC **8250** **4406**
1371

§ 91. Les messages échangés dans le service des opérations portuaires doivent être limités à ceux qui concernent la manutention, le mouvement et la sécurité des navires et, en cas d'urgence, la sauvegarde des personnes. Sont exclus de ce service les messages qui ont le caractère de correspondance publique.

NOC **8251** **4407**
1371A

§ 92. Les messages échangés dans le service du mouvement des navires doivent être limités à ceux concernant le mouvement des navires. Sont exclus de ce service les messages qui ont le caractère de correspondance publique.

NOC **8252** **4408**
1372

§ 93. (1) Les stations côtières qui utilisent la fréquence 156,8 MHz pour l'appel doivent pouvoir utiliser au moins une autre voie aurorisée pour le service mobile maritime international radiotéléphonique dans la bande 156-174 MHz.

NOC **8253** **4409**
1373

(2) Lorsque c'est possible en pratique, les administrations assignent aux stations côtières et aux stations de navire, pour les services internationaux qu'elles jugent nécessaires, des fréquences de la bande 156-174 MHz conformément au tableau des fréquences d'émission qui figure à l'appendice **18** (voir la Résolution **308**).

MOD **8254** **4410**
1373A

(3) L'ordre normal dans lequel il convient que les voies soient mises en service dans la bande 156-174 MHz est indiqué par les numéros inscrits dans les colonnes correspondantes de l'appendice **18**.

NOC **8255** **4411**
1373B

(4) Il convient que les administrations fassent en sorte, autant que possible, que les stations de navire disposant des voies qui correspondent aux numéros encerclés du tableau de l'appendice **18** puissent obtenir une utilisation raisonnablement suffisant des services disponibles.

NOC **8256** **4412**
1374

(5) En assignant des fréquences à leurs stations côtières, il convient que les administrations coopèrent dans le cas où des brouillages préjudiciables sont à craindre.

NOC **8257** **4413**
1375

(6) Les voies sont désignées par des numéros dans de tableau des fréquences d'emission qui figure à l'appendice **18** (voir la Résolution **308**).

NOC **8258** **4414**
1376

§ 94. (1) En assignant des fréquences aux stations des services autres que le service mobile maritime, les administrations doivent éviter de causer des brouillages au service maritime international dans les bandes comprises entre 156 MHz et 174 MHz.

MOD **8259** **4415**
1377

(2) L'utilisation des voies para le service mobile maritime à des fins autres que celles indiquées dans le tableau des fréquences d'emission qui figure à l'appendice **18** doit être telle qu'aucun brouillage préjudiciable ne soit causé aux services fonctionnant conformément à ce tableau et ne doit causer aucun préjudice au développement de ces services (voir la Résolution **308**).

NOC **8260** **4416**
1379

§ 95. La puissance de l'onde porteuse des émetteurs des stations de navire ne doit pas dépasser 25 watts pour les appareils mis en service après le 1er janvier 1970.

4417 à **4440**

(Non attribués).

N58/37A

ARTICLE 61

NOC

Ordre de priorité des communications dans le service mobile maritime et dans le service mobile par satellite

MOD **8361** **4441**
1496A

L'ordre de priorité des communcitions (1) dans de service mobile maritime et dans le service mobile maritime par satellite doit être l'ordre ci-après, sauf impossibilité pratique dans un système entièrement automatisé: cependant, même dans ce cas, la priorité doit être donnée aux communications de la première catégorie:

1) Appels de détresse, messages de détresse et trafic de détresse;
2) Communications précédées du signal d'urgence;
3) Communications précédées du signal de sécurité;
4) Communications relatives aux relèvements radiogoniométriques;
5) Communications relatives à navigation et à la sécurité des mouvements des aéronefs participant à des opérations de recherche et de sauvetage;
6) Communications relatives à la navigation, aux mouvements et aux besoins des navires et des aéronefs, et messages d'observation météorologique destinés à un service météorologique officiel;

ADD **8361.1** **4441.1**

(1) Le terme *communications* employé dans le présent article englobe les radiotélégrammes, les conservations radiotéléphoniques ainsi que les communications radiotélex.

7) ETATPRIORITENATIONS — Radiotélégrammes relatifs à l'application de la Carte des Nations Unies;
8) ETATPRIORITE — Radiotélégrammes d'État avec priorité et communications d'État pour lesquelles le droit de priorité a été expressément demandé;
9) Communications de service relatives au fonctionnement du service de télécommuncation et à des communications précédemment écoulées;
10) Communications d'État autres que celles indiquées à l'alinéa 8 ci-dessus, communications privées ordinaires, radiotélégrammes RTC (1) et radiotélégrammes de presse.

4442 à 4664 *(Non attribués).*

N59

ARTICLE 62

NOC

Procédure relative à l'appel sélectif dans le service mobile maritime

SECTION I

NOC

Généralités

MOD **8387** 1235B **4665** § 1. (1) Dans la bande 1605-4000 kHz, l'appel sélectif peu être émis sus des fréquences de travais appropriées à la radiotéléphonie dans des sens côtière vers navire et navire vers côtière, et entre navires.

MOD **8388** 1239A **4666** (2) Des appels sélectifs peuvent être émis sur la fréquence 156,8 MHz et sur des fréquences de travail appropriées à la radiotéléphonie, dans les sens côtière vers navire et navire vers côtière, et entre navires.

SECTION II

Système séquential à une seule fréquence

NOC **8389** **4667** *A*) Généralités

NOC **8390** 999A **4668** § 2. Les caractéristiques du système international d'appel sélectif séquentiel à une seule fréquence doivent être conformes aux dispositions l'appendice **39**.

SUP **8391** 1013AA

NOC **8392** **4669** *B*) Méthode d'appel

NOC **8393** 999B **4670** § 3. (1) L'appel se compose:

4671
a) Du numéro d'appel sélectif où du numéro ou signal d'identification de la station appelée, suivi
b) Du numéro d'appel sélectif ou du numéro ou signal d'identification de la station appelante.

4672 Toutefois, en ondes métriques, lorsque l'appel émane d'une station côtière, le numéro de la voie à utiliser pour la réponse et pour le trafic peut être substitué au numéro ou signal d'identification de la station côtière.

Cet appel est transmis deux fois.

NOC **8394** 999C **4673** (2) Si une station appelée ne répond pas, il convient normalement d'attendre au moins cinq minutes avant de répéter l'appel: ensuite, il convient d'attendre encore quinze minutes avant de renouveler l'appel.

ADD **8361.2** **4441.2** (1) RCT (Red Cross Telegrams): télégrammes concernant les personnes protégées en temps de guerre par les Conventions de Génève du 12 août 1949.

(MOD) **8395** **4674** (3) L'utilisation d'un «appel à tous les navires» est restreinte aux cas de détresse et d'urgence dans les bandes des ondes hectométriques et décamétriques, ainsi qu'à l'annonce d'avis d'un grande importance pour la navigation émis dans ces bandes; en outre, il peut être aux fins de sécurité dans la bande des ondes métriques. L'«appel á tous les navires» ne peut être utilisé que pour compléter, le cas échéant, les procédures de détresse spécifiées aux numéros **3101, 3102, 3116** et **3117** et ne doit en aucun cas se susbtituer à ces procédures, notamment aux signaux d'alarme mentionnés dans les numéros **3268** et **3270**.
999CA

NOC **8396** **4675** *C)* Réponse aux appels

NOC **8397** **4676** § 4. La réponse aux appels doit se faire:
999D

4677 *a)* En radiotélégraphie, conformément aux dispositions des numéros **4767** et **4769**;

4678 *b)* En radiotéléphonie, conformément aux dispositions des números **4982** à **5002**.

NOC **8398** **4679** *D)* Fréquences à utiliser

MOD **8399** **4680** § 5. Il convient que les sélectifs soient émis sur une ou plusiers des fréquences porteuses ci-dessus:
999E

500 kHz;
2170,5 kHz (1);
4125 kHz;
4419,4 kHz;
6521,9 kHz;
8780,9 kHz;
13 162,8 kHz;
17 294,9 kHz;
22 658 kHz;
156,8 MHz (2).

SECTION III

NOC **Système d'appel sélectif numérique**

NOC **8400** **4681** § 6. Il est possible d'utiliser un système d'appel sélectif numérique qui soit en tous points conforme aux dispositions des Avis pertinents du CCIR tenant compte de tous les aspects techniques, d'exploitation et de compatibilité qui entrent en jeu.
999F

SUP **8401**
1013AB

MOD **8402** **4682** § 7. Les fréquences qui peuvent être assignées aux stations de navire et aux stations côtières pour l'appel sélectif numérique sont les suivantes:
(ex **8739**)
1238B

MOD **8403** **4683** *a) Stations de navire:*
(ex **8740**)
1238C

4187,6 kHz;
6281,4 kHz;
8375,2 kHz;
12 562,3 kHz;
12 562,8 kHz;
16 749,9 kHz;
16 750,4 kHz;

MOD **8399.1** **4680.1** (1) Cette fréquence a remplacé le fréquence porteuse 2182 kHz pour l'appel sélectif, sous réserve des dispositions du numéro **2976**.
999E.1

MOD **8399.2** **4680.2** (2) Normalement, il convient que l'appel sélectif sur cette fréquence se fasse seulement dans le sens côtière-navire ou entre navires et que les appels sélectifs de navire à station côtière soient chaque fois que possible émis sur d'autres fréquences appropriées figurant dans l'appendice **18**.
999E.2

22 248 kHz;
22 248,5 kHz;

MOD **8404** **4684** *b) Stations côtières:*
(ex **8741**)
1238D

4357 kHz;
6506 kHz;
8718,5 kHz;
13 100 kHz;
13 100,5 kHz;
17 232 kHz;
17 232,5 kHz;
22 595 kHz;
22 595,5 kHz.

4685 à **4709** *(Non attribués.)*

N60

ARTICLE 63

NOC

Procédure générale radiotélégraphique dans le service mobile maritime

SECTION I

NOC

Dispositions générales

MOD **8423** **4710** § 1. La procédure détaillée dans le présent article est obligatoire, sauf dans les cas de détresse, d'urgence ou de sécurité, auxquels sont aplicables les dispositions du chapitre IX.
1000

MOD **8424** **4711** § 2. L'emploi des signaux du code Morse figurant dans l'instruction pour l'exploitation du service télégraphique public international est obligatoire. Toutefois, pour les radiocommunications d'un caractère spécial, l'usage d'autres signaux n'est pas exclu.
1003

MOD **8425** **4712** § 3. Les abréviations réglementaires définies à l'appendice **14** doivent être utilisées.
1005

SECTION II

NOC

Opérations préliminaires

NOC **8426** **4713** § 4. (1) Avant d'émettre, une station prend les précautions voulues pour s'assurer que ses émissions ne brouilleront pas des transmissions en cours; si un tel brouillage est probable, la station attend un arrêt opportun de la transmission qu'elle pourrait brouiller. Cette obligation ne s'applique pas aux stations qui peuvent fonctionner sans surveillance par des moyens automatiques (voir le numéro **3863**) sur des fréquences destinées aux systèmes à bande étroite de télégraphie à impression directe.
1007

NOC **8427** **4714** (2) Dans le cas où même en opérant ainsi, l'émission de cette station vient à brouiller une transmission déjá en cours, on applique les règles suivantes:
1008

MOD **8428** **4715** *a)* La station de navire dont l'émission brouille la communication entre une station mobile et une station côtière doit cesser d'émettre à la première demande de la situation côtière;
1009

MOD **8429** **4716** *b)* La station de navire dont l'émission brouille les communications entre des station mobiles doit cesser d'émettre à la première demande de l'une quelconque de ces stations;
1010

MOD **8430** **4717** *c)* La station qui demande cette cessation doit indiquer la durée approximative de l'attente imposée à la station dont elle fait suspendre l'émission.
1011

SECTION III

NOC

Appels en radiotélégraphie

NOC **8431** **4718** *A) Généralités*

NOC **8432** **4719** § 5. Les dispositions de la présente section ne sont pas applicables au service mobile maritime par satellite.
1064A

MOD **8433** **4720** § 6. (1) En règle générale, il incombe à la station de navire d'établir la communications avec la station côtière. A cet effet, la station de navire ne peut appeler la station côtière qu'après arrivée dans sa zone de service, c'est-à-dire dans la zone où, en utilisant une fréquence appropriée, la station de navire peut être entendue par la station côtière.
1065

MOD **8434** **4721** (2) Toutefois, une station côtière qui a du trafic pour une station de navire peut appeler cette station si elle a des raisons de croire que celle-ci se trouve dans sa zone de service et assure l'écoute.
1066

MOD **8435** **4722** § 7. (1) De plus, chaque station côtière doit, pour autant que cela est possible en pratique, transmettre ses appels sous forme de «listes d'appels» formées des indicatifs d'appel, classés par ordre alphabétique, des stations de navire pour lesquelles elle a du trafic en instance. Ces appels ont lieu à des moments déterminés par accord entre les administrations intéressées, espacés de deux heures au moins et de quatre heures au plus, pendant les heures d'ouverture de la station côtière.
1067

NOC **8436** **4723** (2) Toutefois, dans les bandes comprises entre 4000 kHz et 27 500 kHz, les listes d'appels peuvent être transmises à des moments espacés d'une heure au moins.
1067A

NOC **8437** **4724** (3) Il convient que les stations côtières évitent de répéter continuellement ou fréquemment leur indicatif d'appel ou le signal CQ (voir les numéros **1799** a **1803**).
1068

MOD **8438** **4725** (4) Toutefois, dans les bandes comprises entre 4000 kHz et 27 500 kHz, une station côtière peut transmettre son indicatif d'appel à certains intervalles de temps en utilisant des émissions de type A1A, afin de permettre aux stations de navire de choisir pour l'appel la bande dont les fréquences présentent les caractéristiques de propagation les plus favorables pour établir une communication satisfaisante (voir le numéro **4261**).
1068A

NOC **8439** **4726** (5) Les stations côtières transmettent ces listes d'appels sur leurs fréquences normales de travail, dans les bandes appropriées. Cette transmission est précédée d'un appel général à toutes les stations (CQ).
1069

NOC **8440** **4727** (6) L'appel général à toutes les stations annonçant la liste d'appels peut être émis sur une fréquence d'appel, sous la forme suivante:
1070

CQ (trois fois au plus);
Le mot DE;
Trois fois, au plus, l'indicatif d'appel de la station appelante;
QSW suivi de l'indication de la ou des fréquences de travail sur la(les)-quelle(s) la liste d'appels va être transmise aussitôt après.

En aucun cas, ce préambule ne peut être répété.

NOC **8441** **4728** (7) Les dispositions du numéro **4727**:
1071

NOC **8442** **4729** *a*) Sont obligatoires lorsque c'est la fréquence 500 kHz qui est utilisée;
1071A

MOD **8443** **4730** *b*) Ne s'appliquent pas lorsqu'il s'agit de fréquences des bandes comprises entre 4000 kHz et 27 500 kHz.
1072

NOC **8444** **4731** (8) Les heures auxquelles les stations côtières transmettent leurs listes d'appels, ainsi que les fréquences et les classes d'émission qu'elles utilisent à cet effet, doivent être mentionnées dans la Nomenclature des stations côtières.
1073

MOD **8445** **4732** (9) Il convient que les stations de navire écoutent dans toute la mesure du possible les émissions des listes d'appels des stations côtières. Lorsqu'elles perçoivent leur indicatif d'appel dans une liste, elles doivent répondre aussitôt qu'elles le peuvent.
1074

MOD **8446** **4733** (10) Lorsque le trafic ne peut pas être écoulé immédiatement, la station côtière fait connaître à chaque station de navire intéressée l'heure probable à laquelle le travail pourra commencer ainsi que, si cela est nécessaire, la fréquence et la classe d'émission qui seront utilisées.
1075

MOD **8447** **4734** § 8. Lorsqu'une stations côtière reçoit pratiquement en même temps des appels de plusieurs stations de navire, elle décide de l'ordre dans lequel ces stations pourront lui transmettre leur trafic. Sa décision est fondée sur l'ordre de priorité (voir le numéro **4441**) des radiotélégrammes en instance dans les stations de navire, et sur le nécessité de permettre á chacune des stations appelantes d'écouler le plus grand nombre possible de communications.
1076

NOC **8448** **4735** § 9. (1) Lorsqu'une station appelée ne répond pas à l'appel émis trois fois à des intervalles de deux minutes, l'appels doit cesser et il ne doit pas être renouvelé avant quinze minutes.
1077

ADD **8448A** **4736** (2) Dans les cas d'une communication entre une station du service mobile maritime et une station d'aéronef, l'appel peut être renouvelé après cinq minutes, nonobstant les dispositions du número **4735.**
1078

NOC **8449** **4737** (3) Avant le renouveler l'appel, la station appelante doit s'assurer que la station
1079 appelée n'est pas en communication avec une autre station.

NOC **8450** **4738** (4) S'il n'y a pas de raison de craindre que des brouillages préjudiciables n'affectent
1080 des communications en cours, les dispositions des numéros **4146** et **4735** ne sont pas applicables. Dans ce cas, l'appel émis trois fois à des intervalles de deux minutes peut être renouvelé après un intervalle de durée inférieure à quinze minutes mais ou moins égale à trois minutes.

MOD **8451** **4739** § 10. Les stations de navire ne doivent pas émettre leur onde porteuse entre les
1081 appels.

MOD **8452** **4740** § 11. Lorsque le nom et l'adresse de l'administration ou de l'exploitation privée
1082 dont dépend une station de navire de sont pas mentionées dans la nomenclature appropriée on ne sont plus en concordance avec les indications de celle-ci, la station de navire a le devoir de donner d'office à la station côtière à laquelle elle transmet du trafic tous les renseignements nécessaires à cet égard.

MOD **8453** **4741** § 12. (1) La station côtière peut, au moyen de l'abréviation TR, demander à la
1083 station de navire de lui fournir les renseignements suivants:

NOC **8454** **4742** *a*) Position et, autant que possible, route et vitesse;
1084

NOC **8455** **4743** *b*) Prochain lieu d'escale.
1085

MOD **8456** **4744** (2) Il convient que les renseignements indiqués aux numéros **4741** à **4743**, précédés
1086 de l'abréviation TR, soient fournis par les stations de navire, chaque fois que cela semble approprié, sans demande préalable de la station côtière. Ces renseignements ne sont fournis qu'après autorisation du commandant ou de la personne responsable du navire ou de tout autre bâtiment portant la station.

NOC **8457** **4745** *B)* Appels à plusieurs stations

MOD **8458** **4746** § 13. Les dispositions de la présente section ne sont pas applicables au service
1087A mobile maritime par satellite.

NOC **8459** **4747** § 14. Deux types de signaux d'appel «à tous» sont reconnus:
1088

NOC **8460** **4748** *a*) Appel CQ suivi de la lettre K (voir les números **4750** et **4751**);
1089

NOC **8461** **4749** *b*) Appel CQ non suivi de la lettre K (voir le numéro **4752**).
1090

MOD **8462** **4750** § 15. Les stations qui désirent entrer en communication avec des stations du
1091 service mobile maritime, sans toutefois connaître le nom de celles de ces stations qui sont dans leur zone de service, peuvent employer le signal de recherche CQ pour remplacer dans l'appel l'indicatif de la station appelée. L'appel doit alors être suivi le la lettre K (appel général à toutes les stations du service mobile maritime avec demande de réponse).

MOD **8463** **4751** § 16. L'emploi de l'appel CQ suivi de la letre K est interdit dans le régions où
1092 le trafic est intense. Par exception, il peut être utilisé avec des signaux d'urgence.

NOC **8464** **4752** § 17. L'appel CQ non suivi de la lettre K (appel général à toutes les stations
1093 sans demande de réponse) est employé avant la transmission des renseignements de toute nature destinés à être lus ou utilisés par quiconque peut les capter.

NOC **8465** **4753** § 18. L'appel CP suivi de deux ou plusieurs indicatifs d'appel ou d'un mot
1094 conventionnel (appel à certaines stations réceptrices sans demande de réponse) n'est employé que pour la transmission des renseignements de toute nature destinés à être lus ou utilisés par les personnes autorisées.

SECTION IV

NOC **Méthode d'appel, réponse à l'appel et signaux préparatoires au trafic**

NOC **8466** **4754** *A)* Méthode d'appel — Télégraphie Morse
SUP **8467**
1013A

NOC **8468** **4755** § 19. (1) L'appel est constitué comme suit:
1013B

Deux fois, au plus, l'indicatif d'appel de la station appelée;
Le mot DE;
Deux fois, au plus, l'indicatif d'appel de la station appelante;

Les renseignements demandés au numéro **4761** et, éventuellement, aux numéros **4764** et **4765**;
La lettre K.

NOC **8469** 1013C **4756** (2) Pour l'appel normal, lorsque les conditions du número **4261** ont été satisfaites, l'appel spécifié au numéro **4755** peut être transmis une seconde fois, après un intervalle d'au moins une minute, après quoi il ne doit pas être renouvelé avant trois minutes.

NOC **8470** **4757** *B*) Fréquence à utiliser pour l'appel et les signaux préparatoires

NOC **8471** 1014 **4758** § 20. (1) Pour faire l'appel ainsi que pour transmettre les signaux préparatoires, la station appelante utilise une fréquence sur laquelle veille le station appelée.

MOD **8472** 1015 **4759** (2) Une station de navire appelant une station côtière dans l'une des bandes de fréquences situées entre 4000 kHz et 27 500 kHz doit faire usage d'une fréquence de la bande d'appel spécialement réservée à cet effet.

NOC **8473** **4760** *C*) Indication de la fréquence à utiliser pour le trafic

MOD **8474** 1016A **4761** § 21. (1) L'appel, tel qu'il est défini au numéro **4755,** doit contenir l'abréviation réglementaire indiquant la fréquence de travail et, si c'est utile, la classe d'émission que la situation appelant se propose d'utiliser pour transmettre son trafic.

MOD **8475** 1019A **4762** (2) Lorsque l'appel émis par une station côtière ne contient pas l'indication de la fréquence à utiliser pour la trafic, cela signifie que cette station se propose d'utiliser pour le trafic sa fréquence normale de travail indiquée dans la Nomenclature des stations côtières.

NOC **8476** **4763** *D*) Indication de priorité, du motif de l'appel et de la transmission des radiotélégrammes par séries

NOC **8477** 1020A **4764** § 22. (1) La station appelante transmet l'abréviation réglementaire après les signaux preparatoires susmentionnés, afin d'indiquer s'il agit d'une message prioritaire autre qu'un message de détresse, d'urgence ou de sécurité (voir le numéro **4441**) et d'indiquer le motif de l'appel.

NOC **8478** 1021 **4765** (2) De plus, lorsque la station appelante désire transmettre ses radiotélégrammes par séries, elle l'indique en ajoutant l'abréviation réglementaire pour demander le consentement de la station appelée.

NOC **8479** **4766** *E*) Forme de la réponse à l'appel

MOD **8480** 1022A **4767** § 23. La réponse à l'appel est constituée comme suit:
Deux fois, au plus, l'indicatif d'appel de la station appelante;
Le mot DE;
Une fois seulement, l'indicatif d'appel de la station appelée.

NOC **8481** **4768** *F*) Fréquence de réponse

NOC **8482** 1023 **4769** § 24. Sauf indication contraire dans le présent Règlement, pour transmettre la réponse aux appels et aux signaux préparatoires, la station appelée emploie la fréquence sur laquelle veille la station appelante, à moins que la station appelante n'ait désigné une autre fréquence pour la réponse.

NOC **8483** **4770** *G*) Accord sur la fréquence à utiliser pour le trafic

NOC **8484** 1027 **4771** § 25. (1) Si la station appelée est d'accord avec la station appelante, elle transmet:

NOC **8485** 1028 **4772** *a*) La réponse à l'appel;

NOC **8486** 1029 **4773** *b*) L'abréviation réglementaire indiquant qu'à partir de ce moment elle écoute sur la fréquence de travail annoncée par la station appelante;

NOC **8487** 1030 **4774** *c*) Éventuellement, les indications prévues, au numéro **4783;**

MOD **8488** 1031 **4775** *d*) Si c'est utile, l'abréviation réglementaire et le chiffre indiquant la force et ou l'intelligibilité des signaux reçus (voir l'appendice **14**);

NOC **8489** 1032 **4776** *e*) La lettre K, si la station appelée est prête à recevoir le trafic de la station appelante.

NOC **8490** **4777** (2) Si la station appelée n'est pas d'accord avec la station appelante sur la
1033 fréquence de travail à employer, elle transmet:

NOC **8491** **4778** *a*) La réponse à l'appel;
1034

(MOD) **8492** **4779** *b*) L'abréviation réglementaire indiquant la fréquence de travail à utiliser
1035 par la station appelante et, s'il y a lieu, la classe d'émission;

NOC **8493** **4780** *c*) Éventuellement, les indications prévues au numéro **4783.**
1036

NOC **8494** **4781** (3) Lorsque l'accord est réalisé sur la fréquence de travail que la station
1037 appelante doit employer pour son trafic, la station appelée transmet la lettre K à la suite des indications contenues dans sa réponse.

NOC **8495** **4782** *H*) Réponse à la demande de transmission par séries

NOC **8496** **4783** § 26. La station appelée, répondant à une station appelante qui a demandé à
1038 transmettre ses radiotélégrammes par séries (voir le numéro **4765**) indique, au moyen de l'abréviation réglementaire, son acceptation ou son refus. Dans le premier cas, elle spécifie, s'il y a lieu, le nombre des radiotélégrammes qu'elle est prête à recevoir en une série.

NOC **8497** **4784** *I*) Difficultés de réception

NOC **8498** **4785** § 27. (1) Si la station appelée n'est pas en mesure de recevoir le trafic
1039 immédiatement, elle répond à l'appel comme il est indiqué aux numéros **4771** à **4776**, mais elle remplace la lettre K par le signal . — . . . (attente) suivi d'un nombre indiquant en minutes la durée probable de l'attendre. Si cette durée probable dépasse dix minutes (cinq minutes dans le cas d'une station d'aéronef communiquant avec une station du servicwe mobile maritime) l'attente doit être motivée.

NOC **8499** **4786** (2) Lorsqu'une station reçoit un appel sans être certaine qu'il lui est destiné,
1040 ele ne doit pas répondre avant que cet appel ait été répété et compris. Lorsque, d'autre part, une station reçoit um appel qui est destiné, mais a des doutes sur l'indicatif d'appel de la station appelante, elle doit répondre immédiatement en utilisant l'abréviation réglementaire au lieu de l'indicatif d'appel de cette dernière station.

SECTION V

NOC **Ecoulement du trafic**

NOC **8500** **4787** *A*) Fréquence de trafic

MOD **8501** **4788** § 28. (1) En régle générale, une station du service mobile maritime transmet
1041 son trafic en employant l'une de ses fréquences de travail de la bande dans laquelle l'appel a eu lieu.

NOC **8502** **4789** (2) En plus de sa fréquence normale de travail, imprimée en caractères gras
1042 dans la Nomenclature des stations côtières, chaque station côtière peut employer une ou plusieurs fréquences supplémentaires de la même bande, conformément aux dispositions de l'article 60.

MOD **8503** **4790** (3) A l'exception du trafic de détresse (voir le chapitre IX), l'emploi des fré-
1043 quences réservées à l'appel est interdit pour le trafic.

NOC **8504** **4791** (4) Si la transmission d'un radiotélégramme a lieu sur une autre fréquence
1044 et ou une autre classe d'émission que celles utilisées pour l'appel, cette transmission est précédée:

De, deux foi au plus, l'indicatif d'appel de la station appelée;
Du mot DE;
De l'indicatif d'appel de la station appelant, une fois seulement.

NOC **8505** **4792** (5) Si la transmission a lieu sur les mêmes fréquence et classe d'émission
1045 que l'appel, la transmission du radiotélégramme est précédée, si c'est nécessaire:

De l'indicatif d'appel de la station appelée;
Du mot DE;
De l'indicatif d'appel de la station appelante.

NOC **8506** **4793**

B) Numérotage par séries quotidiennes

MOD **8507** **4794** 1046

§ 29. (1) En règle générale, les radiotélégrammes de toute nature transmis par les stations de navire sont numérotés par séries quotidiennes, en donnant le numéro 1 au premier radiotélégramme transmis chaque jour à chaque station différente.

NOC **8508** **4795** 1047

(2) Il convient qu'une série de numéros commencée en radiotélégraphie soit continuée em radiotéléphonie et inversement.

(MOD) **8509** **4796**

C) Radiotélégrammes longs

NOC **8510** **4797** 1048

§ 30. (1) Dans le cas où les deux stations sont pourvues de dispositifs leur permettant de passer de l'émission à la réception sans manœuvre de commutation, la station transmettrice peut poursuivre sa transmission jusqu'à la fin du message ou jusqu'à ce que la station réceptrice l'interrompe au moyen de l'abréviation réglementaire BK. Au préalable, les deux stations se mettent généralement d'accord sur une telle méthode de travail au moyen de l'abréviation réglementaire QSK.

(MOD) **8511** **4798** 1049

(2) Si cette méthode de travail ne peut pas être employée, les radiotélégrammes longs, tant ceux em langage clair que ceux en langage secret sont, en régle générale, transmis par tranches, chaque tranche contenant cinquante mots dans le cas du langage clair et vingt mots ou groupes dans le cas du langage secret.

NOC **8512** **4799** 1050

(3) A la fin de chaque tranche, le signal . . __ __ . . (?) signifiant «Avez-vous bien reçu le radiotélégramme jusqu'ici?» est transmis. Si la tranche a été correctement reçue, la station réceptrice répond en transmettant la lettre K, et la transmission du radiotélégramme est poursuivie.

NOC **8513** **4800**

D) Suspension du trafic

MOD **8514** **4801** 1051

§ 31. Lorsqu'une station de navire transmet sur une fréquence de travail d'une station côtière et brouille les émissions de ladite station côtière, elle doit suspendre son travail à la première demande de celle-ci.

Section VI

NOC

Fin du trafic et du travail

NOC **8515** **4802**

A) Signal de fin de transmission

NOC **8516** **4803** 1052

§ 32. (1) La transmission d'un radiotélégramme se termine par le signal . __ . __ . (fin de transmission), suivi de la lettre K.

NOC **8517** **4804** 1053

(2) Dans le cas d'une transmision par séries, la fin de chaque radiotélégramme est indiquée par le signal . __ . __ . (fin de transmission) et la fin de chaque série par la lettre K.

NOC **8518** **4805**

B) Accusé de réception

NOC **8519** **4806** 1054

§ 33. (1) L'accusé de réception d'un radiotélégramme ou d'une série de radiotélégrammes est donné sous la forme suivante:

L'indicatif d'appel de la station transmettrice;
Le mot DE;
L'indicatif d'appel de la station réceptrice;
La lettre R suivie du numéro du radiotélégramme; *ou*
La lettre R suivie du numéro du dernier radiotélégramme d'une série.

NOC **8520** **4807** 1055

(2) L'accusé de réception est transmis par la station réceptrice sur la fréquence de trafic (voir les numéros **4788** et **4789**).

NOC **8521** **4808**

C) Fin du travail

NOC **8522** **4809** 1056

§ 34. (1) La fin du travail entre deux stations est indiquée par chacune d'elles au moyen du signal . . . __ . __ (fin du travail).

NOC **8523** **4810** 1057

(2) Le signal . . . __ . __ (fin du travail) est aussi utilisé:

À la fin de toute transmission de radiotélégrammes d'information générale, d'avis généraux de sécurité et d'informations météorologiques;

À la fin de la transmission dans le service de radiocommunication à grande distance avec accusé de réceptrion différé ou sans accusé de réception.

SECTION VII

NOC

Direction du travail

NOC **8524** **4811**
1058
§ 35. Les dispositions de la présente section ne s'appliquent pas aux cas de détresse, d'urgence ou de sécurité (voir le numéro **4710**).

MOD **8525** **4812**
1059
§ 36. Dans les communications entre station côtière et station de navire, la station de navire se conforme aux instructions données par la station côtière pour tout ce qui a trait à l'ordre et à l'heure de transmission, au choix de la fréquence et de la classe d'émission, à la durée et à la suspension du travail.

MOD **8526** **4813**
1060
§ 37. Dans les communications entre stations de navire, la station appelée a la direction du travail selon les indications du numéro **4812**. Cependant, si une station côtière estime nécessaire d'intervenir, les stations de navire se conforment à ses instructions.

SECTION VIII

NOC

Essais

MOD **8527** **4814**
1061
§ 38. Lorsqu'il est nécessaire pour une station de navire d'émettre des signaux d'essai ou de réglage susceptibles de brouiller le travail de stations côtières voisines, le consentement de ces stations doit être obtenu avant d'effectuer de telles émissions.

MOD **8528** **4815**
1062
§ 39. Lorsqu'il est nécessaire pour une station du service mobile maritime de faire des signaux d'essai, soit pour le réglage d'un émetteur avant de transmettre un appel, soit pour le réglage d'un récepteur, ces signaux ne doivent pas durer plus de dix seconds. Ils doivent être constitués par une série de VVV suivie de l'indicatif d'appel de la station qui émet pour essais.

4816 à **4840**
(Non attribués.)

N61

ARTICLE 64

NOC

Procédures générales applicables à la télégraphie à impression directe à bande étroite dans le service mobile maritime (1)

SECTION I

NOC

Généralités

MOD **8580** **4841**
1062AA
§ 1. Les stations utilisant la télégraphie à impression directe à bande étroite doivent satisfaire aux dispositions des articles **59** et **60**.

NOC **8581** **4842**
1062AB
§ 2. Il convient que les procédures spécifiées dans le présent article soient appliquées, sauf dans le cas de détresse, d'urgence ou de sécurité.

NOC **8582** **4843**
1062AC
§ 3. (1) Le trafic peut être échangé avec ou sans emploi de dispositifs de correction d'erreur.

NOC **8583** **4844**
1062AD
(2) Dans las communications entre deux stations, il convient d'utiliser le mode «correction d'erreurs avec circuit de retour» (ARQ), si deux stations fonctionnent selon ce mode.

NOC **8584** **4845**
1062AE
(3) Dans les transmissions d'une station côtière ou d'une station de navire à destination de plusieurs autres stations, il convient d'utiliser le mode «correction d'erreurs sans circuit de retour» lorsque les stations en cause fonctionnent selon ce mode.

NOC **8585** **4846**
1062AF
§ 4. Les services assurés par chaque station ouverte à la correspondance publique doivent être indiqués dans la Nomenclature des stations côtières et dans la Nomenclature des stations de navire, ainsi que des renseignements concernant la taxation.

NOC **A.N61** **A.64**
(1) On peut également se reporter aux Avis pertinents du CCIR.

MOD **8586** **4847**
1062AG

§ 5. Lorsque la transmission emprunte les voies de télécommunication ouvertes à la correspondance publique, à l'exclusion des voies de télécomunication du service mobile et du service mobile par satellite et ses liaisons de connexion, il convient de tenir compte des dispositions du Règlement télégraphique et des Avis pertinents du CCITT.

SECTION II

NOC

Procédures applicables à l'exploitation manuelle

NOC **8587** **4848**

A) Généralités

MOD **8588** **4849**
1015A

§ 6. Dans le cas de l'utilisation de systèmes de télégraphie à impression directe ou de systèmes similaires dans une bande de fréquence attribuée au service mobile maritime, l'appel peut être émis, selon accord préalable, sur une fréquence de travail dont ces systèmes peuvent disposer.

NOC **8589** **4850**

B) Sens navire-station côtière

NOC **8590** **4851**
1062AH

§ 7. (1) L'opérateur de la station de navire établit la communication avec la station côtière par télégraphie Morse de classe A1A, par téléphonie ou par un autre moyen, en appliquant les procédures normales d'appel. Il lui demande ensuite une communication à impression directe, échange avec elle des renseignements concernant les fréquences à utiliser et, le cas échéant, lui indique le numéro d'appel sélectif de la station de navire pour l'impression directe, attribué conformément aux dispositions de l'appendice **38.**

NOC **8591** **4852**
1062AI

(2) L'opérateur de la station côtière établit alors la communication à impression directe sur la fréquence décidée d'un commun accord, en utilisant l'indication appropriée du navire.

NOC **8592** **4853**
1062AJ

§ 8. (1) L'opérateur de la station de navire peut également avoir recours à l'équipement à impression directe pour appeler la station côtière sur une fréquence de réception prédéterminée de celle-ci: il utilise alors le signal d'identification de la station côtière attribué conformément aux dispositions de l'appendice **38.**

NOC **8593** **4854**
1062AK

(2) L'opérateur de la station côtière établit alors la communication à impression directe sur la fréquence d'émission correspondance de sa station.

NOC **8594** **4855**

C) *Sens station côtière-navire*

NOC **8595** **4856**
1062AL

§ 9. (1) L'opérateur de la station côtière appelle la station de navire par télégraphie Morse de classe A1A, par téléphonie ou par un autre moyen, en appliquant les procédures normales d'appel.

NOC **8596** **4857**
1062AM

(2) L'opérateur de la station de navire applique alors les procédures décrites aux numéros **4851** ou **4853.**

NOC **8597** **4858**

D) Communications entre navires

NOC **8598** **4859**
1062AN

§ 10. (1) L'opérateur de la station de navire appelante établit la communication avec la station de navire appelée par télégraphie Morse de classe A1A, par téléphonie ou par un autre moyen, en appliquant les procédures normales d'appel. Il lui demande ensuite une communication à impression directe, échange avec elle des renseignements concernant les fréquences à utiliser et le cas échéant, lui indique le numéro d'appel sélectif de sa station à utiliser pour l'impression directe, numéro assigné conformément aux dispositions de l'appendice **38.**

NOC **8599** **4860**
1062AO

(2) L'opérateur de la station de navire appelée établit alors la communication à impression directe sur la fréquence décidée d'un commun accord, en utilisant l'identification appropriée du navire appelant.

SECTION III

NOC

Procédures applicables à l'exploitation automatique

NOC **8600** **4861**

A) Sens navire-station côtière

NOC **8601** **4862**
1062AP

§ 11. (1) La station de navire appelle la station côtière sur une fréquence de réception prédéterminée de celle-ci, en recourant à l'équipement à impression directe et en utilisant le signal d'identification attribué à la station côtière conformément aux dispositions de l'appendice **38.**

NOC **8602** **4863** (2) L'équipement à impression directe de la station côtière détecte l'appel et
1062AQ la station côtière répond directement, soit automatiquement, soit par un procédé manuel, sur la fréquence d'émission correspondante.

NOC **8603** **4864** *B)* Sens station côtière-navire

NOC **8604** **4865** § 12. (1) La station côtière appelle la station de navire sur une fréquence
1062AR d'émission prédéterminée de station côtière, en recourant à l'équipement à impression directe et en utilisant le numéro d'appel sélectif de la station de navire pour l'impression directe, attribué conformément aux dispositions de l'appendice **38.**

NOC **8605** **4866** (2) L'équipement à impression directe de la station de navire, accordé pour
1062AS recevoir la fréquence d'émission prédéterminée de la station côtière, détecte l'appel: la station de navire répond alors selon l'une ou l'autre des méthodes suivantes:

NOC **8606** **4867** *a)* Elle répond soit immédiatement sur la fréquence de réception
1062AT correspondante de la station côtière, soit après un certain délai, selon la procédure décrite au numéro **4853**, *ou*

NOC **8607** **4868** *b)* Son émetteur se met en marche automatiquement sur la fréquence
1062AU de réception correspondante de la station côtière; l'équipement à impression directe du navire émet alors des signaux appropriés pour indiquer qu'il est prêt à recevoir le trafic par voie automatique.

SECTION IV

NOC **Forme des messages**

NOC **8608** **4869** § 13. Lorsque la station côtière dispose des installations appropriées, le trafic
1062AV peut être échangé avec le réseat télex:

NOC **8609** **4870** *a)* Soit selon le mode «conversation»; les stations intéressées sont alors
1062AW directement reliées, automatiquement ou manuellement;

NOC **8610** **4871** *b)* Soit selon le mode «enregistrement et retransmission»: les messages
1062AX sont alors mis en mémoire à la station côtière jusqu'à ce qu'un circuit puisse être établi automatiquement ou manuellement avec le poste appelé.

(MOD) **8611** **4872** § 14. Dans le sens station côtière-navire, il convient que la forme des messages
1062AY soit conforme à celle qui est normalement utilisée dans le réseau télex.

(MOD) **8612** **4873** § 15. Dans le sens navire-station côtière, il convient que la forme des messages
1062AZ soit conforme à celle qui est normalement utilisée dans le réseau télex, moyennant l'adjonction d'un préambule établi comme suit:

NOC **8613** **4874** *a)* Dans le mode «conversation», le préambule se compose des caractères
1062BA DIRTLXyz+ transmis à la suite les uns autres, précédés d'au moins un signe «retour de chariot» et d'un signe «changement de ligne», «y» représentant le code télex de destination conformément aux Avis pertinents du CCITT, «z» représentant le numéro télex de l'abonné à terre et «+» indiquant la fin de la séquence;

NOC **8614** **4875** *b)* Dans le mode «enregistrement et retransmission», le préambule se
1062BB compose des caractères TLXyz+ transmis à la suite les uns des autres, précédés d'au moins un signe «retour de chariot» et d'un signe «changement de ligne», «y» représentant le code télex de destination conformément aux Avis pertinents du CCITT, «z» représentant le numéro télex de l'abonné à terre et «+» indiquant la fin de la séquence.

SECTION V

NOC **Procédures applicables à l'exploitation avec «correction d'erreurs sans circuit de retour»**

NOC **8615** **4876** § 16. Aux termes d'arrangements préalables, les messages peuvent être
1062BC transmis à partir d'une station côtière ou d'une station de navire à destination d'une ou plusieurs stations de navire selon de mode «correction d'erreurs sans circuit de retour», dans les cas suivants:

NOC **8616** **4877** *a)* La station de navire qui doit recevoir le message n'est pas en mesure
1062BD d'utiliser son émetteur ou n'est pas autorisée à le faire;

NOC **8617** **4878** *b)* Le message est destiné à plusieurs navires;
1062BE

NOC 8618 4879 1062BF

c) Il est nécessaire d'effectuer la réception sans surveillance selon le mode «correction d'erreurs sans circuit de retour» et l'accusé de réception automatique n'est pas exigé.

NOC 8619 4880 1062BG

§ 17. Il convient que tous les messages transmis selon le mode «correction d'erreurs sans circuit de retour» soient précédés des signes «retour de chariot» et «changement de ligne», transmis au moins une fois.

NOC 8620 4881 1062BH

§ 18. Les stations de navire peuvent accuser réception des messages transmis selon le mode «correction d'erreurs sans circuit de retour», par télégraphie Morse de classe A1A, par téléphonie ou par tout autre moyen.

4882 à 4902

(Non attribués.)

N62

ARTICLE 65

NOC

Procédure générale radiotéléphonique dans le service mobile maritime

SECTION I

NOC

Dispositions générales

MOD 8671 4903 1209

§ 1. La procédure détaillée dans le présent article est applicable aux stations radiotéléphoniques, sauf dans les cas de détresse, d'urgence ou de sécurité, auxquels sont applicables les dispositions du chapitre IX.

NOC 8672 4904 1211

§ 2. (1) Le service des stations radiotéléphoniques de navire doit être assuré par un opérateur satisfaisant aux conditions fixées à l'article 55.

NOC 8673 4905 1212

(2) Pour les indicatifs d'appel ou autres moyens d'identification des stations radiotéléphoniques côtières ou de navire, voir l'article 25.

NOC 8674 4906 1213

§ 3. Il convient que le service radiotéléphonique ouvert à la correspondance publique à bord des navires soit, si possible, exploité en duplex.

(MOD) 8675 4907 1214

§ 4. (1) On peut utiliser des dispositifs émettant un signal qui indique qu'une communication est en cours sur une voie, à condition de ne pas causer de brouillage préjudiciable au service assuré par les stations côtières.

NOC 8676 4908 1214A

(2) L'utilisation de dispositifs émettant des signaux d'appel ou d'identification continus ou répétés n'est pas autorisée.

NOC 8677 4909 1214B

(3) Une station ne peut pas émettre des informations identiques simultanément sur plusieurs fréquences lorsqu'elle communique avec une seule autre stations.

NOC 8678 4910 1214C

(4) Les stations ne doivent pas émettre d'onde perteuse entre les appels.

MOD 8679 4911 1215

(5) Il convient que les stations radiotéléphoniques soient autant que possible, équipées de dispositifs leur permettant de passer instantanément de l'émission à la réception et vice versa. Ces dispositifs sont nécessaires pour toutes les stations qui assurent des communications entre les navires et les abonnés du réseau téléphonique terrestre.

MOD 8680 4912 1216

§ 5. Les stations équipées pour la radiotéléphonie peuvent transmettre et recevoir les radiotélégrammes en radiotéléphonie. Les stations côtières qui assurent un tel service et qui sont ouvertes à la correspondance publique doivent être signalées dans la Nomenclature des stations côtières.

NOC 8681 4913 1216A

(2) Pour faciliter les radiocommunications, les abréviations de service indiquées à l'appendice 14 peuvent être utilisées.

NOC 8682 4914 1216B

(3) S'il faut épeler certaines expressions, des mots difficiles, des abréviations de service, des chiffres, etc., on utilise les tables d'épellation phonétique de l'appendice **24**.

SECTION II

NOC

Opérations préliminaires

NOC 8683 4915 1217

§ 6. Avant d'émettre, une station prend les précautions voulues pour s'assurer que ses émissions ne brouilleront pas des transmissions en cours, si un tel brouillage est probable, la station attend un arrêt opportun de la transmision qu'elle pourrait brouiller.

NOC 8684 4916 1218

(2) Dans le cas où, même en opérant ainsi, l'émission de cette station vient à brouiller une transmission déjà en cours, on applique les règles suivantes:

MOD 8685 4917 1219

a) La station de navire dont l'émission brouille la communication entre une station mobile et une station côtière doit cesser d'émettre à la première demande de la station côtière;

MOD **8686** **4918**
1220

b) La station de navire don't d'émission brouille les communications entre des stations mobiles cesser d'émettre à la première demande de l'une qualconque de ces stations;

NOC **8687** **4919**
1221

c) La station qui demande cette cessation doit indiquer la durée approximative de l'attente imposée à la station dont elle fait suspendre l'émission.

SECTION III

NOC

Appels en radiotéléphonie

MOD **8688** **4920**
1297A

§ 7. (1) Les dispositions de la présente section relatives aux intervalles entre les appels ne sont pas applicables à une opérant dans les conditions de détresse, d'urgence ou de sécurité.

MOD **8689** **4921**
1297B

(2) Les dispositions de la présente section ne sont pas applicables au service mobile maritime par satellite.

MOD **8690** **4922**
1298

§ 8. (1) En règle générale, il incombe à la station de navire d'établir la communication avec la station sôtière. A cet effet, la station, la station de navire ne peut appeler la station côtière qu'après être arrivée dans sa zone de service, c'est.à-dire dans la zone où, en utilisant une fréquence appropriée, la station de navire peut être entendue par la station côtière.

MOD **8691** **4923**
1299

(2) Toutefois, une station côtière qui a du trafic pour une station de navire peut appeler cette station si elle a des raisons de croire que celle-ci se trouve dans sa zone de service et assure l'écoute.

MOD **8692** **4924**
1300

§ 9. (1) De plus, chaque station côtière doit, pour autant que cela est possible en pratique, transmettre ses appels sous forme de «listes d'appels» formées des indicatifs d'appel ou autres moyens d'identification, classés par ordre alphabétique, des stations de navire pour lesquelles elle a du trafic en instance. Ces appels ont lieu à des moments déterminés ayant fait l'objet d'un accord entre les administrations intéressées, espaces de deux heures au moins et de quatre heures au plus, pendant les heures d'ouverture de la station côtière.

NOC **8693** **4925**
1301

(2) Les stations côtières transmettent ces listes d'appels sur leurs fréquences normales de travail dans les bandes appropriées. Cette transmission est précédée d'un appel général à toutes les stations.

NOC **8694** **4926**
1302

(3) L'appel général à toutes les stations, annonçant la liste d'appels, peut être fait sur une fréquence d'appel sous la forme suivant:

Trois fois, au plus, «appel à tous les navires» ou CQ (épelé à l'aide des mots de code CHARLIE QUEBEC);
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
Trois fois, au plus, «... Radio»;
«Ecoutez ma liste d'appels sur ... kHz».

En aucun cas, ce préambule ne peut être répété.

NOC **8695** **4927**
1302A

(4) Toutefois, dans les bandes comprises entre 156 MHz et 174 MHz, l'appel décrit au numéro **4926** peut lorsque le contact est facile à établir, être remplacé par l'appel décrit ci-après:

Une fois «appel à tous les navires» ou CQ (épelé à l'aide des mots de code CHARLIE QUEBEC);
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
Deux fois, «... Radio»;
«Ecoutez ma liste d'appels sur la voie ... ».

En aucun cas, ce préambule ne peut être répété.

NOC **8696** **4928**
1303

(5) Les dispositions du numéro **4926** sont obligatoires lorsque les fréquences 2182 kHz et 156,8 MHz sont utilisées.

NOC **8697** **4929**
1304

(6) Les heures auxquelles les stations côtières transmettent leurs listes d'appels, ainsi que les fréquences et les classes d'émissions qu'elles utilisent à cet effet, doivent être mentionnées dans la Nomenclature des stations côtières.

MOD **8698** **4930**
1305

(7) Il convient que les stations de navire écoutent, dans toute la mesure du possible, les émissions des listes d'appels des stations côtières. Lorqu'elles perçoivent leur indicatif d'appel ou leur signal d'identification dans une liste, elles doivent répondre aussitôt qu'elles le peuvent.

MOD **8699** **4931**
1306

(8) Lorsque le trafic ne peut pas être écoulé immédiatement, la station côtière fait connaître à chaque station de navire intéressée l'heure probable à laquelle le travail pourra commencer ainsi que, si cela est nécessaire, la fréquence et la classe d'émission qui seront utilisées.

MOD **8700** **4932**
1307

§ 10. Lorsqu'une station côtière reçoit pratiquement en même temps des appels de plusieurs stations de navire, elle décide de l'ordre dans lequel ces stations pourront lui transmettre leur trafic. Sa décision est fondée sur l'ordre de priorité (voir le numéro **4441**) des radiotélégrammes ou des conversations radiotéléphoniques en instance dans les stations de navire, et sur la nécessité de permettre à chacune des stations appelantes d'écouler le plus grand nombre possible de communications.

MOD **8701** **4933**
1308

§ 11. (1) Lorsqu'une station appelée ne répond pas à l'appel émis trois fois à des intervalles de deux minutes, l'appel doit cesser.

MOD **8702** **4934**
1308A

(2) Toutefois lorqu'une station appelée ne répond pas, l'appel peut être répété à des intervalles de trois minutes.

MOD **8703** **4935**
1308B

(3) Dans les zones où il est pratiquement possible d'établir, en ondes métriques, des liaisons sûres avec les stations côtières, la station de navire appelante peut répéter l'appel dès qu'il est certain que la station côtière n'écoule plus de trafic.

NOC **8704** **4936**
1309

(4) Lorsqu'il s'agit d'une communication entre une station du service mobile maritime et une station d'aéronef, l'appel peut être repris cinq minutes plus tard.

NOC **8705** **4937**
1310

(5) Avant de renouveler l'appel, la station appelante doit s'assurer que la station appelée n'est pas en communication avec une autre station.

MOD **8706** **4938**
1311

(6) S'il n'y pas de raison de craindre que des brouillages préjudiciables affectent des communications en cours, les dispositions du numéro **4936** ne sont pas applicables. Dans ces cas l'appel, émis trois fois à des intervalles de deux minutes, peut être renouvelé après un intervalle au moins égal à trois minutes.

MOD **8707** **4939**
1311A

(7) Toutefois, avant de renouveler l'appel, la station appelante doit s'assurer qu'un nouvel appel ne risque pas de causer des brouillages à d'autres communications en cours et que la station appelée n'est pas en communication avec une autre station.

MOD **8708** **4940**
1312

(8) Les stations de navire ne doivent pas émettre leur onde porteuse entre les appels.

MOD **8709** **4941**
1313

§ 12. Lorsque le nom et l'adresse de l'administration ou de l'exploitation privée dont dépend une station de navire ne sont pas mentionnés dans la nomenclature appropriée ou ne sont plus en concordance avec les indications de celle-ci. La station de navire a le devoir de donner d'office à la station côtière à laquelle elle transmet du trafic tous les renseignements nécessaires à cet égard.

MOD **8710** **4942**
1314

§ 13. (1) La station côtière peut, au moyen de l'abréviation TR (épelée à l'aide des mots de code TANGO ROMEU), demander à la station de navire de lui fournir les renseignements suivants:

NOC **8711** **4943**
1315

a) Position et, autant que possible, route et vitesse;

NOC **8712** **4944**
1316

b) Prochain lieu d'escale.

MOD **8713** **4945**
1317

(2) Il convient que les renseignements visés aux numéros **4942** à **4944,** précédés de l'abréviation TR, soient fournis par les stations de navire, chaque fois que cela semble approprié, sans demande préalable de la station côtière. Ces renseignements ne sont fournis qu'après autorisation du commandant ou de la personne responsable du navire.

SECTION IV

NOC

Méthode d'appel, réponse à l'appel et signaux préparatoires au trafic

NOC **8714** **4946**

A) Méthode d'appel

NOC **8715** **4947**
1222

§ 14. (1) L'appel est constitué comme suit:

Trois fois, au plus, l'indicatif d'appel ou tout autre signal d'identification de la station appelée;

Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage;

Trois fois, au plus, l'indicatif d'appel ou tout autre signal d'identification de la station appelante.

NOC **8716** **4948** (2) Toutefois, dans les bandes comprises entre 1256 MHz et 174 MHz, l'appel décrit au numéro **4047** peut, lorsque le contact est facile à établir, être remplacé par l'appel décrit ci-après:
1222A

Une fois l'indicatif d'appel de la station appelée;
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
Deux fois l'indicatif d'appel ou tout autre signal d'identification de la station appelante.

NOC **8717** **4949** (3) Lorsqu'une station de navire appelle sur une fréquence de travail une station côtière qui fonctionne sur plusieurs voies en ondes métriques, il convient qu'elle inclue dans son appel le numéro de la voie employée.
1222B

NOC **8718** **4950** (4) Après l'établissement du contact, l'indicatif d'appel ou tout autre signal d'identification ne peut être émis qu'une seule fois.
1223

NOC **8719** **4951** (5) Si la station côtière est munie d'un dispositif d'appel sélectif et si la station de navire est munie d'un dispositif de réception des appels sélectifs, la station côtière appelle le navire en émettant les signaux de code appropriés: la station de navire appelle la station côtière à la voix, selon la procédure indiquée au numéro **4947** (voir aussi l'article 62).
1224

(MOD) **8720** **4952** § 15. Les appels pour les communications internes à bord des navires qui se trouvent dans des eaux territoriales sont constitués comme suit:
1224A

NOC **8721** **4953** *a*) Appels émanant de la station principale:
1224B

Trois fois, au plus, le nom du navire suivi d'une seule lettre (ALFA, BRAVO, CHARLIE, etc.) indiquant la sous-station;
Le mot ICI;
Le nom du navire suivi du mot CONTROLE.

NOC **8722** **4954** *b*) Appels émanant de la sous-station:
1224C

Trois fois, au plus, le nom du navire suivi du mot CONTROLE;
Le mot ICI;
Le nom du navire suivi d'une seule lettre (ALFA, BRAVO, CHARLIE, etc.) indiquant la sous-station.

NOC **8723** **4955** *B*) Fréquence à utiliser pour l'appel et les signaux préparatoires

NOC **4956** **B1) Bandes comprises emtre 1605 kHz et 4000 kHz**

NOC **8724** **4957** § 16. (1) Lorsqu'une station radiotéléphonique de navire appelle une station côtière, il convient qu'eles utilise pour l'appel, par ordre de préference:
1225

NOC **8725** **4958** *a*) Une fréquence de travail sur laquelle la station côtière assure la veille;
1226

NOC **8726** **4959** *b*) La fréquence porteuse 2182 kHz;
1227

NOC **8727** **4960** *c*) Dans les Régions 1 et 3 et au Groenland, la fréquence porteuse 2191 kHz (fréquence assignée 2192,4 kHz), lorsque la fréquence porteuse 2182 kHz est utilisée pour la détresse.
1227A

NOC **8728** **4961** (2) Lorsqu'une station radiotéléphonique de navire appelle une autre station de navire, il convient qu'elle utilise pour l'appel:
1229

NOC **8729** **4962** *a*) La fréquence porteuse 2182 kHz;
1230

NOC **8730** **4963** *b*) Une fréquence navire-navire, où et lorsque la densité du trafic est élevée et lorsqu'il a été possible d'en convenir à l'avance.
1231

NOC **8731** **4964** (3) Sous réserve des dispositions du numéro **4967** et selon les règlements de leur pays, les stations côtières appellent les stations de navire de leur propre nationalité, soit sur une fréquence de travail, soit, lorsqu'il s'agit d'appels individuels à des navires déterminés, sur la fréquence porteuse 2182 kHz.
1233

NOC **8732** **4965** (4) Toutefois, dans le cas ou une station de navire maintient à la fois une veille sur la fréquence porteuse 2182 kHz et sur une fréquence de travail, il convient de l'appeler sur cette fréquence de travail.
1234

NOC **8733** 1235 **4966** (5) En règle générale, il convient que les stations côtières utilisent la fréquence porteuse 2182 kHz pour appler les stations radiotéléphoniques de navire de nationalité autre que la leur.

(MOD) **8734** 1235A **4967** (6) Les stations côtières peuvent appeler les stations de navire équipées pour recevoir des signaux d'appel sélectif conformément aux dispositions de l'article 62.

4968 **B2) Bandes comprises entre 4000 kHz et 23 000 kHz**

MOD **8735** 1236 **4969** § 17. (1) Lorsqu'une station de navire appelle une station côtière en radiotéléphonie, elle utilise soit l'une des fréquences d'appel mentionnées au numéro **4375**, soit la fréquence de travail associée à celle de la station côtière, conformément à la section A de l'appendice **16.**

MOD **8736** 1237 **4970** (2) Lorsque'une station côtière appelle en radiotélephonie une station de navire, elle utilise à cet effet l'une des fréquences d'appel mentionnées au numero **4376,** l'une de ses fréquences de travail indiquées dans la Nomenclature de stations côtières ou l'une des deux fréquences porteuses 4125 kHz et 6215,5 kHz conformément aux dispositions des numéros **4375.2** et **4375.3.**

NOC **8737** 1238 **4971** (3) Les operations préliminaires à l'établissement des communications radiotéléphoniques peuvent s'effectuer en radiotélégraphie suivant la procédure propre à la radiotélégraphie (voir les numéros **4758** et **4759**).

MOD **8738** 1238A **4972** (4) Les dispositions des numéros **4969** et **4970** ne s'appliquent pas aux communications entre stations de navire et stations côtières sur les fréquences pour l'exploitation simplex spécifiées dans la section B de l'appendice **16.**

SUP **8739** à **8741** (deviennent **8402** à **8404**)

NOC **4973** **B3) Bandes comprises entre 156 MHz et 174 MHz**

MOD **8742** 1239 **4974** § 18. (1) Dans les bandes comprises entre 156 MHz et 174 MHZ, il convient qu'en règle générale l'appel entre les stations de navire et l'appel dans le sens station côtière vers station de navire soient effectués sur la fréquence 156,8 MHz. Toutefois, l'appel dans les sens stations côtière vers stations de navire peut être effectué sur une voie de travail ou sur une voie à deux fréquences destinée à l'appel, qui a été mise en service conformément au numéro **4391.** Sauf pour les communications de détresse, d'urgence ou de sécurité, pour lesquelles il convient d'utiliser la fréquence 156,8 MHZ, l'appel dans le sens station de navire vers station côtière doit, autant que possible, être effectué sur une voie de travail ou sur une voie à deux fréquences, destinées à l'appel, qui a été mise en service conformément au numéro **4391.** Il convient que les navires désirant participer au service des opérations portuaires ou au service du mouvement des navires appellent sur une fréquence de travail destinée au service des opérations portuaires ou au service du mouvement des navires, indiquée en caractères gras dans la Nomenclature des stations côtières.

NOC **8743** 1240 **4975** (2) Si la fréquence 156,8 MHz est utilisée pour des communications de détresse, d'urgence ou de sécurité, une station de navire désirant participer au service des opérations portuaires peut établir le contact sur156,6 MHz ou à l'aide d'une autre fréquence du service des opérations portuaires imprimée en caractères gras dans la Nomenclature des stations côtières.

NOC **4976** **B4) Procédure à appliquer pour appeler une station assurant un service de pilotage**

NOC **8744** 1240A **4977** § 19. Lorsq'une station radioteléphonique de navire appelle uns station assurant un service de pilotage, il convient qu'ele utilise pour l'appel, par ordre de préférence:

(MOD) **8745** 1240B **4978** *a*) Une voie appropriée des bandes comprises entre 156 MHz et 174 MHz;

NOC **8746** 1240C **4979** *b*) Une fréquence de travail choisie dans les bandes comprises entre 1605 kHz et 4000 kHz;

NOC **8747** 1240D **4980** *c*) La fréquence porteuse 2182 kHz, mais alors seulement pour désigner la fréquence de travail à employer.

NOC **8748** **4981** *C*) Forme de la réponse à l'appel

NOC **8749** 1241 **4982** § 20. La réponse à l'appel est constituée comme suit:

Trois fois, au plus, l'indicatif d'appel ou tout autre signal d'identification de la station appelante;
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
Trois fois au plus, l'indicatif d'appel ou tour autre signal d'identification de la station appelée.

NOC **8750** **4983** *D*) Fréquence de réponse

NOC **4984** **D1) Bandes comprises entre 1605 MHz et 4000 KHz**

NOC **8751** 1242 **4985** § 21. (1) Lorsqu'un station de navire est appelée sur la fréquence porteuse 2182 kHz, il convient qu'elle réponde sur cette même fréquence porteuse, à moins qu'une autre fréquence n'ait été indiquée à cet effet par la station appelante.

NOC **8752** 1242A **4986** (2) Lorsqu'une station de navire est appelée au moyen de l'appel sélectif, elle doit répondre sur une fréquence sur laquelle la station côtière assure la veile.

NOC **8753** 1243 **4987** (3) Lorsqu'une station de navire est appelée sur une fréquence de travail par une station côtière de sa nationalité, elle doit répondre sur la fréquence de travail normalement associée à la fréquence utilisée par la station côtière pour l'appel.

NOC **8754** 1244 **4988** (4) En appelant une station côtière ou une station de navire, une station de navire doit indiquer la fréquence sur laquelle la réponse doit lui être trasmise, à moins que cette fréquence ne soit celle qui est normalement associée à la fréquence utilisée pour l'appel.

NOC **8755** 1245 **4989** (5) Une station de navire qui échange fréquemment du trafic avec une station côtière d'une nationalité autre que la sienne peut, lorsque les administrations intéressées sont d'accord à cet effet, utiliser la même procédure de réponse qui les navires de la nationalité de la station côtière.

NOC **8756** 1246 **4990** (6) En règle générale, une station côtière doit répondre:

NOC **8757** 1247 **4991** *a*) Sur la fréquence porteuse 2182 kHz, aux appels transmis sur cette même fréquence porteuse, à moins u'une autre fréquence n'ait été indiquée à cet effet par la station appelante;

NOC **8758** 1248 **4992** *b*) Sur une fréquence de travail, aux appels transmis sur une fréquence de travail;

NOC **8759** 1248A **4993** *c*) Dans les Régions 1 et 3, au Groenland, sur une fréquence de travail, aux appels faits sur la fréquence porteuse 2191 kHz (fréquence assignée 2192,4 kHz).

NOC **4994** **D2) Bandes comprises entre 4000 KHZ et 23 000 KHz**

MOD **8760** 1249 **4995** § 22. (1) Une station de navire appelée par une station côtière répond soit sur l'une des fréquences d'appel mentionnées au numéro **4375,** soit sur la fréquence de travail associée à celle de la station côtière, conformément à la section A de l'appendice **16.**

NOC **8761** 1250 **4996** (2) Une station côtière appelée par une station de navire répond en utilisant l'une des fréquences d'appel mentionnées au numéro **4376,** ou l'une de ses fréquences de travail indiquées dans la Nomenclature des stations côtières.

MOD **8762** 1250A **4997** (3) Dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord, lorsqu'une station est appelée sur le fréquence porteuse 4125 kHz, il convient qu'elle réponde sur cette même fréquence porteuse, à moins qu'une autre fréquence n'ait été indiquée à cet effet par la station appelante.

MOD **8763** 1251 **4998** (4) Dans la zone de la Région 3 situé au sud du parallèle 25° Nord, lorsq'une station est appelée sur la fréquence porteuse 6215,5 kHz, il convient qu'elle réponde sur cette même fréquence porteuse, à moins qu'une autre fréquence n'ait été indiquée à cet effet par la station appelante.

MOD **8764** 1251A **4999** (5) Les dispositions des numéros **4995** et **4996** ne s'appliquent pas aux communications entre stations de navire et stations côtières sur les fréquences pour l'exploitation simplex spécifiées dans la section B de l'appendice **16.**

NOC **5000** **D3) Bandes comprises entre 156 MHz et 174 MHz**

NOC **8765** 1252 **5001** § 23. (1) Lorsqu'une station est appelée sur la fréquence 156,8 MHz, il convient qu'elle réponde sur cette fréquence à moins qu'une autre fréquence n'ait été indiquée à cet effet par la station appelante.

NOC 8766 1253 5002 (2) Lorsq'une station côtière ouverte à la correspondance publique appelle une station de navire, soit à la voix, soit par apple sélectif, sur une voie à deux fréquences, la station de navire répond à la voix sur la fréquence associée à celle de la station côtière; inversement, une station côtière répond à une appel d'une station de navire sur la fréquence associée à celle de la station de navire.

NOC 8767 5003 *E*) Indication de la fréquence à utiliser pour le trafic

NOC 5004 **E1) Bandes comprises entre 1605 kHz et 4000 kHz**

NOC 8768 1254 5005 § 24. Si le contact est établi sur la fréquence porteuse 2182 kHz, la station côtière et la station de navire doivent passer sur des fréquences de travail afin d'échanger leur trafic.

NOC 5006 **E2) Bandes comprises entre 4000 kHz et 23 000 kHz**

NOC 8769 1255 5007 § 25. Après l'etablissement du contact entre une station de navire et une station côtière, ou une autre station de navire, sur la fréquence d'appel de la bande choisie, le trafic doit être échangé sur les fréquences de travail respectives de ces stations.

NOC 5008 **E3) Bandes comprises entre 156 MHz et 174 MHz**

NOC 8770 1256 5009 § 26. (1) Une fois que le contact a été établi entre une station côtière du service de correspondance publique et une station de navire sur la fréquence 156,8 MHz, ou le cas échéant, sur la voie d'appel à deux fréquences (voir le numéro **4392**), les deux stations passent sur l'une deleurs paires de fréquences normales de travail pour échanger leur trafic. Il convient que la station appelante indique la voie sur laquelle elle propose de passer, en identifiant cette voie, soit par la fréquence exprimée em MHz, soit, de préférence, par le numéro qui désigne la voie.

NOC 8771 1257 5010 (2) Une fois que le contact a été établi sur la fréquence 156,8 MHz entre une station côtière du service des opérations portuaires et une station de navire, il convient que la station de navire indique la nature du service qu'elle désire (renseignements sur la navigation, instructions au sujet du mouvement dans les bassins, etc.); la station côtière fait alors connaître la voie à employer pour l'échange du trafic en identifiant cette voie, soit par la fréquence exprimée em MHz, soit, de préférence, par le numéro qui désigne la voie.

NOC 8772 1257A 5011 (3) Une fois que le contact a été établi sur la fréquence 156,8 MHz entre une station côtière du service du mouvement des navires et une station de navire, la station côtière fait connaître la voie à employer pour l'échange du trafic en par le numéro qui désigne la voie.

NOC 8773 1258 5012 (4) Il convient qu'après avoir établi le contact avec une autre station de navire sur la fréquence 156,8 MHz, une station de navire fasse connaître la voie navire-navire qu'elle propose d'employer pour l'échange du trafic, en identifiant cette voie, soit par la fréquence exprimée en MHz, soit, de préférence, par le numéro qui désigne la voie.

NOC 8774 1258A 5013 (5) Cependant, il n'est pas nécessaire qu'un bref échange de trafic, qui ne doit pas durer plus d'une minute, concernant la securité de la navigation, ait lieu sur une fréquence de travail lorsqu'il importe que tous les navires qui se trouvent dans la zone de service reçoivent l'émission.

NOC 8775 1258B 5014 (6) Les stations qui preçoivent une émision concernant la sécurité de la navigation doivent écouter le message jusqu'à ce qu'elles aient acquis la certitude que le message ne les concerne pas. Elles ne doivent faire aucune émission susceptible de brouiller le message.

NOC 8776 5015 F) Accord sur la fréquence à utiliser pour la trafic

NOC 8777 1259 5016 § 27. (1) Si la station appelé est d'accord avec la station appelante, elle transmet:

NOC 8778 1260 5017 *a*) L'indication qu'à partir de ce moment elle écoute sur la fréquence ou la voie de travail annoncée par la station appelante;

NOC 8779 1261 5018 *b*) L'indication qu'elle est prête à recevoir le trafic de la station appelante.

NOC 8780 1262 5019 (2) Si la station appelée n'est pas d'accord avec la station appelante sur la fréquence ou la voie de travail à employer, elle transmet l'indication de la fréquence de travail ou de la voie qu'elle propose.

NOC 8781 5020 (3) Dans une liaison entre une station côtière et une station de navire, la station côtière décide finalement de la fréquence ou de la voie à utiliser.

NOC 8782 1264 5021 (4) Lorsque l'accord est réalisé sur la fréquence ou la voie de travail que devra employer la station appellante pour son trafic, la station appelée annonce qu'elle est prête à recevoir le trafic.

NOC 8783 5022 G) Indication du trafic

NOC 8784 1265 5023 § 28. Lorsque la station appelante désire écouler plusieurs communications radiotéléphoniques ou transmettre un ou plusieurs radiotélégrammes, il convient qu'elle l'indique après la prise de contact.

NOC 8785 5024 *H*) Difficultés de réception

NOC 8786 1266 5025 § 29. (1) Si la station appelée n'est pas en mesure de recevoir le trafic immédiatement, il convient qu'elle réponde à l'appel comme il est indiqué au numéro **4982**, puis qu'elle fasse suivre sa réponse de l'expression «attendez ... minutes» [ou AS épelé à l'aide des mots de code ALFA SIERRA ... (minutes) en cas de difficultés de langage], en précisant la durée probable de l'attente en minutes. Si cette durée probable dépasse dix minutes, l'attente doit être motivée. Au lieu de cette procédure, la station appelée peut faire connaître par tout moyen approprié qu'elle n'est pas prête à recevoir le trafic immédiatement.

NOC 8787 1267 5026 (2) Lorsqu'une station reçoit un appel sans être certaine que cet appel lui est destiné, elle ne doit pas répondre avant que cet appel ait été répété et compris.

NOC 8788 1268 5027 (3) Lorsqu'une station reçoit un appel qui lui est destiné, mais a des doutes sur l'identification de la station appelante, elle doit répondre immédiatement en demandant à celle-ci de répéter son indicatif d'appel ou toute autre signal d'identification qu'elle utilise.

SECTION V

NOC **Ecoulement du trafic**

NOC 8789 5028 *A*) Fréquence de trafic

MOD 8790 1269 5029 § 30. (1) Il convient que chaque station utilise pour l'écoulement de son trafic (communications radiotéléphoniques ou radiotélégrammes) une de ses fréquences de travail de la bande dans laquelle l'appel a eu lieu.

NOC 8791 1270 5030 (2) En plus de sa fréquence normale de travail, imprimée en caractères gras dans la Nomenclature des stations côtières, chaque station côtière peut employer une ou plusieurs fréquences supplémentaires de la même bande, conformément aux dispositions de l'article 60.

MOD 8792 1271 5031 (3) A l'exception du trafic de détresse (voir le chapitre IX), l'emploi des fréquences réservées à l'appel est interdit pour le trafic.

NOC 8793 1272 5032 (4) Lorsque le contact a été établi sur la fréquence à utiliser pour le trafic, la transmission d'un radiotélégramme ou d'une communication radiotéléphonique est précédée:

NOC 8794 1273 5033 De l'indicatif d'appel ou tout autre signal d'identification de la station appelée;

5034 Du mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);

5035 De l'indicatif d'appel ou de tout autre signal d'identification de la station appelante.

NOC 8795 1274 5036 (5) Il n'est pas nécessaire que l'indicatif d'appel ou tout autre signal d'identification soit émis plus d'une fois.

NOC 8796 5037 *B*) Établissement des communications radiotéléphoniques et transmission des radiotélégrammes

NOC 5038 **B1) Établissement des communications radiotéléphoniques**

MOD 8797 1275 5039 § 31. (1) Pour écouler une communication radiotéléphonique, il convient que la station côtière établisse aussi rapidement que possible la liaison avec le réseau téléphonique. Pendant ce temps, la station de navire doit rester à l'écoute sur la fréquence de travail indiquée par la station côtière.

MOD 8798 1276 5040 (2) Toutefois, si la liaison ne peut être établie rapidement, la station côtière doit en informer la station de navire. Dans ce cas, cette dernière peut:

NOC 8799 1277 5041 *a*) Soit rester à l'écoute sur la fréquence appropriée jusqu'á ce que la liaison puisse être établie;

NOC 8800 1278 5042 *b*) Soit reprendre contact avec la station côtière au moment convenu.

NOC 8801 1279 5043 (3) Lorsqu'une communication radiotéléphonique a été ecoulée, la procédure indiquée au numéro **5054** est applicable sauf si d'autres communications sont en instance à l'une des deux stations.

NOC 5044 **B2) Transmission des radiotélégrammes**

NOC 8802 1280 5045 § 32. (1) Il convient que la transmission d'un radiotélégramme s'effectue de la façon suivante:

Radiotélégramme commence: de ... (nom du navire ou de l'aéronef);
Numéro ... (numéro de série du radiotélégramme);
Nombre de mots ...;
Date ...;
Heure ...(heure à laquelle de radiotélégramme a été déposé à bord du navire ou de l'aéronef);
Indications de service, s'il y a lieu;
Adresse ...;
Texte ...;
Signature ... (le cas échéant);
Transmission du radiotélégramme terminée, à vous.

MOD 8803 1281 5046 (2) En règle générale, les radiotélégrammes de toute nature transmis par les stations de navire sont numérotés par séries quotidiennes, en donnant le numéro 1 au premier radiotélégrammes transmis chaque jour à chaque station différente.

NOC 8804 1282 5047 (3) Il convient qu'une série de numéros commencée en radiotélégraphie soit continuée en radiotéléphonie et inversement.

NOC 8805 1283 5048 (4) Chaque radiotélégramme est transmis une seule fois par la station transmettrice. Toutefois, il peut en cas de nécessité être répété intégralement ou en partie par la station réceptrice ou par la station transmettrice.

NOC 8806 1285 5049 (5) Lors de la transmission de groupes de chiffres, chaque chiffre est transmis séparément et la transmission de chaque groupe ou série de groupes doit être précédée des mots «en chiffres».

NOC 8807 1286 5050 (6) Les nombre écris en lettres sont prononcés comme ils sont écrits ne faisant précéder leur transmission par les mots «en toutes lettres».

NOC 5051 **B3) Accusé de réception**

NOC 8808 1287 5052 § 33. (1) L'accusé de réception d'un radiotélégramme ou d'une série de radiotélégrammes est donnée sous la forme suivante:

L'indicatif d'appel ou tout autre signal d'identification de la station transmettrice;
Le mot ICI (ou DE épelé à l'aide des mots de code DELTA ECHO en cas de difficultés de langage);
L'indicatif d'appel ou toute autre signal d'identification de la station réceptrice;
«Reçu votre N°..., à vous» [ou R épélé à l'aide du mot de code ROMEO ... (nombre), K épelé à l'aide du mot de code KILO en cas de difficultés de langage]; *ou*
«Reçu vos N°... à N°... à vous» [ou R épelé à l'aide du mot de code ROMEU... (nombre), K épelé à l'aide du mot de code KILO en cas de difficultés de langage].

NOC 8809 1288 5053 (2) La transmission ne doit pas être considérée comme terminée en ce qui concerne un radiotélégramme, ou une série de radiotélégrammes, tant que cet accusé de réception n'a pas été dûment reçu.

NOC 8810 1289 5054 (3) La fin du travail entre deux stations est indiquée par chacune d'elles au moyen du mot «terminé» (ou $\overline{VA}$ épelé à l'aide des mots de code VICTOR ALFA en cas de difficultés de langage).

SECTION VI

Durée et direction du travail

NOC

MOD **8811** 1290 **5055** § 34. (1) La transmission de l'appel et des signaux préparatoires au trafic sur la fréquence porteuse 2182 kHz ou sur la fréquence 156,8 MHz ne doit pas dépasser une minute, sauf dans les cas de détresse, d'urgence ou de sécurité, auxquels s'appliquent les dispositions du chapitre IX.

MOD **8812** 1291 **5056** (2) Dans les communications entre station côtière et station de navire, la station de navire se conforme aux instructions données par la station côtière pour tout ce qui a trait à l'ordre et à l'heure de transmission, au choix de la fréquence, à la durée et à la suspension du travail.

MOD **8813** 1292 **5057** (3) Dans les communications entre stations de navire, la station appelée a la direction du travail selon les conditions indiquées au numéro **5056.** Cependant, si une station côtière estime nécessaire d'intervenir, les stations de navire se conforment à ses instructions.

SECTION VII

Essais

NOC

MOD **8814** 1293 **5058** § 35. Lorsqu'il est nécessaire pour une station de navire d'émettre des signaux d'essais ou de réglage susceptibles de brouiller le travail des stations côtières voisines, le consentement de ces stations doit être obtenu avant d'effectuer de telles émissions.

NOC **8815** 1294 **5059** § 36. (1) Lorsq'il est nécessaire pour une station de faire des signaux d'essais soit pour le réglage d'un émetteur avant de transmettre un apple, soit pour le réglage d'un récepteur, ces signaux ne doivent pas durer plus de dix secondes et doivent comprendre l'indicatif d'appel ou tour autre signal d'identification de la station qui émet pour essais: cet indicatif ou ce signal d'identifcation doit être prononcé lentement et distinctement.

MOD **8816** 1295 **5060** (2) Les émissions d'essai doivent être réduites au minimum en particulier:

Sur la fréquence porteuse 2182 kHz;
Sur la fréquence 156,8 MHz;
Sur la fréquence porteuse 4125 kHz dans la zone des Régions 1 et 2 située au sud du parallèle 15° Nord, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° Nord;
Sur la frequence porteuse 6215,5 kHz dans la zone de la Région 3 située au sud du parallèle 25° Nord.

NOC **8817** 1295A **5061** (3) Il est interdit de faire des émissions d'essai du signal d'alarme radiotéléphonique sur la fréquence porteuse 2182 kHz et sur la fréquence 156,8 MHz, sauf s'il s'agit d'un matériel de secours qui ne peut émettre que sur ces fréquences; dans ce cas, il y a lieu de prendre les mesures qui s'imposent pour éviter les rayonnement.Il faut également prendre des mesures visant à empêcher le rayonnement provenant des essais du signal d'alarme radiotéléphonique sur les fréquences autres que les fréquences 2182 kHz et 156,8 MHz.

5062 à **5084** *(Non attribués.)*

ADD **N62A**

ARTICLE 66

Correspondance publique dans le service mobile maritime et dans le service mobile maritime par satellite (1)

SECTION I

Généralités

8900 5085 § 1. Les dispositions du Règlement télégraphique et celles du Règlement téléphonique, compte tenu des Avis du CCITT, sont applicables aux radiocommunications tant que le présent Règlement n'en dispose pas autrement.

A.N62A **A.66** (1) Voir Résolution **201.**

SECTION II

Autorité chargée de la comptabilité

8901 **5086** § 2. Les taxes pour les radiocommunications dans le sens navire-terre doivent en principe, et conformément à la législation et à la pratique nationale, être perçues auprès du détenteur de la licence de station mobile maritime:

8902 **5087** *a*) Par l'administration qui a délivré la licence; *ou*

8903 **5088** *b*) Par une exploitation privée reconnue; *ou*

8904 **5089** *c*) Par tout (ou tous) autre(s) organisme(s) désigné(s) par l'administration mentionnée dans le numéro **5087.**

8905 **5090** § 3. Dans le présent article, l'administration ou l'exploitation privée reconnue ou l'(les) organisme(s) designé(s) sont dénommés «autorité chargée de la comptabilité».

8906 **5091** § 4. Le(s) nom(s) et adresse(s) de l'(des) autorité(s) chargée(s) de la comptabilité doivent être notifiés au Secrétaire général en vue de leur publication dans la Nomenclature des stations de navire; le nombre de ces noms et adresses doit être aussi réduit que possible, compte tenu des Avis du CCITT.

SECTION III

Comptabilité

8907 **5092** § 5. L'échange et la vérifications des comptes doivent être effectués conformément au Règlement télégraphique et au Règlement téléphonique, compte tenu des Avis du CCITT.

8908 **5093** § 6. Les comptes sont envoyés aussi rapidement que possible et tout cas avant la fin du troisième mois suivant celui auquel ils se rapportent.

8909 **5094** § 7. En principe, un compte doit être considéré comme accepté sans qu'il soit nécessaire d'en notifier explicitement l'acceptation à l'administration (ou exploitation privées reconnue) qui l'a présenté.

8910 **5095** § 8. Cependent, toute autorité chargée de la comptabilité a le droit de contester les éléments d'un compte dans un délai de six mois à compter de sa date d'envoi.

8911 **5096** § 9. Tous les comptes radiomaritimes doivent être réglés sans retard par l'autorité chargée de la comptabilité eu au plus tard six mois après l'envoi du compte.

8912 **5097** § 10. Si les comptes radiomaritimes internationaux ne sont pas réglés au bout de six mois, l'administration qui a délivré une licence à une station mobile doit, sur demande, prendre toutes les mesures possibles, dans les limites de la législation nationale en vigueur, pour obtenir du détenteur de la licence le règlement des comptes en souffrance.

8913 **5098** § 11. Dans le cas signalé au numéro **5095,** si le compte subit un retard important en cours d'acheminement, il convient que l'autorité chargée de la comptabilité qui attend le compte informe immédiatement l'administration (ou exploitation privée reconnue) d'origine que les demandes de renseignements éventuelles et le règlement sont susceptibles de subir des retards. Toutefois, le retard ne doit pas dépasser trois mois à partir de la date de réception du compte.

8914 **5099** § 12. L'autorité débitrice chargée de la comptabilité peut refuser le règlement et la rectification des comptes présentés plus de dix-huit mois après la date de dépôt des radiotélégrammes ou après la date d'établissement des communications radiotéléphoniques ou des communications radiotélex auxquels ces comptes se rapportent.

SECTION IV

Paiement des soldes

8915 **5100** § 13. Le paiement des soldes doit être effectué conformément au Règlement télégraphique et au Règlement téléphonique, compte tenu des Avis pertinents du CCITT.

SECTION V

Archives

8916 **5101** § 14. Les originaux des radiotélégrammes et les documents y relatifs, ainsi que ceux concernant les communications radiotéléphoniques et les communications radiotélex doivent être conservés par les administrations (ou exploitations privées reconnues), avec

toutes les précautions nécessaires à la sauvegarde du secret, jusqu'au règlement des comptes qui s'y rapportent et, en tout cas, pendant six mois à dater du mois au cours duquel les comptes ont été envoyés. Les administrations (ou exploitations privées reconnues) peuvent conserver ces informations par tout autre moyen, tel que enregistrements magnétiques ou électroniques.

8917 **5102** § 15. Toutefois, si une administration (ou exploitation privée reconnue) juge utile de détruire les originaux des radiotélégrammmes ou de n'importe quel autre document ou enregistrement mentionées dans le numéro **5101** avant l'expiration des délais indiqués ci-dessus et si, de ce fait, elle ne se trouve pas en mesure d'effectuer une enquête concernant des prestations dont elle est responsable, cette administration (ou exploitation privée reconnue) doit en supporter toutes les conséquences, aussi bien pour le remboursement des taxes que pour les différences qui pourraient être constatées dans les comptes en cause.

5103 à **5127** *(Non attribués.)*

NXII

CHAPITRE XII

NOC

Service mobile terrestre

SUP

ARTICLE N63

Autorité du commandant ou de la personne responsable des stations mobiles du service mobile terrestre

SUP **8918** 845 à **8920** 847

SUP

ARTICLE N64/21

Inspection des stations mobiles du service mobile terrestre

SUP **8946** 838 à **8952** 844

N65

ARTICLE 67

NOC

Conditions à remplir par les stations mobiles du service mobile terrestre

MOD **8978** 955 **5128** § 1. Les stations mobiles terrestres doivent être établies de manière à être conformes aux dispositions du chapitre III, en ce qui concerne les fréquences et les classes d'émission.

MOD **8979** 957 **5129** § 2. Les fréquences d'émission des stations mobiles terrestres doivent être vérifiés le plus souvent possible par le service d'inspection dont ces stations relèvant.

NOC **8980** 958 **5130** § 3. L'énergie rayonnée par les appareils récepteurs doit être aussi réduite que possible et ne doit pas causer de brouillage nuisible aux autres stations.

MOD **8981** 959 **5131** § 4. Les administrations prennent toutes les mesures pratiques nécessaires pour que le fonctionnement des appareils électriques ou électroniques de toute nature installés dans les stations mobiles terrestres ne cause pas de brouillage préjudiciable aux services radioélectriques essentiels de ces stations lorsqu'elles fonctionnent conformément aux dispositions du présent Règlement.

MOD **8982** 960 **5132** § 5. (1) Les changements de fréquence dans les appareils émetteurs et récepteurs de toute station mobile terrestre doivent pouvoir être effectuées aussi rapidement que possible.

MOD **8983** 961 **5133** (2) Les installations de toute station mobile terrestre doivent permettre, une fois la communication établie, de passer de l'émission à la reception, et vice versa, dans un temps aussi court que possible.

5134 à 5158 *(Non attribués.)*

SUP

ARTICLE N66/37

Ordre de priorité des communications dans le service mobile terrestre

SUP **9009** 1496

SUP

ARTICLE N67

Procédures générales applicables à la radiotélégraphie dans le service mobile terrestre — Appels

SUP **9035** 1065 à **9052** 1094

N68

ARTICLE 68

NOC

Procédures générales applicables à la radiotéléphonie dans le service mobile terrestre — Appels

MOD **9078** 1298 **5159** § 1. (1) Une station mobile terrestre ne peut appeler une station terrestre qu'après être arrivée dans sa zone de service, c'est-à-dire dans la zone où, en utilisant une fréquence appropriée, la station mobile terrestre peut être entendue par la station terrestre.

MOD **9079** 1299 **5160** (2) Une station terrestre qui a du trafic pour une station mobile terrestre peut appeler cette station si elle a des raisons de croire que ladite station mobile terrestre se trouve dans sa zone de service et assure l'écoute.

SUP **9080** 1307

SUP **9081** 1308

SUP **9082** 1310

SUP **9083** 1311

MOD **9084** 1312 **5161** § 2. Les stations mobiles terrestres ne doivent pas émettre leur onde porteuse entre les appels.

SUP **9085** 1313

SUP **9086** 1314

SUP **9087** 1315

SUP **9088** 1316

SUP **9089** 1317

5162 à 5186 *(Non attribués.)*

SUP

CHAPITRE NXIII (art. 69 à art. 72)

Radiotélégrammes, conversations radiotéléphoniques et communications radiotélex

SUP

(Dans sa totalité.)

SUP

RÉGLEMENT ADDITIONEL DES RADIOCOMMUNICATIONS

SUP

(Dans sa totalité.)

NXIV

CHAPITRE XIII

N73

ARTICLE 69

Entrée en vigueur du Règlement des radiocommunications

MOD **9357** **5187**
1629

§ 1. Le présent Règlement des radiocommunications, qui est annexé à la Convention internationale des télécommunications, entrera en vigueur le 1er janvier 1982, à l'exception des dispositions des numéros **5188** et **5189**.

ADD **9357A** **5188**

§ 2. L'article 25 et l'appendice **43** — mais non les appendices **42** et **44** relatifs à cet article — et l'article 66 du présent Règlement entreront en vigueur le 1er janvier 1981.

ADD **9357B** **5189**

§ 3. Le «Plan d'allotissement de fréquences pour le service mobile aéronautique (R)» ainsi que les dispositions de l'appendice 27 Aer2 (*) au présent Règlement qui s'y rapportent directement entreront en vigueur à 00.01 heure UTC le 1er février 1983.

ADD **9357C** **5190**

§ 4. A la date d'entrée en vigueur de l'article 25 et le l'article 66 du présent Règlement, spécifiée au numéro **5188** (1er janvier 1981), les dispositions révisées du Règlement des radiocommunications (Genève, 1959):

a) Article 19, à l'exception des dispositions des numéros **745** à **747** et des appendices qui s'y rapportent; et

b) Les articles 38, 39, 40 et 40A, y compris les appendices 21, 21A et 22 y relatifs, ainsi que le Règlement additionel des radiocommunications,

seront abrogées et remplacées respectivement par les dispositions des articles 25 et 66 du présent Règlement.

MOD **9358** **5191**
1630

§ 5. A la date spécifiée au numéro **5187** (1er janvier 1982), toutes les autres dispositions du Règlement des radiocommunications (Genève, 1959), révisées en partie par:

a) La Conférence administrative extraordinaire des radiocommunications chargée d'attribuer des bandes de fréquences pour les radiocommunications spatiales (Genève, 1963);

b) La Conférence administrative extraordinaire des radiocommunications chargée d'élaborer un Plan d'allotissement révisé pour le service mobile aéronautique (R) (Genève, 1966);

c) La Conférence administrative mondiale des radiocommunications chargée de traiter de questions concernant le service mobile maritime (Genève, 1967);

d) La Conférence administrative mondiale des télécommunications spatiales (Genève, 1971);

e) La Conférence administrative mondiale des radiocommunications maritimes (Genève, 1974), et par

f) La Conférence administrative mondiale des radiocommunications du service aéronautique (R) (Genève, 1978),

seront abrogées et remplacées par les dispositions du présent Règlement.

ADD **9358A** **5192**

§ 6. Conformément à l'invitation formulée par la Conférence administrative mondiale des radiocommunications chargée d'établir un Plan pour le service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (Régions 2 et 3) et 11,7-12,5 GHz

(*) Note du Secrétariat général: voir le numéro **1314** et la Résolution **400**.

(Région 1) (Genève, 1977), les dispositions et le Plan associé adoptés par cette Conférence sont annexés, sous une forme appropriée qui n'altère ni leur contenu ni leur intégrité, en tant qu'appendice 30 au présent Règlement dont ils font partie intégrante.

MOD **API**

APPENDICE 1

(Voir l'article 12)

Introduction — L'appendice 1 se compose de six sections et d'une annexe:

Section A — Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes des numéros **1214** à **1217** du Règlement des radiocommunications;

Section B — Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes du numéro **1219** du Règlement des radiocommunications;

Section C — Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes des numéros **1223** à **1227** du Règlement des radiocommunications;

Section D — Renseignements à communiquer pour une notification aux termes du numéro **1218** du Règlement des radiocommunications;

Section E — Modèle de fiche de notification;

Section F — Instructions générales:

I) Notes générales;

II) Notes concernant les reiseignements à insérer dans la fiche en vue de leur inscription dans les diverses colonnes du Fichier de référence;

Annexe — Carte des zones géographiques pour la radiodiffusion.

(MOD)

SECTION A

Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes des numéros 1214 à 1217 du Règlement des radiocommunications

Colonne 1 Fréquence assignée.

Colonne 2c Date de mise en service.

Colonne 3 Indicatif d'appel (signal d'identification).

N'est pas une caractéristique fondamentale dans le cas des stations dont il est question au numéro **2055.1.**

Colonne 4a Nom de la station d'émission.

Colonne 4b Pays ou zone géographique où est située la station d'émission.

Colonne 4c Longitude et latitude de l'emplacement de l'émetteur.

Colonne 5a Nom de la station de réception.

N'est pas une caractéristique fondamentale dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radionavigation, des stations terrestres de radiolocalisation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliares de la météorologie.

Colonne 5b Pays ou zone géographique où est située la station de réception.

N'est pas une caractéristique fondamentale dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radionavigation, des stations terrestres de radiolocalisation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliaires de la météorologie.

Colonne 5c Longitude et latitude de l'emplacement de la station de réception.

N'est pas une caractéristique fondamentale dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radionavigation, des stations terrestres de radiolocalisation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliaires de la météorologie.

Colonne 5d Localité ou zone(s) dans laquelle (lesquelles) sont situées les stations de réception.

N'est pas une caractéristique fondamentale que dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radionavigation, des stations terrestres de radiolocalisation et des stations de fréquences étalon et de signaux horaires.

À utiliser seulement si la zone n'est pas suffisamment bien définie dans la colonne 5d.

Colonne 5e Longitude et latitude du centre de la zone circulaire de réception.

N'est une caractéristique fondamentale que dans le cas des stations terrestres, des stations terrestres de radionavegation, des stations terrestres de radiolocalisation et des stations de fréquences étalon et de signaux horaires.

A utiliser seulement si la zone n'est pas suffisamment bien définie dans la colonne 5d.

Colonne 5f Rayon nominal (km) de la zone circulaire de réception.

N'est une caractéristiques fondamentale que dans le cas des stations terrestres, des stations terrestres de radionavegation, des stations terrestres de radiolocalisation et des stations de fréquences étalon et de signaux horaires.

A utiliser seulement si la zone n'est pas suffisamment bien définie dans la colonne 5d.

Colonne 6 Classe de la station et nature du service effectué.

Colonne 7a Classe d'émission, largeur de bande nécessaire et nature de la transmission.

Colonne 7b Classe de fonctionnement de l'assignation.

N'est une caractéristique fondamentale que dans le cas des assignations aux stations du service fixe dans les bandes attribuées à ce service entre 3000 kHz et 27 500 kHz.

Colonne 8 Puissance (dBW).

Colonne 9a Azimut du rayonnement maximum.

Colonne 9b Angle de site pour lequel la directivité est maximale.

N'est une caractéristique fondamentale que pour les stations fonctionnant dans les bandes supérieures à 1 GHz attribuées en partage aux services de radiocommunication spatiale et aux services de radiocommunication de Terre; il doit être fourni avec une précision d'un dixième de degré (1).

Colonne 9c Angle d'ouverture du lobe principal de rayonnement.

N'est pas une caractéristique fondamentale si les données de la colonne 9j sont indiquées.

Colonne 9d Polarisation.

N'est une caractéristique fondamentale que pour les stations fonctionnant dans les bandes supérieures à 1 GHz attribuées en portage aux services de radiocommunication spatiale et de radiocommunication de Terre et pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes décimétriques et métriques, dans Zones africaine et européenne de radiodiffusion.

Colonne 9e Hauteur d'antenne (mètres) pour une antenne verticale simple.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques, dans la Région 1 et dans les bandes d'ondes hectométriques dans la Région 3.

Colonne 9f Hauteur maximale équivalente de l'antenne.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion à ondes métriques et décimétriques dans les Zones africaine et européenne de radiodiffusion. Il est défini dans les Actes finals des conférences appropriées.

Ce renseignements est une caractéristique fondamentale pour les stations de Terre fonctionnant dans les bandes supérieures à 1 GHz qui sont partagées entre services spatiaux et services de Terre. Il doit être indiqué en mètres au-dessus du niveau moyen de la mer.

Colonne 9g Gain d'antenne maximal (isotrope, par rapport à une antenne verticale courte ou par rapport à un doublet demi-onde, selon le cas).

N'est pas une caractéristique fondamentale si la puissance apparente rayonnée, ou la p. i. r. e., est notifiée dans la colonne 8 ou si les données de la colonne 9j sont indiquées.

Colonne 9h Azimuts définissant les secteurs de rayonnement limité, en degrés (dans le sens des aiguilles d'une montre) par rapport au Nord vrai.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques, dans la Région 1 et dans les bandes hectométriques dans la Région 3.

---

(1) Ce renseignement ne sera fourni avec une précision d'un dixième de degré que si la station est située dans la zone de coordination d'une station terrienne ou si la direction du rayonnement maximal ne s'écarte pas de plus de trois degrés de l'orbite des satellites geostationnaires.

Colonne 9i Rayonnement maximal admis dans les secteurs.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques, dans la Région 1 et dans les bandes d'ondes hectométriques dans la Région 3.

Colonne 9j Type d'antenne (voir le Manuel du CCIR intitulé *Diagrammes d'antennes*).

N'est pas une caractéristique fondamentale si les données des colonnes 9c et 9g sont indiquées.

Colonne 10b Horaire normal (UTC) de fonctionnement de l'assignation de fréquence.
Colonne 11 Coordination avec d'autres administrations.

Ce renseignement est une caractéristique fondamentale pour les bandes et services concernés.

Renseignements supplémentaires:

a) Indiquer la ou les *fréquences de référence* chaque fois qu'une émission déterminée en comporte, par exemple la fréquence de l'onde porteuse réduit d'une émission à bande latérale unique ou à bandes latérales indépendantes, ou les fréquences des ondes porteuses du son et de l'image d'une émission de télévision;
b) Toute coordination requise aux termes des numéros **1148 à 1154;**
c) Nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.

SECTION B

Caractéristiques fondamentales à fournir dans le cas d'une notification aus termes du numéro 1219 du Règlement des radiocommunications

Colonne 1 Fréquence assignée.
Colonne 2c Date de mise en service.
Colonne 4a Nom de la station d'émission: inscrire la lettre «M» (pour mobile).
Colonne 4b Indiquer le pays ou la zone géographique où sont situées les stations mobiles d'émission.
Colonne 4c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) du centre de la zone circulaire d'émission.
Colonne 4d Indiquer le rayon nominal (km) de la zone circulaire d'émission.
Colonne 4e Indiquer une zone pour laquelle il existe une définition normalisé au moyen des symboles contenus dans les références normalisées, par exemple ZLAMP, ZLARN, zones géographiques, etc. (voir également la Préface à la Liste internationale des fréquences).
Colonne 5a Nom de la station de réception.
Colonne 5b Pays ou zone géographique où est située la station de réception.
Colonne 5c Indiquer les coordonnées géographiques (longitude et latitude en dégres et en minutes) de l'emplacement de la station de réception.
Colonne 6 Classe des stations mobiles et nature du service effectué.
Colonne 7a Classe d'émission des stations mobiles, largeur de bande nécessaire et nature de la transmission.
Colonne 8 Puissance (dBW).
Colonne 10b Horaire normal (UTC) de fonctionnement de l'assignation de fréquence.

Renseignements supplémentaires:

a) Toute coordination requise aux termes des numéros **1148 à 1154;**
b) Nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.

SECTION C

Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes des numéros 1223 à 1227 du Règlement des radiocommunications

Colonne 1 Fréquence assignée.
Colonne 2c Date de mise en service.
Colonne 4b Indiquer le pays ou la zone géographique où est située la station d'émission.

Pour le reste de la colonne *4*, remplir soit *4e* seulement, soit *4c* et *4d*.

Colonne 4c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) du centre de la zone circulaire d'émission.
Colonne 4d Indiquer le rayon nominal (km) de la zone circulaire d'émission.
Colonne 4e Indiquer une zone pour laquelle il existe une définition normalisée, en utilisant les symboles indiqués dans la Préface à la Liste internationale des fréquences.
Colonne 6 Classe de la station et nature du service effectué.
Colonne 7a Classe d'émission, largeur de bande nécessaire et nature de la transmission.
Colonne 8 Puissance (dBW).

Colonne 10b Horaire normal (UTC) de fonctionnement de l'assignation de fréquence.

Renseignements supplémentaires:

Nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.

SECTION D

Renseignements à communiquer pour une notification aux termes du numéro 1218 du Règlement des radiocommunications

1. *Instructions générales:*

a) L'assistance de l'IFRB porte sur le choix d'une ou de plusieurs fréquences pour une assignation à une station du service fixe, dans les bandes de fréquence comprises entre 3000 kHz et 27 500 kHz attribuées à ce service;

b) L'administration fournira:

Une description générale des difficultés rencontrées;

Les renseignements techniques et tous autres renseignements pouvant orienter les recherches ultérieures de l'IFRB;

c) Les instructions données la section F peuvent également s'appliquer.

2. *Renseignements à fournir pas l'administration:*

Colonne 1 Fréquence.

1) Laisser cette colonne en blanc ou indiquer la bande préférée si la demande porte sur le choix d'une fréquence ou d'un jeu fréquences pour la liaison en question;
2) Si la demande porte sur une fréquence déterminée, spécifier cette fréquence.

Colonne 2c Date de mise en service.

Indiquer la date proposée pour la mise en service de l'assignation de fréquence.

Colonne 3 Indicatif d'appel (signal d'identification).

Colonne 4 Caractéristique de la station d'émission.

Colonne 4a Indiquer le nom de la localité par lequel la station d'émission est désignée ou dans laquelle elle est située.

Colonne 4b Indiquer le pays ou la zone géographique où est située la station. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

Colonne 4c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) de l'emplacement de l'émetteur.

Colonne 5 Caractéristiques de la station de réception.

Colonne 5a Nom de la station de réception. Indiquer le nom de la localité par lequel la station de réception est désignée ou dans laquelle elle est située. A condition que, dans une zone donnée, la zone de réception soit bien définie et suffisamment réduite pour prévoir aisément les conditions d'utilisation de la fréquence du point de vue de la propagation, il suffit de notifier un nombre de stations suffisant pour délimiter la zone de réception.

Colonne 5b Pays ou zone géographique où est située la station de réception.

Colonne 5c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) de l'emplacement de la station de réception.

Colonne 6 Classe de la station et nature du service effectué.

Au moyen des symboles figurant à l'appendice **10**, indiquer la classe de la station et la nature du service effectué.

Colonne 7a Classe d'émision, largeur de bande nécessaire et nature de la transmission.

Indiquer, pour chacune des localités ou zones de réception mentionnées dans la colonne *5a*, la classe de l'émission, la largeur de bande nécessaire et la nature de la transmission, conformément à l'article 4 et à l'appendice **6**.

Colonne 8 Puissance (dBW).

1) Selon la classe d'émission, indiquer de la façon suivante la puissance fournie à la ligne d'alimentation de l'antenne (dBW):

a) Puissance moyenne (PY) s'il s'agit d'une émission à modulation d'amplitude à onde porteuse complète non manipulée ou d'une émission à modulation de fréquence (voir le numéro **152**);

b) Puissance en crête (PX) s'il s'agit d'une émission autre que celles dont il est question en *a*) ci-dessus (voir le numéro **151**);

c) Laisser en blanc si la puissance doit être calculée par l'IFRB;

2) Indiquer la puissance normalement utilisée vers chacune des localités ou zones de réception mentionnées dans la colonne *5a*.

Colonne 9 Caractéristiques de l'antenne d'émission (indiquer tous les reinseignements disponibles).
Colonne 9a Azimut du rayonnement maximum.

1) Si l'on utilise une antenne d'émission à effet directif, indiquer l'azimut du rayonnement maximum de cette antenne, en degrés, à partir du Nord vrai dans le sens des aiguilles d'une montre;
2) Si l'on utilise une antenne d'émission sans effet directif, inscrire «ND» dans cette colonne.

Colonne 9c Si les caractéristiques de rayonnement de l'antenne concernée diffèrent des caractéristiques recommandées par le CCIR, inscrire les renseignements demandés dans les colonnes *9c* et *9g*. Lorsque les caractéristiques de rayonnement se trouvent dans le manuel *Diagrammes d'antennes* du CCIR, indiquer la référence dans la colonne *9j*.
Colonne 9c Angle d'ouverture du lobe principal de rayonnement.

Il convient d'indiquer l'angle total mesuré en projection horizontale dans un plan contenant la direction du rayonnement maximal, en degrés, à l'intérieur duquel la puissance rayonnée dans une direction quelconque n'est pas inférieure de plus de 3 dB à la puissance rayonnée dans la direction du rayonnement maximum.

Colonne 9g Gain d'antenne.

Il convient d'indiquer le gain relatif de l'antenne dans la direction du rayonnement maximum pour la fréquence assignée (voir le numéro **154**).

Colonne 9j Type d'antenne (voir le Manuel *Diagrammes d'antennes* du CCIR).

Indiquer la reférence appropriée au Manuel *Diagrammes d'antennes* du CCIR. Voir ci-dessus les colonnes *9c* et *9g*.

Colonne 10 Horaire de fonctionnement.
Colonne 10a Horaire maximum (UTC) de fonctionnement de la liaison vers chaque localité ou zone.

A titre de reiseignement supplémentaire, indiquer par la lettre «I» les périodes pendant lesquelles le fonctionnement de la liaison est intermittent.

Colonne 10b Horaire normal (UTC) de fonctionnement de l'assignation de fréquence.

Indiquer l'horaire en temps universel coordonné (UTC) au moyen d'un groupe de quatre chiffres (0000 à 2359). Sinon, indiquer les heures de fonctionnement diurne (HJ), nocturne (HN) ou l'horaire de service en période de transition (HT).

Colonne 11 Coordination avec d'autres administrations.

Le cas échéant, indiquer le pays ou la zone géographique avec lequel la coordination pertinent a été effectuée avec succès.

Colonne 12a Administration ou compagnie exploitante.
Colonne 12b Adresse postale et adresse télégraphique de l'administration dont relève la station.

Renseignements supplémentaires:

Indiquer tous les renseignements disponibles concernant l'antenne de réception.

MOD

SECTION E

Modèle de fiche de notification

Le Comité établit et tient à jour un modèle de fiche de notification de manière à respecter la totalité des dispositions réglementaires du présent appendice et les décisions connexes des conférences futures.

SECTION F

Instructions générales

1. Une fiche distincte doit être envoyées au Comité international d'enregistrement des fréquences pour notifier:

Chaque nouvelle assignation de fréquence;
Toute modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de référence international des fréquences, dénommé ci-aprés *Fichier de référence;*
Toute annulation totale d'une assignation de fréquence inscrite dans le Fichier de référence.

2. Lorsqu'une assignation de fréquence est utilisée par une station pour assurer différents services, une fiche distincte doit être envoyée pour chaque type de service (par exemple FA, FB, FC, FX, etc.).

3. Les fréquences prescrites dans le présent Règlement comme devant être utilisées en commun conformément à la Préface à la Liste internationale des fréquences ne font pas l'objet de notification (voir le numéro **1220**).

4. Dans les colonnes *5a* à *10*, il convient d'inscrire séparément les caractéristiques lorsqu'elles ne sont pas valables pour la totalité de l'assignation, par exemple lorsque la classe d'émission ou la puissance diffèrent selon les localités ou zones de réception.

5. En ce qui concerne les stations de télévision de la Région 1, des fiches de notification distinctes doivent être présentées pour la voie son et la voie image respectivement. En pareil cas, les fréquences à indiquer sont celles des ondes porteuses du son et de l'image.

NOC

1. Notes générales

a) Indiquer le nom de l'administration dont émane la fiche de notification.

b) Porter la lettre «X» dans cette case lorsque la fiche a trait à:

La première utilisation d'une fréquence par une station;
Ou la première utilisation d'une fréquence supplémentaire par une station.

c) Porter la lettre «X» dans cette case lorsque la fiche a trait à une modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de référence:

1) Au cas où des caractéristiques existantes (y compris la fréquence) sont modifiées, il convient d'indiquer, à l'emplacement approprié, les nouvelles caractéristiques, de les souligner et de mentionner au-dessous ou à côté, entre parenthèses, les caractéristiques originales qui sont modifiées;
2) Au cas où la modification consiste en une adjunction aux caractéristiques existentes, il convient d'indiquer, à l'emplacement approprié, les caractéristiques ajoutées et de les souligner;
3) Au cas où la modification consiste en l'annulation d'une ou de plusieurs caractéristiques, il convient d'indiquer ceci par un trait à l'emplacement approprié et de mentionner au-dessous ou à côté de ce trait, entre parenthèses, la ou les caractéristiques annulées.

d) Porter la lettre «X» dans cette case lorsque la fiche a trait à l'annulation de la totalité des caractéristiques notifiées d'une assignation.

e) Le numéro de série de la fiche et la date de son envoi au Comité doivent être indiqués ici.

II. Notes concernant les renseignements à insérer dans la fiche en vue de leur inscription dans les diverses colonnes du Fichier de référence

Colonne 1 Fréquence assignée.

1) Indiquer la fréquence assignée (1) (2) (3) telle qu'elle est définie à l'article 1: en kWz jusqu'à 28 000 kHz compris, en MHz au-dessus de 28 000 kHz et jusqu'à 10 500 MHz compris et en GHz au-dessus de 10 500 MHz;
2) *Ce renseignement est une caractéristique fondamentale.*

Colonne 2c Date de mise en service.

1) Dans le cas d'une nouvelle assignation, indiquer la date de mise en service effective ou prévue, selon le cas, de l'assignation de fréquence;
2) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont définies dans le présent appendice, à l'exception de celles qui figurent dans les colonnes *3*, *4a*, *10a* ou *11*, la date à inscrire dans cette colonne doit être celle de la dernière modification effective ou prévue, selon de cas;
3) *Ce renseignement est une caractéristique fondamentale.*

Colonne 3 Indicatif d'appel (signal d'identification).

1) Inscrire l'indicatif d'appel ou tout autre signal d'identification utilisé aux termes de l'article 25;
2) *Ce renseignement est une caractéristique fondamentale, sauf dans les cas dont il est question aux numéros* **1224** *à* **1227** *et* **2055.1** *ou lorsqu'il s'agit d'une fréquence utilisée à la réception dans les circonstances spécifiées au numéro* **1219.**

(1) En ce qui concerne les stations de télévision de la Région 1, les fréquences à notifier sont celles des ondes porteuses du son et de l'image.
(2) En ce qui concerne les stations radiotéléphoniques du service mobile maritime, voir le numéro **4194**.
(3) En ce qui concerne les stations du service mobile aéronautique (R), voir le paragraphe 27/72 révisé de l'appendice 27 Aer2.

Colonne 4 Caractéristiques de la station d'émission.

Si l'assignation de fréquence est utilisée dans les circonstances spécifiées aux numéros **1214** *à* **1217** *les caractéristiques fondamentales à inscrire dans la colonne 4 sont les suivantes:*

Colonne 4a Indiquer le nom de la localité par lequel la station d'émission est désignée ou dans laquelle elle est située.

Colonne 4b Indiquer le pays ou la zone géographique où est située la station. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

Colonne 4c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) de l'emplacement de l'émetteur. Lorsqu'il s'agit d'assignations de fréquence au-dessus de 1 GHz dans les bandes utilisées en partage par les services de radiocommunication de Terre et de radiocommunication spatiale, indiquer les coordonées géographiques (longitude et latitude en degrés, minutes et secondes à un dixième de minute près (1); on peut aussi indiquer la longitude et la latitude en degrés et minutes et, dans la colonne *9a*, l'azimut du rayonnement maximum de l'antenne à un dixième de degré près).

Si l'assignation de fréquence est utilisée à la réception dans les circonstances spécifiées au numéro **1219**, *les caractéristiques fondamentales à inscrire dans la colonne 4 sont les suivantes:*

Colonne 4a Nom de la station d'émission: inscrire la lettre «M» (pour mobile).

Colonne 4b Indiquer le pays ou la zone géographique où sont situées les stations mobiles d'émission. Si les stations ne sont pas situées dans un pays, indiquer le pays responsable. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

Colonne 4c Indiquer les coordonnées gépgraphiques (longitude et latitude en degrés et minutes) du centre de la zone circulaire d'émission.

Colonne 4d Indiquer le rayon nominal (km) de la zone circulaire d'émission.

Colonne 4e Indiquer une zone pour laquelle il existe une définition normalisée au moyen des symboles contenus dans les références normalisées, par exemple, ZLAMP, ZLARN, zones géographiques, etc. (voir également la Préface à la Liste internationale des fréquences).

Si l'assignation de fréquences est utilisée dans les circonstances spécifiées aux numéros **1223** *à* **1227**, *les caractéristiquies fondamentales à inscrire dans la colonne 4 sont les suivantes:*

Colonne 4b Indiquer le pays ou la zone géographique où est située la station. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.
Le reste de la colonne *4* se compose soit de *4e* seulement, soit de *4c* et *4d*.

Colonne 4c Indiquer les coordonnées géographiques (longitude et latitude en degrés et minutes) du centre de la zone circulaire d'émission.

Colonne 4d Indiquer le rayon nominal (km) de la zone circulaire d'émission.

Colonne 4e Indiquer une zone pour laquelle il existe une définition normalisée, en utilisant les symboles figurant dans la Préface à la Liste internationale des fréquences.

Colonne 5 Caractéristiques de la station de réception.

Si l'assignation de fréquence est utilisée dans les circonstances spécifiées aux numéros **1214** à **1217**, *les caractéristiques fondamentales à inscrire dans la colonne 5 sont les suivantes:*

Colonne 5a Nom de la station de réception. Indiquer le nom de la localité par lequel la station de réception est désignée ou dans laquelle elle est située.

1) A condition que, dans le service fixe, la zone de réception soit bien définie et suffisamment réduite pour prévoir aisément les conditions d'utilisation de la fréquence du point de vue de la propagation, il suffit de notifier un nombre de stations suffisant pour délimiter la zone de réception;
2) Toutefois, dans le cas des stations de radiodiffusion, des stations terrestres de radionavigation, des stations terrestres de radiolocalisation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliaires de la météorologie, il n'est pas nécessaire d'inscrire quoi que ce soit dans cette colonne;
3) Dans le cas d'un réseau de stations communiquant entre elles sur la même fréquence inscrire dans la colonne *5a* le symbole ZN. Lorsque la même fréquence est utilisée par plusieurs réseaux relevant de la même administration, il convient de désigner chaque réseau par une lettre distincte placée à la suite du symbole ZN, par exemple ZN-A, ZN-B, etc.;
4) Dans le cas d'un réseau, de même que dans le cas où de nombreuses stations relevant d'une même administration utilisent la même fréquence dans une zone déterminée, il est nécessaire de notifier seulement un nombre de stations suffisant pour dèlimiter la zone d'utilisation de la fréquence, pourvu que cette zone soit bien définie et suffisamment réduite pour que, compte tenu des conditions de propagation, on puisse aisément prévoir les conditions d'utilisation de la fréquence.

---

(1) Les seconds ne seront notifiées avec une précision d'un dixième de minute que dans le cas où la station est située dans la zone de coordination d'une station terrienne.

Colonne 5b Pays ou zone géographique où est située la station de réception. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

Toutefois, dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radionavigation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliaires de la météorologie, il n'est pas nécessaire d'inscrire quoi que ce soit dans cette colonne.

Colonne 5c Indiquer les coordonnées géographiques (longitude et latitude en degrés et en minutes) de l'emplacement de la station de réception.

Toutefois, dans le cas des stations de radiodiffusion, des stations terrestres, des stations terrestres de radiolocalisation, des stations de fréquences étalon et de signaux horaires et des stations à terre du service des auxiliaires de la météorologie, il n'est pas nécessaire d'inscrire quoi que ce soit dans cette colonne.

Colonne 5d Localité ou zone(s) dans laquelle (lesquelles) la (les) station(s) de réception est (sont) située(s).

1) Pour les stations de radiodiffusion, il convient d'indiquer la zone de réception. Chaque zone doit être caractérisée de la manière suivante:

Intérieure (INTR);
Ou symbole désignant un ou des pays ou zone(s) géographique(s) (Préface à la Liste internationale des fréquences);
Ou l'une des zones géographiques délimitées sur la carte annexée au présent appendice. Si la zone de réception ne peut être définie de la manière ci-dessus, il faut remplir les colonnes *5e* et *5f*.

N'est pas une caractéristique fondamentale dans le cas des stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques/hectométriques ou métriques/décimétriques, sauf spécification dans un accord régional pertinent.

2) Pour les stations terrestres, les stations terrestres de radionavigation, les stations terrestres de radiolocalisation, les stations de fréquences étalon et de signaux horaires et les stations à terre du service des auxiliaires de la météorologie, n'indiquer une zone de réception que si elle fait l'objet d'une description normalisée. Si tel n'est pas le cas, inscrire les renseignements relatifs à cette zone dans les colonnes *5e* et *5f*.

Colonne 5e Longitude et latitude du centre de la zone circulaire de réception.

1) Indiquer les coordonnées géographiques (degrés et minutes);
2) Cette colonne n'est pas à utiliser si la zone de réception est suffisamment bien définie dans la colonne *5d*. Si la colonne *5e* est utilisée, une inscription correspondante doit être faite dans la colonne *5f*.

Colonne 5f Rayon nominal de la zone circulaire de réception.

1) Indiquer la rayon (km) de la zone circulaire de réception;
2) Cette colonne n'est pas à utiliser si la zone de réception est suffisamment bien définie dans la colonne *5d*. Si la colonne *5f* est utilisée, une inscription correspondante doit être faire dans la colonne *5e*.

Si l'assignation de fréquence est utilisée dans les circonstances spécifiées au numéro **1219**, *les caractéristiques fondamentales à inscrire dans la colonne 5 sont les suivantes:*

Colonne 5a Nom de la station de réception. Indiquer le nom de la localité par lequel la station de réception est désignée ou dans laquelle elle est située.

Colonne 5b Pays ou zone géographique où est située la station de réception. Il convient d'utiliser, à cet effet, les symboles figurant dans la Préface à la Liste internationale des fréquences.

Colonne 5c Indiquer les coordonnées géographiques (longitude et latitude en degrés et en minutes) de l'emplacement de la station de réception.

Si l'assignation de fréquence est utilisée dans les circonstances spécifiées aux numéros **1223** *à* **1227**, *il n'est pas nécessaire d'inscrire quoi que ce soit dans la colonne 5.*

Colonne 6 Classe de la station et nature du service effectué.

1) Au moyen des symboles figurant à l'appendice **10**, indiquer la classe de la station et la nature du service effectué;
2) Lorsqu'il s'agit d'une fréquence utilisée à la réception dans les circonstances spécifiées au numéro **1219**, c'est la classe des stations mobiles et la nature du service qu'elles effectuent qu'il convient d'indiquer;
3) *Ces renseignements sont des caractéristiques fondamentales.*

Colonne 7 Classe d'émission et classe de fonctionnement.
Colonne 7a Classe d'émission, largeur de bande nécessaire et nature de la transmission.

1) Indiquer pour chacune des localités ou zones de réception mentionnées dans la colonne *5a*, la classe de l'émission, la largeur de bande nécessaire et la nature de la transmission, conformément à l'article 4 et à l'appendice **6**;
2) Lorsqu'il s'agit d'une fréquence utilisée à la réception dans les circonstances spécifiées au numéro **1219**, les caractéristiques à indiquer sont celles des stations mobiles;
3) *Ces renseignements sont des caractéristiques fondamentales.*

Colonne 7b Classe de fonctionnement de l'assignation.

Ce renseignement est une caractéristique fondamentale. Pour les assignations à des stations du service fixe dans les bandes de fréquences attribuées à ce service entre 3000 kHz et 27 500 kHz, indiquer la classe de fonctionnement de l'assignation au moyen des symboles A, B ou C comme suit:

Symbole A — Assignation destinée à être utilisée pour exploitation régulière qui n'est pas assurée par un autre moyen satisfaisant de télécommunication;
Symbole B — Assignation destinée à être utilisée comme assignation de réserve pour un autre moyen de télécommunication;
Symbole C — Assignation pour utilisation occasionnelle en réserve n'exigeant pas de protection internationalement reconnue contre les brouillages préjudiciables.

Colonne 8 Puissance (dBW).

1) Selon la classe d'émission, indiquer de la façon suivante la puissance, en dBW, fournie à la ligne d'alimentation de l'antenne:
   a) Puissance de la porteuse (PZ) s'il s'agit d'une émission de radiodiffusion sonore de classe A3E (voir le numéro **153**);
   b) Puissance moyenne (PY) s'il s'agit d'une émission à modulation d'amplitude à onde norteuse complète non manipulée, autre qu'une émission de radiodiffusion sonore, ou d'une émission à modulation de fréquence (voir le numéro **152**);
   c) Puissance en crête (PX) s'il s'agit d'une émission autre que celles dont il est question en *a*) et *b*) ci-dessus, y compris les émissions de télévision (image) de classe C3F (voir le numéro **151**).
2) Dans les bandes supérieures à 28 000 kHz qui ne sont pas attribués sur la base du partage aux services de radiocommunication spatiale et aux services de radiocommunication de Terre exception faite des fiches de notification visées aux numéros **1223** à **1227**, il convient de notifier la puissance apparente rayonnée (voir le numéro **156**);
3) Dans les bandes supérieures à 1 GHz, attribuées sur la base du partage aux services de radiocommunication spatiale et aux services de radiocommunication de Terre, il convient de notifier la puissance isotrope rayonnée équivalente (p. i. r. e.) (voir le numéro **155**);
4) Le symbole approprié PZ, PY ou PX doit suivre l'indication de la valeur de la puissance. S'il s'agit de la puissance apparente rayonnée, ce symbole doit être suivi de la lettre «e». S'il s'agit de la p. i. r. e., ce symbole doit être suivi de la lettre «i»;
5) Indiquer la puissance normalement utilisée vers chacune des localités ou zones de réception;
6) Lorsqu'il s'agit d'une fréquence utilisée à la reception dans les circonstances spécifiés au numéro **1219**, il convient d'indiquer la puissance des stations mobiles. Si celles-ci ne sont pas toutes de même puissance, c'est la puissance la plus élevée qu'il convient d'indiquer;
7) *Ce renseignement est une caractéristique fondamentale.*

Colonne 9 Caractéristiques de l'antenne d'émission.
Colonne 9a Azimut du rayonnement maximum.

1) Si l'on utilise une antenne d'émission à effet directif, indiquer l'azimut du rayonnement maximum de cette antenne, en degrés, à partir du Nord vrai dans le sens des aiguilles d'une montre;
2) Si l'on utilise une antenne d'émission sans effet directif, inscrire «ND» dans cette colonne;
3) Pour les assignations de fréquence supérieures à 1 GHz dans les bandes partagées entre services de radiocommunication de Terre et services de radiocommunication spatiale, indiquer l'azimut avec une précision d'un dixième de degré (1) dans le cas où la précision avec laquelle les coordonnnées géographiques doivent être indiquées [un dixième de minute (2)] n'a pas été spécifiée dans la collone *4c*;
4) *Ce renseignement est une caractéristique fondamentale sauf lorsqu'il s'agit de stations dont il est question aux numéros* **1223** *à* **1227** *ou d'une fréquence utilisée à la réception dans les circonstances spécifiée au numéro* **1219.**

---

(1) Ce renseignement ne sera fourni avec une précision d'un dixième de dégre que si la station est située dans la zone de coordination d'une station terrienne ou si la direction du rayonnement maximal ne s'écarte pas de plus de trois degrés de l'órbite des satellites géostationnaires.

(2) Les secondes ne seront notifiées avec une précision d'un dixième de minute que dans le cas où la station est située dans la zone de coordination d'une station terrienne.

Colonne 9b Agle de site pour lequel la directivité est maximale.

N'est une caractéristique fondamentale que pour les stations fonctionnant dans les bandes superieures à 1 GHz attribuées en partage aux services de radiocommunication spatiale et aux services de radiocommunication de Terre; il doit être fourni avec une précision d'un dixième de degré (1).

Collone 9c et 9g Si les caractéristiques de rayonnement de l'antenne concernée diffèrent des caractéristiques recommandées par le CCIR, inscrire les renseignements demandés dans les colonnes *9c* et *9g*. Lorsque les caractéristiques de rayonnement se trouvent dans le Manuel du CCIR intitulé Diagrammes d'antennes, indiquer la réference dans la colonne *9j*.

Colonne 9c Angle d'ouverture du lobe principal de rayonnement.

Il convient d'indiquer l'angle total mésure en projection horizontale dans un plan contenant la direction du rayonnement maximal, en degrés, à lintérieur duquel la puissance rayonnée dans une direction quelconque n'est pas inférieure de plus de 3 dB á la puissance rayonnée dans la direction du rayonnement maximum.

Colonne 9d Polarisation.

Ce renseignement est une caractéristique fondamentale pour les stations fonctionnant dans les bandes supérieures à 1 GHz attribuées en partage aux services de radiocommunication spatiale et de radiocommunication de Terre et pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes métriques et décimétriques dans les Zones africaine et européenne de radiodiffusion.

Colonne 9e Hauteur d'antenne (mètres) pour une antenne verticale simple.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques dans la Région 1 et dans les bandes d'ondes hectométriques dans la Région 3.

Colonne 9f Hauteur équivalent maximale de l'antenne.

Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes métriques et décimétriques dans les Zones africaine et européene de radiodiffusion. Cette hauteur est définie dans les Actes finals des conférences correspondantes;

Ce renseignement est une caractéristique fondamentale pour les stations de Terre fonctionnant dans les bandes supérieures à 1 GHz qui sont partagées entre services de radiocommunication spatiale et services de radiocommunication de Terre. Cette hauteur doit être indiquée en mètres au-dessus du niveau moyen de la mer.

Colonne 9g Gain d'antenne maximal (isotrope, par rapport à une antenne verticale courte ou par rapport à un doublet demi-onde, selon le cas).

1) Il convient d'indiquer le gain relatif de l'antenne dans la direction du rayonnement maximum pour la fréquence assignée (voir le numéro **154**);
2) *N'est pas une caractéristique fondamentale si la puissance apparente rayonnée ou la p. i. r. e. est notifiée dans la colonne 8.*

Colonne 9h Azimuts définissant les secteurs de rayonnement limité en degrés à partir du Nord vrai dans le sens les aiguilles d'une montre.

1) Indiquer les azimuts définissant les secteurs de rayonnement limité en degrés à partir du Nord vrai dans le sens des aiguilles d'une montre;
2) *Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques dans la Région 1 et dans les bandes d'ondes hectométriques dans la Région 3.*

Colonne 9i Rayonnement maximal dans les secteurs.

1) Indiquer le rayonnement maximal admis dans le secteur, en dB, par rapport à une force cymo motrice (f. c. m.) de 300 V ou à une puissance apparente rayonnée sur une antenne verticale courte (p. a. r. v.) de 1 kW, déterminé d'après la puissance nominale de l'émetteur et le gain théorique de l'antenne, sans marge pour les diverses pertes;
2) *Ce renseignement est une caractéristique fondamentale pour les stations de radiodiffusion fonctionnant dans les bandes d'ondes kilométriques et hectométriques dans la Région 1 et dans les bandes hectométriques dans la Région 3.*

---

(1) Ce renseignement ne sera fourni avec une précision d'un dixième de dégre que si la station est située dans la zone de coordination d'une station terrienne ou si la direction du rayonnement maximal ne s'écarte pas de plus de trois degrés de l'órbite des satellites géostationnaires.

Colonne 9j Type d'antenne (voir le Manuel *Diagrammes d'antennes* du CCIR).

Indiquer la référence appropriée du Manuel *Diagrammes d'antennes* du CCIR. Voir les colonnes 9c et 9g ci-dessus.

Colonne 10 Horaire de fonctionnement.

Colonne 10a Horaire maximum (UTC) de fonctionnement de la liaison vers chaque localité ou zone.

1) Dans le cas où il s'agit d'une fréquence utilisée à la réception dans les circonstances spécifiés au numéro **1219** l'horaire maximum de fonctionnement à indiquer est celui des stations mobiles;
2) A titre de renseignement supplémentaire, indiquer par la lettre «I» les périodes pendant lesquelles le fonctionnement de la liaison est intermittent;
3) *N'est pas une caractéristique fondamentale.*

Colonne 10b Horaire normal (UTC) de fonctionnement de l'assignation de fréquence.

1) Indiquer, si on le connaît, l'horaire normal (UTC) de fonctionnement de l'assignation de fréquence. Si l'on ignore cet horaire, indiquer l'horaire de fonctionnement comme suit: service de jour (HJ), service de nuit (HN) ou service de transition (HT);
2) *Ce renseignement est une caractéristique fondamentale.*

Colonne 11 Coordination avec d'autres administrations.

1) Indiquer le pays ou la zone géographique avec lequel (ou laquelle) la coordination a été effectuée avec succès et indiquer la disposition qui requiert cette coordination (numéro du Règlement des radiocommunications, accord régional ou autre);
2) *Ce renseignement est une caractéristique fondamentale pour les bandes et les services concernés.*

Colonne 12a Administration ou compagnie exploitante (1).

Ce renseignement n'est pas une caractéristique fondamentale, mais il est recommandé de le fournir lorsqu'il s'agit d'une organisation qui exploite des stations dans plusieurs pays.

Colonne 12b Adresse postale et adresse télégraphique de l'administration dont relève la station (1).

1) Ces adresses sont celles auxquelles il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à l'exploitation technique de la liaison (voir l'article 22);
2) *Ce renseignement n'est pas une caractéristique fondamentale.*

Renseignements supplémentaires:

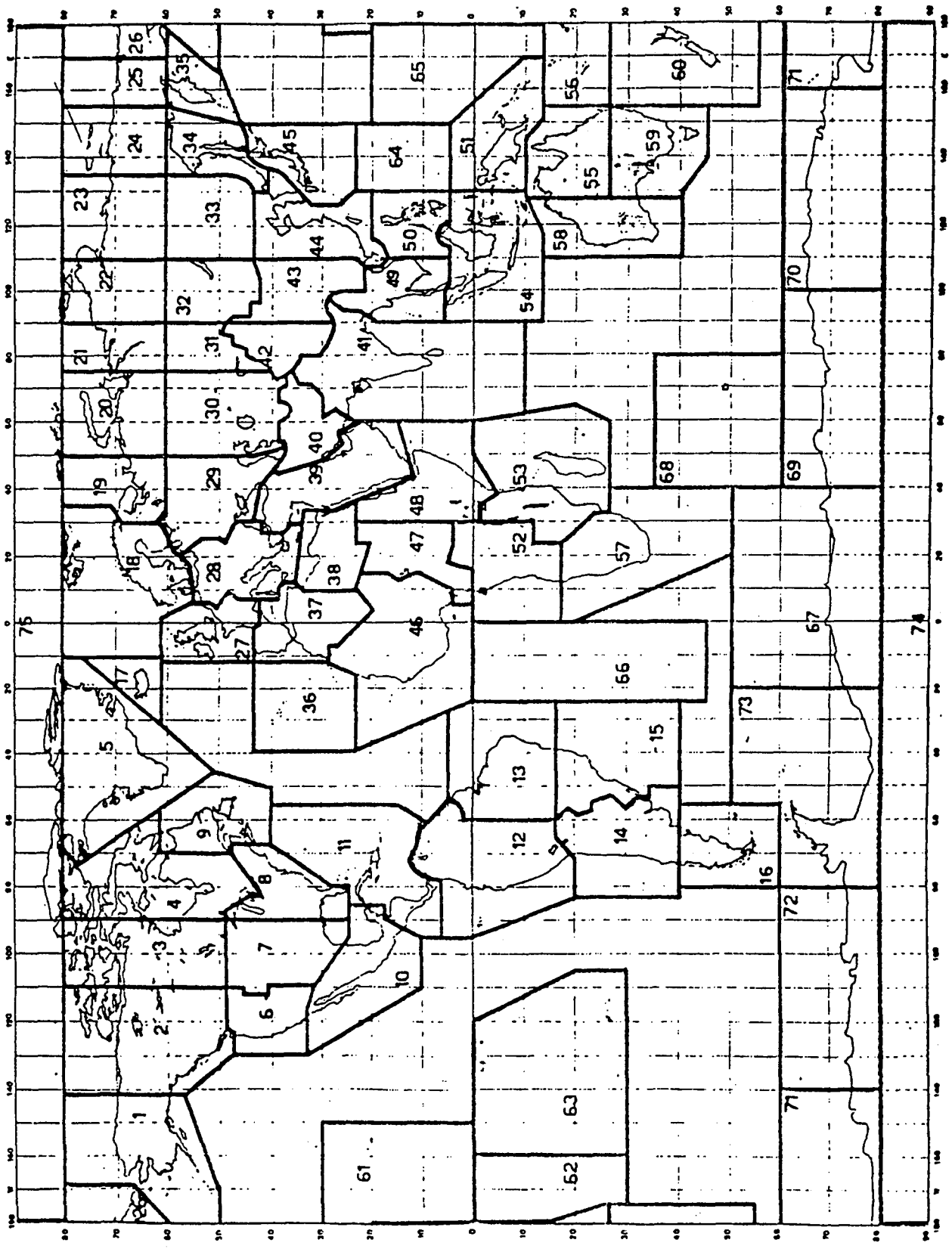
Tout renseignement supplémentaire fourni par l'administration doit figurer dans le cadre prévu à cet effet dans la fiche:

1) Si l'assignation est faite en exécution d'un accord régional ou de service, mentionner cet accord à l'emplacement approprié de la fiche; dans le cas contraire, inscrire l'indication «Nil»;
2) Indiquer à la suite du symbole «COORD» le nom de toute administration avec laquelle une coordination a été effectuée pour l'utilisation de la fréquence; si aucune coordination n'a lieu, inscrire l'indication «Nil». Dans le cas d'une notification aux termes des numéros **1223** à **1227** dans une bande de fréquences au-dessus de 28 000 kHz, indiquer, le cas échéant, la ou les zones dans lesquelles il a été convenu, à l'issue de la coordination, que la fréquence en question serait utilisée;
3) Indiquer la ou les fréquences de référence chaque fois qu'une émission déterminée en comporte, par exemple la fréquence de l'onde porteuse réduite d'une émission à bande latérale unique ou à bandes latérales indépendantes, ou les fréquences des ondes porteuses du son et de l'image d'une émission de télévision. En ce qui concerne les stations de télévision de la Région 1, chaque fiche de notification doit indiquer, à titre de renseignement supplémentaire, à la fois la fréquence de l'autre onde porteuse et la fréquence assignée;
4) Ajouter tout autre renseignement que l'administration juge pertinent, par exemple, l'indication que l'assignation en question sera utilisée conformément au numéro **342** du présent Règlement, ou bien des renseignements concernant l'utilisation de la fréquence notifiée, si cette utilisation est restreinte ou si la fréquence n'est pas utilisée pendant tout le temps où cela est possible d'après les conditions de propagation;
5) *Seuls les renseignements spécifiés au paragraphe 3 ci-dessus sont des caractéristiques fondamentales, mais il est recommandé de donner ceux dont il est question dans les paragraphes 1 et 2 ci-dessus. Cependent, dans les cas de des stations des services de radiocommunications de Terre dont il est question aux numéros **1148** à **1154**, le nom de toute administration auprès de laquelle une coordination a été recherchée en vue de l'utilisation de la fréquence et le nom de toute administration avec laquelle cette coordination a été effectuée sont des caractéristiques fondamentales.*

---

(1) Lorsque ces renseignements figurent déjà dans la Préface à la Liste internationale des fréquences, il convient d'utiliser le nombre ou la lettre de référence appropriés.

ANNEXE À L'APPENDICE 1



Zones géographiques pour la radiodiffusion

NOC AP2

APPÊNDICE 2

(voir l'article 17)

BC

SECTION A

Modèle de fiche (*)

À utiliser pour presenter au Comité international d'enregistrement des fréquences un horaire saisonnier de radiodifusion à ondes decamétriques ou une modification à un tel horaire

(Voir l'article 17)

(a) Administration notificatrice.

6 Classe de la station

(e) Fiche n° _____
Date _____

(b) Assignation pour la saison intèresade.

(c) Modification aut caractéristiques l'une assignation pour la saison.

(d) Anulation l'une assignation pour la saison.

1. Frequence assigné. (kHz)

1b Autre fréquence proposée. (kHz)

1c Bande de fréquences désirée. (kHz)

2c Date de mise en service pendant la saison.

Saison: Mars | Mai | Septembre | Novembre

Année:

Autre date:

3. Indicatif d'appel (signal d'identification).

4a Nom de la station d'émission.

4b Pays.

4c Longitude et latitude de l'emplacement de l'émetteur.

Zone(s) ou region(s) de réception 5a	Classe d'énussion et largeur de bande nécessaire 7	Puissance (em kW) 8	Caractéristique de l'antenne d'emission: Azimut du rayonnement maximum 9a	Angle d'ouverture du lobe principal de rayonnement 9b	Gain de antenne (dB) 9c	Angle de site 9d	Type d'antenne 9e	Horaire de fonctionnement (T. M. G.) 10	Autres fréquences utilisées simultanément pour le même programme à destination de la ou des mème(s) région(s) 11	Renseignements supplémentaires

12b _____ Nom et adresse postale .. } de l'administration (article 22).
_____ Adress telégraphique .... }

COORD _____

Autres l'enseignements:

(*) Il appartient à chaque administration de déterminer la dimension de la fiche.

SECTION B

Instructions générales

1. Une fiche distincte doit être envoyée à l'IFRB pour notifier:

Chaque assignation de fréquence à mettre en service au cours d'une saison déterminée;
Toute modification aux caractéristiques d'une assignation de fréquence figurant dans l'Horaire de radiodiffusion à ondes décamétriques d'une saison;
Toute annulation d'une assignation de fréquence figurant dans l'Horaire de radiodiffusion à ondes décamétriques d'une saison.

2. Dans les collones *5a* et *8* à *11*, il convient d'inscrire séparément les caractéristiques lorsqu'elles ne sont pas valables pour la totalité de l'assignation, par exemple lorsque la puissance, les caractéristiques de l'antenne ou l'horaire de fonctionnement diffèrent selon les zones ou régions de réception.

I. Notes générales

a) Indiquer le nom de l'administration notificatrice.

b) Porter la lettre «X» dans cette case lorsque la fiche a trait à la première utilisation d'une fréquence par une station pendant une saison donnée.

c) Porter la lettre «X» dans cette case lorsque la fiche a trait à une modification aux caractéristiques d'une assignation de fréquence inscrite dans l'Horaire de radiodiffusion à ondes décamétriques d'une saison:

1) Au cas où des caractéristiques existants sont modifiées, il convient d'indiquer, à l'emplacement appropriée, les nouvelles caractéristiques, de les souligner et de menctionner au-dessous ou à côte, entre parenthèses, les caractéristiques originales qui sont modifiées;
2) Au cas où la modification consiste en une adjonction aux caractéristiques existantes, il convient d'indiquer, à l'emplacement appropriée, les caractéristiques ajoutées et de les souligner;
3) Au cas où la modification consiste en l'annulation d'une ou de plusieus caractéristiques, il convient d'indiquer ceci par un trait à l'emplacement approprié et de mentionner au-dessous ou à côte de ce trait, entre parenthèses, la ou les caractéristiques annulées.

d) Porter la lettre «X» dans cette case lorsque la fiche a trait à l'annulation, au cors de la saison, de la totalité des caractéristiques notifiées d'une assignation.

e) Le numéro de série de la fiche et la date de son envoi au Comité doivent être indiqués ici.

II. Notes concernant les renseignements à insérer dans les diverses colonnes de la fiche

Colonne 1 Fréquence.

Colonne 1a Indiquer la fréquence assignée en lHz, conformément à la définition figurant à l'article 1.

Colonne 1b Indiquer toute autre fréquence proposée, en kHz;

Colonne 1c ou bien la bande de fréquences désirée en MHz, si aucune fréquence n'est indiquée aux termes des paragraphes la et *1b* ci-dessus.

Colonne 2c Data de mise en service pendant la saison.

1) Si l'assignation est à mettre en service à la date de mise en application de l'horaire saisonnier, inscrire les deux derniers chiffres de l'année dans la ou les cases qui correspondent à la ou aux saisons pendant lesquelles l'assignation sera utilisée;
2) Si l'assignation est à mettre en service ou est modifiée à toute date autre que la date de mise en application de l'horaire saisonnier, cette date doit être inscrite à l'emplacement prévu à cet effet.

Colonne 3 Indicatif d'appel (signal d'identification).

Inscrire l'indicatif d'appel ou tout autre signal d'identification utillisé aux termes de l'article 25.

Colonne 4 Nom et remplacement de la station d'émission.

Colonne 4a Indiquer le nome de localité par lequel la station d'émission est designée ou dans laquelle elle est située.

Colonne 4b Indiquer le pays où la station est située. Il convient d'utiliser à cet effet les symboles figurant dans le Préface à la Liste internationale des fréquences.

Colonne 4c Indiquer les coordonnées géographiques (en degrés et minutes) de l'emplacement de l'émetteur.

Colonne 5a Zone(s) ou région(s) de réception.

1) Indiquer la ou les zones de réception telles qu'elles sont délimitées sur la carte annexé à l'appendice **1**;
2) Si la région de réception est moins étendue qu'une zone entière, il convient qu'elle corresponde à un pays ou à une partie d'un pays et qu'elle soit désignée, dans la mesure du possible, au moyen des symboles qui figurent dans la Préface à la Liste internationale des fréquences;
3) Indiquer à titre de renseignement supplémentaire la distance maximum de service en kilomètres, lorsque ce renseignement est tenu pour nécessaire.

Colonne 7 Classe d'émission et largeur de bande nécessaire.

Indiquer la classe d'émission et largeur de bande nécessaire, conformément à l'article 4 et à l'appendice **6.**

Colonne 8 Puissance (en kW).

Indiquer la puissance de l'onde porteuse fournie par l'émetteur à la ligne d'alimentation de l'antenne.

Caractéristiques de l'antenne d'émission:

Colonne 9a Azimut du rayonnement maximum.

1) Si l'on utilise une antenne d'émission à effet directif, indiquer l'azimut du rayonnement maximum de cette antenne, en degrés, à partie du Nord vrai dans le sens des aiguilles d'une montre;
2) Si l'on utilise une antenne d'émission sans effet directif, inscrire «ND» dans cette colonne.

Colonne 9b Angle d'ouverture du lobe principal de rayonnement.

Il convient d'indiquer l'angle total en projection sur le plan horizontal, en degrés, à l'intérieur duquel la puissance rayonnée dans une direction quelconque n'est pas inférieure de plus 6 dB à la puissance rayonnée dans la direction du rayonnement maximum.

Colonne 9c Gain de l'antenne (dB).

Il convient d'indiquer le gain relatif de l'antenne dans la direction du rayonnement maximum pour la fréquence assignée.

Colonne 9d Angle de site.

Il convient d'indiquer, en degrés, l'angle de la direction du rayonnement maximum avec le plan horizontal.

Colonne 9e Type d'antenne.

Utiliser, lorsque c'est possible, la nomenclature des *Diagrammes d'antenne* du CCIR. Les différentes types d'antenne sont énumérés à la fin des présentes instructions (voir la sous-section III de la présente section).

Colonne 10 Horaire de fonctionnement (UTC).

Colonne 11 Autres fréquences utilisées simultanément pour le même programme à destination de la ou des même(s) région(s).

1) Si la fréquence notifiée est la seule fréquence utilisée pour l'horaire en question, incrire «Nil» dans cette colonne;
2) Dans le cas contraire, indiquer les autres fréquences utilisée simultanément pour le même programme à destination de la même région.

Colonne 12b Adresse postale et adresse téléphonique de l'administration dont relève la station ([1]).

Ces adresses sont celles auxquelles il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à exploitation technique (voir l'article 22).

Renseignements supplémentaires:

Tout renseignement supplémentaire fourni par l'administration doit figurer dans le cadre prévu à cet effet dans la fiche:

1) Indiquer à la suite du symbole «COORD» le nom de toute administration avec laquelle une coordination a été effectuée pour l'utilisation de la fréquence; si aucune coordination n'a été effectuée, inscrire l'indication «Nil»;

([1]) Lorsque ces renseignements figurent déjà dans la Préface à la Liste internationale des fréquences, il convient d'utiliser le nombre ou la lettre de référence appropriés.

2) Ajouter tout autre renseignement que l'administration juge pertinent, par example la distance maximum de service, lorsque celle-ci est inférieure à 2000 kilomètres, ou des renseignements concernant l'utilisation de la fréquence notifiée, si cette utilisation est restreinte ou si la fréquence n'est pas utilisée pendant tout l'horaire indiqué dans la colonne *10*, ou n'est utilisée que certains jours de la semaine, ou si la technique de synchronisation est appliquée.

III. Symboles correspondant aux différents types d'antenne

HOR Antenne non directive horizontale.
VER Antenne non directive verticale.
DP Dipôle.
H Horizontal.
V Verticale.
R Avec réflecteur.

(Exemple: DPHR signifie: dipôle horizontal avec réflecteur.)

H Antenne-rideau en dipôles horizontaux.
R Avec réflecteur.
S Antenne décalée.
/.. Nombre d'elements demi-ondes par rangée horizontale.
/.. Nombre d'elements demi-onde par rangée verticale.
/.. Hauter au-dessus du sol de la rangée d'elements la plus basse (en longeurs d'onde.)
S.. Angle de décalage, le cas échéant.

(Exemple: HRS/4/3/2S15 signifie: système horizontal avec réflecteur, 4 rangées horizontales, 3 rangées verticales de dipôles, rangée horizontal inférieure située à 2 longueurs d'onde au-dessus du sol, décalage 15°.)

RHO Antenne en losange.
/.. Longueur du côte du losange (en longueurs d'onde).
/.. Hauteur du losange au-dessus du sol (en longueurs d'onde).
/.. Moitié de l'angle intérieur du losange.

(Exemple: RHO/2,5/0,4/65 signifie: antenne en losange, longueur d'un côté 2,5 longueurs d'onde, hauteur au-dessus du sol 0,4 longueur d'onde, demi-angle intérieur 65°.)

TRO Antenne pour la radiodiffusion dans la Zone tropicale.
/.. Nombre de rangées.
/.. Hauteur au-dessus du sol (en longueurs d'onde).

(Exemple: TRO/4/0,2 signifie: antenne pour la radiodiffusion tropicale à quatre rangées (et 4 dipôles par rangée) à une hauteur de 0,2 longueur d'onde au-dessus du sol.)

MOD **AP1A**

APPENDICE 3

Fiches de notification relatives aux stations de radiocomunications spatiale et de radioastronomie

(Voir les articles 11 et 13)

SECTION A

Instructions générales

1. Une fiche de notification distincte doit être envoyée au Comité international d'enregistrement des fréquences pour notifier:

Chaque nouvelle assignation de fréquence à une station terrienne, pour l'émission ou la réception, ou à une station spatiale, pour l'émission ou la réception;
Toute modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de référence international des fréquences, dénommé ci-après *Fichier de référence;*
Toute annulation totale d'une assignation de fréquence inscrite dans le Fichier de référence.

2. En ce qui concerne les assignations de fréquence aux stations terriennes et spatiales notifiées aux termes des numéros **1488** à **1491** selon qu'il s'agit de fréquences d'émission ou de réception, une fiche de notification distincte doit être présentée au Comité pour chaque assignation à une station terrienne ou spatiale. Dans chacun de ces cas, lorsque les caractéristiques fondamentales sont identiques, à l'exception de la fréquence, une seule fiche de notification peut être soumise, cette fiche

indiquant toutes les caractéristiques fondamentales et donnant la liste des fréquences assignées. Dans le cas d'une système à satellites réflecteurs, seules les assignations aux stations terriennes pour l'émission ou la réception doivent faire l'objet d'une notification.

3. Dans le cas d'un système à satellites comportant plusieurs stations spatiales de mêmes caractéristiques générales, une fiche distincte doit être présentée au Comité pour chaque station spatiale, pour les assignations de fréquences d'émission et de réception:

Si elle est placée à bord d'un satellite géostationnaire;

Si elle est placée à bord d'un satellite non géostationnaire, sauf si plusieurs satellites ont les mêmes caractéristiques aux fréquences radioélectriques et les mêmes caractéristiques d'orbite (à l'exclusion de la position du nœud ascendant); en pareil cas, une fiche unique valable pour toutes ces stations spatiales peut être présentée au Comité.

4. Chaque fiche de notification doit contenir les renseignements de base suivants:

a) Le numéro de série de la fiche et la date de son envoie au Comité;
b) Le nom de l'administration dont elle émane;
c) Des données suffisantes pour permettre d'identifier le réseau à satellite particulier dans lequel fonctionnera la station terrienne ou spatiale, y compris la position orbitale dans le cas d'un satellite géostationnaire;
d) L'indication de la fiche a trait:

1) À la première utilisation d'une fréquence par une station;
2) À une modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de réference (indiquer si cette modification consiste en un remplacement, une adjonction ou une annulation des caractéristiques existantes);
3) À l'annulation de la totalité des caractéristiques notifiées d'une assignation;

e) Une réference à la circulaire hebdomadaire de l'IFRB contenant la publication anticipée requise aux termes du numéro **1042;**
f) Les caractéristiques fondamentales définies dans les sections B, C, D, E ou F selon le cas;
g) Tout autre renseignement que l'administration juge pertinent, par exemple tout facteur pris en considération lors de l'application des dispositions de l'appendice **28** pour déterminer la zone de coordination, ainsi que l'indication éventuelle que l'assignation sera utilisée conformément au numéro **342**, des renseignements concernant l'utilisation de la fréquence notifiée dans le cas où cette utilisation est restreinte ou, lorsqu'il s'agit d'une fiche de notification relative à une station spatiale, si les émissions de celle-ci seront définitivement interrompues au terme d'une période déterminée.

SECTION B

Caractéristiques fondamentales à fournir dans la cas de la notification d'une fréquence d'émission d'une station terrienne

Point 1 Fréquence(s) assignée(s).

Indiquer la (les) fréquence(s) assignée(s) selon la définition de l'article 1 (voir le numéro **142**), en kHz jusqu'à 28 000 kHz inclus, en MHz au-dessus de 28 000 kHz jusqu'à 10 500 MHz inclus et en GHz au-dessus de 10 500 MHz.

Point 2 Bande de fréquences assignée.

Indiquer la largeur de la bande de fréquences assignée en kHz (voir le numéro **141**).

Point 3 Date de mise en service.

a) Dans le cas d'une nouvelle assignation, indiquer la date de mise en service effective ou prévue, selon le cas, de l'assignation de fréquence;
b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au *point 4, a)*, la date à indiquer doit être celle de la dernière modification effective ou prèvue, selon le cas.

Point 4 Identité et emplacement de la station terrienne d'émission.

a) Indiquer le nom sous lequel la station est désignée ou le nom de la localité dans laquelle elle est située;
b) Indiquer le pays ou la zone géographique où la station est située. Il, convient d'utiliser à cet effet les symboles figurant dans le Préface à la Liste internationale des fréquences;
c) Indiquer les coordonnées géographiques de l'emplacement de l'émetteur (longitude e latitude en degrés et minutes). Indiquer également les secondes ([1]) à un dixième de minute près.

([1]) Cette information n'est pas nécessaire que si la zone de coordination de la station terrienne empiète sur le territoire d'une autre administration.

Point 5 Station(s) avec laquelle (lesquelles) la communication doit être établie.

Indiquer l'identité de la (ou des) station(s) spatiale(s) de réception associée(s) à la station terrienne en se référant aux notifications y relatives ou de toute autre façon appropriée, ou bien, dans le cas d'un satellite réflecteur, l'identité du satellite et l'emplacement de la (ou des) station(s) terrienne(s) de réception qui lui sont associée(s). Dans le cas d'un satellite géostationaire, indiquer aussi sa position orbitale.

Point 6 Classe de la station et nature du service.

Au moyen des symboles figurant à l'appendice **10**, indiquer la classe de la station et la nature du service effectué.

Point 7 Classe d'émission, largeur de bande nécessaire et nature de la transmission.

Conformément à l'article 4 et à l'appendice **6:**

a) Indiquer la classe d'émission;
b) Indiquer la (ou les) fréquence(s) porteuse(s) de l'émission (1);
c) Indiquer, pour chaque porteuse, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission (1);
d) Indiquer pour la porteuse ayant la plus petite largeur de bande des assignations du système, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission (1).

Point 8 Caractéristiques de puissance de l'émission.

a) Indiquer, pour chaque porteuse, la puissance en crête (dBW) fournie à l'entrée de l'antenne (1);.
b) Indiquer la puisance totale en crête (dBW) et la densité maximale de puissance par Hz [dB (W/Hz)] (2) fournie à l'entrée de l'antenne (valeur moyenne calculée dans la bande de 4 kHz la plus défavorisée pour les porteuses inférieures à 15 GHz ou dans la bande de 1 MHz la plus défavorisée pour les porteuses supérieures à 15 GHz);
c) Indiquer, pour chaque porteuse, la valeur minimale de la puissance en crête fournie à l'entrée de l'antenne (1).

Point 9 Caractéristiques de l'antenne d'émission.

a) Indiquer le gain isotrope ou absolu (dB) de l'antenne dans la direction du rayonnement maximal (voir le numéro **154**);
b) Indiquer, en degrés, l'angle formé par les directions dans lesquelles la puissance est réduite de moitié (donner une description détaillée si le diagramme de rayonnement n'est pas symétrique);
c) Joindre à la fiche le diagramme de rayonnement de l'antenne mesuré en prenant la direction du rayonnement maximal comme référence, ou indiquer le diagramme de rayonnement de référence à utiliser pour la coordination;
d) Joindre à la fiche un schéma indiquant l'angle de site de l'horizon dans chaque azimut autour de la station terrienne;
e) Indiquer, en degrés, par rapport au plan horizontal, l'angle de site minimal, prévu en exploitation, de la direction du rayonnement maximal de l'antenne;
f) Indiquer, en degrés, à partir du Nord vrai dans le sens des aiguilles d'une montre, les limites entre lesquelles l'azimut de la direction du rayonnement maximal de l'antenne peut varier pendant l'exploitation;
g) Indiquer, le type de polarisation de l'onde émisse dans la direction du rayonnement maximal: indiquer aussi le sens de la polarisation dans le cas où elle est circulaire et le plan de la polarisation dans le cas où elle est linéaire (voir les numéros **148** et **149**) (1);
h) Indiquer l'altitude em mètres de l'antenne au-dessus du niveau moyen de la mer.

Point 10 Caractéristiques de modulation (1).

Pour chaque porteuse, selon la nature du signal modulant la porteuse et selon le type de modulation, indiquer les caractéristiques suivantes:

a) Porteuse modulée en fréquence par une bande de base téléphonique multivoies à repartition en fréquence (MRF/MF) ou par un signal pouvant être représenté par une bande de base téléphonique multivoies à répartition en fréquence: indiquer les fréquences inférieure et supérieure de la bande de base et l'excursion de fréquence efficace de la tonalité d'essai en fonction de la fréquence de la bande de base;

---

(1) Cette information n'est pas nécessaire qui si elle a servi comme base pour effectuer la coordination avec une autre administration.
(2) Il convient d'utiliser la plus récente version du Rapport 792 du CCIR dans la mesure où elle s'applique au calcul de la densité maximale de puissance par hertz.

b) Porteuse modulée en frequence par un signal de télévision: indiquer la norme du signal de télévision (y compris, s'il y a lieu, la norme utilisée pour la couleur), l'excursion de fréquence pour la fréquence pivot de la caractéristiques de préaccentuation et cette caractéristique de préaccentuation: indiquer également, s'il y a lieu, les caractéristiques de multiplexage du signal image avec le(s) son(s) ou d'autres signaux;

c) Porteuse modulée par déplacement de phase par un signal à modulation par impulsions et codage (MIC/MDP): indiquer le débit binaire et le nombre de phases;

d) Porteuse modulée en amplitude (y compris à bande latérale unique): indiquer de façon aussi précise que possible la nature du signal modulant et le type de modulation d'amplitude utilisé;

e) Pour tous les autres types de modulation, indiquer les renseignements qui peuvent être utiles pour une étude de brouillage;

f) Quel que soit le type de modulation utilisé, indiquer les caractéristiques de dispersion de l'énergie, telles que l'excursion crête à crête de fréquence (MHz) et la fréquence de balayage kHz de l'onde de dispersion.

Point 11 Horaire normal de fonctionnement.

Indiquer l'horaire normal de fonctionnement (UTC) sur la fréquence de chaque porteuse.

Point 12 Coordination.

Indiquer le nom de toute administration avec laquelle l'utilisation de la fréquence a été coordonnée avec succès, conformément aux numéros **1060** et **1107** et, le cas échéant, le nom de toute administration auprès de laquelle la coordination de l'utilisation de la fréquence a été recherchée, mais non effectuée.

Point 13 Accords.

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 14 Administration ou compagnie exploitante.

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à l'exploitation technique des stations (voir l'article 22).

SECTION C

Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception d'une station terrienne

Point 1 Fréquence(s) assignée(s).

Indiquer la (les) fréquence(s) assignée(s) de l'émission à recevoir selon la défintion de l'article 1 (voir le numéro **142**), en kHz jusqu'à 28 000 kHz, inclus, en MHz au-dessus de 28 kHz jusqu'à 10 500 MHz inclus et en GHz au-dessus de 10 500 MHz.

Point 2 Bande de fréquences assignée.

Indiquer la largeur de la bande de fréquences assignée en kHz (voir le numéro **141**).

Point 3 Date de mise en service.

a) Dans le cas d'une nouvelle assignation, indiquer la date effective ou prévue, selon le cas, à laquelle commence la récpetion sur la fréquence assignée;

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au *point 4, a)*, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité et emplacement de la station terrienne de réception.

a) Indiquer le nom sous lequel la station terrienne de réception est désignée ou le nom de la localité dans laquelle elle est située;

b) Indiquer le pays ou la zoné géographique où la station terrienne de réception est située. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences;

c) Indiquer les coordonnés géographiques de l'emplacement du récepteur (longitude et latitude en degrés et minutes). Indiquer également les secondes ([1]) à un dixième de minute près.

([1]) Cette information n'est pas nécessaire que si la zone de coordination de la station terrienne empiète sur le territoire d'une autre administration.

Point 5 Station(s) avec laquelle (lesquelles) la comunication doit être établie.

Indiquer l'identité de la (ou des) station(s) spatiale(s) d'émission associée(s) à la station terrienne, en se référant aux notifications y relatives ou de toute autre façon appropriée, ou bien, dans le cas d'un satellite réflecteur, l'identité du satellite et de la (ou des) station(s) terrienne(s) d'émission qui lui sont associée(s). Dans le cas d'un satellite géostationaire, indiquer aussi sa position orbitale.

Point 6 Classe de la station et nature du service.

Au moyen des symboles figurant à l'appendice **10**, indiquer la classe de la station et la nature du service effectuée.

Point 7 Classe d'émission, largeur de bande nécessaire et nature de la transmission à recevoir.

Conformément à l'article 4 et l'appendice **6**:

a) Indiquer la classe d'émission de la transmission à recevoir;
b) Indiquer la (ou les) fréquence(s) porteuse(s) de la transmission à recevoir (1);
c) Indiquer, pour chaque fréquence porteuse à recevoir, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission (1).

Point 8 Caractéristiques de l'antenne de réception de la station terrienne.

a) Indiquer le gain isotrope ou absolu (dB) de l'antenne dans la direction du rayonnement maximal (voir le numéro **154**);
b) Indiquer, en degrés, l'angle formé par les directions dans lesquelles la puissance est réduite de moitié (donner une description détaillée si le diagramme de rayonnement n'est pas symétrique);
c) Joindre à la fiche de diagramme de rayonnement de l'antenne mesuré en prenant la direction du rayonnement maximal comme référence, ou indiquer le diagramme de rayonnement de référence à utiliser pour la coordination;
d) Joindre à la fiche un schéma indiquant l'angle de site de l'horizon dans chaque azimut autour de la station terrienne;
e) Indiquer, en degrés, par rapport au plan horizontal l'angle de site minimal, prévu en exploitation, de la direction du rayonnement maximal de l'antenne;
f) Indiquer, en degrés, à partir du Nord vrai dans le sens des aiguilles d'une montre, les limites entre lesquelles l'azimut de la direction du rayonnement maximal de l'antenne peut varier pendant l'exploitation;
g) Indiquer l'altitude en mètres de l'antenne au-dessus du niveau moyen de la mer;
h) Indiquer le type de polarisation de l'antenne. Dans le cas de la polarisation circulaire, en indiquer le sens (voir les numéros **148** e **149**). Dans le cas de la polarisation rectiligne, indiquer le plan de polarisation. Indiquer également si l'autorisation est donnée pour l'utilisation générale de ce renseignement en vue de déterminer la nécessité de la coordination avec d'autres réseaux à satellite conformément à l'appendice **29** (1).

Point 9 Température de bruit, température de bruit de la liaison et gain de transmission.

a) Indiquer, en kelvins, la plus faible température de bruit du système de réception total, rapportée à la sortie de l'antenne de réception de la station terrienne, dans les conditions de «ciel calme». Cette valeur est à indiquer pour la valeur nominale de l'angle de site dans le cas où la station d'émission associée est placée à bord d'un géostationnaire et, dans les autres cas, pour la valeur minimale de l'angle de site;
b) Lorsque de simples répéteurs-changeurs de fréquence sont utilisés à bord de la station spatiale associée, indiquer les plus faibles températures de bruit équivalents de la liaison par satellite dans les conditions du *point 9, a)*, ci-dessus pour chaque assignation (voir le numéro **168**);
c) Indiquer la valeur du gain de transmission associé à chaque température de bruit équivalent de la liaison par satellite donnée au *point 9, b)*, ci-dessus. Le gain de transmissions s'évalue de la sortie de l'antenne de réception de la station spatiale à la sortie de l'antenne de réception de la station terrienne.

Point 10 Horaire normal de réception.

Indiquer en tempos UTC l'horaire normal de réception sur la fréquence de chaque porteuse.

Point 11 Coordination.

Indiquer le nom de toute administration avec laquelle l'utilisation de la frequence a été coordonnée avec succès, conformément aux numéros **1060** et **1107** et, le cas échéant, le nom de toute administration auprès de laquelle la coordination de l'utilisation de la fréquence a été recherchée, mais non effectuée.

---

(1) Cette information n'est pas nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

Point 12 Accords.

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 13 Administration ou compagnie exploitante.

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 22).

SECTION D

Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence d'émission de stations spatiales

Point 1 Fréquence(s) assignée(s).

Indiquer la (ou les) fréquence(s) assignée(s), selon la définition de l'article 1 (voir le numéro **142**), en kHz jusqu'à 28 000 kHz, inclus, en MHz, au dessus de 28 000 kHz jusqu'à 10 500 MHz inclus et en GHz au-dessus de 10 500 MHz. Il convient que chaque faisceau de rayonnement d'antenne fasse l'objet d'au moins une fiche de notification distincte.

Point 2 Bande de fréquences assignée.

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro **141**).

Point 3 Date de mise en service ([1]).

a) Dans le cas d'une nouvelle assignation, indiquer la date de mise en service effective ou prévue, selon le cas, de l'assignation de fréquence;

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au *point 4*, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité de la (ou des) station(s) spatiale(s).

Indiquer l'identité de la (ou des) station(s) spatiale(s).

Point 5 Renseignements relatifs à l'orbite.

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale sur l'orbite des satellites géostationnaires, ainsi que la tolérance de longitude et l'excursion d'inclinaison prévues. Indiquer également, dans le cas où il est prévu qu'un satellite géostationnaire communique avec une station terrienne:

1) L'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site d'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
2) L'arc de l'orbitre des satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;
3) Si l'arc dont il est question à l'alinéa 2) ci-dessus est plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

Note. — Les arcs dont il est question aux alinéas 1) et 2) sont à définir par la longitude géographique de leurs extrémités sur l'orbitre des satellites géostationnaires.

b) Dans le cas d'une ou plusieurs stations spatiales placées à bord d'un ou de plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en kilomètres) de l'apogée et du périgée de la (ou des) station(s) spatiale(s) ainsi que le nombre de satellites utilisées.

Point 6 Zone(s) de service ou station(s) de réception.

a) Dans le cas où les stations de réception associées sont des stations terriennes, indiquer la (ou les) zone(s) de service prévue(s) sur la Terre ou le nom de la localité et du pays ou la zone géographique où est située chaque station de réception;

([1]) Voir aussi la Résolution **4**.

b) Dans le cas où des stations de réception associeées sont des stations spatiales, indiquer l'identité de chacune d'elles en se référent aux notificatins y relatives ou de toute autre façon appropriée.

Point 7 Classe de station et nature du service.

Au moyen des symboles figurent à l'appendice **10**, indiquer la classe de la (ou des) station(s) et la nature du service effectué.

Point 8 Classe d'émission, largeur de bande nécessaire et nature de la transmission.

Conformément à l'article 4 et à l'appendice **6**:

a) Indiquer la classe d'émission de la transmission;
b) Indiquer la (ou les) fréquences(s) porteuses(s) de la transmission (1);
c) Indiquer, pour chaque porteuse, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission (1);
d) Indiquer, pour la porteuse avant la plus petite largeur de bande de assignations du système, la classe d'émission, la largeur de bande nécessaire et la nature de transmission (1).

Point 9 Caractéristiques de puissance de l'émission.

a) Indiquer pour chaque porteuse la puissance en crête (dBW) fournie à l'entrée de l'antenne (1);
b) Indiquer la puissance totale en crête (dBW) et la densité maximale de puissance par Hz [dB (W/Hz)] (2) fournie à l'entrée de l'antenne (valeur moyenne calculée dans la bande de 4 kHz la plus défavorisée pour les porteuses inférieures à 15 GHz ou dans la bande de 1 MHz la plus défavorisée pour les porteuses supérieures à 15 GHz);
c) Indiquer, pour chaque porteuse, la valeur minimale de la puissance en crête fournie à l'entrée de l'antenne (1).

Point 10 Caractéristiques de l'antenne d'émission de la station spatiale.

Pour chaque zone de service, ou chaque faisceau de rayonnement de l'antenne:

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, destinée à communication avec une station terrienne, indiquer le gain maximal de l'antenne d'émission de la station spatiale et les contours de gain tracés sur une carte de la surface terrestre, de préférence dans une porjection radiale à partir du satellite et sur un plan perpendiculaire à l'axe joignant le centre de la Terre au satellite. Indiquer le gain isotrope ou absolut sur chaque contour correspondant à un gain inférieur de 2, 4, 6 10, 20 dB à la valeur maximale, et ainsi de suite de 10 dB en 10 dB si nécessaire. Chaque fois que possible, les contours du gain de l'antenne d'émission de la station spatiale devraient également être indiqués sour forme d'une équation numérique ou sous forme d'un tableau;
b) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire dont le faisceau de rayonnement de l'antenne est dirigé vers un autre satellite ou dans le cas d'une station spatiale placée à bord d'un satellite non géostationnaire, indiquer le gain isotrope ou absolu de l'antenne d'émission de la station spatiale dans la direction de rayonnement maximal et le diagramme de rayonnement de cette antenne, en prenant pour réference le gain dans la direction de rayonnement maximal;
c) Indiquer le type de polarisation du rayonnement émis par l'antenne. Dans le cas d'une polarisation circulaire, indiquer le sens de la polarisation (voir les numéros **148** et **149**). Dans le cas d'une polarisation rectiligne, indiquer l'angle, en degrées, mesuré dans le sens inverse des arguilles d'une montre, dans le plan normal à l'axe du faisceau du plan équatorial au vecteur électrique de l'onde vu du satellite (1);
d) Dans le cas d'un satellite géostationnaire, indiquer la précision de pointage de l'antenne;
e) Dans le cas d'une station spatiale installée à bord d'un satellite géostationnaire fonctionnant dans une bande attribuée dans le sens Terre vers espace et dans le sens espace vers Terre, indiquer aussi le gain de l'antenne de la station spatiale d'émission dans la direction des parties de l'orbite des satellites géostationnaires qui ne sont pas occultées par la Terre, au moyen d'un diagramme indiquant le gain d'antenne estimé, en fonction de la longitude orbitale.

Point 11 Caractéristiques de modulation (1).

Pour chaque fréquence porteuse, selon la nature du signal modulant la porteuse et selon le type de modulation, indiquer les caractéristiques suivantes:

a) Porteuse modulée en fréquence par une bande de base téléphonique multivoie à répartition en fréquence (MRF/MF) ou par un signal pouvant être représenté par une bande de base

(1) Cette information n'est nécessaire qui si elle a servi comme base pour effectuer la coordination avec une autre administration.
(2) Il convient d'utiliser la plus récent version du Rapport 792 du CCIR dans la mesure où elle s'applique au calcul de la densité maximale de puissance par hertz.

téléphonique multivoie à répartition en fréquence: indiquer les fréquences inférieure et supérieure de la bande de base et l'excursion de fréquence efficace de la tonalité d'essai en fonction de la fréquence de la bande de base;

b) Porteuse modulée en fréquence par un signal de télévision: indiquer la norme du signal de télévision (y compris, s'il y a lieu, la norme utilisée pour la couleur), l'excursion de fréquence pour la fréquence pivot de la caractéristique de préaccentuation et cette caractéristique de préaccentuation: indiquer également, s'il y a lieu, les caractéristiques de multiplexage du signal image avec le(s) son(s) ou d'autres signaux;

c) Porteuse modulée par déplacement de phase par un signal à modulation par impulsions et codage (MIC/MDP): indiquer le débit binaire et le nombre de phases;

d) Porteuse modulée en amplitude (y compris à bande latérale unique): indiquer de façon aussi précise que possible la nature du signal modulant et le type de modulation d'amplitude utilisé;

e) Pour tous les autres types de modulation: indiquer les renseignements qui pouvant être utiles pour une étude de brouillage;

f) Quel que soit le type de modulation utilisé: indiquer, s'il y a lieu, les caractéristiques de dispersion de l'énergie.

Point 12 Horaire normal de fonctionnement.

Indiquer l'horaire normal (UTC) de foncionnement sur la fréquence de chaque porteuse.

Point 13 Coordination.

Indiquer le nom de toute administration ou groupe d'administrations avec lequel l'utilisation du réseau à satellite auquel appartient la station spatiale a été coordonnée avec succès, conformément au numéro **1060.**

Point 14 Accords.

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un acord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 15 Administration ou compagnie exploitante.

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à exploitation technique des stations (voir l'article 22).

SECTION E

Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception de stations spatiales

Point 1 Fréquence(s) assignée(s).

Indiquer la (ou les) fréquence(s), selon la définition de l'article 1 (voir le numéro **142**), en kHz jusqu'a 28 000 kHz inclus, en MHz au-dessus de 28 000 kHz jusqu'à 10 500 MHz, inclus et en GHz au-dessus de 10 500 MHz. Il convient que chaque faisceau de rayonnement d'antenne fasse l'objet d'au moins une fiche de notification distincte.

Point 2 Bande de fréquences assignée.

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro **141**).

Point 3 Date de mise en service (1).

a) Dans le cas d'une nouvelle assignation, indiquer la date effective ou prévue, selon le cas, à laquelle commence la réception sur la fréquence assignée;

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à exception de celle qui figure au *point 4*, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité de la (ou des) station(s) spatiale(s) de réception.

Indiquer l'identité de la (ou des) station(s) spatiale(s) de réception.

---

(1) Voir aussi la Résolution **4.**

Point 5 Renseignements relatifs à l'orbite.

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale sur l'orbite des satellites géostationnaires, ainsi que la tolérance de longitude et l'excursion d'inclinaison prévues. Indiquer également, dans le cas où il est prévu qu'un satellite géostationnaire communique avec une station terrienne:

1) L'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site d'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
2) L'arc de l'orbite de satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;
3) Si l'arc dont il est question à alinéa 2) ci-dessus et plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

Note. — Les arcs dont il est question aux alinéas 1) et 2) sont à définir par la longitude géographique de leurs extrémités sur l'orbitre des satellites géostationnaires.

b) Dans le cas d'une ou de plusiers stations spatiales placées à bord d'un ou de plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en kilomètres) de l'apogée et du périgée de la (ou des) stations(s) spatiale(s) ainsi que le nombre des satellites utilisés:

Point 6 Station(s) terrienne(s) ou spatiales(s) d'émission associée(s).

Indiquer l'identité de la (ou des) station(s) terriennes(s) ou spatiale(s) d'émission associée(s) à la (ou aux) station(s) spatiale(s), en se référent aux notifications y relatives ou de toute autre façon appropriée.

Point 7 Classe de station et nature du service.

Au moyen des symboles figurant à l'appendice **10,** indiquer la classe de la (ou des) stations(s) et la nature du service effectué.

Point 8 Classe d'émission, largeur de bande nécessaire et nature de la (ou des) transmissions à recevoir.

Conformément à l'article 4 et à l'appendice **6**:

a) Indiquer la classe d'émission de (ou des) transmission(s) à recevoir;
b) Indiquer la (ou les) fréquence(s) porteuse(s) de la (ou des) transmissions(s) à recevoir (1);
c) Indiquer, pour chaque fréquence portuese à recevoir, la classe d'émisson, la largeur de bande nécessaire et la nature de la (ou des) transmission(s) à recevoir (1).

Point 9 Caractéristiques de l'antenne de réception de la station spatiale.

Pour chaque faisceau d'antenne de réception:

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostacionnaire destiné à communiquer avec une station terrienne, indiquer le gain maximal de l'antenne de récepption de la station spatiale et les contours de gain tracés sur une carte de la surface terrestre, de préférence dans une projection radiale à partir du satellite et sur un plan perpendiculaire à l'axe joignante le centre de la Terre au satellite. Indiquer le gain isotrope ou absolu sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale, et ainsi de 10 dB en 10 dB si nécessaire. Chaque fois que possible, les contours de gain de l'antenne de réception de la station spatialle devranit ègalement être indiqués sous forme d'une èquation numérique ou sous forme s'un tableau;
b) Dans la cas d'une station spatiale placée à bord d'un satéllite géostationnaire dont le faisceau de rayonnement de l'antenne est dirigé vers un autre satellite ou dans le cas d'une station spatialle placée à bord d'un satellite non géostationaire, indiquer le gain isotrope ou absolu de l'antenne de réception de la sation spatiale dans la direction de rayonnement maximal et le diagramme de rayonnment de cette antenne, en prenant pour référence le gain dans la direction de rayonnement maximal;
c) Indiquer le type de polarisation de l'antenne. Dans le cas de la polarisation circulaire, en indiquer le sens (voir les numéros **148** et **149**). Dans le cas de la polarisation rectiligne, indiquer l'angle, en degrés, mesuré dans le sens inverse des aiguilles d'une montre dans un plan normal à l'axe du faisceau du plan équatorial au vecteur électrique de l'onde vu du satellite. Indiquer également si l'autorisation a été donnée pour l'utilisation générale de ce renseignemente en vue de déterminer la nécessité de la coordination avec d'autres réseaux à satellite conformément à l'appendice **29** (1);

(1) Cette information n'est nécessaire que sil elle a servi conune base pour effectuer la coordination avec une autre administration.

d) Dans de cas d'un satellite géostionnaire, indiquer la précision de pointage de l'antenne;
e) Dans le cas d'une station spatialle installée à bord d'un satellite géostationnaire fonctionnant dans une band attribuée dans le sens Terre vers espace et dans le sens espace vers Terre, indiquer aussi le gain dę l'antenne de la station spatiale de réception dans la direction des parties de l'orbite des satellites géostacionnaires qui ne sont pas occultées par la Terre, au moyen d'un diagramme indiquant le gain d'antenne estimé, en fonction de la longitude orbitale.

Point 10 Température de bruit.

Indiquer, en kelvins, la température de bruit de l'ensemble du système de réception à la sortie de l'antenne de réception de la sation spatiale.

Point 11 Horaire normal de réception.

Indiquer en temps UTC l'horaire normal de réception sur la fréquence de chaques porteuse.

Point 12 Coordination.

Indiquer le nom de toute adiministration ou groupe d'administrations avec lequel l'utilisation du réseau à satellite auquel appartient la station spatiale a été coordonnée avec succès, conformément au numéro **1060.**

Point 13 Accords.

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dèpasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 14 Administration ou compagnie exploitante.

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télegraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 22).

SECTION F

Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception de sation de radioastronomie

Point 1 Fréquence observée.

Indiquer, le centre de la bande de fréquences observée, en kHz jusqu'à 28 000 kHz inclus, en MHz au-dessus de 28 000 kHz inclus, en Mhz au-dessus de 28 000 kHz jusqu'à 10 500 MHz inclus et en GHz au-dessus de 10 500 MHz.

Point 2 Date de mise en service.

a) Indiquer la date effective ou prévue, selom le cas, à laquelle commence la rèception dans la bande de fréquences;
b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales spécifiées dans la présent section, à l'exception de celle qui figure au *point 3, b*), la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 3 Nom et emplacement de la station.

a) Indiquer les lettres «RA»;
b) Indiquer le nom sous lequel la station est désignée ou le nom de la localité dans laquelle elle est située, ou bien ces deux noms;
c) Indiquer le pays ou la zone géographique où la station est située. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences;
d) Indiquer les coordonnées géographiques, de l'emplancement de la station (longitude et latitude en degrés et minutes).

Point 4 Largues de bande.

Indiquer la largeur de la bande de fréquences (en kHz) sur laquelle portent les observations.

Point 5 Caractéristiques de l'antenne.

Indiquer le type et les dimensions de l'antenne, sa surface effective et les limites entre lesquelles peuvent varier son azimut et son angle de site.

Point 6 Horaire normal de réception.

Indiquer l'horaire normal (UTC) de réception sur la fréquence observée.

Point 7 Température de bruit.

Indiquer, en kelvins, la temperature de bruit de l'ensemble du système de réception, rapportée à la sortie de l'antenne de réception.

Point 8 Classe des observations.

Indiquer la classe des observations effectuées dans la bande de fréquences indiquée au *point 4*. Les observations de la classe A sont celles dans lesquelles la sensibilité des appareils n'est pas un facteur essentiel. Les observations de la classe B sont celles que l'on ne peut effectuer qu'avec des récepteurs à faible bruit très perfectionnés.

Point 9 Administration ou compagnie exploitante.

Indiquer le nom de l'administration ou de la compagnie expoitante et les adresses postale et télegraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 22).

SECTION G

Modèles de fiche de notification (station terrienne)

Le Comité établit et tient à jour des modéles de fiche de notification de manière à respecter la totalité des dispositions réglementaires du présent appendice et les décisions connexes des conférences futures.

SECTION H

Modèles de fiche de notification (station spatiale)

Le Comité établit et tient à jour des modèles de fiche de notification de manière à respecter la totalité des dispositions réglementaires du présent appendice et les décisions connexes des conférences futures.

ANNEXE À L'APPENDICE 3

Renseignements minimum nécessaires à la coordination régie par les dispositions des numéros 1060 et 1107

Renseignements géneraux:

a) Pour la coordination régie par les dispositions du numéro **1060**:

Dans le cas de la coordination de l'utilisation d'une ou plusieurs assignations de fréquence à une station spatiale, les renseignements à fournir au titre de la section B ou C de l'appendice **3** sont, soit les caractéristiques de la station terrienne réelle associée du réseau, si ces caractéristiques sont connues, soit les caractéristiques d'une station terrienne type;

Dans le cas de la coordination de l'utilisation d'une ou plusieurs assignations de fréquence à une station terrienne, les renseignements visés aux p*oints 4, c*), et *4, e*), de la section A de l'appendice **3** sont fournis si aucune modification n'a été apportée aux caractéristiques fondamentales de l'assignation, ou des assignations, à la station spatiale pour tenir compte des besoins de la station terriene (ou des stations terriennes). Dans les autres cas, la coordination de l'assignation (des assignations) de fréquence à la station spatiale est nécessaire.

b) Pour la coordination régie par les dispositions du numéro **1107**, seuls les renseignements indiqués dans les colonnes 9 et 10 du tableau joint sont nécessaires;

c) Un «X» dans une colonne du tableau indique que le renseignement en question est nécessaire.

Reinseignements requis au tire de l'appendice 3 — Type de coordination requise

Titres des colonnes

1 — Assignations à une station terrienne d'émission dotée d'un simple répéteurchangeur de fréquence à bord du satelite, conforme aux dispositions du numéro **1060.**

2 — Comme en 1, dans les cas nécessitant un traitement séparé de la liaison montante et de la liaison descendante (par exemple télémesure, télécommande).

3 — Assignations à une station terrienne de réception dotée d'un simple répéteurchangeur de fréquence à bord du satelite, conforme aux dispositions du numéro **1060.**

4 — Comme en 3, dans les cas nécessitant un traitement séparé de la liaison montante et de la liaison descendante (par exemple télémesure, télécommande).

5 — Assignations à une station spatiale d'émission dotée d'un simple répéteurchangeur de fréquences à bord du satelite, conforme aux dispositions du numéro **1060.**

6 — Comme en 5, dans les cas nécessitant un traitement séparé de la liaison montante et de la liaison descendante (par exemple télémesure, télécommande).

7 — Assignations à une station spatiale de réception dotée d'un simple répéteur-changeur de fréquence à bord du satélite, conforme aux dispositions du numéro **1060.**

8 — Comme en 7, dans les cas nécessitant un traitement séparé de la liaison montante et de la liaison descendante (par exemple télémesure, télécommande).

9 — Assignations à une station terrienne d'émission, conforme aux dispositions du numéro **1107.**

10 — Assignations à une station terrienne de réception, conforme aux dispositions du numéro **1107.**

Point numéro	1	2	3	4	5	6	7	8	9	10	Point numéro
Section B											**Section B**
1 + 2	×	×			×				×		1 + 2
3a + 3b									×		3a + 3b
4a + 4b + 4c	×	×			×				×		4a + 4b + 4c
5	×	×			×						5
7a + 8b (*) + 9a + 9c	×	×			×				×		7a + 8b (*) + 9a + 9c
9d + 9e + 9f									×		9d + 9e + 8f
Section C											**Section C**
1 + 2			×	×			×			×	1 + 2
3a + 3b										×	3a + 3b
4a + 4b + 4c			×	×			×			×	4a + 4b + 4c
5			×	×			×				5
7a + 8a + 8c			×	×			×			×	7a + 8a + 8c
8d + 8e + 8f										×	8d + 8e + 8f
9a				×						×	9a
9b + 9c			×				×			×	9b + 9c
Section D											**Section D**
1 + 2 + 4 + 5a + 5a1 + 5a2 + 5a3 + 6a + 6b + 8a + 9b (*) + 10a + (10b**) + 10d + 10e (**)	×				×	×					1 + 2 + 4 + 5a + 5a1 + 5a2 + 5a3 + 6a + 6b + 8a + 9b (*) + 10a + 10b (**) + 10d + 10e (*)
Section E											**Section E**
1 + 2 + 4 + 5a + 5a1 + 5a2 + 5a3 + 6 + 8a + 9a + 9b (**) + 9d + 9e (**)			×					×	×		1 + 2 + 4 + 5a + 5a1 + 5a2 + 5a3 + 6 + 8a + 9a + 9b (**) + 9d + e (**)
10			×						×		10

(*) Densité de puissance seulement.

(**) Peut ne pas être toujours applicable.

APPENDICE 4

MOD AP1B **Renseignements à fournir pour la publication anticipée relative à un réseau à satellite**

(Voir l'article 11)

SECTION A

Instructions générales

Point 1 Les renseignements sont fournis séparément pour chaque réseau à satellite.

Point 2 Les renseignements à founir pour chaque réseau à satellite comprennent les caractéristiques pour générales (section B) et, selon le cas, les caractéristiques le sens «Terre vers espace» (section C), les caractéristiques pour le sens «espace vers Terre» (section D), et les caractéristiques pour les liasions espace-espace (section E). De plus, l'administration ou une administration agissant au nom d'un groupe d'administrations, nommémemt désignées, fournissant les rensignements pour la publication anticipée pourra fournir, à titre de resneignements supplémentaires, des donnés relatives au calcul des brouillages aux fins de la coordination entre réseaux (section F).

SECTION B

Caractéristiques générales à fournir pour un réseuau à satellite

Point 1 Identité du réseau à satellite.

Indiquer l'indentité du réseau à satellite au moyen de renseignements suffisants pour éviter toute ambiguité et, le cas échéant, l'identité du système à satellites dont il consiturera un élément.

Point 2 Date de mise en service ([1]).

Indiquer la date prévue pour la première mise en service du réseau à satellite.

Point 3 Administration ou groupe d'administration fournissant les rensseignements pour la publication anticipée.

Indiquer le nom de l'administration (ou les noms des administrations) du groupe fournissant les renseignements relatifs au réseau à satellite aux fins de leur publication antiipée, ainsi que les adresses postale et télegraphique de la (ou des) administration(s) à laquelle (auxquelles) il convient d'envoyer toute communication.

Point 4 Renseignements relatifs à l'orbite de la (ou des) station(s) spatiale(s).

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale sur l'orbite des satellites géostacionnaires ainsi que la tolérance de longitude et l'excursion d'inclinaison prévues, indiquer également:

1) L'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site s'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
2) L'arc de l'orbite des satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;
3) Si l'arc dont il est question à l'alinéa 2) ci-dessus est plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

Note. — Les arcs dont il est question aux alinéas 1) et 2) sont à définer par la longitude géographique de leurs extrémités sur l'orbite des satellites géostationnaires.

b) Dans le cas d'une ou de plusieurs stations spatiales placées à bord d'un ou plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en kilomètres) de l'apogée et du périgée de la (ou des) station(s) spatiale(s) ainsi que le nombre des satelites de mêmes caractéristiques utilisés.

([1]) Voir aussi Résolution **4.**

SECTION C

Caractéristiques du réseau à satellite pour le sens «Terre vers espace»

Point 1 Zone(s) de service «Terre vers espace».

Pour chaque antenne de réception de la station spatiale, indiquer la (ou des) zone(s) de service associée(s) sur la surface de la Terre.

Point 2 Classe des stations et nature du service.

Pour chaque zone de service «Terre vers espace», indiquer, au moyem des symboles figurant à l'appendice **10**, la classe des stations du réseau à satellite er la nature du service à effectuer.

Point 3 Gamme de fréquences.

Pour chaque zone de service «Terre vers espace», indiquer la gamme de fréquences dans laquelle les porteuses seront situées.

Point 4 Caractéristiques de puissance de l'onde émisse.

a) Pour chaque zone de service «Terre vers espace», indiquer la densité spectrale maximale de puissance [dB(W/Hz)](1) fournie à l'antenne des stations terriennes d'émission (la larguer de bande dans laquelle la moyenne est calculée dépend de la nature du servive dont il s'agit) pour chaque dimension d'antenne de station terrienne d'emission et, si elle est connue, la puissance en crête totale (dBW) et la largeur de bande nécessaire de cette émission;

b) Si ce renseignement est disponible, indquer pour chaque zone de service «Terre vers espace», en prenant pour référence le niveau isotrope, le diagramme de rayonnement réel de l'antenne de la station terrienne d'émission pour lequel la densité spectrale de puissance isotrope rayonnée équivalente en dehors du faisceau principal est la plus élevée pour chaque dimension l'antenne de station terrienne d'émission;

c) Si ce renseignement est disponible, indiquer, pour les proteuses de télévision et pour chaque zone de service «Terre vers espace», la puissance en crête fournie à l'entrée de l'entenne d'émission de la station terrienne;

d) Si ce renseignement est disponible, indiquer la valeur minimale de la puissance de la porteuse fournie à l'antenne de la station terrienne pour des porteuses à bande étroite.

Point 5 Caractéristiques des antennes de réception de la station spatiale.

Pour chaque zone de service «Terre vers espace»:

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer de gain maximal de l'antenne de réception de la station spatiale et les contours de ganin tracés sur une carte de la surface terrestre de préférence au moyen d'une projection radiale à partir du satellite sur un plan perpendiculaire à l'axe joignant le centre de la terre au satellite. Indiquer le gain isotrope ou absolu sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale et ainsi de suite de 10 dB, si nécessaire. Chaque fois que possible, les contours de gain estimés de l'antenne de réception de la station spatiale devraient également être indiqués sous forme d'une équation numérique ou sous forme d'un tableau;

b) Dans le cas s'une station spatiale placée à bord d'un satellite son géostationnaire, indiquer le gain isotrope ou absolu de l'antenne de réception de la station spatiale dans la direction de rayonnement maximal et le diagramme de rayonnement de cette antenne, en prenant pour référence le gain dans la direction de rayonnement maximal;

c) Si ce renseignement est disponible, indiquer, pour chaque antenne de réception de la station spatiale, de type de polarisation de l'antenne. Dans le cas d'une polarisation circulaire en indiquer le sens (voir les numéros **148** et **149**);

---

(1) Il convient d'utiliser la plus récent version du Rapport 702 du CCIR dans la mesure où elle s'apllique au calcul de la densité maximale de pussiance par hertz.

d) Dans le cas d'une station spatiale placée à bord d'un stallite géostationnaire fonctionnant dans une bande attribuée dans le direction «Terre vers espace» et dans la direction «espace vers Terre», indiquer également le gain estiné de l'antenne de réception de la station spatiale dans la direction des parties de l'orbite des satellites géostationnaires qui ne sont pas occultées par la Terre, au moyen d'un diagramme indiquant le gain d'antenne estimé par rapport à la longitude de l'orbite.

Point 6 Température de bruit de la station spatiale de réception.

Pour le chaque zone de service «Terre vers espace», indiquer, lorsqu'il n'est pas fait usage d'un simple répéteur-changeur de fréquence à bord de la station, la température de bruit la plus de l'ensemble du système de réception raportée à la sortie de l'antenne de réception.

Point 7 Larguer de bande nécessaire.

Si ce renseignement est disponible, indiquer, dans le cas de porteuses à bande étroite, larguer de bande nécessaire.

Point 8 Caractéristiques de modulation.

Si ce renseignement est disponible dans le cas de porteuses de télévision, indiquer les caractéristiques de dispersion de l'énergie telles que l'excursion crête à crête de fréquence (en MHz) et le fréquence de balayage (kHz) de l'onde de dispersion.

SECTION D

Caractéristiques du réseau à satellite dans le sens «espace vers Terre»

Point 1 Zone(s) de service «espace vers Terre».

Pour chaque antenne de émission de la station spatiale, indiquer la (ou les) zone(s) de service associée(s) sur la surface de la Terre.

Point 2 Classe des stations et nature du service.

Pour chaque zone de service «espace vers Terre», indiquer, au moyem des symboles figurant à l'appendice **10**, la classe des stations du réseau à satellite er la nature du service à effectuer.

Point 3 Gamme de fréquences.

Pour chaque zone de service «espace vers Terre», indiquer la gamme de fréquences dans laquelle les porteuses seront situées.

Point 4 Caractéristiques de puissance de l'émission.

a) Pour chaque zone de service «espace vers Terre», indiquer la densité spectrale maximale de puissance [dBN (W/Hz)] (1) fournie à l'antenne d'émission de la station spatiale (la largeur de bande dans laquelle la moyenne est calculée dépend de la nature du service dont il s'agit) et si elle sont connues, la puissance en crête totale (dBW) et la largeur de bande nécessaire de cette émission;

b) Si ce renseignement est disponible, indiquer, pour les porteuses à bande étroite et pour les porteuses de télévision, la puissance en crête fournie à l'entrée de l'antenne d'émission de la station spatiale;

c) Si ce renseignement est disponible, indiquer, la valeur minimale de la puissance de la porteuse fournie à l'antenne de la station spatiale, pour des porteuses à bande étroite.

Point 5 Caractéristiques des antennes d'émission de la station spatiale.

Pour chaque zone de service «espace vers Terre»:

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain maximal de l'antenne d'émission de la station spatiale et les contours de gain tracés sur une

(1) Il convient d'utiliser la plus récente version du Rapport 792 du CCIR dans la mesure où elle s'applique au calcul de la densidé maximale de puissance par hertz.

carte de la surface terrestre, de préférence dans une projection radiale à partir du satellite sur un plan perpendiculaire à l'axe joignant le centre de la Terre au satellite. Indiquer le gain isotrope ou absolu sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale, et ainsi de suite de 10 dB en 10 dB, si nécessaire. Chaque fois que possible, les contours de gain estimés de l'antenne d'émission de la station spatiale devraient également être indiqués sous forme d'une équation numérique ou sous forme d'un tableau;

b) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain isotrope ou absolu de l'antenne d'émission de la station spatiale dans la direction de rayonnement de cette antenne, en prenant pour référence le gain dans la direction de rayonnement maximal;

c) Si le renseignement est disponible, indiquer, pour chaque antenne d'émission de la station spatiale, le type de polarisation de l'antenne. Dans le cas d'une polarisation circulaire, en indiquer le sens (voir les numéros **148** et **149**);

d) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, fonctionnaire dans une bande attribuée dans le sens «Terre vers espace» et dans le sens «espace vers Terre», indiquer également de gain estimé de l'antenne d'émission de la station spatiale dans la direction des parties de l'orbite des satellites géostationnaires qui ne sont pas ocultées par la Terre, au moyen d'un diagramme montrant le gain d'antenne estimé, par rapport à la longitude de l'orbite.

Point 6 Caractéristiques de réception des stations terriennes.

a) Pour chaque zone de service «espace vers Terre», indiquer, lorsqu'il n'est pas fait usage d'un simple répéteur-changeur de fréquence à bord de la station spatiale, la température de bruit la plus basse de l'ensemble du système de réception des stations terriennes, rapportée à la sortie de l'antenne de réception.

Pour chaque zone de service «espace vers Terre» et pour chaque utilisation ([1]) projetée, indiquer, lorsqu'il est fait usage de simples répéteurs-changeurs de fréquence à bord de la station spatiale:

1) La plus faible température de bruit équivalente de liaison par satellite et la valeur associée du gain de transmission;

2) Les valeurs du gain de transmission et de la température de bruit équivalente de liaison associée, qui correspondent au rapport le plus élevé «gain de transmission/température de bruit équivalente de liaison par satellite»; le gain de transmission s'évalue de la sortie de l'antenne de réception de la station spatiale à la sortie de l'antenne de réception de la station terrienne. Pour chaque utilisation projetée, indiquer également à quelle(s) antenne(s) de réception de la station spatiale chaque simple répéteur-changeur de fréquence sera connecté;

b) Si ce renseignement est disponible, indiquer pour chaque zone de service «espace vers Terre», en prenant pour référence le niveau isotrope, le diagramme de rayonnement réel de l'antenne de la station terrienne de réception dont le niveau en dehors du faisceau principal est le plus élevé pour chaque dimension d'antenne de station terrienne de réception. Lorsqu'il est fait usage de simples répéteurs--changeurs de fréquence à bord de la station spatiale, indiquer également, si ce renseignement est disponible, le diagramme qui est associé à chacune des températures de bruit équivalentes de liaison par satellite indiqués ci-dessus.

Point 7 Largeur de bande nécessaire.

Si ce renseignement est disponible, indiquer, dans le cas de porteuses à bande étroite, la largeur de bande nécessaire.

Point 8 Caractéristiques de modulation.

Si ce renseignement est disponible, dans le cas de porteuses de télévision, indiquer les caractéristiques de dispersion de l'énergie telles qie l'excursion crête à crête de fréquence (MHz) et la fréquence de balayage (kHz) de l'onde de dispersion.

([1]) On considérera qu'il s'agit d'utilisations différentes lorsqu'il est fait usage de types différents de porteuse (par leur densité spectrale maximale de puissance) ou de types différents de stations terriennes de reception (par leur gain d'antenne de réception).

SECTION E

Caractéristiques à fournir pour les liaisons espace-espace

Si le réseau à satellite est relié à un ou plusieurs autres réseaux à satellite au moyen de liaisons espace-espace, indiquer:

a) L'identité du (ou des) réseau(x) à satellite auxquels le réseau à satellite considéré est relié;
b) Les bandes de fréquence d'émission et de réception;
c) Les classes d'émission;
d) Les puissances isotropes rayonnées équivalentes (p. i. r. e.) nominales dans l'axe des faisceaux d'antenne.

SECTION F

Renseignements supplémentaires (s'ils sont disponibles)

Point 1 Généralités.

Une administration ou une administration agissant au nom d'un groupe d'administrations nommément désignées qui le désire peut fournir des renseignements supplémentaires. Ces renseignements peuvent servir aux calculs de brouillage liés au processus de publication anticipée. Ils peuvent comprendre tout ou partie des données indiquées aux points suivantes, dont la liste n'est pas limitative, mais donnent une indication du type de renseignements qui peuvent être données.

Point 2 Sens «Terre vers espace».

Pour chaque zone de service «Terre vers espace», on peut fournir les renseignements suivants:

a) Classe d'émission, largeur de bande nécessaire et caractéristiques de modulation (y compris, s'il y a lieu, la dispersion de l'énergie) pour chaque type de porteuse émise;
b) P. i. r. e. de la station terrienne pour chaque type de porteuse associé à chaque type et diamètre d'antenne de station terrienne;
c) La description technique et les caractéristiques du système de télécommande (sauf pour les données de codage).

Point 3 Sens «espace vers Terre».

Pour chaque zone de service «espace vers Terre», on peut fournir les renseignements suivantes:

a) Classe d'émission, largeur de bande nécessaire et caractéristiques de modulation (y compris, s'il y a lieu, la dispersion de l'énergie) pour chaque type de porteuse;
b) Puissance d'émission du satellite fournie à l'antenne d'émission de ce satellite pour chaque type de porteuse;
c) La description technique et les caractéristiques du système d'émissions de poursuite et de télémesure (sauf pour les données de codage).

Point 4 Toute autre renseignement pouvant être utile.

NOC **AP1C**

APPENDICE 5

Renseignements à fournir conformément aux dispositions des numéros 1682 à 1684

(Voir l'article 16)

Allotissement initial	Allotissement additionel	Allotissement de remplacement (numéro 1721)

1. Pays ou zone d'allotissement ...

2.2.1. Fréquence proposée ..... { Fréquence porteuse... kHz / Fréquence assignée ... kHz

2.2. Autre fréquence proposée ..... { Fréquence porteuse... kHz / Fréquence assignée ... kHz

2.3. Fréquence à remplacer (numéro **1721**)..... { Fréquence porteuse... kHz / Fréquence assignée ... kHz

3.3.1. Zone de service principale ...
3.2. Longueur maximale de la liaison, en kilomètres ...
4. Nature du service (par exemple: CP, CO, CV ou OT) ...
5. Classe d'émission ...
6. Puissance de crête (en kW) ...
7. Caractéristiques de l'antenne d'émission (voir détails dans l'appendice 1):
7.1. S'il s'agit d'une antenne sans effet directif, inscrire le symbole «ND» ...
7.2. S'il s'agit d'une antenne à effet directif, indiquer:

a) L'azimut du rayonnement maximum ...
b) L'angle d'ouverture du lobe principal ...
c) Le gain relatif de l'antenne en dB ...

8. Horaire d'utilisation prévu de la fréquence proposée ... à ... h (UTC).
9. Indiquer si possible:

a) Les heures de point du trafic (estimation) ... à ... h (UTC).
b) Le volume journalier de trafic en minutes (estimation) ...

10. Date prévue pour la première utilisation de la voie ... (mois) ... (année).

MOD AP5

APPENDICE 6

Caractéristiques additionnelles pour la classification des émissions; détermination des largeurs de bande nécessaires, exemples de calcul de la largeur de bande nécessaire et exemples connexes de désignation des émissions

(Voir l'article 4)

PARTIE A

Caractéristiques additionnelles pour la classification des émissions

L'article 4 du présent Règlement décrit à l'aide de trois symboles les caractéristiques fondamentales pour la classification des émissions. Pour une description plus détaillée des émissions, il convient de recourir à deux caractéristiques additionnelles facultatives.

Ces caractéristiques additionnelles facultatives (voir aussi la Recommandation **62**) sont les suivantes:

Quatrième symbole — détails concernant le signal (ou les signaux);
Cinquième symbole — nature du multiplexage.

Si l'on n'utilise ni le quatrième ni le cinquième symbole, il convient de le mentionner par un trait placé à l'endroit où symbole devrait figurer.

1. *Quatrième symbole* — Détails concernant le signal (ou les signaux):

1. 1. Code bivalent, avec des éléments de signal qui diffèrent soit en nombre soit endurée ..... A
1. 2. Code bivalent, avec des éléments de signal identiques en nombre et en durée, sans correction d'erreur ..... B
1. 3. Code bivalent, avec des éléments de signal identiques en nombre et en durée, avec correction d'erreurs C

1. 4. Code quadrivalent, dans lequel chaque état représente un élément de signal (d'un ou plusieurs bits) ..... D
1. 5. Code plurivalent, dans lequel chaque état représente un élément de signal (d'un ou plusieurs bits) ..... E
1. 6. Code plurivalent, dans lequel chaque état ou combinaison d'états représente un caractère ..... F
1. 7. Son de qualité radiophonique (monophonique) ..... G
1. 8. Son de qualité radiophonique (stéréophonique ou quadriphonique) ..... H
1. 9. Son de qualité commerciale (à l'exclusion des catégories visées en 1.10 et 1.11) ..... J
1.10. Son de qualité commerciale avec emploi de l'inversion des fréquences ou du découpage de la bande .... K
1.11. Son de qualité commerciale, avec des signaux séparés modulés en fréquence pour commander le niveau di signal démodulé L
1.12. Image en noir et blanc ..... M
1.13. Image en couleur ..... N
1.14. Combinaison des cas ci-dessus ..... W
1.15. Autres cas X

2. *Cinquième symbole* — Nature du multiplexage:

2. 1. Pas de multiplexage ..... N
2. 2. Multiplexage par répartition du code (1) C
2. 3. Multiplexage par répartition en fréquence ..... F
2. 4. Multiplexage par répartition dans le temps ..... T
2. 5. Combinaison du multiplexage par répartition en fréquence et du multiplexage par répartition dans le temps W
2. 6. Autres types de multiplexage X

PARTIE B

Détermination des largeurs de bande nécessaires, exemples de calcul de la largeur de bande nécessaires et exemples connexes de désignation des émissions

Pour désigner complètement une émission, il faut ajouter, juste avant les symboles de classification, la largeur de bande nécessaire, indiquée par quatre caractères. Lorsqu'on l'utilise, la largeur de bande nécessaire doit être déterminée par l'une des méthodes suivantes:

1) Utilisation des formules contenues dans le tableau ci-après qui contient également des exemples de largeurs de bande nécessaires et de désignation des émissions correspondantes;
2) Calcul fondé sur les Avis du CCIR (2);
3) Mesure, dans les cas non prévus aux alinéas 1) et 2) ci-dessus.

Cependant, la largeur de bande nécessaire ainsi déterminée n'est pas la seule caractéristique d'une émission qu'il convient de prendre en considératiuon lorsqu'il s'agit d'évaluer le brouillage que cette émission est susceptible de causer.

Dans la rédaction du tableau, les notations qui suivent ont été utilisées:

B_n = largeur de bande nécessaire, en hertz;
B = rapidité de modulation, en bauds;
N = nombre maximal possible des éléments «noirs plus blancs» à transmettre par seconde dans le cas du fac-similé;
M = fréquence maximale de modulation, en hertz;
C = fréquence de la sous-porteuse, en hertz;
D = excursion de crête, c'est-à-dire la moitié de la différence entre les valeurs maximale et minimale de la fréquence instantanée. La fréquence instantanée en hertz s'obtient en divisant la vitesse de variation de la phase, en radians, par 2π;
t = durée de l'impulsion, en secondes, à mi-amplitude;
t_r = temps de montée de l'impulsion, en secondes, entre 10 % et 90 % d'amplitude;
K = facteur numérique général, qui varie suivant l'émission et qui dépend de la distorsion admissible du signal;
N_c = nombre de voies dans la bande de base dans les systèmes radioélectriques multiplex à plusieurs voies;
f_p = fréquence de la sous-porteuse pilote de continuité, en hertz (signal continu utilisé pour contrôler la qualité de fonctionnement des systèmes à multiplexage par répartition en fréquence).

(1) Comprend les techniques d'étalement de la largeur de bande.
(2) Voir également la Recommandation **63**.

Description de l'émission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	
I. Pas de signal modulant			
Onde entretenue pure.....	—	—	Non
II. Modulation d'amplitude			
1. Signal modulation de l'information quantifiée ou numérique			
Télégraphie à ondes entretenues, code Morse.	$B_n = BK$. $K = 5$ pour les liaisons affectées d'évanouissements. K = 3 pours les liaisons sans évanouissements.	25 mots par minute. $B = 20$, $K = 5$. Largeur de bande: 100 Hz	100HA1AAN
Télégraphie à manipulation par tout ou rien d'une porteuse modulée par une fréquence audible, code Morse.	$B_n = BK + 2M$. $K = 5$ pour les liaisons affectées d'évanouissements. $K = 3$ pour les liaisons sans évanouissements.	25 mots par minute. $B = 20$, $M = 1000$. $K = 5$. Largeur de bande: 2100 Hz = 2,1 kHz ...	2K10A2AAN
Signal d'appel sélectif avec emploi d'un code séquentiel à une seule fréquence, bande latérale unique, onde porteuse complète.	$B_n = M$.	Fréquence maximale du code: 2110 Hz. $M = 2110$. Largura de bande: 2110 Hz = 2,11 kHz	2K11H2BFN
Télégraphie à impression directe, avec emploi d'une sous-porteuse modulante à déplacement de frequence, correction des erreurs, bande latérale unique, onde porteuse supprimée (une seule voie).	$B_n = 2M + 2DK$. $M = \frac{B}{2}$.	$B = 50$. $D = 35$ Hz (déplacement 70 Hz). $K = 1,2$. Largura de bande: 134 Hz	134HJ2BCN
Télégraphie harmonique multivoie avec correction des erreurs, quelques voies sont multiplexées par répartion dans le temps, bande latérale unique, onde porteuse réduite.	B_n = fréquence centrale la plus élevée + $M + DK$. $M = \frac{B}{2}$.	15 voies, fréquence centrale la plus élevée = 2805 Hz. $B = 100$. $D = 42,5$ Hz (déplacement 85 Hz). $K = 0,7$. Largeur de bande: 2885 Hz = 2,885 kHz	2K89R7BCW
2. Téléphonie (qualité commerciale)			
Téléphonie, double bande latérale (une seule voie).	$B_n = 2M$.	$M = 3000$. Largeur de bande: 6000 Hz = 6 kHz.....	6K00A3EJN
Téléphonie, bande latérale unique, onde porteuse complète (une seule voie).	$B_n = M$.	$M = 3000$. Largeur de bande: 3000 Hz = 3 kHz....	3K00H3EJN
Téléphonie, bande latérale unique, onde porteuse supprimée (une seule voie).	$B_n = M$ — fréquence de modulation la plus basse.	$M = 3000$. Fréquence de modulation la plus basse = 300 Hz. Largeur de bande: 2700 Hz = 2,7 kHz ...	2K70J3EJN
Téléphonie avec signaux distincts modulés en fréquence pour régler le niveau du signal vocal démodulé, bande latérale unique, onde porteuse réduite. (Lincompex) (une seule voie).	$B_n = M$.	Fréquence maximale de réglage: 2990 Hz. $M = 2990$. Largeur de bande: 2990 Hz = 2,99 kHz	2K99R3ELN
Téléphonie avec dispositif de secret, bande latérale unique, onde porteuse supprimée (deux voies ou plus).	$B_n = N_c M$ — fréquence de modulation la plus basse dans la voie la plus basse.	$N_c = 2$. $M = 3000$, fréquence de modulation la plus basse: 250 Hz. Largeur de bande: 5750 Hz = 5,75 kHz	5K75J8EKF
Téléphonie, bande latérale indépendante (deux voies ou plus).	B_n = somme de M pour chaque bande latérale.	2 voies. $M = 3000$. Largeur de bande: 6000 Hz = 6 kHz....	6K00B8EJN

Description de l'emission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	
3. Radiodiffusion sonore			
Radiodiffusion sonore, double bande latérale.	$B_n = 2M$. M peut varier entre 4000 et 10 000, selon la qualité désirée.	Parole et musique, M = 4000. Largeur de bande: 8000 Hz = 8 kHz....	8K00A3EGN
Radiodiffusion sonore, bande latérale unique, onde porteuse réduite (une seule voie).	$B_n = M$. M peut varier entre 4000 et 10 000, selon la qualité désirée.	Parole et musique, M = 4000. Largeur de bande: 4000 Hz = 4 kHz...	4K00R3EGN
Radiodiffusion sonore, bande latérale unique, onde porteuse supprimée.	$B_n = M$ — fréquence de modulation la plus basse.	Parole et musique, M = 4500, fréquence de modulation la plus basse = 50 Hz. Largeur de bande: 4450 Hz = 4,45 kHz	4K45J3EGN
4. Télévision			
Télevision, image et son.	Pour les largeurs de bande communément utilisées pour les systèmes de télévision, voir les documents correspondants du CCIR.	Nombre de lignes: 625. Largeur de bande vidéo nominale: 5 MHz. Porteuse sonore par rapport à la porueuse: 5,5 MHz. Largeur de bande totale pour l'image: 6,25 MHz ..... Largeur de la voie de transmission sonore modulée en fréquence, y compris les bandes de garde: 750 kHz ..... Largeur de bande de la voie aux fréquences radioéletriques: 7 MHz.	6M25C3F — — 750KF3EGN
5. Fac-similé			
Fac-similé analogique par modulation en fréquence de la sous-porteuse d'une émission à bande latérale unique, onde portuese réduite, noir et blanc.	$B_n = C + \frac{N}{2} + DK$. K = 1,1. (Valeur type.)	N = 1100, correspondant à un module de coopération de 352 et à une vitesse de rotation du cylindre de 60 tours par minute. Le module de coopération est le produit du diamètre du cylindre et du nombre de lignes par unité de longueur. C = 1900, D = 400 Hz. Largeur de bande: 2890 Hz = 2,89 kHz	2H89R3CMN
Fac-similé analogique; modulation en fréquence d'une sous-porteuse audio-fréquence modulant la porteuse principale, bande latérale unique, onde porteuse supprimée.	$B_n = 2M + 2DK$. $M = \frac{N}{2}$. K = 1,1. (Valeur type.)	N = 1100. D = 400 Hz. Largeur de bande: 1980 Hz = 1,98 kHz	1K98J3C — —
6. Emissions composites			
Double bande latérale, faisceau hertzien de télévision.	$B_n = 2C + 2M + 2D$.	Fréquences vidéo limitées à 5 MHz, son sur sous-porteuse 6,5 MHz, modulée en fréquence avec excursion de 50 kHz: $C = 6{,}5 \times 10^6$; $D = 50 \times 10^3$ Hz; M = 15 000. Largeur de bande: $13{,}13 \times 10^6$ Hz = 13,13 MHz	13M1A8W — —
Double bande latérale, faisceau hertzien, multiplexage par répartition en fréquence.	$B_n = 2M$.	10 voies téléphoniques, occupant la bande de base 1-164 kHz. M = 164 000. Largeur de bande: 328 000 Hz = 328 kHz	328KA8E — —

Description de l'émission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	
Double bande latérale de VOR avec téléphonie (VOR = radiophare d'alignement équidirectif VHF).	$B_n = 2C_{max} + 2M + 2DK$. $K = 1$. (Valeur type.)	La porteuse principale est modulée par: Une sous-portuese de 30 Hz; Une porteuse résultant d'une tonalité de 9960 Hz modulée en fréquence par une tonalité de 30 Hz, Une voie téléphonique; Une tonalité de 1020 Hz manipulée pour identification continue en Morse. $C_{max} = 9960$. $M = 30$. $D = 480$ Hz. Largeur de bande: 20 940 Hz = 20,94 kHz	20K9A9WWF
Bandes latérales indépendantes; plusieurs voies télégraphiques avec correction d'erreurs, ainsi que plusieurs voies téléphoniques avec dispositif de secret; multiplexage par répartition en fréquence.	B_n = somme de M pour chaque bande latérale.	Normalement, les systèmes composites sont exploités conformément aux dispositions normalisées des voies (par exemple Avis 348-2 du CCIR). Pour 3 voies téléphoniques et 15 voies télégraphiques, la largeur de bande nécessaire est de 12 000 Hz = 12 kHz	12K0B9WWF

III-A. Modulation de fréquence

1. Sinal contenant de l'information quantifiée ou numérique

Télégraphie sans correction d'erreurs (une seule voie).	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valeur type.)	$B = 100$. $D = 85$ Hz (déplacement 170 Hz). Largeur de bande: 304 Hz	304HF1BBN
Télégraphie à impression directe à bande étroite, avec correction d'erreurs (une seule voie).	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valeur type.)	$B = 100$. $D = 85$ Hz (déplacement 170 Hz). Largeur de bande: 304 Hz	304HF1BCN
Signal d'appel sélectif.	$B_n = 2M + 2DK$. $M = \frac{B}{2}$. $K = 1,2$. (Valeur type.)	$B = 100$. $D = 85$ Hz (deslocamento 170 Hz). Largeur de bande: 304 Hz	304HF1BCN
Télégraphie duoplex à 4 fréquences.	$B_n = 2M + 2DK$. B = rapidité de modulation en bauds de la voie la plus rapide. Se les voies sont synchronisées: $M = \frac{B}{2}$ (autrement $M = 2B$). $K = 1,1$. (Valeur type.)	Espacement entre fréquences adjacentes = 400 Hz. Voies synchronisées: $B = 100$; $M = 50$; $D = 600$ Hz. Largeur de bande: 1420 Hz = 1,42 kHz	1K42F7BDX

2. Téléphonie (qualité commerciale)

Téléphonie commerciale.	$B_n = 2M + 2DK$. $K = 1$. (Valeur type mais, dans certaines conditions des valeurs plus grandes de K peuvent être nécessaires.)	Cas moyen de téléphonie commerciale, $D = 5000$ Hz. $M = 3000$. Largeur de bande: 16 000 Hz = 16 kHz.	16K0F3EJN

Description de l'émission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	
3. Radiodiffusion sonore			
Radiodiffusion sonore	$B_n = 2M + 2DK$. $K = 1$. (Valeur type.)	Monophonique. D = 75 000 Hz. M = 15 000. Largeur de bande: 180 000 Hz = 180 kHz	180KF3EGN
4. Fac-similé			
Fac-similé par modulation directe en fréquence de la porteuse; noir et blanc.	$B_n = 2M + 2DK$. $M = \frac{N}{2}$. K = 1,1. (Valeur type.)	N = 1100 élements par seconde; D = 400 Hz. Largeur de bande: 1980 Hz = 1,98 kHz	1K98F1C — —
Fac-similé analogique.	$B_n = 2M + 2DK$. $M = \frac{N}{2}$. K = 1,1. (Valeur type.)	N = 1100 élements par seconde; D = 400 Hz. Largeur de bande: 1980 Hz = 1,98 kHz	1K98F3C — —
5. Emissions composites (voir le taleau III-B)			
Faisceau hertzien, multiplexage par répartition en fréquence.	$B_n = 2f_p + 2DK$. $K = 1$. (Valeur type.)	60 voies téléphoniques occupant la bande de base 60-300 kHz; excursion efficace par voie: 200 kHz; la fréquence pilote de continuité (331 kHz) donne lieu à une excursion efficace de la porteuse principale 100 Hz. $D = 200 \times 10^3 \times 3,76 \times 2,02 = 1,52 \times 10^6$ Hz. $f_p = 0,331 \times 10^6$ Hz. Largeur de bande: $3,702 \times 10^6$ Hz = 3,702 MHz	3M70F8EJF
Faisceau hertzien, multiplexage par répartition en fréquence.	$B_n = 2M + 2DK$. $K = 1$. (Valeur type.)	960 voies téléphoniques occupant la bande de base 60-4028 kHz; excursion efficace par voie: 200 kHz; la fréquence pilote de continuité (4715 kHz) donne lieu à une excursion efficace de la porteuse principale de 140 kHz. $D = 200 \times 10^3 \times 3,76 \times 5,5 = 4,13 \times 10^6$ Hz. $M = 4,028 \times 10^6$. $f_p = 4,715 \times 10^6$: $(2M + 2DK) > 2 f_p$. Largeur de bande: $16,32 \times 10^6$ Hz = 16,32 MHz	16M3F8EJF
Faisceau hertzien, multiplexage par répartition en fréquence.	$B_n = 2f_p$.	600 voies téléphoniques occupant la bande de base 60-2540 kHz; excursion efficace par voie: 200 kHz; la fréquence pilote de continuité (8500 kHz) donne lieu à une excursion efficace de la porteuse principale de 140 kHz. $D = 200 \times 10^3 \times 3,76 \times 4,36 = 3,28 \times 10^6$ Hz. $M = 2,54 \times 10^6$. $K = 1$. $f_p = 8,5 \times 10^6$; $(2M + 2DK) < 2 f_p$. Largeur de bande: 17×10^6 Hz = 17 MHz	17M0F8EJF
Radiodiffusion sonore stéréophonique avec sous-porteuse subsidiaire de téléphonie multiplexée.	$B_n = 2M + 2DK$. $K = 1$. (Valeur type.)	Système à fréquence pilote. M = 75 000. D = 75 000 Hz. Largeur de bande: 300 000 Kz = 300 kHz	300KF8EHF

III-B. Facteurs de multiplication à utiliser pour calculer *D*, excursion de fréquence de crête, dans les émissions multivoies à modulation de fréquence et multiplexage par répartition en fréquence (MF/MRF)

Pour les systèmes MF/MRF, la largeur de bande nécessaire est:

$$B_n = 2M + 2DK$$

On calcule la valeur de *D*, ou excursion de fréquence de crête dans les formules pour B_n en multipliant la valeur efficace d'excursion par voie par le «facteur multiplicatif» approprié indiqué ci-dessous.

Dans le cas où une onde pilote continuité de fréquence f_p est présente au-dessus de la fréquence maximale de modulation *M*, la formule générale prende la forme suivante:

$$B_n = 2f_p + 2DK$$

Dans le cas où l'indice de modulation de la porteuse principale produit par l'onde pilote est inférieur à 0,25 et où la valeur efficace de l'excursion de fréquence de la porteuse principale produite par l'onde pilote est inférieure ou égale à 70 % de la valeur efficace de l'excursion por voie, la formule générale prend celle des deux formes ci-après qui donne la valeur la plus grande:

$$B_n = 2f_p \text{ ou } B_n = 2M + 2DK$$

Nombre de voies téléphoniques N_c	Facteur multiplicatif (*a*)
	(Facteur de crête) × antilog $\left[\frac{\text{Valeur en dB au-dessus du niveau de modulation de référence}}{20}\right]$
$3 < N_c < 12$	4,47 × antilog $\left[\frac{\text{Une valeur en dB spécifiée par le constructeur de l'equipement ou par l'esploitant de la station, sous réserve de l'approbation de l'administration}}{20}\right]$
$12 \leq N_c < 12$	3,76 × antilog $\left[\frac{2{,}6 + 2 \log N_c}{20}\right]$

(*a*) Dans ce tableau, les facteurs multiplicatifs 3,76 et 4,47 correspondent respectivement à des factures de crête de 11,5 dB et 13,0 dB.

Nombre de voies téléphoniques N_c	Facteur multiplicatif (*a*)
	(Facteur de crête) × antilog $\left[\frac{\text{Valeur en dB au-dessus du niveau de modulation de référence}}{20}\right]$
$60 \leq N_c < 240$	3,76 × antilog $\left[\frac{-1 + 4 \log N_c}{20}\right]$
$N_c \geq 240$	3,76 × antilog $\left[\frac{-15 + 10 \log N_c}{20}\right]$

(*a*) Dans ce tableau, le facteur multiplicatif 3,76 correspond à un facteur de crête de 11,5 dB.

Description de l'émission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	

IV. Modulation par impulsions

1. Radar

Emission d'impulsions non modulées.	$B_n = \frac{2K}{t}$. *K* dépend du rapport entre la durée de l'impulsion et le temps de montée de l'impulsion. Savaleur se situe généralement entre 1 et 10 et, dans de nombreux cas, sa valeur n'a pes besoin de dépasser 6.	Radar primaire. Pouvoir séparateur en distance: 150 m. $K = 1{,}5$ (impulsion triangulaire où $t = t_r$ seules les composantes les plus fortes jusqu'à 27 dB étant prises en considération). D'où $t = \frac{2 \text{ (pouvoir séparateur en distance)}}{\text{vitesse de la lumière}} = \frac{2 \times 150}{3 \times 10^8} = 1 \times 10^{-6}$ seconde. Largeur de bande: 3×10^6 Hz = 3 MHz	3M00P0NAN

Description de l'émission	Largeur de bande nécessaire		Désignation de l'émission
	Formule	Exemple de calcul	
2. Emissions composites			
Faisceau hertzien.	$B_n = \frac{2K}{t}$. $K = 1,6$.	Impulsions modulées en position par une bande de base de 36 voies téléphoniques. Durée de l'impulsion à mi-amplitude = 0,4, µs. Largeur de bande: 8×10^6 Hz = 8 MHz (Largeur de bande indépendante du nombre de voies téléphoniques.)	8M00M7EJT

MOD AP3

APPENDICE 7

Tableau des tolérances de fréquence des émetteurs

(Voir l'article 5)

§ 1. La tolérance de fréquence est définie à l'article 1, et sauf indication contraire, elle est exprimée em millionièmes.

§ 2. La puissance indiquée pour les diverses catégories de stations est, sauf indication contraire, la puissance en crête des émetteurs à bande latérale unique et la puissance moyenne pour tous les autres émetteurs. Le terme «puissance d'un émetteur redioélectrique» est défini à l'article 1.

§ 3. Pour des raisons techniques ou d'exploitation, certains catégories de stations peuvent nécessiter des tolérances plus strictes que celles spécifiées au tableau.

Bandes de fréquences (limite inférieure exclue, limite supérieure incluse) et catégories de stations	Tolérances applicables jusqu'au 1er janvier 1990 aux émetteurs actuellement en service et à ceux qui seront installés avant le 2 janvier 1985.	Tolérances applicables aux nouveaux émetteurs installés à partir du 1er janvier 1985 et à tous les émetteurs à partir du 1er janvier 1990.
1	2	3
Bande: **de 9 kHz a 535 kHz**		
1. *Stations fixes:*		
De 9 kHz à 50 kHz	1 000	100
De 50 kHz à 535 kHz	200	50
2. *Stations terrestres:*		
a) Stations côtières	-	(1) 100
D'une puissance inférieure ou égale a 200 W	(2) 500	-
D'une puissance supérieure à 200 W	(2) 200	-
b) Stations aéronautique	100	100
3. *Stations mobiles:*		
a) Stations de navire	(3) 1 000	(4) 200
b) Émetteurs de secours de navire	5 000	(5) 500
c) Stations d'engin de sauvetage	5 000	500
d) Sations d'aéronef	500	100
4. *Stations de radiorepérage*	100	100
5. *Stations de radiodiffusion*	10 Hz	10 Hz
Bande: **de 535 kHz à 1606,5 kHz (1605 kHz, Région 2)**		
Stations de radiodiffusion	(6) 10 Hz	(6) 10 Hz

Bandes de fréquences (limite inférieure exclue, limite supérieure incluse) et catégories de stations	Tolérances applicables jusqu'au 1er janvier 1990 aux émetteurs actuellement en service et à ceux qui seront installés avant le 2 janvier 1985.	Tolérances applicables aux nouveaux émetteurs installés à partir du 1er janvier 1985 et à tous les émetteurs à partir du 1er janvier 1990.
1	2	3
***Bande:* de 1606,5 kHz (1605 kHz, Région 2) à 4000 kHz**		
1. *Stations fixes:*		
D'une puissance inférieure ou égale à 200 W	100	(7) (8) 100
D'une puissance supérieure à 200 W	50	(7) (8) 50
2. *Stations terrestres:*		
D'une puissance inférieure ou égale à 200 W	(2) (9) (10) 100	(1) (7) (10) 100
D'une puissance supérieure à 200 W	(2) (9) (10) 50	(1) (7) (10) 50
3. *Sations mobiles:*		
a) Station de navire	(3) (11) 200	(12) 40 Hz
b) Station d'engin de sauvetage	300	100
c) Radiobalises de localisation des sinistres	300	100
d) Satation d'aéronef	(10) 100	(10) 100
e) Stations mobiles terrestres	200	(13) 50
4. *Stations de radiorepérage*:		
D'une puissance inférieure ou égale à 200 W	100	(14) 20
D'une puissance supérieure à 200 W	50	(14) 10
5. *Stations de radiodiffusion*	20	(15) 10 Hz
***Bande:* de 4 MHz à 29,7 MHz**		
1. *Stations fixes:*		
D'une puissance inférieure ou égale à 500 W	50	–
D'une puissance supérieure à 500 W	15	–
a) Émissions à bande latérale unique et à bande latérale indépendante:		
D'une puissance inférieure ou égale à 500 W	–	50 Hz
D'une puissance supérieure à 500 W	–	20 Hz
b) Émissions de classe FIB	–	10 Hz
c) Autres classes d'émission:		
D'une puissance inférieure ou égale à 500 W	–	20
D'une puissance supérieure à 500 W	–	10
2. *Stations terrestres:*		
a) Stations côtières	–	(1) (16) 20 Hz
D'une puissance inférieure ou égale à 500 W	(2) (9) 50	–
D'une puissance supérieure à 500 W et inférieure ou égale à 5 kW	(2) (9) 30	–
D'une puissance supérieure à 55 kW	(2) (9) 15	–
b) Stations aéronautiques:		
D'une puissance inférieure ou égale à 500 W	(10) 100	(10) 100
D'une puissance supérieure à 500 W	(10) 50	(10) 50
c) Stations de base	–	(7) 20
D'une puissance supérieure ou égale à 500 W	100	–
D'une puissance supérieure à 500 W	50	–
3. *Stations mobiles:*		
a) Stations de navire:		
1) Émissions de classe A1A	(17) (18) 50	10
2) Émissions de classe autre que A1A	(3) (11) 50	(4) (19) 50 Hz
b) Stations d'engin de sauvetage	200	50
c) Stations d'aéronef	(10) 100	(10) 100
d) Stations mobiles terrestres	200	(20) 40
4. *Stations de radiodiffusion*	15	(15) (21) 10 Hz
5. *Stations spatiales*	–	20
6. *Stations terriennes*	–	20

Bandes de fréquences (limite inférieure exclue, limite supérieure incluse) et catégories de stations	Tolérances applicables jusqu'au 1er janvier 1990 aux émetteurs actuellement en service et à ceux qui seront installés avant le 2 janvier 1985.	Tolérances applicables aux nouveaux émetteurs installés à partir du 1er janvier 1985 et à tous les émetteurs à partir du 1er janvier 1990.
1	2	3
Bande: **de 29,7 MHz à 100 MHz**		
1. *Stations fixes:*		
D'une puissance inférieure ou égale à 200 W	50	–
D'une puissance supérieure à 200 W	30	–
D'une puissance inférieure ou égale à 50 W	–	30
D'une puissance supérieure à 50 W	–	20
2. *Stations terrestres*	–	20
D'une puissance inférieure ou égale à 15 W	50	–
D'une puissance supérieure à 15 W	20	–
3. *Stations mobiles*	–	(22) 20
D'une puissance inférieure ou égale à 15 W	100	–
D'une puissance supérieure à 5 W	50	–
4. *Stations de radiorepérage*	200	50
5. *Stations de radiodiffusion (autres que de télévision)*	–	(23) 2 000 Hz
D'une puissance inférieure ou égale à 50 W	50	–
D'une puissance supérieure à 50 W	20	–
6. *Stations de radiodiffusion (télévision, son et image)*	–	(24) (25) 500 Hz
D'une puissance inférieure ou égale à 50 W	100	–
D'une puissance supérieure à 50 W	1 000 Hz	–
7. *Stations spatiales*	–	20
8. *Stations terriennes*	–	20
Bande: **de 100 MHz à 470 MHz**		
1. *Stations fixes:*		
D'une puissance inférieure ou égale à 50 W	50	(26) 20
D'une puissance supérieure à 50 W	20	10
2. *Stations terrestres:*		
a) Stations côtières	(27) 20	10
b) Stations aéronautiques	50	(28) 20
c) Station de base:		
D'une puissance inférieure ou égale à 5 W	50	–
D'une puissance supérieure à 5 W	20	–
Dans la bande 100-235 MHz	–	(29) 15
Dans la bande 235-401 MHz	–	(29) 7
Dans la bande 401-470 MHz	–	(29) 5
3. *Stations mobiles*	–	(22) 20
a) Stations de navire et stations d'engin de sauvetage:		
Dans la bande 156-174 MHz	(27) 20	10
En dehors de la bande 156-174 MHz	(30) (31) 50	(31) 50
b) Stations d'aéronef	50	(28) 30
c) Stations mobiles terrestres:		
D'une puissance inférieure ou égale à 5 W	50	–
D'une puissnace supérieure à 5 W	20	–
Dans la bande 100-235 MHz	–	(29) 15
Dans la bande 235-401 MHz	–	(29) (32) 7
Dans la bande 401-470 MHz	–	(29) (32) 5
4. *Stations de radiorepérage*	(30) (33) 50	(33) 50
5. *Stations de radiodiffusion (autres que de télévision)*	20	(23) 2 000 Hz
6. *Stations de radiodiffusion (télévision, son et image)*	–	(24) (25) 500 Hz
D'une puissance inférieure ou égale à 100 W	100	–
D'une puissance supérieure à 100 W	1 000 Hz	–
7. *Stations spatiales*	–	20
8. *Stations terriennes*	–	20

Bandes de fréquences (limite inférieure exclue, limite supérieure incluse) et catégories de stations	Tolérances applicables jusqu'au 1er janvier 1990 aux émetteurs actuellement en service et à ceux qui seront installés avant le 2 janvier 1985.	Tolérances applicables aux nouveaux émetteurs installés à partir du 1er janvier 1985 et à tous les émetteurs à partir du 1er janvier 1990.
1	2	3
Bande: **de 470 MHz à 2450 MHz**		
1. *Stations fixes:*		
D'une puissance inférieure ou égale à 100 W	(34) 300	100
D'une puissance supérieure à 100 W	(35) 100	50
2. *Stations terrestres*	300	(36) 20
3. *Stations mobiles*	300	(36) 20
4. *Stations de radiorepérage*	(33) 500	(33) 500
5. *Stations de radiodiffusion (autres que de télévision)*	100	100
6. *Stations de radiodiffusion (télévision, son et image)* dans la bande de 470 MHz à 960 MHz	–	(24) (25) 500 Hz
D'une puissance inférieure ou égale à 100 W	100	–
D'une puissance supérieure à 100 W	1 000 Hz	–
7. *Stations spatiales*	–	20
8. *Stations terriennes*	–	20
Bande: **de 2450 MHz à 10 500 MHz**		
1. *Stations fixes:*		
D'une puissance infèrieure ou égale à 100 W	(34) 300	200
D'une puissance supérieure à 100 W	(35) 100	50
2. *Stations terrestres*	300	100
3. *Stations mobiles*	300	100
4. *Stations de radiorepérage*	(33) 2 000	(33) 1 250
5. *Stations spatiales*	–	50
6. *Stations terriennes*	–	50
Bande: **de 10,5 GHz à 40 GHz**		
1. *Stations fixes*	500	300
2. *Stations de radiorepérage*	(33) 7 500	(33) 5 000
3. *Stations de radiodiffusion*	–	100
4. *Stations spatiales*	–	100
5. *Stations terriennes*	–	100

Renvois du tableau des tolérances de fréquence des émetteurs

SUP Renvois actuels de *a*) à *r*)

(1) Pour les émetteurs de station côtière utilisés pour la télégraphie à impression directe ou pour la transmission de données, la tolérance est de 15 Hz.

(2) Pour les émetteurs de station côtière utilisés pour la télégraphie à impression directe ou pour la transmission de données, la tolérance est de 15 Hz. Cette tolérance est apllicable aux appareils installés après le 1er janvier 1976, et à la totalité des appareils à partir du 1er janvier 1985. Pour les appareils installés avant le 2 janvier 1976, la tolérance est de 40 Hz.

(3) Pour les émetteurs de station de navire utilisés pour la télégraphie à impression directe ou pour la transmission de données, la tolérance est de 40 Hz. Cette tollérance est applicable aux appareils installés après le 1er janvier 1976 et à la totalité des appareils après de 1er janvier 1985. Pour les appareils installés ayant le 2 janvier 1976, cette tolérance est de 100 Hz (avec une dérive maximale de 40 Hz pour de courtes périodes de l'ordre de quinze minutes).

(4) Pour les émetteurs de stations de navire utilisés pour la télégraphie à impression directe ou pour la transmission de données, la tolérance est de 40 Hz.

(5) Si l'émetteur de secours sert d'émetteur de réserve pour remplacer au besoin l'émetteur principal, la tolérance prévue pour les émetteurs des stations de navire est applicable.

(6) Dans les pays ou l'Accord régional de radiodiffusion de l'Amérique du Nord (NARBA) est em vigueur, on pourra continuer d'appliquer la tolérance de 20 Hz.

(7) Pour les émetteurs de radiotéléphonie à bande latérale unique, la tolérance est:

Dans les bandes 1606,5 (1605 Région 2)-4000 kHz et 4-29,7 MHz, pour des puissances en crête de 200 W ou moins respectivement: 50 Hz;

Dans les bandes 1606,5 (1605 Région 2)-4000 kHz et 4-29,7 MHz, pour des puissances en crête supérieurs à 200 W respectivement: 20 Hz.

(8) Pour les émetteurs de radiotélégraphie avec manipulation par déplacement de fréquence, la tolérance est de 10 Hz.

(9) Pour les émetteurs des stations côtières radiotéléphoniques à bande latérale unique, la tolérance est de 20 Hz.

(10) Pour les émetteurs à bande latérale unique fonctionnant dans les bandes attribuées en exclusivité au service mobile aéronautique (R) entre 1606,5 kHz (1605 kHz Région 2) et 4000 kHz et entre 4 Mhz et 29,7 MHz, la tolérance sur la fréquence porteuse (fréquence de référence) est:

a) Pour toutes les stations aéronautiques, 10 Hz;
b) Pour toutes les stations d'aéronef fonctionnant dans les services internationaux, 20 Hz;
c) Pour les stations d'aéronef fonctionnant exclusivement dans des services nationaux, 50 Hz (*).

(11) Pour les émetteurs des stations radiotéléphoniques de navire à bande latérale unique, la tolérance est:

a) Dans les bandes comprises entre 1606,5 kHz (1605 kHz Région 2) et 4000 kHz:

100 Hz por les émetteurs en service ou installés avant le 2 janvier 1982;
50 Hz pour les émetteurs installés après le 1er janvier 1982, mais avant le 1er janvier 1985;

b) Dans les bandes comprises entre 4000 kHz et 23 000 kHz:

100 Hz pour les émetteurs en service installés avant de 2 janvier 1978;
50 Hz pour les émetteurs installés aprés le 1er janvier 1978. (Voir également l'appendice 17.)

(12) Pour les émissions de classe A1A, la tolérance est de 50 millionièmes.

(13) Pour les émetteurs utilisés en radiotéléphonie à bande latérale unique ou en radiotélégraphie avec manipulation par déplacement de fréquence, la tolérance est de 40 Hz.

(14) Pour les émetteurs de radiobalise dans la bande 1606,5 (1605 Région 2)-1800 kHz, la tolérance est de 50 millionièmes.

(15) Pour les émissions de classe A3E, d'une puissance de porteuse inférieure ou égale à 10 kW, fonctionnant dans les bandes 1606,5 (1605 Région 2)-4000 kHz et 4-29,7 MHz, la tolérance est respectivement de 20 millionièmes et de 15 millionièmes.

(16) Pour les émissions de classe A1A, la tolérance est de 10 millionièmes.

(17) Dans les bandes de fréquences de travail en télégraphie Morse de classe A1A, une tolérance de fréquence de 200 millionièmes peut être appliquée aux émetteurs existants sous réserve que les émissions restent à l'intérieur de ces bandes.

(18) Dans les bandes de fréquences de d'appel en télégraphie Morse de classe A1A, des tolérances de fréquence de 40 millionièmes dans les bandes comprises entre 4 MHz et 23 MHz, et de 30 millionièmes dans la bande des 25 MHz sont recommandées dans tout la mesure du possible.

(19) Pour les émetteurs de stations de navire de faible tonnage d'une puissance de porteuse inférieure ou égale à 5 W fonctionnant dans les eaux côtières ou dans leur voisinage et utilisant des émissions de classe A3E ou F3E et G3E dans la bande 26 175-27 500 kHz la tolérance est de 40 millionièmes.

(20) La tolérance est de 50 Hz pour les émetteurs de radiotéléphonie à bande latérale unique, sauf pour les émetteurs fonctionnant dans la bande 26 175-27 500 kHz dont la puissance en crête ne dépasse pas 15 W; pour ces derniers, la tolérance de base applicable est de 40 millionièmes.

(21) Il est suggéré que les administrations évitent des différences de fréquence porteuse de l'ordre de quelques hertz, qui causent des dégradations analogues à celles des évanouissements périodiques. Il convient pour ce faire, que la tolérance de fréquence soit de 0,1 Hz; cette tolérance conviendrait également pour les émissions à bande latérale unique.

(22) Pour des équipements portatifs qui ne sont pas montés sur des véhicules, et dont la puissance moyenne d'émission ne dépasse pas 5 W, la tolérance est de 40 millionièmes.

(23) Pour les émetteurs d'une puissance moyenne inférieure ou égale à 50 W fonctionnant sur des fréquences inférieures à 108 MHz, une tolérance de 3000 Hz est applicable.

(24) Dans le cas de stations de radiodiffusion (télévision):

D'une puissance en crête d'image inférieure ou égale à 50 W dans la bande 29,7-100 Mhz;
D'une puissance en crête d'image inférieure ou égale à 100 W dans la bande 100-960 Mhz,

et qui recoivent leurs émissions d'autres stations de télévision ou qui desservent de petites localités isolées, il peut être impossible, pour des raisons d'exploitation, de respecter cette tolérance. Pour ces stations, la tolérance est de 2000 Hz. Pour des stations d'une puissance en crête d'image inférieure ou égale à 1 W, cette tolérance peut être assouplie à:

5 kHz dans la bande 100-470 MHz;
10 kHz dans la bande 470-960 MHz.

(25) Pour les émetteurs utilisant le système M (NTSC), la tolérance est de 1000 Hz. Toutefois, pour les émetteurs de faible puissance utilisance ce système, la note (24) est apllicable.

(26) Pour les systèmes de faisceaux hertziens à plusieurs bonds qui emploient la conversion directe de fréquence, la tolérance est de 30 millionièmes.

(27) Pour les émetteurs de station côtière et de station de navire fonctionnant dans la bande 156-174 MHz et mis en service après le 1er janvier 1973, la tolérance de fréquence est de 10 millionièmes. Cette tolérance est applicable à tous les émetteurs, y compris ceux des stations d'engins de sauvetage, à partir de 1er janvier 1983.

(28) Pour un espacement entre voies de 50 kHz, la tolérance est de 50 millionièmes.

(29) Ces tolérances sont applicables pour des espacements entre voies égaux ou supérieurs à 20 kHz.

(30) Cette tolérance n'est pas applicable aux stations d'engin de sauvetage fonctionnant sur la fréquence 243 MHz.

(31) Pour les émetteurs utilisés par les stations de communications de bord, la tolérance de fréquence est de 5 millionièmes.

(32) Pour les équipements portatifs non installés sur véhicules dont la puissance moyenne d'émission ne dépasse pas 5 W, la tolérance est de 15 millionièmes.

(33) Lorsqu'il n'est pas assigné de fréquences déterminées aux stations de radar la largeur de bande occupée par leurs émissions doit être maintenue tout entière à l'intérieur de la bande attribuée à ce service et la tolérance mentionnée ne leur est pas applicable.

(34) Pour les émetteurs utilisant le multiplexage par répartition dans le temps, la tolérance de 300 millionièmes peut être portée à 500 millionièmes.

(35) Cette tolérance s'applique uniquement aux émissions dont la largeur de bande necessaire est au plus égale à 3000 kHz; pour les émissions dont la largeur de bande est supérieure à 3000 kHz, la tolérance est portée à 300 millionièmes.

(36) En appliquant cette tolérance, il convient que les administrations se réfèrent aux Avis pertinents les plus récents du CCIR.

(*) Afin d'obtenir une intellegibillité maximale, il'est suggéré aux administrations d'encourager la réduction de cette tolérance à 20 Hz.

MOD AP4

APPENDICE 8

Tableau des niveaux de puissance maximaux tolérés des rayonnements non essentiels

(Voir l'article 5)

1. Le tableau suivant indique les niveaux maximaux tolérés des rayonnements non essentiels, en terme de niveau de puissance moyenne de toute composante non essencielle fournie par un émetteur à la ligne d'allimentation de l'antenne.

2. Aucun rayonnement non essentiel provenant d'une partie de l'installation autre que l'antenne et sa ligne d'alimentation ne doit avoir un effet plus grand que celui qui se produirait si ce système rayonnant était alimenté à la puissance maximum tolérée sur la fréquence de ce rayonnement non essentiel.

3. Toutefois, ces niveaux ne s'appliquent pas aux radiobalises de localisation des sinistres, aux émetteurs de localisation d'urgence, aux émetteurs de secours de navire, aux émetteurs de canot de sauvetage, aux stations d'engin de sauvetage ni aux émetteurs de navire lorsqu'ils sont employés en cas de sinistre.

4. Pour des raisons techniques ou d'exploitation, certains services peuvent avoir besoin de niveux plus strics que ceux spécifiés dans le tableau. Les niveaux applicables à ces services doivent être ceux qui ont été adoptés par la conférence administrative mondiale des radiocommunications compétente. Les niveaux plus stricts peuvent être également fixés par accord spécifique entre les administrations concernées.

5. Dans le cas des stations de radiorepérage, tant que l'on ne dispose pas de méthodes de mesure acceptables, il convient que la puissance des rayonnements non essentiels soit aussi faible que pratiquement possible.

Bande de fréquences dans laquelle l'assignation est située (limite inférieure exclue, limite supérieure incluse)	Pour toute composante non essentielle, l'affaiblissement (puissance moyenne à l'intérieur de la largeur de bande nécessaire par rapport à la puissance moyenne de la composante non essentielle considérée) doit avoir au moins la valeur spécifiée dans les colonnes A et B ci-dessous et les niveaux absolus de puissance moyenne donnés ne doivent pas être dépassés [Note (1)].	
	A	B
	Niveaux applicables jusqu'au 1er janvier 1994 aux émetteurs actuellement en service et à ceux qui seront installés avant le 2 janvier 1985.	Niveaux applicables à tout émetteur installé à partir du 1er janvier 1985 et à touts émetteurs à partir du 1er janvier 1994.
9 kHz à 30 MHz	40 dB 50 mW [Notes (2), (3), (4)]	40 dB 50 mW [Notes (4), (7), (8)]
30 MHz à 235 MHz:		
Puissance moyenne supérieure à 25 W	60 dB 1 mW [Note (5)]	60 dB 1 mW [Note 9)]
Puissance moyenne égale ou inférieure à 25 W	40 dB 25 µW [Notes (5), (6)]	40 dB 25 µW
235 MHz à 960 MHz:		
Puissance moyenne supérieure à 25 W		60 dB 20 mW [Notes (10), (11)]
Puissance moyenne égale ou inférieure à 25 W		40 dB 25 µW [Notes (10), (11)]
960 MHz à 17,7 GHz:		
Puissance moyenne supérieure à 10 W		50 dB 100 mW [Notes (10), (11), (12), (13)]
Puissance moyenne égale ou inférieure à 10 W	Aucun niveau n'est précisé pour les émetteurs fonctionnant sur des fréquences assignées supérieures à 235 MHz. Pour ces émetteurs, la puissance des rayonnements non essentiels devra être aussi faible que pratiquement possible.	100 µW [Notes (10), (11), (12), (13)]
Au-dessus de 17,7 GHz		Compte tenu de la nature diverse des techniques appliquées par les services fonctionnant au-dessus de 17,7 GHz, il est nécessaire que le CCIR poursuive ses travaux avant que l'on spécifie les niveaux. Dans la mesure du possible, les valeurs qui devront être respectées seront celles qu'indiqueront les Avis pertinents du CCIR et, tant que de tels Avis n'auront pas été élaborés, on appliquera les valeurs les plus faibles qu'il est possible d'obtenir (voir la Recommandation 66).

Notes du tableau des niveaux de puissance maximaux tolérés des rayonnements non essentiels

(1) Pour s'assurer que les dispositions du tableau sont appliquées, on doit vérifier que la larguer des bandes de l'appareil de mesure est assez grande pour couvrir toutes les composantes significatives du rayonnement non essentiel concerné.

(2) Pour les émmetteurs dont la puissance moyenne est supérieure à 50 kW et qui fontionnent au-dessous de 30 MHz sur une gamme de fréquences d'environ une octave ou davantage, une réduction à moins de 50 mW nést pas obligatoire; cependant, un affaiblissement de 60 décibles au minimum doit être obtenu et on s'efforcera d'atteindre le niveau de 50 mW.

(3) Pour les appareils portatifs dont la puissance moyenne est inférieure à 5 W, fonctionnant au-dessous de 30 MHz, l'affaiblissement doit être d'au moins 30 décibles; cependant, on s'efforcera d'atteindre l'affaiblissement de 40 décibels.

(4) Pour les émetteurs mobiles fonctionnant au-dessous de 30 MHz, toute composante non essentielle doit avoir un affaiblissement d'au moins 40 décibels, sans dépasser la valeur de 200 mW; cependant, on s'efforcera, dans tous les cas où cela sera possible en pratique, d'atteindre le niveau de 50 mW.

(5) Pour les appareils de radiotéléphonie à modulation de fréquence du service mobile maritime fonctionnant au-dessous de 30 MHz, la puissance moyenne de tout rayonnement non essentiel due à des produits de modulation dans toute autre voie du service mobile maritime international, ne doit pas dépasser un niveau de 10 μW et la puissance moyenne de tout autre rayonnement non essentiel sur une fréquence discrète quelconque de la bande du service mobile maritime international ne doit pas dépasser un niveau de 2,5 μW. Dans les cas exceptionnels où l'on utilise des émetteurs de plus de 20 watts de puissance moyenne, on peut augmenter ces derniers niveaux proportionnellement à la puissance moyenne de l'émetteur.

(6) Pour les émetteurs dont la puissance moyenne ets inférieur à 100 mW, il n'est pas obligatoire d'atteindre le niveau d'affaiblissement de 40 décibels, pourvu que le niveau de la puissance moyenne ne dépasse pas 10 μW.

(7) Pour les émetteurs dont la puissance moyenne est supérieure à 50 kWet qui peuvent fonctionner sur plusieurs fréquences en counvrant une gamme de fréquences d'énviron une octave ou davantage, une réduction à moins de 50 μW n'est pas obligatoire; cependant, un affaiblissement minimal de 60 décibels doit être obtenu.

(8) Pour les appareils portatifs dont la puissance moyenne est inférieure à 5 W, l'affaiblissement doit être de 30 décibels; cependant, on s'efforcera, dans tous les cas où cela sera possible en pratique, d'atteindre l'affaiblissement de 40 décibels.

(9) Les administrations peuvent adopter un niveau de 10 mW, à condition d'éviter tout brouillage préjudiciable.

(10) Lorsque plusieur émetteur utilisent une antenne commune ou des antenners très faiblement espacées sur des fréquences voisines, on s'efforcera, dans touts les cas où cela sera possible en pratique, d'atteindre les niveaux spécifiés.

(11) Puisqu'il se peut que ces niveaux n'assurent pas une protection suffisante aux stations de réception du service de radioastronomie et des services spatiaux, on pourrait envisager, dans chaque cas d'espèce, des niveaux plus en tenant compte de la situation géographique des stations intéressées.

(12) Ces niveaux ne s'appliquent pas aux systèmes utilisant les techniques de modulation numérique, mais peuvent servir à titre de directives. Pour les valeurs applicables à ces systèmes, on pourra, lorsqu'on en dispose, se référer aux Avis pertinents du CCIR (voir la Recommandation **66**).

(13) Ces niveaux ne s'appliquent pas aux stations des services spatiaux mais il convient que les niveaux des rayonnements non essentiels de ces stations soient réduits aux valeurs les plus faibles possibles compatibles avec les contraintes techniques et écononiques imposées au matériel. Pour les valeurs applicables à ces systèmes, on pourra, lorsqu'on en dispose, se référer aux Avis pertinents du CCIR (voir la Recommandation **66**).

MOD **AP9**

APPENDICE 9

Documents de service (1)

(Voir les articles 10, 12, 13, 17 et 26)

LISTE I

Liste internationale des fréquences

L'IFRB établit et tient à jour les titres des colonnes de la Liste internationale des fréquences de manière à respecter la totalité des dispositions réglementaires des appendices **1** et **3** ainsi que les décisions connexes des conférences futures. En outre, l'IFRB apportera à ladite Liste les améliorations nécessaires du point de vue de la présentation sans modifier de quelque manière que se soit les données fondamentales spécifiées dans le Règlement des radiocommunications.

LISTE II

Nomenclature des stations fixes qui assurent des liaisons internationales

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station d'émission	Indicatif d'appel (signal d'identification)	Fréquence assignée (kHz ou MHz)	Localité(s) ou zone(s) avec laquelle (lesquelles) la (les) communication(s) est (sont) établie(s)	Observations
1	2	3	4	5

(1) Le format de ces documents peut être modifié si la situation l'exige.

SUP

LISTE III-A

Nomenclature des stations de radiodiffusion fonctionnant dans les bandes au-dessous de 5950 kHz

SUP

LISTE III-B

Nomenclature des stations de radiodiffusion fonctionnant dans les bandes comprises entre 5950 kHz et 26 100 kHz

LISTE IV

Nomenclature des stations côtières

PARTIE I

Tableuax d'intérêt général ou particulier

PARTIE II

Index alphabétique des stations côtières

Nom de la station	Voir partie III, page ...	Nom de la station	Voir partie III, page	Nom de la station	Voir partie III, page ...

PARTIE III

Stats signalétiques des stations côtières

Noms des pays par ordre alphabétique des abreviations

Noms des stations par ordre alphabétique

Nom de la station (1)	Indicatif d'appel (2) (3)	Emission			Service			Taxes (4) (*)	Coordonnées géographiques de l'antenne d'émission (longitude et latitude en degrés, minutes et secondes).	Observations (5) (6)
		Fréquences (kHz ou MHz)		Classe	Puissance (kW) (7)	Nature (7) e (8)	Heures d'ouverture (UTC)			
1	2	3a (9)	3b (9)	4	5	6	7	8	9	10

(1) Pour chaque pays, on indique la ou les stations côtières sur lesquelles il faut diriger les radiotélégrammes destinés à être transmis sur ondes décamétriques à destination des navires.

(2) Indiquer si la station a une identité dans le service mobile maritime.

(3) L'indicatif d'appel de la station est suivi, s'il y a lieu, entre parenthèses, de l'identité dans le service mobile maritime ou du numéro ou du signal d'appel sélectif que la station utilise.

(4) Fréquence d'émission. La fréquence normale de travail est imprimée en caractères gras.

(5) Fréquences ou voies de veille et ou de réception.

(6) Dans le cas d'antennes directives, il y a lieu de mentionner, au-dessous de l'indication de la puissance, l'azimut de la direction ou des directions du gain maximum, en degrés à partir du Nord vrai, dans les sens des aiguilles d'une montre.

(7) Indiquer si la station utilise un système d'appel sélectif et préciser le système utilisé.

(8) Indiquer si la station utilise un système de télégraphie à impression directe à bande étroite.

(*) La taxe de ligne télégraphique du pays dont dépend la station côtière et la taxe appliquée par ce pays aux télégrammes à destination des pays limitrophes sont indiquées dans la partie IV de la Nomenclature des stations côtières.

(**) Si les comptes de taxes sont liquidés par une exploitation privée, il y a lieu d'indiquer, le cas échéant, le nom et l'adresse de cette exploitation privée.

(9) Indiquer si la station assume un service de radiotétection.

(10) Il convient que la Nomenclature contienne les renseignements concernant les heures d'émission des listes d'appels ainsi que les heures de veille de la station côtière sur les diverses fréquences, etc. Les stations côtières ou les stations côtières terriennes ouvertes à la correspondance publique et assurant un service d'émission et de réception de radiotélégrammes par radiotéléphonie sont indiqués dans la Nomenclature des stations côtières.

PARTIE IV

Taxes télégraphiques intérieures, limitrophes, etc.

LISTA V

Nomenclature des stations de navire

États signalétiques des stations de navire

Les renseignements relatifs à ces stations sont publiés comme il est indiqué ci-dessous:

Nom du navire	Indicatif d'appel	Pays	Installations auxiliaires	Classe du navire	Nature du service	Heures d'ouverture	Bandes des fréquences d'émission en télégraphie	Bandes des fréquences d'émission en téléphonie	Taxe de bord par mot applicable aux radiotélégrammes.	Taxe de bord applicable à une conversation radiotéléphonique de trois minutes.	Observations
1	2	3	4	5	6	7	8	9	10	11	12

Colonne 1 — les stations sont classées par ordre alphabétique des noms de navire sans considération de nationalité. En cas d'homonymie, le nom du navire est suivi de l'indicatif d'appel, le nom et l'indicatif étant séparés par une barre de fraction.

Colonne 2 — indicatif d'appel. Cette colonne contient également, le cas échéant, l'identité dans le service mobile maritime ou le numéro ou signal d'appel sélectif.

Collone 3 — pays dont relève la station (indication au moyen du symbole approprié).

Colunne 4 — installations auxiliaires, y compris des renseigments concernant:

a) Le nombre des embarcations de sauvetage munies d'appareils radioélectriques installés à bord;

b) Le type et le nombre des radiobalises de localisation des sinistres (facultatif), la fréquence utilisée étant désignée par l'une des lettres suivantes:

A = 2182 kHz;
B = 121,5 MHz;
C = 243 MHz.

Un chifrre suivant la lettre indique le nombre des radiobalises, la lettre «X» remplace ce chiffre lorsque ce nombre n'a pas été indiqué.

Colonnes 5 à 7 — sous forme de notations de service (voir l'appendice **10**). De plus, la liste des symboles utilisés dans la colonne 5 pour désigner la classe du navire dans la préface à la Nomenclature.

Collonnes 8 et 9 — indication des bandes de fréquences et des classes d'émission au moyen des symboles suivants:

Radiotélegraphie	*Radiotéléphonie*
W = 110-150 kHz	T = 6105-4000 kHz
X = 405-535 kHz	U = 4000-27 500 kHz
Y = 1605-3800 kHz	V = 156-174 MHz
Z = 4000-27 500 khz	

Ces symboles sont, le cas échéant, suivis de renvois succincts, à la fin de la Nomencalture, qui contiennent des renseignements de nature spéciale et l'indication des fréquences sur lesquelles émetteurs sont réglés.

Colonne 10 — taxe de bord de base applicable par mot aux radiotélégrammes (1).

Colonne 11 — taxe minimale pour une conversation radiotéléphonique de trois minutes (1). Les renseignements qui figurent dans les colonnes 10 et 11 sont suivis d'un renvoi qui désigne l'administration ou l'exploitation privée à laquelle

(1) Ces taxes sont fixées ou approuvées par chaque administration.

laquelle les comptes de taxe doivent être adressés. En cas de changement de l'adresse de l'exploitant, un second renvoi après la taxe donne le nouvelle adresse et la date à partir de laquelle le changement entrera en vigueur.

Colonne 12 — lorsque plusieurs stations de navire de la même nationalité portent le même nom, ou lorsque les comptes de taxes doivent être adressés directement ao propriétaire du navire, le nom de la compagnie de navigation ou de l'armatuer auquel appartient le navire est mentionné dans cette colonne.

De plus, en cas de manque de place dans la colonne appropriée, des renseignements supplémantaires relatifs aux colonnes 1 à 11 peuvent figurer dans la colonne 12 au moyen d'un renvoi. Cette colonne peut comporter plusierurs lignes.

Indiquer si l'identité dans le service mobile maritime est prévue.

Indiquer si la station utilise un système d'appel sélectif et préciser le système employé.

Indiquer si la station utilise un système de télégraphie à impression directe à bande étroite.

LISTE VI

Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux

(Aux fins de la navigation, il convient d'utiliser la présent Nomenclature avec précaution. Voir l'article 35 du Règlement des radiocommunications).

PARTIE A

Index alphabétique des stations

Nom de la station	Indicatif d'appel	Nature do service	Voir partie B, page ...
1	2	3	4

PARTIE B

États signalétiques des stations

1. Stations radiogoniométriques

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Coordonées géographiques (longitude et latitude en degrés, minutes et secondes): *a*) De l'antenne de réception de la station gonio; *b*) De l'antenne d'émission de la station gonio; *c*) De l'antenne de l'émetteur de la station visée dans la colonne 8.	Indicatif d'appel	Fréquences en (kHz ou MHz) et classes des émissions			Puissance (en kW)	Nom et indicatif d'appel de la station avec laquelle la communication doit être établie si la station gonio n'est pas doiée d'un émetteur.	Taxes	Observations: *a*) Secteurs de relèvement normalement sûrs et renvois aux publications nationales ou internationales autres que la présente nomenclature; *b*) Heures d'ouverture (UTC), etc.
			Pour appeler la station gonio	Pour transmettre à la station gonio les signaux requis pour qu'elle prenne les relèvements.	Pour la transmission des relèvements par la station gonio				
1	2	3	4	5	6	7	8	9	10

2. Stations de radiophare

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Coordonées géographiques de l'antenne d'émission du radiophare (longitude et latitude en degrés, minutes et secondes).	Signa caractéristique du radiophare	Indicatif d'appel du radiophare s'il y a lieu	Emission			Portée normale en milles nautiques	Nom et indicatif d'appel de la station à laquelle on peut demander une émission du radiophare.	Fréquence à utiliser pour appeler la station mentionnée dans la colonne 9 (en kHz ou MHz).	Observations:
				Fréquence (en kHz ou MHz)	Classe	Fréquence de modulations s'il y a lieu (en Hz)				
1	2	3	4	5	6	7	8	9	10	11
										a) Secteurs normalement sûrs et renvois aux publications nationales ou internationales autres que la présente nomenclature; b) Heures d'ouverture (UTC); c) Description de l'émission; d) Taxes, etc.

3. Navires — Stations océaniques

Régions océaniques par ordre alphabétique

Noms des stations par ordre alphabétique

Nom de la station	Position géographique assignée à la station	Indicatif d'appel du navire-station	Fréquence pour appeler la station (en kHz ou MHz	Radiophare					Radiogoniométrie			Observations:
				Signal caractéristique	Fréquence d'émission (en kHz ou MHz)	Classe d'émission	Fréquence de modulations, s'il y a lieu (en Hz)	Portée normale en milles nautiques	Fréquence d'émission des signaux requis pour que la station prenne des relèvements (en kHz ou MHz)	Fréquence utilisée par la station pour la transmission des relèvements (en kHz ou MHz)	Puissance de l'émetteur (en kW)	
1	2	3	4	5	6	7	8	9	10	11	12	13
												a) Renvois aux publications nationales ou internationales autres que la présente nomenclature; b) Heures d'ouverture (UTC); c) Description de l'émission du radiophare.

4. Stations émettant des signaux pour l'étallonnage des goniomètres

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Coordonées géographiques de l'antenne d'émission (longitude et latitude, em degrés, minutes e secondes)	Signal caractéristique du radiophare	Indicatif d'appel du radiophare, s'il y a lieu	Emission			Portée normale en milles nautiques	Nom et indicatif d'appel de la station à laquelle on peut demander une émission	Fréquence à utiliser pour appeler la station mentionnée dans la colonne 9 (en kHz ou MHz)	Observations:
				Fréquence (en kHz ou MHz)	Classe	Fréquence de modulation, s'il y a lieu (en Hz)				
1	2	3	4	5	6	7	8	9	10	11
										a) Secteurs normalement sûrs et renvois aux publications nationales ou internationales autres que la présente nomenclature; b) Heures d'ouverture (UTC); c) Description de l'émission; d) Taxes, etc.

5. Stations émettant des fréquences étalon et des signaux horaires

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (en kHz ou MHz)	Classe d'émission	Heures d'émission (UTC)	Méthode (*a*)
1	2	3	4	5	6

(*a*) Instructiones générales concernant les signaux horaires.

SUP

6. Stations émettant des fréquences étalon

...

7. Stations émettant des bulletins météorologiques réguliers

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (en kHz ou MHz)	Classe d'emission	Heures d'emission (UTC)	Observations (*a*)
1	2	3	4	5	6

(*a*) Instructions générales concernant aos les bulletins météorologiques, y compris le code employé.

8. Stations émettant des avis aux navigateurs

Noms des pays par orde alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (em kHz ou MHz)	Classe d'émission	Heures d'émission (UTC)	Observations
1	2	3	4	5	6

9. Stations émettant des avis aux médicaux

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (en kHz ou MHz)	Classe d'émission	Heures d'émission (UTC)	Observations
1	2	3	4	5	6

10. Stations émettant des bulletins épidémiologiques

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (en kHz ou MHz)	Classe d'émission	Heures d'émission (UTC)	Observations
1	2	3	4	5	6

11. Stations émettant des ursigrammes

Noms des pays par ordre alphabétique des abréviations

Noms des stations par ordre alphabétique

Nom de la station	Indicatif d'appel	Fréquences (en kHz ou MHz)	Classe d'émission	Heures d'émission (UTC)	Observations
1	2	3	4	5	6

12. Stations terriennes fixes du sevice de radionavigation maritime par satellite

Noms des pays notificateurs par ordre alphabétique des symboles désignant les pays

Noms des stations par ordre alphabétique

Nome sous lequel la station est désignée	Coordonnées géographiques (en degrés et minutes) de l'emplacemente de la station	Emision des renseignements de radionavigation			Réception des renseignements de radionavigation		Identité de la (ou des) stations(s) spatiale(s) associée(s)	Administration ou compagnie exploitante	Observations: Méthodes spéciales de modulation, taxes, etc.
		Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission	Puissance (en kW)	Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission			
1	2	3a	3b	3c	4a	4b	5	6	7

13. Stations spatiales du service de radionavigation maritime par satelite

Noms des pays notificateurs par ordre alphabétique des symboles désignant les pays

Noms des stations par ordre alphabétique ou numérique de leur désignation

Identité de la station	Emission des renseignements de radionavigation à destination des navires			Réception des renseignements de radionavigation en provenance des navires		Zone(s) de service sur la Terre	Nom de la localité et du pays ou est (ou sont) située(s) la (ou les) stations(s) terrienne(s) fixe(s) associée(s)	Administration ou compagnie exploitante	Observations: Renseignements relatifs à l'orbite, dispositions spéciales des canaux, méthodes spéciales de modulation, taxes, etc.
	Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission	Puissance (en watts)	Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission				
1	2a	2b	2c	3a	3b	4	5	6	7

Note. — Le Secrétaire général, s'il l'estime nécessaire, introduira dans cette nomenclature des sections supplémentaires relatives aux dispositifs nouveaux, au fur et à mesure du développement de leur emploi.

LISTE VIII

Nomenclature des stations de contrôle international des émissons

(Voir l'article 20)

Remarque. — Dans cette Liste, les stations désignées par les administrations comme susceptibles de participer au système de contrôle international des émissons portent l'indication (SCIE).

PARTIE I

Bureaux centralisateurs

Noms des pays par ordre alphabétique des abréviations.

Bureau centralisateur national (adresses postale et télégraphie, numéro de téléphone et tout autre renseignement).

PARTIE II

Contrôle des émissions des stations des services de radiocommunication de Terre

A) États signalétiques des stations de contrôle qui effectuent des mesures de fréquence

Noms des pays par ordre alphabétique des abréviations.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés et minutes).
Heures de service (UTC).
Gammes des fréquences mesurables (en kHz, MHz ou GHz).
Précision des mesures (1).
Observations.

B) États signalétiques des stations de contrôle qui effectuent des mesures d'intensité de champ ou de puissance surfacique

Noms des pays par ordre alphabétique des abréviations.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés et minutes).
Heures de service (UTC).
Gammes des fréquences (en kHz, MHz ou GHz).
Valeures maximum et minimum des intensités de champ ou des puissances surfaciques mesurables.
Précision des mesures en dB (1).
Observations.

C) États signalétiques des stations de contrôle qui effectuent des mesures radiogoniométriques

Noms des pays par ordre alphabétique des abréviations.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés, minutes et secondes).
Heures de service (UTC).
Gammes des fréquences (en kHz, MHz ou GHz).
Types des antennes utilisées.
Observations.

(1) Indiquer le maximum de précision qui peut être atteint pour chaque gamme de fréquences.

D) États signalétiques des stations de contrôle qui effectuent des mesures de larguer de bande

Noms des pays par ordre alphabétique des abréviations.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés et minutes).
Heures de service (UTC).
Gammes des fréquences (en kHz, MHz ou GHz).
Méthode(s) des mesure (1).
Pouvoir séparatuer à — 60 dB (le cas échéant).
Observations.

E) États signalétiques des stations de contrôle qui effectuent des relevés automatiques du degré d'ocupation du spectre

Noms des pays par ordre alphabétique des abréviations.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés et minutes).
Heures de service (UTC).
Gammes des fréquences (en kHz, MHz ou GHz).
Méthode(s) utilisée(s).
Observations.

PARTIE III

Contrôle des émissions de stations des services de radiocommunication spatiale

États signalétiques des stations de contrôle qui effectuent des mesures se rapportant aus stations des services de radiocommunication spatiale

Noms des pays par ordre alphabétique des symboles.
Noms des stations par ordre alphabétique.

Nom et coordonnées géographiques de la station (longitude et latitude en degrés, minutes et secondes).
Heures de service (UTC).
Renseignements sur les antennes utilisées (par exemple: diamètre ou gain en fonction de la fréquence; le cas échéant, vitesse d'exploration; etc.)
Gamme des angles d'azimut et de site.
Précision maximum qui peut être atteinte dans la détermination des positions orbitales des stations spatiales.
Renseignements sur le système de polarisation.
Température de bruit du système.
Gammes des fréquences, avec indication du maximum de précision de fréquence qui peut être atteint dans chaque gamme.
Gammes de fréquences dans lesquelles il est possible de mesurer l'intensité de champ ou la puissance surfacique.
Valeures minimum des intensité de champ ou de la puissence surfacique mesurable, avec indication de la précision de mesure qui peut être atteinte.
Renseignements disponibles pour la mesure de la largeur de bande (1).
Renseignements disponibles pour la mesure de l'occupation du spectre.
Renseignements disponibles pour la mesure de l'occupation de l'orbite.
Observations.

(1) Voir les Avis et Rapports pertinents du CCIR.

Liste VIII-A

Nomenclature des stations des services de radiocommunication spatiale et du service de radioastronomie

Le Comité établit et tient à jour le contenu de cette liste, en groupe ses rubriques de telle façon que les administrations puissent identifier plus facilement touts les stations faisant partie d'un réseau à satellite donné. De plus, le Comité apporte les améliorations nécessaires à la présentation de la liste, sans modifier de quelque maniére que ce soit les données fondamentales spécifiées dans le Règlement des radiocommunications.

SUP **Statistique des radiocommunications**

...

APPENDICE 10

Notations utilisées dans les documents de service

(Voir l'article 26 et l'apedendice 9)

■	Station classé comme située dans une région à trafic intense (voir l'article 60) («TI») (1)
O	De jour («HJ»)(1).
●	De nuit («HN») (1).
[]	Navire pourvu d'embarcations de sauvetage munies d'appareils radioélectriques installés à bord; le nombre entre les crochets indique le nombre de ces embarcations de sauvatage («S») (1).
Δ	(SUP).
AL	Station terrestre de radionavegation aéronautique.
AM	Station mobile de radionavegation aéronautique.
AT	Station d'amateur.
AX	Station fixe aéronautique.
BC	Station de radiodiffusion sonore.
BT	Station de radiodiffusion, télévision.
C	Exploitation continue pendant la période indiquée.
CA	Navire de charge.
CO	Station ouverte à la correspondance officielle exclusivement.
CP	Station ouverte à la correspondance publique.
CR	Station ouverte à la correspondance publique restreinte.
CV	Station ouverte exclusivement à la correspondence d'une entreprise privée.
D30°	Antenne dont la direction de rayonnement maximum est 30° (direction exprimée en degrés à partir du Nord vrai, de 0 à 360, dans le sense des aiguiles d'une montre).
DR	Antenne à effet directif pourvue d'un réflecteur.
EA	Station spatiale du service d'amateur par satellite.
EB	Station spatiale du service de radiodiffusion par satellite (radiodiffusion sonore).
EC	Station spatiale du service fixe par satellite.
ED	Station spatiale de télécommande spatiale.
EG	Station spatiale du service mobile maritime par satellite.
EH	Station spatiale de recherce spatiale.
EK	Station spatiale du poursuite spatiale.
EM	Station spatiale de satellite de météorologie.
EN	Station spatiale de satellite de radionavigation.
ER	Station spatiale de télémesure spatiale.
EV	Station spatiale du service de radiodiffusion par satellite (télévision).
EX	Station expérimentale.
FA	Station aéronautique.
FB	Station de base.

(1) Le symbole entre parenthèses peut être utilisé dans les notifications ainsi que dans les documents de service.

FC	Station côtière.
FE	(SPU).
FL	Station terrestre.
FP	Station des opérations portuaires.
FR	Station uniquement réceptrice, reliée au réseau géneral des voies de télécommunication.
FS	Station terrestre établie uniquement pour la sécurité de la vie humaine.
FX	Station fixe.
GS	Station à bord d'un navire de guerre ou d'un aéronef de l'armée ou de la marine.
H	Exploitation selon un horaire déterminé.
H8	Service de 8 heures effectué par une station de navire de la troisième catégorie.
H16	Service de 16 heures effectué par une station de navire de la deuxième catégorie.
H24	Exploitation continue de jour et de nuit.
HJ	Service de jour.
HN	Service de nuit.
HT	Exploitations pendant les périodes de transition entre le jour et la nuit.
HX	Exploitation intermittente de jour et de nuit ou station n'ayant pas de vacations déterminées.
I	Exploitation intermittente pendant la période indiquée.
LR	Station terrestre de radiolocalisation.
MA	Station d'aéronef.
ME	Station spatiale.
ML	Station mobile terrestre.
MO	Station mobile.
MR	Station mobile de radiolocalisation.
MS	Station de navire.
ND	Antenne dépourvue d'effet directif.
NL	Station terrestre de radionavigation maritime.
OD	Station de transmission de données océanographiques.
OE	Station qui interroge des stations de transmission de données océanographiques.
OT	Station écoulant exclusivement le trafic de service du service intéressé.
PA	Navire à passagers.
RA	Station de radioastronomie.
RC	Radiophare non directionnel.
RD	Radiophare directionnel.
RG	Station radiogoniométrique.
RM	Station mobile de radionavigation maritime.
RT	Radiophare tournant.
SM	Station du service des auxiliares de la météorologie.
SS	Station émmettant des fréquences étalon et des signaux horaires.
TA	Station terrienne d'exploitation spatiale du service d'amateur par satellite.
TC	Station terrienne du service fixe par satellite.
TD	Station terrienne de télécommande spatiale.
TE	Station terrienne d'émission.
TF	Station terrienne fixe du service de radiorepérage par satellite.
TG	Station terrienne mobile du service mobile maritime par satellite.
TH	Station terrienne du service de recherche spatiale.
TI	Station terrienne du service mobile maritime par satellite située en un point fixe déterminé.
TK	Station terrienne de poursuite spatiale.
TL	Station terrienne mobile du service de radiorepérage par satellite.
TM	Station terrienne du service de météorologie par satellite.
TMG	Temps moyen de Greenwich.
TN	Station terrienne du service de radionavigation par satellite.
TP	Station terrienne de réception.
TR	Station terrienne de télemesure spatiale.
TS	Voie son (télévision).
TT	Station terrienne du service d'exploitation spatiale.
TV	Voie image (télevision).
UTC	Temps universel coordonné.

(Les symboles peuvent être modifiés selon les besoins.)

MOD AP11

APPENDICE 11

Documents dont les stations de navire et les stations d'aéronef doivent être pourvues

(Voir les articles **24, 26, 44, 46, 49, 55, 57, 59** et l'appendice **9**)

SECTION I

Stations de navire obligatoirement pourvues d'une installation radiotélégraphique en vertu d'un accord international

Ces stations doivent être pourvues:

1) De la licence prévue à l'article 24;
2) Du certificat de chaque opérateur;
3) Du registre (journal du service radioeléctrique) sur lequel sont notés, au moment où ils ont lieu et avec l'indication de l'heure:
   a) Dans leur intégralité, toutes les communications relatives au trafic de detrésse;
   b) Les communications d'urgence et de sécurité;
   c) L'écoute assurée sur la fréquence internationale de détresse pendant les périodes de silence;
   d) Les communications entre la station du navire et les stations terrestres ou mobiles;
   e) Les incidents de service de toute nature;
   f) Si le règlement du bord le permet, la position du navire au moins une fois par jour;
   g) L'ouverture et la clôture de chacune des vacations;
4) De la Liste alphabétique des indicatifs d'appel des stations utilisées dans le service mobile maritime;
5) De la Nomenclature des stations côtières;
6) De la Nomenclature des stations de navire (il est facultatif pour la station de disposer du supplément);
7) De la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux;
8) Du Manuel á l'usage des services mobile maritime et mobile maritime par satellite;
9) Des tarifs télégraphiques des pays à destination desquels la station transmet le plus fréquemment des radiotélégrames.

SUP 10

SECTION II

Autres stations radiotélégraphiques de navire

Ces stations doivent être pourvues des documents visés aux alinéas 1 à 6 inclus, 8 et 9 de la section I.

SECTION III

Stations de navire obligatoirement pourvues d'une installation radiotéléphonique en vertu d'un accord international

Ces stations doivent être pourvues:

1) De la licence prèvue à l'article 24;
2) Du certificat de chaque opérateur;
3) Du registre (journal du service radioeléctrique) sur lequel sont notés, au moment où ils ont lieu et avec l'indication de l'heure:
   a) Un résumé de toutes les communications relatives au trafic de détresse, d'urgence et de sécurité;
   b) Un résumé des communications entre la station du navire et les stations terrestres ou mobiles;
   c) Une mention des incidents de service importants;
   d) Si le règlement du bord le permet, la position du navire au moins une fois par jour;
4) D'une liste des stations côtières avec lesquelles elles sont susceptibles d'échanger des communications, cette liste mentionnant les heures de veille, les heures de veille, les fréquences et les taxes;
5) Des dispositions du Règlement des radiocommunications et des Résolutions et Avis du CCITT applicables au service mobile maritime radiotéléphonique, ou du Manuel à l'usage des services mobile maritime et mobile maritime par satellite.

SECTION IV

Autres stations radiotéléphoniques de navire

Ces stations doivent être pourvues:

1) Des documents visés aux alinéas 1 et 2 de la section III;
2) Des documents visés aux alinéas 3, 4 et 5 de la section III, selon les exigences des administrations intéressées.

SECTION V

Stations de navire équipées de plusieurs installations

Ces stations doivent être pourvues:

1) Pour chaque installation, si c'est nécessaire, des documents visés aux alinéas 1, 2 et 3 de la section I, ou aux alinéas 1, 2 et 3 de la section III selon le cas;
2) Pour une seule d'entre elles, des autres documents visés par les sections I ou III selon le cas.

SECTION VI

Stations d'aéronef

Ces stations doivent être pourvues:

1) Des documents visés aux alinéas 1 et 2 de la section I;
2) Du registre (journal du service radioélectrique) visé à alinéa 3 de la section I, à moins que les administrations intéressées n'aient adopté d'autres dispositions pour l'enregistrement de toutes les informations que ledit registre doit mentionner;
3) Des autres documents contenant les renseignements officiels relatifs aux stations auxquels la station d'aéronef peut avoir recours pour l'exécution de son service.

NOC **AP12**

APPENDICE 12

Vacations des stations de navire classées dans la deuxième ou dans la troisième catégorie

(Voir les articles 26 et 58)

SECTION I

Tableau

Vacations — Heure locale du navire ou heure du fuseau horaire (voir les numéros **4058** et **4059**)	
16 heures (H16)	8 heures (H8)
De 00.00 à 04.00 heures. De 08.00 à 12.00 heures. De 16.00 à 18.00 heures. De 20.00 à 22.00 heures. Plus 4 heures. (Voir le numéro **4058**).	De 08.00 à 12.00 heures. De 18.00 à 22.00 heures (*a*). Plus 2 heures. (Voir le numéro **4059**).

(*a*) Deux heures de service continu entre 18.00 et 22.00, heure locale du navire ou heure du fuseau horaire, fixées par l'administration, le commandant ou la personne responsable.

SECTION II

Graphique et mappemonde

Note *a*) — Le graphique indique les vacations *fixes* et les vacations *à option* des stations de navire classées dans la deuxième ou dans la troisième catégorie, suivant les fuseaux horaires. (Les vacations indiquées ne comprennent pas celles qui sont fixées par l'administration, le commandant ou la personne responsable du navire.)

Les vacations *fixes* sont répresentées de la manière suivante:

I) Pour les navires classés dans la deuxième catégorie .....

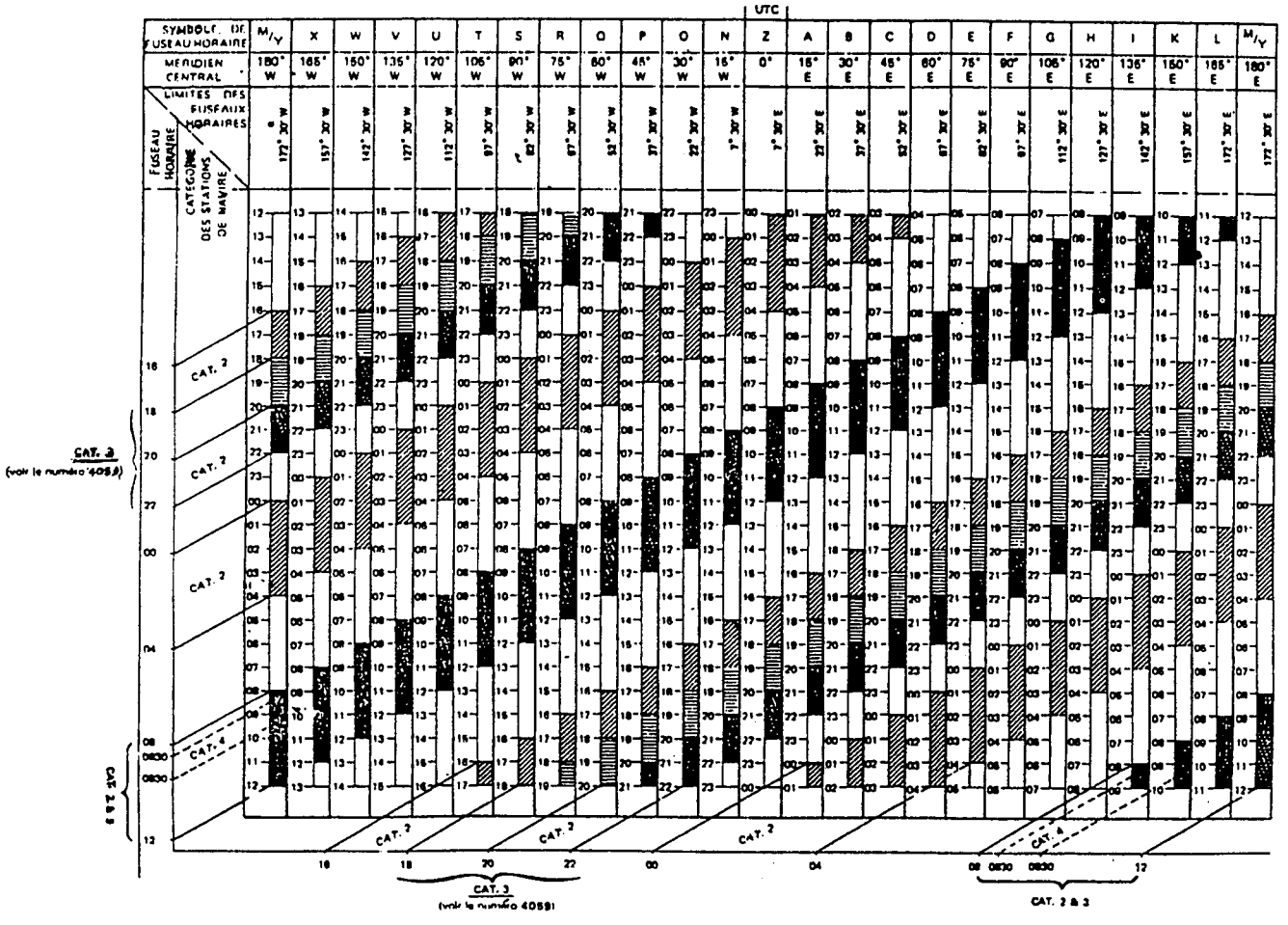
II) Pour les navires classés dans la deuxième ou dans la troisième catégorie .....

III) Pour les navires classés dans la troisième catégorie, période dans laquelle les deux heures de service continu peuvent être choisies .....

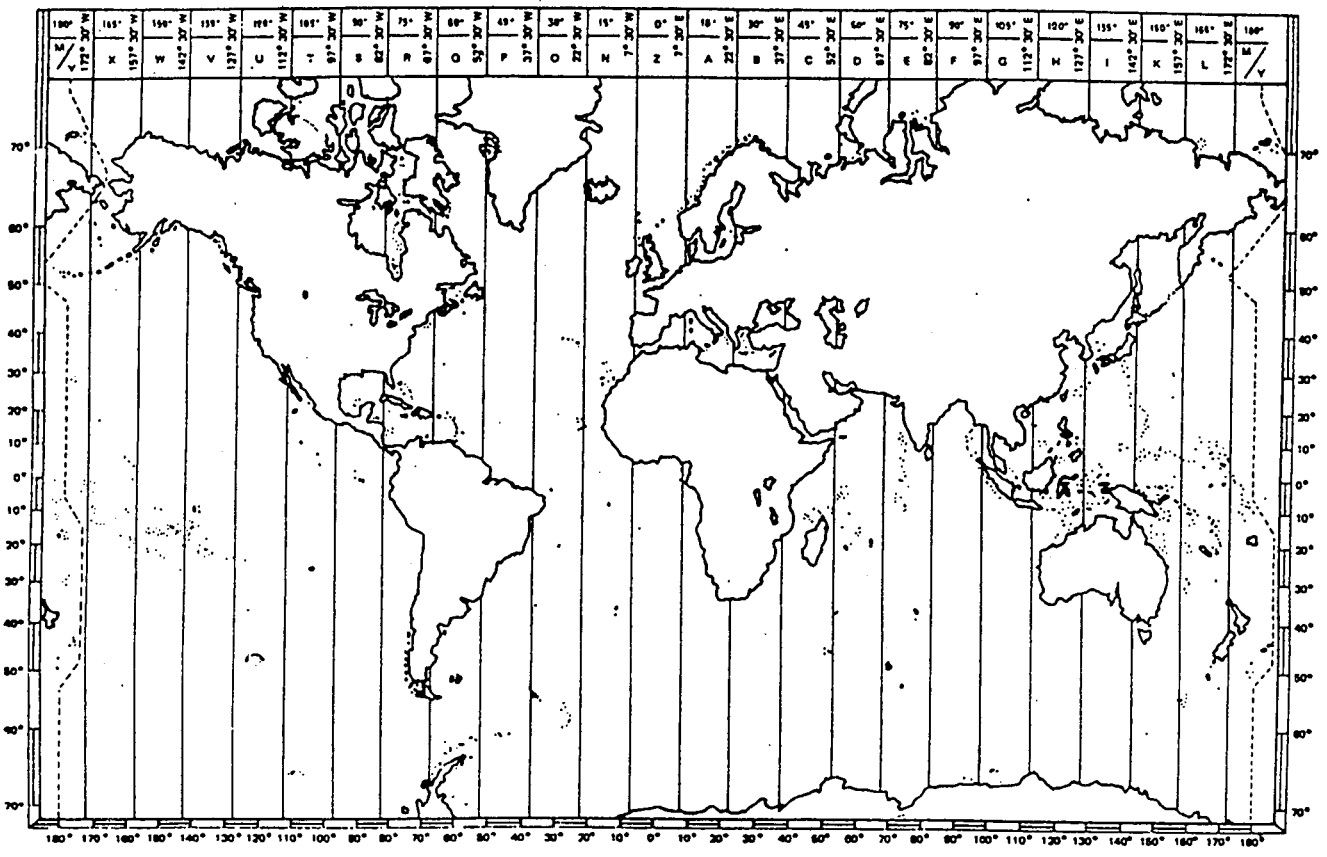
Note *b*) — Le graphique indique également (en noir) la période entre 08.30-09.30 pendant laquelle il est recommandé aux navires classés dans la quatrième catégorie d'assurer le service (voir le numéro **4062**).

GRAPHIQUE

Vacations, par fuseau horaire, des stations de navire



MAPPEMONDE (FUSEAUX HORAIRES)



NOC AP13

APPENDICE 13

Abréviations et signaux divers à employer dans les communications radiotélégraphiques, à l'exception de celles du service mobile maritime

(Voir l'article 52)

SECTION I

Code Q

Introduction

1. Les séries de groupes QRA à QUZ, mentionnées ci-après, sont utilisables dans tous les services.

2. Les séries QAA à QNZ sont réservées au service aéronautique et les séries QOA à QQZ sont réservées aux services maritimes. Elles ne font pas partie du présent Règlement (1).

3. On peut donner un sens affirmatif ou négatif à certaines abréviations du code Q en transmettant respectivement YES ou NO immédiatement après l'abréviation.

4. La signification des abréviations du code Q peut être étendue ou complétée par l'addition appropriée d'autres abréviations, d'indicatifs d'appel, de noms de lieux, de chiffres, de numéros, etc. Les espaces en blanc contenus entre parenthèses correspondent à des indications facultatives. Ces indications sont transmises dans l'ordre où elles se trouvent dans le texte de tables ci-après.

5. Les abréviations du code Q prennent la forme de questions quand elles sont suivies d'un point d'interrogation. Quand une abréviation employée comme question est suivie d'indications complémentaires, il convient de faire suivre celles-ci d'un point d'interrogation.

6. Les abréviations du code Q comportant plusieurs significations numérotéls sont suivies du numéro approprié qui précise le sens choisi. Ce numéro est transmis immédiatement après l'abréviation.

7. Le heures sont indiquées en Temps universel coordonné (UTC) à moins d'indications contraires dans les questions ou réponses.

---

(1) Note du Secrétariat général: les séries QOA à QQZ figurent à l'appendice **14.**

Abréviations utilisables dans tous les services

A) Liste de abréviations par ordre alphabétique

Abréviation	Question	Réponse ou avis
QRA	Quel est le nom de votre station?	Le nom de ma station est ...
QRB	A quelle distance approximative vous trouvez-vouz de ma station?	La distance approximative entre nos stations est de ... milles nautiques (*ou* kilomètres).
QRC	Par quelle exploitation privée (*ou* administration d'État) sont liquidés les comptes de taxes de votre station?	Les comptes de taxes de ma station sont liquidés par l'exploitation privée... (*ou* par l'administration de l'État ...).
QRD	Où allez-vouz et d'où venez-vouz?	Je vais à ... et je viens de ...
QRE	A quelle heure comptez-vous arriver à ... (*ou* au-dessus de ...) *(lieu)*?	Je compte arriver à ... (*ou* au-dessus de ...) *(lieu)* à ... heures.
QRF	Retournez-vous à ... *(lieu)*?	Je retourne à ... *(lieu)*. *ou* Retournez à ... *(lieu)*.
QRG	Voulez-vous m'indiquer ma fréquence exacte (*ou* la fréquence exacte de ...)?	Votre fréquence exacte (*ou* la fréquence exacte de ...) est ... kHz (*ou* MHz).
QRH	Ma fréquence varie-t-elle?	Votre fréquence varie.
QRI	Quelle est la tonalité de mon émission?	La tonalité de votre émission est ... 1. Bonne; 2. Variable; 3. Mauvaise.
QRJ	Combien d'appels radiotéléphoniques avez-vous en instance?	J'ai ... appels radiotéléphoniques en instance.
QRK	Quelle est l'intelligibilité de mes signaux (*ou* des signaux de ...)?	L'intelligibilité de vos signaux (*ou* des signaux de ...) est ... 1. Mauvaise; 2. Médiocre; 3. Assez bonne; 4. Bonne; 5. Excellente.
QRL	Etes-vous occupé?	Je suis occupé (*ou* Je suis occupé avec ...). Prière de ne pas brouiller.
QRM	Etes-vous brouillé?	Je suis brouillé ... 1. Je ne suis nullement brouillé; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
QRN	Etes-vous troublé par des parasites?	Je suis troublé par des parasites ... 1. Je ne suis nullement troublé par des parasites; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
QRO	Dois-je augmenter la puissance d'émission?	Augmentez la puissance d'émission.
QRP	Dois-je diminuer la puissance d'émission?	Diminuez la puissance d'émission.
QRQ	Dois-je transmettre plus vite?	Transmettez plus vite (... mots par minute).
QRR	Etes-vous prêt pour l'emploi des appareils automatiques?	Je suis prêt pour l'emploi des appareils automatiques. Transmettez à la vitesse de ... mots par minute.
QRS	Dois-je transmettre plus lentement?	Transmettez plus lentement (... mots par minute).
QRT	Dois-je cesser la transmission?	Cessez la transmission.
QRU	Aves-vous quelque chose pour moi?	Je n'ai rien pour vous.
QRV	Etes-vous prêt?	Je suis prêt.
QRW	Dois-je aviser ... que vous l'appelez sur ... kHz (*ou* MHz)?	Prière-d'aviser ... que je l'appelle sur ... kHz (*ou* MHz).
QRX	A quel moment me rappellerez-vous?	Je vous rappellerai à ... heures [sur ... kHz (*ou* MHz)].
QRY	Quel est mon tour *(concerne les communications)*?	Le numéro de votre tour est ... *(ou d'aprés toute autre indication) (concerne les communications)*.
QRZ	Par qui suis-je appelé?	Vous êtres appelé par ... [sur ... kHz (*ou* MHz)].
QSA	Quelle est la force de mes signaux (*ou* des signaux de ...)?	La force de vos signaux (*ou* des signaux de ...) est ... 1. À peine perceptible; 2. Faible; 3. Assez bonne; 4. Bonne; 5. Très bonne.
QSB	La force de mes signaux varie-t-elle?	La force de vos signaux varie.
QSC	Etes-vous un navire de charge?	Je suis un navire de charge.
QSD	Ma manipulation est-elle défectueuse?	Votre manipulation est défectueuse.
QSE	Quelle est la dérive estimée de l'engin de sauvetage?	La dérive estimée de l'engin de sauvetage est ... *(chiffre et unité)*.
QSF	Avez-vous effectué le sauvetage?	J'ai effectué le sauvetage et je me dirige sur la base de ... (avec ... blessés nécessitant ambulance).
QSG	Dois-je transmettre ... télégrammes à la fois?	Transmettez ... télégrammes à la fois.

Abréviation	Question	Réponse ou avis
QSH	Pouvez-vous effectuer un ralliement avec votre radiogoniomètre?	Je peux avec mon radiogonomètre effectuer un ralliement (rallier la station de ...).
QSI	—	Il m'a été impossible d'interrompre votre transmission. *ou* Voulez-vous informer ... *(indicatif d'appel)* qu'il m'a été impossible d'interrompre sa transmission [sur ... kHz (*ou* MHz).
QSJ	Quelle est la taxe à percevoir pour ... y compris votre taxe intérieure?	Le taxe à percevoir pour ... est de ... francs, y compris ma taxe intérieure.
QSK	Pouvez-vous m'entendre entre vos signaux? Dans l'affirmative puis-je vous interrompre dans votre transmission?	Je peux vous entendre entre mes signaux; vous pouvez interrompre ma transmission.
QSL	Pouvez-vous me donner accusé de réception?	Je vous donne accusé de réception.
QSM	Dois-je répéter le dernier télégramme que je vous ai transmis (*ou* un télégramme précédent)?	Répétez le dernier télégrame que vous m'avez transmis [*ou* le(s) télégramme(s) numéro(s) ...].
QSN	M'avez-vous entendu [*ou* avez-vous entendu ...*(indicatif d'appel)*] sur... kHz (*ou* MHZ)?	Je vous ai entendu [*ou* j'ai endentu ...*(indicatif d'appel)*] sur... kHz (*ou* MHZ).
QSO	Pouvez-vous communiquer avec ... directement (*ou* par relais)?	Je suis communiquer avec ... directement (*ou* par l'intermédiaire de ...).
QSP	Voulez-vous retransmettre à ... gratuitement?	Je peux retransmettre à ... gratuitement.
QSR	Avez-vous à bord un médicin [*ou ... (nom d'une personne)*]?	J'ai à bord un médicin [*ou ... (nom d'une personne)*].
QST	Dois-je répéter l'appel sur la fréquence d'appel?	Répétez l'appel sur la fréquence d'appel. Je ne vous ai pas entendu (*ou* il y a eu du brouillage).
QSS	Quelle fréquence de travail allez-vous utiliser?	Je vais utiliser la fréquence de travail ... kHz *(en régle générale, il suffira d'indiquer les trois derniers chiffres de la fréquence).*
QSU	Dois-je (transmettre ou répondre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHZ)] (en émission de la classe ...)?	Transmettez ou répondez sur la fréquence actuelle [*ou* sur ...kHz [*ou* MHz)] (en émission de la classe ...).
QSV	Dois-je transmettre une série de V sur cette fréquence [*ou* sur ... kHz (*ou* MHz)]?	Transmettez une série de V sur cette fréquence [*ou* sur ... kHz (*ou* MHz)].
QSW	Voulez-vous transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...)?	Je vais transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSX	Voulez-vous écouter ... *(indicatif d'appel)* sur ... kHz (*ou* MHz)?	J'écoute ... *(indicatif d'appel)* sur ... kHz (*ou* MHz).
QSY	Dois-je passer à la transmission sur une autre fréquence?	Passez à la transmission sur une autre fréquence [*ou* sur ... kHz (*ou* MHz)].
QSZ	Dois-je transmettre chaque mot ou groupe plusieurs fois?	Transmettez chaque mot ou groupe deux fois (*ou* ... fois).
QTA	Dois-je annuler le télégramme numéro ...?	Annulez le télégramme numéro ...
QTB	Etes-vous d'accord avec mon compte de mots?	Je ne suis pas d'accord avec votre compte de mots. Je vais répéter la première lettre de chaque mot et le premier chiffre de chaque nombre.
QTC	Combien avez-vous de télégrammes à transmettre?	J'ai ... télégrammes pour vous (*ou* pour ...).
QTD	Qu'à repêché le navire de sauvetage ou l'aéronef de sauvetage?	... (*identifications*) a repêché ...: 1. ... *(nombre)* survivants; 2. Épave; 3. ... *(nombre)* cadavres.
QTE	Quel est mon relèvement VRAI relativement à vous? *ou* Quel est mon relèvement VRAI relativement à ... *(indicatif d'appel)*? *ou* Quel est le relèvement VRAI de ... *(indicatif d'appel)* relativement à ... *(indicatif d'appel)*?	Votre relèvement VRAI relativement à moi est de ... degrés à ... heures. *ou* Votre relèvement VRAI relativement à ... *(indicatif d'appel)* était de ... degrés à ... heures. *ou* Le relèvement VRAI de ... *(indicatif d'appel)* relativement à ... *(indicatif d'appel)* était de ... degrés à ... heures.
QTF	Voulez-vous m'indiquer la position de ma station résultant des relèvements pris par les stations radiogoniométriques que vous contrôlez?	La position de votre station résultant des relèvements pris par les sations radiogoniométriques que je contrôle était ... latitude, ... longitude *(ou une outre indication de la position)*, classe ... à ... heures.
QTG	Voulez-vous transmettre deux traits de dix secondes chacun, suivis de votre indicatif d'appel (répétés ... fois) [sur ... kHz (*ou* MHz)]? *ou* Voulez-vous demander à ... de transmettre deux traits de dix secondes suivis de son indicatif d'appel (répétés ... fois) sur ... kHz (*ou* MHz)?	Je vais transmettre deux traits de dix secondes chacun, suivis de mon indicatif d'appel (répétés ... fois) [sur ... kHz (*ou* MHZ)]. *ou* J'ai demandé à ... de transmettre deux traits de dix secondes suivis de son indicatif d'appel (répétés ... fois) sur ... kHz (*ou* MHz).
QTH	Quelle est votre position en latitude et en longitude *(ou d'après toute autre indications)?*	Ma position est ... latitude ... longitude *(ou d'après toute autre indication).*
QTI	Quelle est votre route VRAIE?	Ma route VRAIE est de ... degrés.
QTJ	Quelle est votre vitesse de marche? *(Demande la vitesse du navire ou de l'aéronef par rapport à l'eau ou à l'air respectivement.)*	Ma vitesse de marche est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure). *(Indique la vitesse du navire ou de l'aéronef par rapport à l'eau ou à l'air respectivement.)*
QTK	Quelle est la vitesse de votre aéronef par rapport à la surface de la terre?	La vitesse de mon aéronef est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure) par rapport à la surface de la terre.
QTL	Quel est votre cap VRAI?	Mon cap VRAI est de ... degrés.

Abréviation	Question	Réponse ou avis
QTM	Quel est votre cap MAGNÉTIQUE?	Mon cap MAGNÉTIQUE est de ... degrés.
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heures.
QTO	Etes-vous sorti du bassin (*ou* du port)? *ou* Avez-vous décollé?	Je suis sorti du bassin (*ou* du port). *ou* J'ai décollé.
QTP	Allez-vous entrer dans le bassin (*ou* dans le port)? *ou* Allez-vous amérir (*ou* atterrir)?	Je vais entrer dans le bassin (*ou* dans le port). *ou* Je vais amérir (*ou* atterrir).
QTQ	Pouvez-vous communiquer avec ma station à l'aide du Code international de signaux?	Je vais communiquer avec votre station à l'aide du Code international de signaux.
QTR	Quelle est l'heure exacte?	L'heure exacte est ...
QTS	Voulez-vous transmettre votre indicatif d'appel aux fins de réglage, ou pour permettre la mesure de votre fréquence, maintenant (*ou* à ... heures) sur ... kHz (*ou* MHz)?	Je vais transmettre mon indicatif d'appel aux fins de réglage ou pour permettre la mesure de ma fréquence, maintenant (*ou* à ... heures) sur ... kHz (*ou* MHz).
QTT	—	Le signal d'identification qui suit est superposé à une autre émission.
QTU	Quelles sont les heures pendant lesquelles votre station est ouverte?	Ma station est ouverte de ... à ... heures.
QTV	Dois-je prendre la veille à votre place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures)?	Prenez la veille à ma place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures).
QTW	Quel est l'état des survivants?	Les survivants sont en ... état et ont besoin d'urgence ...
QTX	Voulez-vous laisser votre station ouvert pour communiquer avec moi jusqu'à nouvel avis de ma part (*ou* jusqu'à ... heures)?	Ma station reste ouverte pour communiquer avec vous jusqu'à nouvel avis de votre part (*ou* jusqu'à ... heures).
QTY	Vous dirigez-vous vers le lieu de l'accident et, dans d'affirmative, quand pensez-vous arriver?	Je me dirige vers le lieu de l'accident et je pense arriver à ... heures *(... date)*.
QTZ	Continuez-vous les recherches?	Je continue les recherches (de ... aéronef, navire, engin de sauvetage, survivants, épave).
QUA	Avez-vous des nouvelles de ... *(indicatif d'appel)*?	Voici des nouvelles de ... *(indicatif d'appel)*.
QUB	Pouvez-vous me donner dans l'ordre, les renseignements concernant: la direction VRAIE et la vitesse du vent au sol; la visibilité, le temps qu'il fait, l'importance, le type, et la hauteur de la base des nuages au-dessus de ... *(lieu d'observations)?*	Voici les renseingnements demandés: ... *(Il convient de préciser les unités utilisées pour les vitesse et les distances.)*
QUC	Quel est le numéro *(ou autre indication)* du dernier message que vous avez reçu de moi [*ou* de ... *(indicatif d'appel)*]?	Le numéro *(ou autre indication)* du dernier message que j'ai reçu de vous [*ou* de ... *(indicatif d'appel)*] est ...
QUD	Avez-vous reçu le signal d'urgence transmis par ... *(indicatif d'appel d'une stations mobile)*?	J'ai reçu le signal d'urgence transmis par ... *(indicatif d'appel d'une station mobile)* à ... heures.
QUE	Pouvez-vous téléphoner en ... *(langue)*, avec un interprète au besoin; dans l'affirmative, sur quelles fréquences?	Je peux téléphoner en ... *(langue)* sur ... kHz (*ou* MHz).
QUF	Avez-vous reçu le signal de détresse émis par ... *(indicatif d'appel d'une station mobile)*?	J'ai reçu le signal de détresse émis par ... *(indicatif d'appel d'une station mobile)* à ... heures.
QUG	Allez-vous être forcé d'amérir (*ou* d'atterrir)?	Je suis forcé d'amérir (*ou* d'atterrir) immédiatement. *ou* Je vais être forcé d'amérir (*ou* d'atterrir) à ... *(position ou lieu)* à ... heures.
QUH	Voulez-vous m'indiquer la pression barométrique actuelle au niveau de la mer?	La pression barométrique actuelle au niveau de la mer est de ... *(unités)*.
QUI	Vos feux de navigation sont-ils allumés?	Mes feux de navigation sont allumés.
QUJ	Voulez-vous m'indiquer la route VRAIE à suivre pour vous atteindre (*ou* pour atteindre ...)?	La route VRAIE à suivre pour m'atteindre (*ou* pour atteindre ...) est de ... degrés à ... heures.
QUK	Pouvez-vous m'indiquer l'état de la mer observé à ... *(lieu ou coordonnées)*?	La mer à ... *(lieu ou coordonées)* est ...
QUL	Pouvez-vous m'indiquer la houle observée à ... *(lieu ou coordonnées)*?	La houle a ... *(lieu ou coordonnés)* est ...
QUM	Pui-je reprendre le travail normal?	On peut prendre le travail normal.
QUN	Prière aux navires dans mon voisinage immédiat *ou* (dans le voisinage de ... latitude, ... longitude) *ou* (dans le voisinage de ...) d'indiquer leurs positions, cap VRAI et vitesse.	Ma position, mon cap VRAI et ma vitesse sont ...
QUO	Dois-je rechercher ... 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; (dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indications)*?	Voulez-vous rechercher ... 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; (dans le voisinage de ... latitude, ... longitude *(ou d'après toute indications)*.
QUP	Voulez-vous indiquer votre position par ... 1. Projecteur; 2. Fumée noire; 3. Fusées lumineuses?	Ma position est indiquée par ... 1. Projecteur; 2. Fumée noire; 3. Fusées lumineuses.

Abréviation	Question	Réponse ou avis
QUQ	Dois-je diriger mon projecteur verticalement sur un nuage, d'une manière intermittente si possible, puis diriger ensuite le faisceau sur l'eau (*ou* sur le sol) contre le vent, lorsque l'on verra ou entendra votre aéronef, afin de faciliter votre amérissage *(ou* votre atterrissage*)*?	Prière de diriger votre projecteur verticalement sur un nuage, d'une manière intermittente si possible, puis diriger ensuite le faisceau sur l'eau (*ou* sur le sol) contre le vent, lorsque vous verrez ou entendrez mon aéronef, afin de faciliter mon amérissage (*ou* mon atterrissage).
QUR	Les survivants ont-ils ... 1. Reçu l'equipement de sauvetage; 2. Été recuillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol?	Les survivants ont ... 1. Reçu l'équipement de sauvetage lancé par ...; 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol.
QUS	Avez-vous aperçu des survivants ou des débris? Si oui, à quel endroit?	J'ai aperçu ... 1. Des survivants dans l'eau; 2. Des survivants sur des radeaux; 3. Des débris ou épaves; à ... latitude, ... longitude *(ou d'après toute autre indication).*
QUT	Le lieu de l'accident est-il indiqué?	Le lieu de l'accident est indiqué par ... 1. Brûlot ou bouée fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spècifier).*
QUU	Dois-je diriger le navire ou l'aéronef sur ma position?	Dirigez le navire ou l'aéronef ... *(indicatif d'appel)* ... 1. Sur votre position en transmettant votre indicatif d'appel et des traits prolongés sur ... kHz (*ou* MHz); 2. En transmettant sur ... kHz (*ou* MHz) la route VRAIE pour vous atteindre.
QUW	Etes-vous sur la zone de recherches ... *(symbole ou latitude et longitude)*?	Je suis sur la zone de recherches ...*(désignation).*
QUY	L'emplacement de l'engin de sauvetage a-t-il été balisé?	L'emplacement de l'engin de sauvetage a été balisé à ... heure par...: 1. Brûlot ou bouée fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier).*

B) Liste des abréviations por nature des questions, réponses ou avis

Abréviation	Question	Réponse ou avis
	Nom	
QRA	Quel est nom de votre station?	Le nom de ma station est ...
	Parcours	
QRD	Où allez-vous et d'où venez-vous?	Je vais à ... et je viens de ...
	Position	
QRB	A quelle distance approximative vous trouvez-vous de ma station?	La distance approximative entre nos stations est de ... milles nautiques (*ou* kilomètres).
QTH	Quelle est votre position en latitude et en longitude *(ou d'après toute autre indication)*?	Ma position est ... latitude ... longitude *(ou d'après toute autre indication).*
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heures.
	Qualité des signaux	
QRI	Quelle est la tonalité de mon émission?	La tonalité de votre émission est ... 1. Bonne; 2. Variable; 3. Mauvaise.
QRK	Quelle est l'intelligibilité de mes signaux (*ou* des signaux de...)?	L'intelligibilité de vos sugnaux (*ou* des signaux de ...) est ... 1. Mauvaise; 2. Médiocre; 3. Assez bonne; 4. Bonne; 5. Excellente.

Abréviation	Question	Réponse ou avis
		Force des signaux
QRO	Dois-je augmenter la puissance d'émission?	Augmentez la puissance d'émission.
QRP	Dois-je diminuer la puissance d'émission?	Diminuez la puissance d'émission.
QSA	Quelle est la force de mes signaux (*ou* des signaux de ...)?	La force de vos signaux (*ou* des signaux de ...) est ... 1. À peine perceptible; 2. Faible; 3. Assez bonne; 4. Bonne; 5. Très bonne.
QSB	La force de mes signaux varie-t-elle?	La force de vos signaux varie.
	Manipulation	
QRQ	Dois-je transmettre plus vite?	Transmettez plus vite (... mots par minute).
QRR	Etes-vous prêt pour l'emploi des appareils automatiques?	Je suis prêt pour l'emploi des appareils automatiques. Transmettez à la vitesse de ... mots par minute.
QRS	Dois-je transmettre plus lentement?	Transmettez plus lentement (... mots par minute).
QSD	Ma manipulation est-elle défectueuse?	Votre manipulation est défectueuse.
	Brouillage	
QRM	Etes-vous brouillé?	Je suis brouillé ... 1. Je ne sui nullement brouillé; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
QRN	Etes-vous troublé par des parasites?	Je suis troublé par des parasites ... 1. Je ne suis nullement troublé par des parasites; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
	Réglage de la fréquence	
QRG	Voulez-vous m'indiquer ma fréquence exacte (*ou* la fréquence exacte de ...)?	Votre fréquence exacte (*ou* la fréquence exacte de ...) est ... kHz (*ou* MHz).
QRH	Ma fréquence varie-t-elle?	Votre fréquence varie.
QTS	Voulez-vous transmettre votre indicatif d'appel aux fins de réglage, ou pour permettre la mesure de votre fréquence, maintenant (*ou* à ... heures) sur ... kHz (*ou* MHZ)?	Je vais transmettre mon indicatif d'appel aux fins de réglage ou pour permettre da mesure de ma fréquence, maintenant (*ou* à ... heures) sur ... Khz (*ou* MHZ).
	Choix de la fréquence et ou de la classe d'émission	
QSN	M'avez-vous entendu [*ou* avez-vous entendu ... *(indicatif d'appel)*] sur ... kHz (*ou* MHz)?	Je vous ai entendu [*ou* j'ai entendu ... *(indicatif d'appel)*] sur ... kHz (*ou* MHz).
QSS	Quelle fréquence de travail allez-vous utiliser?	Je vais utiliser la fréquence de travail ... kHz *(en règle générale, il suffira d'indiquer les trois derniers chiffres de la fréquence).*
QSU	Dois-je transmettre ou répondre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...)?	Transmettez ou répondez sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz) (en émission de la classe ...).
QSV	Dois-je transmettre une série de V sur cette fréquence [*ou* sur ... kHz (*ou* MHz)]?	Transmettez une série de V sur cette fréquence [*ou* sur ...kHz (*ou* MHz)].
QSW	Voulez-vous transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...)?	Je vais transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSX	Voulez-vous écouter ... *(indicatif d'appel)* sur ... kHz (*ou* MHz)?	J'écoute ... *(indicatif d'appel)* sur ... kHz (*ou* MHz).
	Changement de fréquence	
QSY	Dois-je passer à la transmition sur une autre fréquence?	Passez à la transmission sur une autre fréquence [*ou* sur ... kHz (*ou* MHz)].
	Établissement de la communication	
QRL	Etes-vous occupé?	Je sui occupé (*ou* Je suis occupé avec ...). Prière de ne pas brouiller.
QRV	Etes-vous prêt?	Je suis prêt.
QRX	A quel moment me rappellerez-vous?	Je suis rappellerai à ... heures [sur ... kHz (*ou* MHz)].
QRY	Quel est mon tour *(concerne les communications)*?	Le numéro de votre tour est ... *(ou d'après toute autre indication) (concerne les communications).*

Abréviation	Question	Réponse ou avis
QRZ	Par qui suis-je appelé?	Vous êtes appelé par ... [sur ... kHz (*ou* MHz)].
QSC	Etes-vous un navire de charge?	Je suis un navire de charge.
QSR	Dois-je répéter l'appel sur la fréquence d'appel?	Répétez l'appel sur la fréquence d'appel. Je ne vous ai pas entendu (*ou* il y a eu du brouillage).
QTQ	Pouvez-vous communiquer avec ma station à l'aide du Code international de signaux?	Je vais communiquer avec votre station à l'aide du Code international de signaux.
QUE	Pouvez-vous téléphoner en ... *(langue)*, avec un interprète au besoin; dans l'affirmative, sur quelles fréquences?	Je peux téléphoner en ... *(langue)* sur ... kHz (*ou* MHz).
	Heure	
QTR	Quelle est l'heure exacte?	L'heure exacte est ...
QTU	Quelles sons les heures pendant lesquelles votre station est ouverte?	Ma station est ouverte de ... à ... heures.
	Taxes	
QRC	Par quelle exploitation privée (*ou* administration d'État) son liquidés les comptes de taxes de votre station?	Les comptes de taxes de ma station sont liquidés par l'exploitation privée ... (*ou* par l'administration de l'État ...).
QSJ	Quelle est la taxe à percevoir pour ... y compris votre taxe intérieure?	La taxe à percevoir pour ... est de ... francs, y compris ma taxe intérieure.
	Transit	
QRW	Dois-je aviser ... que vous l'appelez sur ... kHz (*ou* MHz)?	Prière d'aviser ... que je l'appelle sur ... kHz (*ou* MHz).
QSO	Pouvez-vous communiquer avec ... directement (*ou* par relais)?	Je suis communiquer avec ... directement (*ou* par l'intermédiaire de ...).
QSP	Voulez-vous retransmettre à ... gratuitement?	Je peux retransmettre à ... gratuitement.
QSQ	Avez-vous à bord un médicin [*ou ... (nom d'une personne)*]?	J'ai à bord un médicin [*ou ... (nom d'une personne)*].
QUA	Avez-vous des nouvelles de ... *(indicatif d'appel)*?	Voici des nouvelles de ... *(indicatif d'appel)*.
QUC	Quel est le numéro *(ou autre indication)* du dernier message que vous avez reçu de moi [*ou* de ... *(indicatif d'appel)*]?	Le numéro *(ou autre indication)* du dernier message que j'ai reçu de vous [*ou* de ... *(indicatif d'appel)*].
	Acheminement de la correspondance	
QRJ	Combien d'appels radiotéléphoniques avez-vous en instance?	J'ai ... appels radiotéléphoniques en instance.
QRU	Avez-vous quelque chose pour moi?	Je n'ai rien pour vous.
QSG	Dois-je transmettre ... télégrammes à la fois?	Transmettez ... télégrammes à la fois.
QSI	—	Il m'a été impossible d'interrompre votre transmission. *ou* Voulez-vous informer ... *(indicatif d'appel)* qu'il m'a été impossible d'interrompre sa transmission [sur ... kHZ (*ou* MHz)].
QSK	Pouvez-vous m'entendre entre vos signaux? Dans l'affirmative puis-je vous interrompre dans votre transmission?	Je peux entendre entre mes signaux; vous pouvez interrompre ma transmission.
QSL	Pouvez-vous me donner accusé de réception?	Je vous donne accusé de réception.
QSM	Dois-je répéter le dernier télégramme que je vous ai transmis (*ou* un télégramme précédent)?	Répétez le dernier télégramme que vous m'avez transmis [*ou* le(s) télégramme(s) numéro(s) ...)].
QSZ	Dois-je transmettre chaque mot ou groupe plusieurs fois?	Transmettez chaque mot ou groupe deux fois (*ou* ... fois).
QTA	Dois-je annuler le télégramme numéro ...?	Annulez le télégramme numéro ...
QTB	Etes-vous d'accord avec mon compte de mots?	Je ne suis pas d'accord avec votre compte de mots. Je vais répéter la première lettre de chaque mot et le premier chiffre de chaque nombre.
QTC	Combien avez-vous de télégrammes à transmettre?	J'ai ... télégrammes pour vous (*ou* pour ...).
QTV	Dois-je prendre la veille à votre place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures)?	Prenez la veille à ma place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures).
QTX	Voulez-vous laisser votre station ouverte pour communiquer avec moi jusqu'à nouvel avis de ma part (*ou* jusqu'à ... heures)?	Ma station reste ouverte pour communiquer avec vous jusqu'à nouvel avis de votre part (*ou* jusqu'à ... heures).
	Mouvement	
QRE	A quelle heure comptez-vous arriver à ... (*ou* au-dessus de ...) *(lieu)*?	Je compte arriver à ... (*ou* au-dessus de ...) *(lieu)* à ... heurs.
QRF	Retournez-vous à ... *(lieu)*?	Je retourne à ... *(lieu)*. *ou* Retournez à ... *(lieu)*.
QSH	Pouvez-vous effectuer un ralliement avec votre radiogoniomètre?	Je peux avec mon radiogoniomètre effectuer un ralliement (rallier la station de ...).
QTI	Quelle est votre route VRAIE?	Ma route VRAIE est de ... degrés.
QTJ	Quelle est votre vitesse de marche?	Ma vitesse de marche est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure).
	(Demande la vitesse du navire ou de l'aéronef par rapport à l'eau ou l'air respectivement.)	*(Indique la vitesse du navire ou de l'aéronef par rapport à l'eau ou à l'air respectivement.)*

Abréviation	Question	Réponse ou avis
QTK	Quelle est la vitesse de votre aéronef par rapport à la surface de la terre?	La vitesse de mon aéronef est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure) par rapport à la surface de la terre.
QTL	Quel est votre cap VRAI?	Mon cap VRAI est de ... degrés.
QTM	Quel est votre cap MAGNÉTIQUE?	Mon cap MAGNÉTIQUE est de ... degrés.
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heurs.
QTO	Etes-vous sorti du bassin (*ou* du port)?	Je suis sorti du bassin (*ou* du port).
	ou	*ou*
	Avez-vous décollé?	J'ai décollé.
QTP	Allez-vous entrer dans le bassin (*ou* dans le port)?	Je vais entrer dans le bassin (*ou* dans le port).
	ou	*ou*
	Allez-vous amérir (*ou* atterrir)?	Je vais amérir (ou atterrir).
QUG	Allez-vous être forcé d'amérir (*ou* d'atterrir)?	Je suis forcé d'amérir (*ou* d'atterrir) immédiatement.
		ou
		Je vais être forcé d'amérir (*ou* d'atterrir) à ... (*position ou lieu*) à ... heurs.
QUJ	Voulez-vous m'indiquer la route VRAIE à suivre pour vous atteindre (*ou* pour atteindre ...)?	La route VRAIE à suivre pour m'atteindre (*ou* pour m'atteindre ...) est de ... degrés à ... heures.
QUN	Prière aux navires dans mon voisinage immédiat	Ma position, mon cap VRAI et ma vitesse sont ...
	ou	
	(dans le voisinage de ... latitude, ... longitude)	
	ou	
	(dans le voisinage de ...)	
	d'indiquer leurs position, cap VRAI et vitesse.	
	Météorologie	
QUB	Pouvez-vous me donner, dans l'ordre, les renseignements concernant: la direction VRAIE et la vitesse du vent au sol; la visibilité, le temps qu'il fait, l'importance, le type et la hauteur de la base des nuages au-dessus de ... *(lieu d'observation)*?	Voici les renseignements demandés: *(Il convient de préciser les unités utilisées pour les vitesses et les distances.)*
QUH	Voulez-vous m'indiquer la pression barométrique actuelle au niveau de la mer?	La pression barométrique actuelle au niveau de la mer est de ... *(unités)*.
QUK	Voulez-vous m'indiquer l'état de la mer observé à ... *(lieu ou coordonnées)*?	La mer à ... *(lieu ou coordonnées)* est ...
QUL	Pouvez-vous m'indiquer la houle observée à ... *(lieu ou coordonnées)*?	La mer à ... *(lieu ou coordonnées)* est ...
	Radiogoniométrie	
QTE	Quel est mon relèvement VRAI relativement à vous?	Votre relèvement VRAI relativement à moi est de ... degrés à ... heures
	ou	*ou*
	Quel est mon relèvement VRAI relativement à ... *(indicatif d'appel)*?	Votre relèvement VRAI relativement à ... *(indicatif d'appel)* était de ... degrés à ... heures
	ou	*ou*
	Quel est le relévement VRAI de ... *(indicatif d'appel)* relativement à ... *(indicatif d'appel)*?	Le relèvement VRAI de ... *(indicatif d'appel)* relativement à ... *(indicatif d'appel)* était de ... degrés à ... heures.
QTF	Voulez-vous m'indiquer la position de ma station résultant des relèvements pris par les stations radiogoniométriques que vous contrôlez?	La position de v otre station résultant des relèvements pris par les stations radiogoniométriques que je contrôle, était ... latitude, ... longitude *(ou une autre indication de la position)*, classe ... à ... heures.
QTG	Voulez-vous transmettre deux traits de dix secondes chacun, suivis, de votre indicatif d'appel (répétés ... fois) [sur ... kHz (*ou* MHz)]?	Je vais transmettre deux traits de dix secondes chacun, suivis de mon indicatif d'appel (répété ... fois) [sur ... kHz (*ou* MHz)].
	ou	*ou*
	Voulez-vous demander à ... de transmettre deux traits de dix secondes suivis de son indicatif d'appel (répétés ... fois) sur ... kHz (*ou* MHz)?	J' ai demandé à ... de transmettre deux traits de dix secondes suivis de son indicatif d'appel (répétés ... fois) sur ... kHz (*ou* MHz).
	Suspension du travail	
QRT	Dois-je cesser la transmission?	Cessez la transmission.
QUM	Puis-je reprendre le travail normal?	On peut reprendre le travail normal.
	Urgence	
QUD	Avez-vous reçu le signal d'urgence transmit par ... *(indicatif d'appel d'une station mobile)*?	J'ai reçu le signal d'urgence transmis par ... *(indicatif d'appel d'une station mobile)* à ... heures.
QUG	Allez-vous être forcé d'amérir (*ou* d'atterrir)?	Je suis forcé d'amérir (*ou* d'atterrir) immédiatement.
		ou
		Je vais être forcé d'amérir (*ou* d'atterrir) à ... *(position ou lieu)* à ... heures.

Abréviation	Question	Réponse ou avis
	Détresse	
QUF	Avez-vous reçu le signal de détresse émis par ... *(indicatif d'appel d'une station mobile)*?	J'ai reçu le signal de détresse émis par ... *(indicatif d'appel d'une station mobile)* à ... heures.
QUM	Puis-je reprendre le travail normal?	On peut reprendre le travail normal.
	Recherche et sauvetage	
QSE	Quelle est la dérive estimée de l'engin de sauvetage?	La dérive estimée de l'engin de sauvetage est ... *(chiffre et unité)*.
QSF	Avez-vous effectué le sauvetage?	J'ai effectué le sauvetage et je me dirige sur la base de ... (avec ... blessés nécessitant ambulance).
QTD	Qu'a repêché le navire de sauvetage ou l'aéronef de sauvetage?	... *(identification)* a repêché: 1. ... *(nombre)* survivants; 2. Épave; 3. ... *(nombre)* cadavres.
QTW	Quel est'état des survivants?	Les survivants son en ... était et ont besoin d'urgence ...
QTY	Vous dirigez-vous vers le lieu de l'accident et, dans l'affirmative, quand pensez-vouz arriver?	Je me dirige vers le lieu de l'accident et je pense arriver à ... heures (... date).
QTZ	Continuez-vous les recherches?	Je continue les recherches (de ... aéronef, navire, engin de sauvetage, survivants, épave).
QUI	Vos feux de navigation sont-ils allumés?	Mes feux de navigation sont allumés.
QUN	Prière aux navire dans mon voisinage immédiat *ou* (dans le voisinage de ... latitude, ... longitude). *ou* (dans le voisinage de ...) d'indiquer leurs position, cap VRAI et vitesse.	Ma position, mon cap VRAI et ma vitesse sont ...
QUO	Dois-je rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication)*?	Voulez-vous rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication)*.
QUP	Voulez-vous indiquer votre position par ... 1. Projecteur; 2. Fumée noire; 3. Fusées lumineuses?	Ma position est indiquer par ... 1. Projecteur; 2. Fumée noir; 3. Fusées lumineuses.
QUQ	Dois-je diriger mon projecteur verticalement sur un nuage, d'une manière intermittente si possible, puis diriger ensuite le faisceau sur l'eau (*ou* sur le sol) contre le vent, lorsque l'on verra ou entendra votre aéronef, afin de faciliter votre amérissage (*ou* votre atterrissage)?	Prière diriger votre projecteur verticalement sur un nuage, d'une manière intermittente si possible, puis diriger ensuite le faisceau sur l'eau (*ou* sur le sol) contre le vent, lorsque vous verrez ou entendrez mon aéronef, afin de faciliter mons amérissage (*ou* mon atterrissage).
QUR	Les survivants ont-ils: 1. Reçu l'équipement de sauvetage; 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage ao sol?	Les survivants ont: 1. Reçu l'équipement de sauvetage lancé par ... 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol.
QUS	Avez-vous aperçu des survivants ou des débris? Si oui, à quel endroit?	J'ai aperçu: 1. Des survivants dans l'eau; 2. Des survivants sur des radeaux; 3. Des débris ou épaves; à ... latitude, ... longitude *(ou d'après toute autre indication)*.
QUT	Le lieu de l'accident est-il indiqué?	Le lieu de l'accident est indiqué par: 1. Brûlot ou bouée fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier)*.
QUU	Dois-je diriger la navire ou l'aéronef sur ma position?	Dirigez le navire ou l'aéronef ... *(indicatif d'appel)* ... 1. Sur votre position en transmettant votre indicatif d'appel et des traits prolongés sur ... kHz (*ou* MHz): 2. En transmettant sur ... kHz (*ou* MHz) la route VRAIE por vous atteindre.
QUW	Etes-vous sur la zone de recherches *(symbole ou latitude et longitude)*?	Je suis sur la zone de recherches ...*(désignation)*.
QUY	L'emplacement de l'engin de sauvetage a-t-il été balisé?	L'emplacement de l'engin de sauvetage a été balisé à ... heures par ... 1. Brûlot ou bouée fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier)*.
	Identification	
QTT	–	Le signal d'identification qui suit est superposé à une autre émission.

SECTION II

Abréviations et signaux divers

Abréviation ou signal	Définition
AA	Tout après ... *(à employer après un point d'interrogation pour demander une répétition).*
AB	Tout avant ... *(à employer après un point d'interrogation pour demander une répétition).*
ADS	Adresse *(à employer après un point d'interrogation pour demander une répétition).*
$\overline{AR}$	Fin de transmission (. — . — . *à transmettre comme un seul signal).*
$\overline{AS}$	Attente (. — . . . *à transmettre comme un seul signal).*
BK	Signal employé pour interrompre une transmission en cours.
BN	Tout entre ... et ... *(à employer après un point d'interrogation pour demander une répétition).*
BQ	Réponse à RQ.
CFM	Confirmez (*ou* Je confirme).
CL	Je ferme ma station.
COL	Collationnez (*ou* Je collattione).
CP	Appel général à deux ou à plusieurs stations spécifiées *(voir l'article 52).*
CQ	Appel général à toutes les stations *(voir l'article 52).*
$\overline{CS}$	Indicatif d'appel *(employé pour demander un indicatif d'appel).*
$\overline{DDD}$	Utilisé pour identifier la transmission d'un message de détresse par une station qui n'est pas elle-même en détresse (*voir le numéro* **3164**).
DE	De *(utilisé devant l'indicatif d'appel de la station appelante).*
DF	Votre relèvement à ... heures était ... degrés, dans le secteur douteux de cette station, avec une erreur possible de ... degrés.
DO	Relèvement douteux. Demandez un relèvement plus tard (*ou* à ... heures).
E	Est (point Cardinal).
ER	Ici ...
ETA	Heure estimée d'arrivée.
ITP	La ponctuation compte.
K	Invitation à transmettre.
KMH	Kilomètres à l'heure.
KTS	Milles marins à l'heure *(nœuds).*
MIN	Minute (*ou* Minutes).
MPH	Milles terrestres à l'heure.
MSG	Préfixe indiquant un message à destination ou en provenance du commandant d'un navire et concernant l'exploitation du navire ou sa navigation.
N	Nord (point cardinal).
NIL	Je n'ai rien à vous transmettre.
NO	Non *(négation).*
NW	Maintenant.
OK	Nous sommes d'accord (*ou* C'est correct).
OL	Lettre transocéanique.
P	Préfixe indiquant un radiotélégrame privé.
PBL	Préambule *(à employer après un point d'interrogation pour demander une répétition).*
R	Reçu.
REF	Référence à ... (*ou* Référez-vous à ...).
RPT	Répétez (*ou* Je répéte) (*ou* Répétez ...).
RQ	Indication d'une demande.
S	Sud (point cardinal).
SIG	Signature (*à employer après un point d'interrogation pour demander une répétition*).
SLT	Lettre radiomaritime.
$\overline{SOS}$	Signal de détresse (. . . — — — . . . *à transmettre comme un seul signal).*
SS	Indication précédent le nom d'une station de navire.
SVC	Préfixe indiquant un télégramme de service.
SYS	Référez-vous à votre télégramme de service.
TFC	Trafic.
TR	Utilisé par une station terrestre pour demander la position et le prochain port d'escale d'une station mobile (*voir le numéro* **3691**); utilisé également comme préfixe à la réponse.
TTT	Ce groupe, lorsqu'il est transmis trois fois, constitue le signal de sécurité (*voir le numéro* **3221**).
TU	Je vous remercie.
TXT	Texte *(à employer après un point d'interrogation pour demander une répétition).*
$\overline{VA}$	Fin de travail (. . . — . — *à transmettre comme un seul signal).*
W	Ouest (point cardinal).
WA	Mot après ... *(à employer après un point d'interrogation pour demander une répétition).*
WB	Mot avant ... *(à employer après un point d'interrogation pour demander une répétition).*
WD	Mot(s) *ou* Groupe(s).
XQ	Préfixe indiquant une communication établie dans le service fixe.
XXX	Ce groupe, lorsqu'il est transmis trois fois, constitue le signal d'urgence (*voir le numéro* **3196**).
YES	Oui *(affirmation).*

NOC AP13A

APPENDICE 14

Abréviations et signaux divers à employer dans les radiocommunications du service mobile maritime

(Voir les articles 37, 63 et 65)

SECTION I

Code Q

Introduction

1. Les séries de groupes mentionnées dans les présent appendice vont de QOA à QUZ.

2. Les séries QOA à QQZ sont réservées au service mobile maritime.

3. On peut donner un sens affirmatif ou négatif à certaines abréviation du code Q en transmettant immédiatement après l'abréviation, la lettre C ou les lettres NO (en radiotéléphonie, mot de code CHARLIE ou prononciation NO).

4. La signification des abréviations du code Q peut être étendue ou complétée par l'adjonction appropriée d'autres abréviations, d'indicatifs d'appel, de noms de lieux, de chiffres, de numéros, etc. Les espaces en blanc contenus entre parenthèses correspondent à des indications facultatives. Ces indications sont transmises dans l'ordre où elles se trouvent dans le texte des tables ci-après.

5. Les abréviations du code Q prennent la forme de questions quand elles sont suivies d'un point d'interrogation en radiotélégraphie et de RQ (ROMEO QUEBEC) en radiotéléphonie. Quand une abréviation employée comme question est suivie d'indications additionnelles ou complémantaires, il convient de placer de point d'interrogation ou l'abréviation RQ après ces indications.

6. Les abréviations du code Q qui comportent plusieurs significations numérotées sont suivies du numéro approprié qui précise le sens choisi. Ce numéro est transmis immédiatement après l'abréviation.

7. Les heures sont indiquées en Temps universel coordonné (UTC) à moins d'indications contraires dans les questions ou réponses.

8. Un astéristique (*) placé à la suite d'une abréviation du code Q signifie que ce signal a une signification analogue à celle d'un signal qui figure dans le Code international de signaux.

Abréviations utilisables dans le service mobile maritime

A) Liste des abréviations par ordre alphabétique

Abréviation	Question	Réponse ou avis
QOA	Pouvez-vous communiquer en radiotélégraphie (500 kHz)?	Je peux communiquer en radiotélégraphie (500 kHz).
QOB	Pouvez-vous communiquer en radiotéléphonie (2182 kHz)?	Je peux communiquer en radiotéléphonie (2182 kHz).
QOC	Pouvez-vous communiquer en radiotéléphonie (voie 16 — fréquence 156,80 MHz)?	Je peux communiquer en radiotéléphonie (cote 16 — fréquence 156,80 MHz).
QOD	Pouvez-vous communiquer avec moin en: 0. Néerlandais? 1. Anglais? 2. Français? 3. Allemand? 4. Grec? 5. Italien? 6. Japonais? 7. Norvégien? 8. Russe? 9. Espagnol?	Je peux communiquer avec vous en: 0. Néerlandais; 1. Anglais; 2. Français; 3. Allemand; 4. Grec; 5. Italien; 6. Japonais; 7. Norvégien; 8. Russe; 9. Espagnol.
QOE	Ave-vous reçu le signal de sécurité transmis par ... *(nom ou indicatif d'appel, ou les deux)?*	J'ai reçu le signal de sécurité transmis par ... *(nom ou indicatif d'appel, ou les deux).*
QOF	Quelle est la qualité commerciale de mes signaux?	La qualité de vos signaux est: 1. Non commerciale; 2. Tout juste commerciale; 3. Commerciale.
QOG	Combien de bandes avez-vous à transmettre?	J'ai ... bandes à transmettre.
QOH	Dois-je émettre un signal de mise en phase pendant ... secondes?	Emettez un signal de mise en phase pendant ... secondes.
QOI	Dois-je transmettre ma bande?	Transmettez votre bande.
QOJ	Voulez-vous écouter sur la fréquence ... kHz (*ou* MHz) des signaux de radiobalises de localisation des sinistres?	J'écoute sur la fréquence ... kHz (*ou* MHz) des signaux de radiobalises de localisation des sinistres.
QOK	Avez-vous reçu sur la fréquence ... kHz (*ou* MHz) les signaux d'une radiobalise de localisation des sinistres?	J'ai reçu sur la fréquence ... kHz (*ou* MHz) les signaux d'une radiobalise de localisation des sinistres.

Abréviation	Question	Réponse ou avis
QOL	Votre navire peut-il recevoir les appels sélectifs? Dans l'affirmative, quel est son numéro ou signal d'appel sélectif?	Mon navire peut recevoir les appels sélectifs; son numéro ou signal d'appel sélectif est ...
QOM	Quelles sont les fréquences à utiliser pour qu'un appel sélectif parvienne á votre navire?	La ou les fréquences à ulitiliser pour un appel sélectif sont les suivantes ... (le cas échéant, indiquer en outre les périodes de temps appropriées).
QOT	Entendez-vous mon appel? Quelle est à peu près la durée (en minutes) pendant laquelle je dois attendre avant que nous puissions échanger du trafic?	J'entends votre appel; l'attente est approximativement de ... minutes.
QRA	Quel est le nom de votre navire (*ou* de votre station)?	Le nom de mon navire (*ou* de ma station) est ...
QRB	A quelle distance approximative vous trouvez-vous de ma station?	La distance approximative entre nos stations est de ... milles marins (*ou* kilomètres).
QRC	Par quelle exploitation privée (*ou* administration d'État) sont liquidés les comptes de taxes de votre station?	Les comples de taxes de ma station sont liquidés par l'exploitation privée ... (*ou* par l'administration de l'État ...).
QRD	Où allez-vous et d'où venez-vous?	Je vais à ... et je viens de ...
QRE	A quelle heure comptez-vous arriver à ... (*ou* au-dessus de ...) *(lieu)*?	Je compte arriver à ... (*ou* au-dessus de ...) *(lieu)* à ... heures.
QRF	Retournez-vous à ... *(lieu)*?	Je retourne à ... *(lieu) ou* retournez à ... *(lieu)*.
QRG	Voulez-vous m'indiquer ma fréquence exacte (*ou* la fréquence exacte de ...)?	Votre fréquence exacte (*ou* la fréquence exacte de ...) kHz (*ou* MHz).
QRH	Ma fréquence varie-t-elle?	Votre fréquence varie.
QRI	Quelle est la tonalité de mon énisssion?	La tonalité de votre émissions est ... 1. Bone; 2. Variable; 3. Mauvaise.
QRJ	Combien de demandes de conversation radiotéléphonique avez-vous en instance?	J'ai ... demandes de converstation radiotélephonique en instance.
QRK	Quelle est l'intelligibilité de ma transmission (*ou* de la transmission de ... *(nom ou indicatif d'appel ou les deux)*)?	L'intelligibilité de votre transmission [*ou* de la transmission de ... *(nom ou indicatif dáppel ou les deux)*] est ... 1. Mauvaise; 2. Médiocre; 3. Assez bonne; 4. Bonne; 5. Excellente.
QRL	Êtes-vous occupé?	Je suis ocupé [*ou* je suis occupé avec ... *(nom ou indicatif d'appel ou les deux)*]. Prière de ne pas brouiller.
QRM	Mon émission est-elle brouillée?	Votre énission est brouillée: 1. Votre émission n'est nullement brouillée; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
QRN	Êtes-vous gêné par des parasites?	Je suis gêné par des parasites: 1. Je ne suis nullement gêné par des parasites; 2. Faiblement; 3. Modérémente; 4. Fortement; 5. Très fortement.
QRO	Dois-je augmenter la puissance d'énission?	Augmentez la puissance d'émission.
QRP	Dois-je diminuer la puissance d'émission?	Diminuez la puissance d'émission.
QRQ	Dois-je transmettre plus vite?	Transmettez plus vite (... mots par minute).
QRR	Etes-vous prêt pour l'emploi des appareils automatiques?	Je suis prêt pour l'emploi des appareils automatiques. Transmettez à la vitesse de ... mots par minute.
QRS	Dois-je transmettre plus lentement?	Transmettez plus lentement (... mots par minute).
QRT	Dois-je cesser la transmission?	Cessaz la transmission.
QRU	Avez-vous quelque chose pour moi?	Je n'ai rien pour vous.
QRV	Etes-vous prêt?	Je suis prêt.
QRW	Dois-je aviser ... que vous l'appelez sur ... kHz (*ou* MHz)?	Prière d'aviser ... que je l'appelle sur ... kHz (*ou* MHz).
QRX	A quel moment me rappellerez-vous?	Je vous rappellerai à ... heures sur ... kHz (*ou* MHz).
QRY	Quel est mon tour? *(concerne les communications)*.	Le numéro de votre tour est ... *(ou d'après toute autre indication) (concerne les communications)*.
QRZ	Par qui suis-je appelé?	Vous êtes appelé par ... [sur ... kHz (*ou* MHz)].
QSA	Quelle est la force de mes signaux [*ou* des signaux de ... *(nom ou indicatif d'appel ou les deux)*]?	La force de vos signaux [*ou* des signaux de ... *(nom ou indicatif d'appel ou les deux)*] est: 1. À peine perceptible; 2. Faible; 3. Assez bonne; 4. Bonne; 5. Très bonne.

Abréviation	Question	Réponse ou avis
QSB	La force de mes signaux varie-t-elle?	La force de vos signaux varie.
QSC	Etes-vous une station de navire à faible trafic?	Je suis une station de navire à faible trafic.
QSD	Mes signaux sont-ils mutilés?	Vos signaux sont mutilés.
QSE *	Quelle est la dérive estimée de l'engin de sauvetage?	La dérive estimée de l'engin de sauvetage est ... *(chiffres et unité).*
QSF *	Avez-vous eflectué le sauvetage?	J'ai effectué le sauvetage et je me dirige sur la base de ... (avec ... blessés nécessitant ambulance).
QSG	Dois-je transmettre ... télégrammes à la fois?	Transmettez ... télégrammes à la fois.
QSH	Pouvez-vous eflectuer un ralliement avec votre radiogoniomètre?	Je peux effectuer un ralliement [rallier ... *(nom ou indicatif d'appel ou les deux)*] avec mon radiogoniomètre.
QSI	—	Il m'a été impossible d'interrompre votre transmission. *ou* Voulez-vous informer ... *(nom ou indicatif d'appel ou les deux)* qu'il m'a été impossible d'interrompre sa transmission [sur ... kMz (*ou* MHz)].
QSJ	Quelle est la taxe à percevoir pour ... y compris votre taxe intérieure?	La taxe à percevoir pour ... est de ... francs, y compris ma taxe intérieure.
QSK	Pouvez-vous m'entendre entre vos signaux? Dans l'affirmative, puis-je interrompre votre transmission?	Je peux vous entendre entre mes signaux; vous pouvez interrompre ma transmission.
QSL	Pouvez-vous me donner accusé de réception?	Je vous donne accusé de réception.
QSM	Dois-je répéter le dernier télégramme que je vous ai transmis (ou un télégramme précédent)?	Répétez le dernier télégramme que vous m'avez transmis [*ou* le(s) télegramme(s) numéro(s) ...].
QSN	M'avez-vous entendu [*ou* avez-vous entendu ... *(nom ou indicatif d'appel ou les deux) sur ... kHz (ou MHz)*]?	Je vous ai entendu [*ou* j'ai entendu ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz)].
QSO	Pouvez-vous communiquer avec ... *(nom ou indicatif d'appel ou les deux)* directement (*ou* par relais)?	Je peux communiquer avec ... *(nom ou indicatif d'appel ou les deux)* directement (*ou* par relais par l'intermédiaire de ...).
QSP	Voulez-vous retransmettre à ... *(nom ou indicatif d'appel ou les deux)* gratuitement?	Je vais retransmettre à ... *(nom ou indicatif d'appel ou les deux)* gratuitement.
QSQ	Avez-vous à bord un médecin [*ou ... (nom d'une personne)*]?	J'ai à bord un médecin [*ou ... (nom d'une personne)*].
QSR	Dois-je répéter l'appel sur la fréquence d'appel?	Répétez l'appel sur la fréquence d'appel. Je ne vous ai pas entendu (*ou* il y a eu du brouillage).
QSS	Quelle fréquence de travail allez-vous utiliser?	Je vais utilizer la fréquence de travail ... kHz (*ou* MHz) *(en onde décamétriques, il suffira en règle générale d'indiquer les trois derniers chiffres de la fréquence).*
QSU	Dois-je transmettre ou répondre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...)?	Transmettez ou répondez sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSV	Dois transmettre une série de V (*ou* de signaux) pour réglage sur cette fréquence [*ou* sur ... kHz (*ou* MHz)]?	Transmettez une série de V (*ou* de signaux) pour réglage sur cette fréquence [(*ou* sur ... kHz (*ou* MHz)].
QSW	Voulez-vous transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...)?	Je vais transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSX	Voulez-vous écouter ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz) ou dans les bandes ... voies ...?	J'écoute ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz) ou dans les bandes ... voies ...
QSY	Dois-je passer à la transmission sur une autre fréquence?	Passez á la transmission sur une autre fréquence [*ou* sur ... kHz (*ou* MHz)].
QSZ	Dois-je transmettre chaque mot ou groupe plusieurs fois?	Transmettez chaque mot ou groupe deux fois (*ou* ... fois).
QTA	Dois-je annuler le télégramme (*ou* le message) numéro ...?	Annuelez le télégramme (*ou* le messsage) numéro ...
QTB	Êtes-vous d'accord avec mon compte de mots?	Je ne suis pas d'accord avec votre compre de mots. Je vais répéter la première lettre de chaque mot et le premier chiffre de chaque nombre.
QTC	Combien avez-vous de télégrammes à transmettre?	J'ai ... télégrammes pour vous [*ou* pour ... *(nom ou indicatif d'appel ou les deux)*].
QTD *	Qu'a repêché le navire de sauvetage *ou* l'aéronef de sauvetage?	... *(identification)* a repêché: 1. ... *(nombre)* survivants; 2. Épave; 3. ... *(nombre)* cadavres.
QTE	Quel est mon relèvement VRAI relativement à vous? *ou* Quel est mon relèvement VRAI relativement à ... *(nom ou indicatif d'appel ou les deux)*? *ou* Quel est relèvement VRAI de ... *(nom ou inclicatif d'appel ou les deux)* relativement à ... *(nom ou indicatif d'appel ou les deux)*?	Votre relèvant VRAI relativement à moi est de ... degrés à ... heures. *ou* Votre relèvement VRAI relativement à ... *(nom ou indicatif d'appel ou les deux)* était de ... degrés à ... heures. *ou* Le relèvement VRAI de ... *(nom ou indicatif d'appel ou les deux)* relativement à ... *(nom ou indicatif d'appel ou les deux)* était de ... degrés à ... heures.
QTF	Voulez-vous m'indiquer ma position résultant des relèvements pris par les stations radiogoniométriques que vous contrôler?	Votre position résultant des relèvements pris par les stations radiogoniométriques que je contrôle était ... latitude, ... longitude *(ou une autre indication de la position),* classe ... à ... heures.
QTG	Voulez-vous transmettre deux traits de dix secondes chacun (*ou* la porteuse pendant deux périodes de dix secondes), puis votre indicatif d'appel (*ou* votre nom) (répétés ... fois) sur ... kHz (*ou* MHz) *ou* Voulez-vous demander à ... *(nom ou indicatif d'appel ou les deux)* de transmettre deux traits de dix secondes (*ou* la porteuse pen-	Je vais transmettre deux traits de dix secondes chacun (*ou* la porteuse pendant deux périodes de dix secondes), puis mon indicatif d'appel (*ou* mon nom), (répétés ... fois) sur ... kHz (*ou* MHz). *ou* J'ai demandé à ... *(nom ou indicatif d'appel ou les deux)* de transmettre deux traits de dix secondes (*ou* la porteuse pendant

Abréviation	Question	Réponse ou avis
	dant deux périodes de dix secondes) puis son indicatif d'appel (*ou* son nom *ou les deux*) répétés ... fois) sur ... kHz (ou MHz)?	deux périodes de dix secondes), puis son indicatif d'appel (*ou* son nom *ou les deux*) (répétés ... fois) sur ... kMz (*ou* MHz).
QTH	Quelle est votre position en latitude et en longitude *(ou d'après toute autre indication)*?	Ma position est ... latitude ... longitude *(ou d'après toute autre indication)*.
QTI *	Quelle est votre route VRAIE?	Ma route VRAIE est de ... degrés.
QTJ *	Quelle est votre vitesse de marche?	Ma vitesse de marche est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure).
	(Demande la vitesse du navire ou de l'aéronef par rapport à l'eau ou à l'air respectivement.)	*(Indique la vitesse du navire ou de l'aéronef par rapport à l'eau ou à l'air respectivement.)*
QTK *	Quelle est la vitesse de votre aéronef par rapport à la surface de la terre?	La vitesse de mon aéronef est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure) par rapport à la surface de la terre.
QTL *	Quel est votre cap VRAI?	Mon cap VRAI est de ... degrés.
QTM *	Quel este votre cap MAGNÉTIQUE?	Mon cap MAGNÉTIQUE est de ... degrés.
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heures.
QTO	Etes-vous sorti du bassin (*ou* du port)? *ou* Avez-vous décollé?	Je suis sorti du bassin (*ou* du port). *ou* J'ai décollé.
QTP	Allez-vous entrer dans le bassin (*ou* dans le port)? *ou* Allez-vous amérir (*ou* atterrir)?	Je vais entrer dans le bassin (*ou* dans le port). *ou* Je vais amérir (*ou* atterrir).
QTQ	Pouvez-vous communiquer avec ma station à l'aide du Code international de Signaux (INTERCO)?	Je vais communiquer avec votre station à l'arde du Code internationale de Signaux (INTERCO).
QTR	Quelle est l'heure exacte?	L'heure exacte est ...
QTS	Voulez-vous transmettre votre indicatif d'appel (*ou* votre nom, *ou les deux*) pendant ... secondes?	Je vais transmettre mon indicatif d'appel (ou mon nom *ou les deux*) pendant ... secondes.
QTT	—	Le signal d'identification qui suit est superposé á une autre émission.
QTU	Quelles sont les heures pendant lesquelles votre station est ouverte?	Ma station est ouverte de ... à ... heures.
QTV	Dois-je prendre la veille à votre place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures)?	Prenez la veille à ma place sur la fréquence ... à ... kHz (*ou* MHz) de ... heures).
QTW *	Quel est l'état des survivants?	Les survivants sont en ... état et ont d'urgence besoin de ...
QTX	Voulez-vous laisser votre station ouverte pour communiquer avec moi jusqu'à nouvel avis de ma part (*ou* jusqu'à ... heures)?	Ma station reste ouverte pour communiquer avec vous jusqu'à nouvel avis de votre part (*ou* jusqu'à ... heures).
QTY *	Vous dirigez-vous ver le lieu de l'accident et, dans l'affirmative, quand pensez-vous arriver?	Je me dirige vers le lieu de l'accident et je pense arriver à ... heures (... *date*).
QTZ *	Continuez-vous les recherches?	Je continue les recherches (de ... aéronef, navire, engin de sauvetage, survivants, épave).
QUA	Avez-vous des nouvelles de ... *(nom ou indicatif d'appel ou les deux)*?	Voici des nouvelles de ... *(nom ou indicatif d'appel ou les deux)*.
QUB	Pouvez-vous me donner dans l'ordre, les renseignements concernant: la direction VRAIE et la vitesse du vent au sol; la visibilité, le temps qu'il fait, l'importance, le type et la hauteur de la base des nuages au-dessus de ... *(lieu d'observation)*?	Voici les renseignements demandés ... *(Il convient de préciser les unités utilisées pour les vitesses et les distances.)*
QUC	Quel est le numéro *(ou autre indication)* du dernier message que vous avez reçu de moi [*ou* de ... *(nom ou indicatif d'appel ou les deux)*]?	Le numéro *(ou autre indication)* du dernier message que j'ai reçu de vous [*ou* de ... *(nom ou indicatif d'appel ou les deux)*] est ...
QUD	Avez-vous reçu le signal d'urgence émis par ... *(nom ou indicatif d'appel ou les deux)*?	J'ai reçu le signal d'urgence émis par *(nom ou indicatif d'appel ou les deux)* à ... heures.
QUE	Pouvez-vous converser en ... *(langue)*, au besoin avec un interprète: dans l'affirmative, sur quelles fréquences?	Je peux converser en ... *(langue)* sur ... kHz (ou MHz).
QUF	Avez-vous reçu le signal de détresse émis par ... *(nom ou indicatif d'appel ou les deux)*?	J'aile signal de détresse émis par ... *(nom ou indicatif d'appel* ou *les deux)* à ... heures.
QUH *	Voulez-vous m'indiquer la pression barométrique actuelle au niveau de la mer?	La pression barométrique actueile au niveau de la mer est de ... *(unités)*.
QUM	Puis-je reprendre le travail normal?	On peut reprendre le travail normal.
QUN	1. *Posée à toutes les stations:* Les navires dans mon voisinage immédiat *ou* (dans le voisinage de ... latitude, ... longitude) *ou* (dans le voisinage de ...) peuvent-ils m'indiquer leur position, cap VRAI et vitesse? 2. *Pasée à une seule station:* Veuillez indiquer votre position, cap VRAI et vitesse?	Ma position, mon cap VRAI et ma vitesse sont ...
QUO *	Dois-je rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage;	Veuillez rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage;

Abréviation	Question	Réponse ou avis
	dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication)*?	dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication).*
QUP *	Voulez-vous indiquer votre position par ... 1. Projecteur? 2. Fumée noire? 3. Fusées lumineuses?	Ma position est indiquée par ... 1. Projecteur; 2. Fumée noire; 3. Fusées lumineuses.
QUR *	Les survivants ont-ils ... 1. Reçu l'équipement de sauvetage; 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol?	Les survivants ont ... 1. Reçu l'équipement de sauvetage lancé par ... 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol.
QUS *	Avez-vous aperçu des survivants ou des débris? Si oui, à quel endroit?	J'ai aperçu: 1. Des survivants dans l'eau; 2. Des survivants sur des radeaux; 3. Des débris ou épaves à ... latitude, ... longitude *(ou d'aprés toute autre indication).*
QUT *	Le lieu de l'accident est-il indiqué?	Le lieu de l'accident est indiqué par: 1. Brûlot ou boueé fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier).*
QUU *	Dois-je diriger le navire ou l'aéonef sur ma position?	Dirigez le navire ou l'aéronef ... *(nom ou indicatif d'appel ou les deux):* 1. Sur votre position en transmettant votre indicatif d'appel et des traits prolongés sur ... kHz (*ou* MHz); 2. En transmettant sur ... kHz (ou MHz) la route VRAIE pour vous atteindre.
QUW *	Etes-vous sur la zone des recherches ... *(symbole ou latitude et longitude)*?	Je suis sur lá zone de recherches ... *(désignation).*
QUX	Avez-vous en instance des avis relatifs à la navigation ou à une tempête?	J'ai en instance l'avis (les avis) suivant(s) relatif(s) à la navigation ou à une tempête.
QUY *	L'emplacement de l'engin de sauvetage a-t-il été balisé?	L'emplacement de l'engin de sauvetage a été balisé à ... heures par: 1. Brûlot ou bouée fumigéne; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier).*
QUZ	Puis je reprendre un travial restreint?	Procédure de détresse encore en vi gueur, un travail restreint peut être repris.

B) Liste des abréviations par nature des questions, rèponses ou avis

Abréviation	Question	Réponse ou avis
	Nom	
QRA	Quel est le nom de votre navire (*ou* de votre station)?	Le nom de mon navire (*ou* ma station) est ...
	Parcours	
QRD	Où allez-vous et d'où venez-vous?	Je vais à ... et je viens de ...
	Position	
QRB	A quelle distance approximative vous trouvez-vous de ma station?	La distance approximative entre nos stations est de ... milles marins (*ou* kilomètres).
QTH	Quelle est votre position en latitude et en longitude *(ou d'après toute autre indication)*?	Ma position est ... latitude ... longitude *(ou d'après toute autre indication).*
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heures.
	Qualité des signaux	
QOF	Quelle est la qualité commerciale de mes signaux?	La qualité de vos signaux est: 1. Non commerciale; 2. Tout juste commerciale; 3. Commerciale.

Abréviation	Question	Réponse ou avis
QRI	Quelle est la tonalité de mon émission?	La tonalité de votre émission est ... 1. Bonne; 2. Variable; 3. Mauvaise.
QRK	Quelle est l'intelligibilité de ma transmission [*ou* de la transmission de ... *(nom ou indicatif d'appel ou les deux)*]?	L'intelligibilité de votre transmission [*ou* de la transmission de ... *(nom ou indicatif d'appel ou les deux)*] est ... 1. Mauvaise; 2. Médiocre; 3. Assez bonne; 4. Bonne; 5. Excelente.
	Force des signaux	
QRO	Dois-je augmenter la puissance d'émission?	Augmentez la puissance d'émission.
QRP	Dois-je diminuer la puissance d'émission?	Diminuez la puissance d'émission.
QSA	Quelle est la force de mes signaux [*ou* des signaux de ... *(nom ou indicatif d'appel ou les deux)*]?	La force de vos signaux [*ou* des signaux de ... *(nem ou indicatif d'appel ou les deux)*] est ... 1. À peine perceptible; 2. Faible; 3. Assez bonne; 4. Bonne; 5. Très bonne.
QSB	La force de mes signaux variet-t-elle?	La force de vos signaux varie.
	Manipulation	
QRQ	Dois-je transmettre plus vite?	Transmettez plus vite (... mots par minute).
QRR	Etes-vous prêt pour l'emploi des appareils automatiques?	Je suis prêt pour l'emploi des appareils automatiques. Transmettez à la vitesse de ... mots par minute.
QRS	Dois-je transmettre plus lentement?	Transmettez plus lentement (... mots par minute).
QSD	Mes signaux sont-ils mutilés?	Vos signaux sont mutilés.
	Brouillage	
QRM	Mon émission est-elle brouillée?	Votre émission est brouillée: 1. Votre émission n'est nullemente brouillé; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
QRN	Etes-vous gêne par des parasites?	Je suis gêné par des paraistes ... 1. Je ne suis nullement gêné par des parasites; 2. Faiblement; 3. Modérément; 4. Fortement; 5. Très fortement.
	Réglage de la fréquence	
QRG	Voulez-vous m'indiquer ma fréquence exacte (*ou* la fréquence exacte de ...)?	Votre fréquence exacte (*ou* la fréquence exacte de ...) est ... kHz (*ou* MHz).
QRH	Ma fréquence varie-t-elle?	Votre fréquence varie.
QTS	Voulez-vous transmettre votre indicatif d'appel (*ou* votre nem *ou les deux*) pendant ... secondes?	Je vais transmettre mon indicatif d'appel (*ou* mon nom *ou les deux*) pendant ... secondes.
	Choix de la fréquence et ou de la classe d'émission	
QSN	M'avez-vous entendu (*ou* avez-vous entendu ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz)?	Je vous ai entendu [*ou* j'ai entendu ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz)].
QSS	Quelle fréquence de travail allez-vous utiliser?	Je vais utiliser la fréquence de travail ... kHz (*ou* MHz) *(en ondes décamétriques, il suffira en règle générale d'indiquer les trois derniers chiffres de la fréquence).*
QSU	Dois-je transmettre ou répondre sur la fréquence actuelle (*ou* sur ... kHz (*ou* MHz) (en émission de la classe ...)?	Transmettez ou répondez sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSV	Dois-je transmettre une série de V (*ou* de signaux) pour réglage sur cette fréquence [*ou* sur ... kHz (*ou* MHz)]?	Transmettez une série de V (*ou* de signaux) pour réglage sur cette fréquence [*ou* sur ... kHz (*ou* MHz)].
QSW	Voulez-vous transmettre sur la fréquence actuelle [*ou* sur ... kMz (*ou* MHz)] (en émission de la classe ...)?	Je vais transmettre sur la fréquence actuelle [*ou* sur ... kHz (*ou* MHz)] (en émission de la classe ...).
QSX	Voulez-vous écouter ... *(nom ou indicatif d'appel ou les deux)* sur kMz (*ou* MHz) ou dans les bandes ... voies ...	J'écoute ... *(nom ou indicatif d'appel ou les deux)* sur ... kHz (*ou* MHz) ou dans les bandes ... voies ...

Abréviation	Question	Réponse ou avis
	Changement de fréquence	
QSY	Dois-je passer à la transmission sur une autre fréquence?	Passez à la transmission sur une autre fréquence [*ou* sur ... kHz (*ou* MHz)].
	Établissement de la communication	
QOA	Pouvez-vous communiquer en radiotélégraphie (500 kHz)?	Je peux communiquer en radiotélégraphie (500 kHz).
QOB	Pouvez-vous communiquer en radiotéléphonie (2182 kHz)?	Je peux communiquer en radiotéléphonie (2182 kHz).
QOC	Pouvez-vous communiquer en radiotéléphonie (voie 16–fréquence 156,80 MHz)?	Je peux communiquer en radiotéléphonie (voie 16 — fréquence 156,80 MHz).
QOD	Pouves-vous communiquer avec moi en: 0. Néerlandais? 1. Anglais? 2. Français? 3. Allemand? 4. Grec? 5. Italien? 6. Japonais? 7. Norvégien? 8. Russe? 9. Espagnol?	Je peux communiquer avec vous en: 0. Néerlandais; 1. Anglais; 2. Français; 3. Allemand; 4. Grec; 5. Italien; 6. Japonais; 7. Norvégien; 8. Russe; 9. Espagnol.
QOT	Entendez-vous mon appel? Quelle est à peu près la durée (en minutes) pendant laquelle je dois attendre avant que nous puissions échanger du trafic?	J'entends votre appel. L'attente est approximativement de ... minutes.
QRL	Etes-vous occupé?	Je suis occupé [*ou* je suis occupé avec ... *(nom ou indicatif d'appel ou les deux)*]. Prière de ne pas brouiller.
QRV	Etes-vous prêt?	Je suis prêt.
QRX	A quel moment me rappellerez-vous?	Je vous rappellerai à ... heures sur ... kHz (*ou* MHz).
QRY	Quel est mon tour? *(concerne les communications).*	Le numéro de votre tour est ... *(ou d'après toute autre indication) (concerne les communications).*
QRZ	Par qui suis-je appelé?	Vous êtes appelé par ... [sur ... kHz (*ou* MHz)].
QSC	Etes-vous une station de navire à faible trafic?	Je suis une station de navire à faible trafic.
QSR	Dois-je répéter l'appel sur la fréquence d'appel?	Répétez l'appel sur la fréquence d'appel. Je ne vous ai pas entendu (*ou* il y a eu du brouillage).
QTQ	Pouvez-vous communiquer avec ma station à l'aide du Code international de Signaux (INTERCO)?	Je vais communiquer avec votre station à l'aide du Code international de Signaux (INTERCO).
QUE	Pouvez-vous converser en ... *(langue)*, au besoin avec un interprète; dans l'affirmative, sur quelles fréquences?	Je peux converser en ... *(langue)* sur ... kHz (*ou* MHz).
	Appels sélectifs	
QOL	Votre navire peut il recevoir les appels sélectifs? Dans l'affirmative, quel est son numéro ou signal d'appel sélectif?	Mon navire peut recevoir les appels sélectifs; son numéro ou signal d'appel sélectif est ...
QOM	Quelles sont les fréquences à utiliser pour qu'un appel sélectif parvienne a votre navire?	La ou les fréquences à utiliser pour un appel sélectif sont les suivantes ... (le cas écheant, indiquer en outre les périodes de temps appropriées).
	Heure	
QTR	Quelles est l'heure exacte?	L'heure exacte est ...
QTU	Quelles sont les heures pendant lesquelles votre station est ouverte?	Ma station est ouvert de ... à ... heures.
	Taxes	
QRC	Par quelle exploitation privée (*ou* administration d'État) sont liquidés les comptes de taxes de votre station?	Les comptes de taxes de ma station sont liquidés par l'exploitation privée ... (*ou* par l'administration de l'État ...).
QSJ	Quelle est la taxe à percevoir pour ... y compris votre taxe intérieure?	La taxe à percevoir pour ... este de ... francs, y compris ma taxe intérieure.
	Transit	
QRW	Dois-je aviser ... que vous l'appelez sur ... kHz (*ou* MHz)?	Prière d'aviser ... que je l'appelle sur ... kHz (*ou* MHz).
QSO	Pouvez-vous communiquer avec ... *(nom ou indicatif d'appel ou les deux)* directement (*ou* par relais)?	Je peux communiquer avec ... *(nom ou indicatif d'appel ou les deux)* directement (*ou* par relais par l'intermédiaire de ...).
QSP	Voulez-vous retransmettre à ... *(nom ou indicatif d'appel ou les deux)* gratuitement?	Je vais retransmettre ... *(nom ou indicatif d'appel ou le deux)* gratuitement.
QSQ	Avez-vous à bord un médecin [*ou* ... *(nom d'une personne)*]?	J'ai á bord un médecin [*ou* ... *(nom d'une personne)*].
QUA	Avez-vous des nouvelles de ... *(nom ou indicatif d'appel ou les deux)*?	Voici des nouvelles de ... *(nom ou indicatif d'appel ou les deux).*
QUC	Quel est le numéro *(ou autre indication)* du dernier message que vous avez reçu de moi [*ou* de ... *(nom ou indicatif d'appel ou les deux)*]?	Le numéro *(au autre indication)* du dernier message que j'ai reçu de vous [*ou* de ... *(nom ou indicatif d'appel ou les deux)*] est ...
	Acheminement de la correspondance	
QOG	Combien de bandes avez-vous à transmettre?	J'ai ... bandes à transmettre.
QOH	Dois-je émettre un signal de mise en phase pendant ... secondes?	Emettez un signal de mise en phase pendant ... secondes.

Abréviation	Question	Réponse ou avis
QOI	Dois-je transmettre ma bande?	Transmettez votre bande.
QRJ	Combien de demandes de conversation radiotéléphonique avez-vous en instance?	J'ai ... demandes de conversation radiotéléphonique en instance.
QRU	Avez-vous quelque chose pour moi?	Je n'ai rien pour vous.
QSG	Dois-je transmettre ... télégrammes à la fois?	Transmettez ... télégrammes à la fois.
QSI	—	Il m'a été impossible d'interrompre votre transmission. *ou* Voulez-vous informer ... *(nom ou indicatif d'appel ou les deux)* qu'il m'a été impossible d'interrompre sa transmission [sur ... kHz (*ou* MHz)].
QSK	Pouvez-vous m'entendre entre vos signaux? Dans l'affirmative, puis-je interrompre votre transmission?	Je peux vous entendre entre mes signaux; vous pouvez interrompre ma transmission.
QSL	Pouvez-vous me donner accusé de réception?	Je vous donne accusé de réception.
QSM	Dois-je répéter le dernier télégramme que je vous ai transmis (*ou* un télégramme précedent)?	Répétez le dernier télégramme que vous m'avez transmis [*ou* le(s) télégramme(s) numéro(s)].
QSZ	Dois-je transmettre chaque mot ou groupe plusieurs fois?	Transmettez chaque mot ou groupe deux fois (*ou* ... fois).
QTA	Dois-je annuler le télégramme (*ou* le message) numéro ...?	Annulez le télégramme (*ou* le message) numéro ...
QTB	Etes-vous d'accord avec mon compte de mots?	Je ne suis pas d'accord avec votre compte de mots. Je vais répéter la première lettre de chaque mot et la premier chiffre de chaque nombre.
QTC	Combien avez-vous de télégrammes à transmettre?	J'ai ... télégramme pour vous [*ou* pour ... *(nom ou indicatif d'appel ou les deux)*].
QTV	Dois-je prendre la veille á votre place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures)?	Prenez la veille à ma place sur la fréquence ... kHz (*ou* MHz) (de ... à ... heures).
QTX	Voulez-vous laisser votre station ouverte pour communiquer avec moi jusqu'à nouvel avis de ma part (*ou* jusqu'à ... heures)?	Ma station reste ouverte pour communiquer avec vous jusqu'à nouvel avis de votre part (*ou* jusqu'à ... heures).
	Mouvement	
QRE	A quelle heure comptez-vous arriver à ... (*ou* au-dessus de ...) *(lieu)*?	Je compte arriver à ... (*ou* au-dessus de ...) *(lieu)* à ... heures.
QRF	Retournez-vous à ... *(lieu)*?	Je retourne à ... *(lieu)* ou retournez à ... *(lieu)*.
QSH	Pouvez-vous effectuer un ralliement avec votre radiogoniomètre?	Je peux effectuer un ralliement [rallier ... *(nom ou indicatif d'appel ou les deux)*] avec mon radiogoniomètre.
QTI *	Quelle est votre route VRAIE?	Ma route VRAIE est de ... degrés.
QTJ *	Quelle est votre vitesse de marche? *(Demande la vitesse du navire ou de l'aéronef á l'eau ou à láir respectivement.)*	Ma vitesse de marche est de ... nœuds (*ou* de ... kilomètres à l'heure, *ou* de ... milles terrestres à l'heure). *(Indique la vitesse du navire ou de l'aéronef par rapprt á l'eau ou à l'air respectivement.)*
QTK *	Quelle est la vitesse de votre aéronef par rapport à la surface de la terre?	La vitesse de mon aéronef est de ... nœuds (*ou* de ... kilomètres á l'heure, *ou* de ... milles terrestres à l'heure) par rapport à la surface de la terre.
QTL *	Quel est votre cap VRAI?	Mon cap VRAI est de ... degrés.
QTM *	Quel est votre cap MAGNÉTIQUE?	Mon cap MAGNÉTIQUE est de ... degrés.
QTN	A quelle heure avez-vous quitté ... *(lieu)*?	J'ai quitté ... *(lieu)* à ... heures.
QTO	Etes-vous sorti du bassin (*ou* du port)? *ou* Avez-vous décollé?	Je suis sorti du bassin (*ou* du port). *ou* J'ai décollé.
QTP	Allez-vous entrer dans le bassin (*ou* dans le port)? *ou* Allez-vous amérir (*ou* atterrir)?	Je vais entrer dans le bassin (*ou* dans le port). *ou* Je vais amérir (*ou* atterrir).
QUN	1. *Posée á toutes les stations:* Les navires dans mon voisinage immédiat *ou* (dans le voisinage de ... latitude, ... longitude) *ou* (dans le voisinage de ...) peuvent-ils m'indiquer leur position, cap VRAI et vitesse? 2. *Posée à une seule station:* Veuillez indiquer votre position, cap VRAI et vitesse?	Ma position, mon cap VRAI et ma vitesse sont ...
	Météorologie	
QUB *	Pouvez-vous me donner dans l'ordre, les renseignements concernant: la direction VRAIE et la vitesse du vent au sol; la visibilité, le temps qu'il fait, l'importance, le type et la hauteur de la base des nuages au-dessus de ... *(lieu d'observation)*?	Voici les renseignements demandés: *(Il convient de préciser les unités utilisées pour les vitesses et les distances.)*
QUH *	Voulez-vous m'indiquer la pression barométrique actuelle au niveau de la mer?	La pression barométrique actuelle au niveau de la mer est de ... *(unités)*.
QUX	Avez-vous en instance des avis relatifs a la navigation ou à une tempête?	J'ai en instance l'avis (les avis) suivant(s) relatif(s) á la navigation ou à une tempête.

Abréviation	Question	Réponse ou avis
	Radiogoniométrie	
QTE	Quel est mon relèvement VRAI relativement à vous?	Votre relèvement VRAI relativement à moi est de ... Jegrés à ... heures.
	ou	*ou*
	Quel est mon relèvement VRAI relativement à ... *(nom ou indicatif d'appel ou les deux)?*	Votre relèvement VRAI relativement à ... *(nom ou indicatif d'appel ou les deux)* était de ... degrés à ... heures.
	ou	*ou*
	Quel est le relèvement VRAI de ... *(nom ou indicatif d'appel ou les deux)* relativement à ... *(nom ou indicatif d'appel ou les deux)*?	Le relèvement VRAI de ... *(nom ou indicatif d'appel ou les deux)* relativement à ... *(nom ou indicatif d'appel ou les deux)* était de ... degrés à ... heures.
QTF	Voulez-vouz m'indiquer ma position résultant des relèvments pris par les stations radiogoniométriques que vous contrôlez?	Votre position résultant des relèvments pris par les stations radiogoniométriques que je contrôle était ... latitude, ... longitude *(ou une outre indication de la position)*, classe ... à ... heures.
QTG	Voulez-vous transmettre deux traits de dix secondes chacun (*ou* la porteuse pendant deux périodes de dix secondes) puis votre indicatif d'appel (*ou* votre nom) (répétés ... fois) sur ... kHz (*ou* MHz)?	Je vais transmettre deux traits de dix secondes chacun (*ou* la porteuse pendant deux périodes de dix secondes) puis mon indicatif d'appel (*ou* mon nom) (répétés ... fois) sur ... kHz (*ou* MHz).
	ou	*ou*
	Voulez-vous demander à ... *(nom ou indicatif d'appel ou les deux)* de transmettre deux traits de dix secondes (*ou* la porteuse pendant deux périodes de dix secondes) puis son indicatif d'appel (*on* son nom *ou les deux*), (répétés ... fois) sur ... kHz (*ou* MHz)?	J'ai demandé à ... *(nom ou indicatif d'appel ou les deux)* de transmettre deux traits de dix secondes (*ou* la porteuse pendant deux périodes de dix secondes) puis son indicatif d'appel *(ou* son nom *ou les deux*) (répétés ... fois) sur ... kHz (*ou* MHz).
	Suspension du travail	
QRT	Dois-je cesser la transmission?	Cesssez la transmission.
QUM	Puis-je reprendre le travail normal?	On peut reprendre le travail normal.
QUZ	Puis-je repreende un travail restreint?	Procédure de détresse encore en viguer, un travail restreint peut être repris.
	Sécurité	
QOE	Avez-vous reçu le signal de sécurité transmis par ... *(nom ou indicatif d'appel, ou les deux)*?	J'ai reçu le signal de sécurité transmis par ... *(nom ou indicatif d'appel, ou les deux).*
QUX	Avez-vous en instance des avis relatifs à la navigation ou à une tempête?	J'ai en instance l'avis (les avis) suivant(s) relatif(s) à la navigation ou à une tempête.
	Urgence	
QUD	Avez-vous reçu le signal d'urgence énis par ... *(nom ou indicatif d'appel ou les deux)*?	J'ai reçu le signal d'urgente énis par ... *(nom ou indicatif d'appel ou les deux)* à ... heures.
	Détresse	
QOJ	Voulez-vous écouter sur la fréquence ... kHz (*ou* MHz) des signaux de radiobalises de localisation des sinistres?	J'écoute sur la fréquence ... kHz (*ou* MHz) des signaux de radiobalises de localisation des sinistres.
QOK	Avez-vous reçu sur la fréquence ... kHZ (ou MHz) les signaux d'une radiobalise de localisation des sinistres?	J'ai reçu sur la fréquence ... kHz (*ou* MHz) les signaux d'une radiobalise de localisation des sinistres.
QUF	Avez-vous reçu le signal de détresse énis par ... *(nom ou indicatif d'appel ou les deux)*?	J'ai reçu le signal de détresse énis par ... *(nom ou inidicatif d'appel ou les deux)* à ... heures.
QUM	Puis-je reprendre le travail normal?	On peut reprendre le travail normal.
QUZ	Puis-je reprendre un travail restreint?	Procédure de détresse encore em vigueur, un travail restreint peut être repris.
	Recherches et sauvetage	
QSE *	Quelle est la dérive estimée de l'engin de sauvetage?	La dérive estimée de l'engin de sauvetage est ...*(chiflres et unité).*
QSF *	Avez-vous effectué le sauvetage?	J'ai effectué le sauvetage et je me dirige sur la base de ... (avec ...blessés necéssitant ambulance).
QTD *	Qu'a repêché le navire sauvetage *ou* l'aéronef de sauvetage?	... (identification) a repêché: 1. ... *(nombre)* survivants; 2. Épave; 3. ... *(nombre)* cadavres.
QTW *	Quel est l'état des survivants?	Les survivants sont en ... état et ont d'urgence besoin de ...
QTY *	Vous dirigez-vous vers le lieu de l'accident et, dans l'affirmative, quand pensez-vous arriver?	Je me dirige vers le lieu de l'accident et je pense arriver à ...heures *(... date).*
QTZ *	Continuez-vous les recherches?	Je continue les recherches (de ... aéronef, navire, engin de sauvetage, survivants, épave).
QUN	1. *Posée à toutes les stations:*	
	Les navires dans mon voisinage immédiat *ou* (dans le voisinage de ... latitude, ... longitude) *ou* (dans le voisinage de ...) peuvent-ils m'indiquer leur position, cap VRAI et vitesse?	Ma position, mon cap VRAI et ma vitesse sont ...

Abréviation	Question	Réponse ou avis
	2. *Posée à une seule station:* Veuillez indiquer votre position, cap VRAI et vitesse?	
QUO *	Dois-je rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication)*?	Veuillez rechercher: 1. Un aéronef; 2. Un navire; 3. Un engin de sauvetage; dans le voisinage de ... latitude, ... longitude *(ou d'après toute autre indication).*
QUP *	Voulez-vous indiquer votre position par: 1. Projecteur? 2. Fumée noire? 3. Fusées lumineuses?	Ma position est indiquée par: 1. Projecteur; 2. Fumée noire; 3. Fusées lumineuses.
QUR *	Les survivants ont-ils: 1. Reçu l'equipement de sauvetage? 2. Été recueillis par un navire? 3. Été rejoints par l'équipe de sauvetage au sol?	Les survivants ont: 1. Reçu l'équipement de sauvetage lancé par ... 2. Été recueillis par un navire; 3. Été rejoints par l'équipe de sauvetage au sol.
QUS *	Avez-vous aperçu des survivants ou des débris? Si oui, à quel endroit?	J'ai aperçu: 1. Des survivants dans l'eau; 2. Des survivants sur des radeaux; 3. Des débris ou épaves à ... latitude, ... longitude *(ou d'aprés toute autre indication).*
QUT *	Le lieu de l'accident est-il indiqué?	Le lieu de l'accident est indiqué par: 1. Brûlot ou bouée fumigène; 2. Balise marine; 3. Produit colorant; 4. ... *(autre dispositif à spécifier).*
QUU *	Dois-je diriger le navire ou l'aéronef sur ma position?	Dirigez le navire ou l'aéronef ... *(nom ou indicatif d'appel ou les deux):* 1) Sur votre position en transmettant votre indicatif d'appel et des traits prolongés sur ... kHz (*ou* MHz); 2) En transmettant sur ... kHz (ou MHz) la route VRAIE pour vous atteindre.
QUW *	Etes-vous sur la zone des recherches ... *(symbole ou latitude et longitude)*?	Je suis sur la zone de recherches ... *(designation).*
QUY *	L'emplacement de l'engin de sauvetage a-t-il été balisé?	L'emplacement de l'engin de sauvetage a été balisé à ... heures par: 1) Brûlot ou bouée fumigéne; 2) Balise marine; 3) Produit colorant; 4) ... *(autre dispositif à spécifier).*
QUZ *	Puis-je reprendre un travail restreint?	Procédure de détresse encore en vigueur, un travail restreint peut être repris.
	Identification	
QTT *	—	Le signal d'identification qui suit est superposé à une autre émission.

SECTION II

Abreviations et signaux divers

Abréviation ou signal	Définition
AA	Tout aprés ... [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
AB	Tout avant ... [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
ADS	Adresse [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
$\overline{AR}$	Fin de transmission.

Abréviation ou signal	Définition
$\overline{AS}$	Attente.
BK	Signal employé pour interrompre une transmission en cours.
BN	Tout entre ... et ... [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
BQ	Réponse à RQ.
$\overline{BT}$	Signal de séparation entre les différentes parties d'une même transmission.
C	Oui *(réponse affirmative), ou bien:* le groupe qui précède fdoit être compris comme une affirmation.
CFM	Confirmez (*ou* Je confirme).
CL	Je ferme ma station.
COL	Collationnez (ou Je collationne).
CORRECTION	Annulez mon dernier mot *ou* groupe, la correction va suivre *(utilisé en radiotéléphonie et prononcé KOR-REX-CHEUNN).*
CP	Appel général à plusieurs stations spécifiées *(voir l'article 63).*
CQ	Appel général à toutes les stations.
CS	Indicatif d'appel *(employé pour demander un indicatif d'appel).*
DE	De *(utilisé devant le nom ou toute autre identification de la station appelante).*
DF	Votre relèvement à ... heures était ... degrés, dans le secteur douteux de cette station, avec une erreur possible de ... degrés.
DO	Relèvement douteux. Demandez un relèvement plus tard (*ou* à ... heures).
E	Est (point cardinal) *(Voir le numéro* 3098).
ETA	Heure estimée d'arrivée.
INTERCO	Des groupes du Code international de Signaux suivent *(utilisé en radiotéléphonie et prononcé IN-TER-CO).*
K	Invitation à transmettre.
$\overline{KA}$	Signal de commencement de transmission.
KTS	Milles marins à l'heure *(nœude).*
MIN	Minute (ou minutes).
MSG	Préfixe indiquant un mesage à destination ou en provenance du commandant d'un navire et concernant l'exploitation du navire ou sa navigation.
N	Nord (point cardinal) *(voir le numéro* 3098).
NIL	Je n'ai rien á vous transmettre.
NO	Non *(négation).*
NW	Mainteant.
NX	Avis aux navigateurs (*ou* Avis aux navigateurs maritimes suit).
OK	Nous sommes d'accord (*ou* C'est correct).
OL	Lettre transocéanique.
P	Préfixe indiquant un radiotélégramme privé.
PBL	Préambule [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
PSE	S'il vous plalt.
R	Reçu.
REF	Référence à ... (*ou* Référez-vous à ...).
RPT	Répétez (*ou* Je répète) (ou Répétez ...).
RQ	Indication d'une demande.
S	Sud (point cardinal) *(voir le numéro* 3098).
SIG	Signature [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou aprés RPT, pour demander une répétition*].
SLT	Lettre radiomaritime.
SVC	Préfixe indiquant un télégramme de service.
SYS	Référez-vous á votre télégramme de service.
TFC	Trafic.
TR	Utilisé par une station terrestre pour demander la position et le prochain port d'escale d'une station mobile *(voir les numéros* 4741 *et* 4942; utilisé également comme préfixe à la réponse.
TU	Je vous remercie.
TXT	Texte [*à employer aprés un point d'interrogation en radiotélégraphie ou aprés RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
$\overline{VA}$	Fin de travail.
W	Quest (point cardinal) *(voir le numéro* 3098).
WA	Mot après ... [*à employer aprés un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
WB	Mot avant ... [*à employer après un point d'interrogation en radiotélégraphie ou après RQ en radiotéléphonie (en cas de difficultés de langage) ou après RPT, pour demander une répétition*].
WD	Mot(s) ou groupe(s).
WX	Bulletin météorologique (*ou* Bulletin météorologique suit).
XQ	Préfixe indiquant la transmission d'une note de service.
YZ	Les mots qui suivent sont en langage clair.

Note. — En radiotélégraphie, un trait horizontal les lettres qui composent um signal signific que ces lettres doivent être transmises comme un seul signal.

NOC **AP14**

APPENDICE 15

Codes SINPO et SINPFEMO

(Voir l'Avis N° 251 du CCIR)

Code SINPO

Échelle	S	I	N	P	O
	Force du signal	Effets nuisibles			Appréciation d'ensemble
		Brouillage	Bruit	Perturbations de la propagation	
5	Excellente.	Nul.	Nul.	Nulles.	Excellent.
4	Bonne.	Léger.	Léger.	Légères.	Bon.
3	Satisfaisante.	Modéré.	Modéré.	Modérées.	Satisfaisant.
2	Médiocre.	Sévère.	Sévère.	Sévères.	Médiocre.
1	A peine audible.	Très grave.	Très grave.	Très graves.	Inutilisable.

Code SINPFEMO

Échelle	S	I	N	P	F	E	M	O
	Force du signal	Effets nuisibles			Fréquence des évanouissements	Modulation		Appréciation d'ensemble
		Brouillage	Bruit	Perturbations de la propagation		Qualité	Taux	
5	Excellente.	Nul.	Nul.	Nulles.	Nulle.	Excellente.	Maximum.	Excellente.
4	Bonne.	Léger.	Léger.	Légères.	Lente.	Bonne.	Bon.	Bon.
3	Satisfaisante.	Modéré.	Modéré.	Modérées.	Modérée.	Satisfaisante.	Satisfasant.	Satisfaisant.
2	Médiocre.	Sévère.	Sévère.	Sévères.	Rapide.	Médiocre.	Médiocre ou nul.	Médiocre.
1	A peine audible.	Très grave.	Très grave.	Très graves.	Très rapide.	Très médiocre.	Surmodulé en permanence.	Inutilisable.

Remarques particulières:

a) Un rapport codé sera formé du mot code SINPO ou SINPFEMO suivi d'un groupe de cinq ou huit chiffres décrivant respectivement les cinq ou huit caractéristiques figurant dans le code correspondant;
b) Pour les caractéristiques qui n'ont pas été évaluées, on utilisera la lettre X au lieu d'un chiffre;
c) Quoique le code SINPFEMO ait été prévu pour la radiotéléphonie, il peut être utilisé pour la radiotélégraphie;

d) L'appréciation d'ensemble, pour la radiotélégraphie, doit être interprétée comme il est indiqué dans les tableaux I et II ci-dessous:

TABLEAU I

Appréciation d'ensemble	Télégraphie automatique
5. Excellent	Multiplex 4 voies par répartition dans le temps.
4. Bon	Multiplex 2 voies par répartition dans le temps.
3. Satisfasant	Presque commercial en système arythmique à une voie.
2. Médiocre	BK, XQ et indicatifs lisibles.
1. Inutilisable	Illisible.

TABLEAU II

Appréciation d'ensemble	Télégraphie Morse
5. Excellent	Grande vitesse.
4. Bon	100 mots/minute.
3. Satisfaisant	50 mots/minute.
2. Médiocre	BK, XQ et indicatifs lisibles.
1. Inutilisable	Illisible.

e) L'évaluation d'ensemble, pour la téléphonie, doit être interprétée comme il est indiqué dans le tableau III:

TABLEAU III

Appréciation d'ensemble	Conditions de réception	Qualité
5. Excellent	Signal sans défaut	Commerciale.
4. Bon	Signal présentant de légers défauts	
3. Passable	Signal présentant de graves défauts. Voie utilisable par des opérateurs ou par des abonnés expérimentés.	Tout juste commerciale.
2. Médiocre	Voie juste utilisable par des opérateurs	Non commerciale.
1. Inutilisable	Voie inutilisable par des opérateurs	

NOC AP 17 Rév.

APPENDICE 16

Voices radiotéléphoniques dans les bandes du service mobile maritime comprises entre 4000 kHz et 23 000 kHz

(Voir l'article 60, section IV)

1. La répartition des voices radiotéléphoniques à utilisser par les stations côtières et les stations de navire dans les bandes attribuées au service mobile maritime est indiquée dans les deux sections ci-après:

Section A — table des fréquences d'emission à bande latérale unique pour l'exploitation duplex (voices à deux fréquences), en kHz;

Section B — table des fréquences d'emission à bande latérale unique pour l'exploitation simplex (voices à une fréquence) et pour l'exploitation à bandes croisées entre navires (deux fréquences), en kHz.

2. Les caractéristiques techinques des émetteurs à bande latérale unique sonto spécifiées à l'appendice 17.

3. Une ou plusieurs séries de fréquences de la section A (à l'exception des fréquences mentionnées au paragraphe 5 ci-dessous) peuvent être assignées à charque station côtière et celle-ci utilise ces fréquences associées par paires (voir le numéro 4381); chaque paire comprend une fréquence d'émission et une fréquence de réception. Les séries doivent être choisies en tenant compte des zones à desservir et de façon à éviter, autant que possible, les brouillages préjudiciables entre les émissions des différentes stations côtières.

4. Les fréquences de la section B sont destinées à être utilisées en commum dans le monde entier par les navires de toutes catégories, compte tenu des besoins du trafic, pour les émissions des navires à destination des stations côtières et les communications entre navires. De plus, elles peuvent être utilisées en commum dans le monde entier pour les émissions des stations côtières (exploitation simplex), sous réserve que la puissance de crête ne dépasse pas 1 kW (voir da Recommandation 304).

5. Les fréquences suivantes de la section A sont attribuées pour l'appel:

Voie N° 421 dans la bande des 4 MHz;
Voie N° 606 dans la bande des 6 MHz;
Voie N° 821 dans la bande des 8 MHz;
Voie N° 1221 dans la bande des 12 MHz;
Voie N° 1621 dans la bande des 16 MHz;
Voie N° 2221 dans la bande des 22 MHz.

Les autres fréquences des sections A et B sont des fréquences de travail.

6:

a) Les stations qui utilisent des émissions à bande latérale unique doivent fonctionner uniquement sur les fréquences porteuses spécifiées dans les sections A et B conformément aux caractéristiques techniques spécifiées à l'appendice 17. Ces stations doivent toujours utiliser la bande latérale supérieure;

b) Les stations qui utilisent des émissions à bande latérale unique doivent faire uniquement des émissions des classes R3E et J3E. Néanmoins, il convient que les administrations s'efforcent, autant que possible, de limiter aux émissions de la classe J3E l'utilisations des voies N^{os} 401, 601, 801, 1201, 1601 et 2201.

7. Si une administration autorise l'emploi de fréquences autres que celles qui sont indiquées dans les sections A et B, ses communications radiotélephoniques ne doivent pas causer de brouillage préjudiciable aux stations radiotéléphoniques du service mobile maritime qui emploient des fréquences spécifiées dand les tables qui suivent.

SECTION

Table des fréquences d'émission à bande latérale unique

Voie numéro	Bande des 4 MHz				Voie numéro	Bande des 6 MHz				Voie numéro	Bande des 8 MHz			
	Stations côtières		Stations de navire			Stations côtières		Stations de navire			Stations côtières		Stations côtières	
	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées		Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées		Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées
401	4 357,4	4 358,8	4 063	4 064,4	601	6 506,4	6 507,8	6 200	6 201,4	801	8 718,9	8 720,3	8 195	8 196,4
402	4 360,5	4 361,9	4 067,1	4 067,5	602	6 509,5	6 510,9	6 203,1	6 204,5	802	8 722	8 723,4	8 198,1	8 199,5
403	4 363,6	4 365	4 069,2	4 070,6	603	6 512,6	6 514	6 206,2	6 207,6	803	8 725,1	8 726,5	8 201,2	8 202,6
404	4 366,7	4 368,1	4 072,3	4 073,7	604	6 515,7	6 517,1	6 209,3	6 210,7	804	8 728,2	8 729,6	8 204,3	8 205,7
405	4 369,8	4 371,2	4 075,4	4 076,8	605	6 518,8	6 520,2	6 212,4	6 213,8	805	8 731,3	8 732,7	8 207,4	8 208,8
406	4 372,9	4 374,3	4 078,5	4 079,9	606	(1) 6 521,9	(1) 6 523,3	(1) (2) 6 215,5	(1) 6 216,9	806	8 734,4	8 735,8	8 210,5	8 211,9
407	4 376	4 377,4	4 081,6	4 083	–	–	–	–	–	807	8 737,5	8 738,9	8 213,6	8 215
408	4 379,1	4 380,5	4 084,7	4 086,1	–	–	–	–	–	808	8 740,6	8 742	8 216,7	8 218,1
409	4 382,2	4 383,6	4 087,8	4 089,2	–	–	–	–	–	809	8 743,7	8 745,1	8 219,8	8 221,2
410	4 385,3	4 386,7	4 090,9	4 092,3	–	–	–	–	–	810	8 746,8	8 748,2	8 222,9	8 224,3
411	4 388,4	4 389,8	4 094	4 095,4	–	–	–	–	–	811	8 749,9	8 751,3	8 226	8 227,4
412	4 391,5	4 392,9	4 097,1	4 098,5	–	–	–	–	–	812	8 753	8 754,4	8 229,1	8 230,5
413	4 394,6	4 396	4 100,2	4 101,6	–	–	–	–	–	813	8 756,1	8 757,5	8 232,2	8 233,6
414	4 397,7	4 399,1	4 103,3	4 104,7	–	–	–	–	–	814	8 759,2	8 760,6	8 235,3	8 236,7
415	4 400,8	4 402,2	4 106,4	4 107,8	–	–	–	–	–	815	8 762,3	8 763,7	8 238,4	8 239,8
416	4 403,9	4 405,3	4 109,5	4 110,9	–	–	–	–	–	816	8 765,4	8 766,8	8 241,5	8 242,9
417	4 407	4 408,4	4 112,6	4 114	–	–	–	–	–	817	8 768,5	8 769,9	8 244,6	8 246
418	4 410,1	4 411,5	4 115,7	4 117,1	–	–	–	–	–	818	8 771,6	8 773	8 247,7	8 249,1
419	4 413,2	4 414,6	4 118,8	4 120,2	–	–	–	–	–	819	8 774,7	8 776,1	8 250,8	8 252,2
420	4 416,3	4 417,7	4 121,9	4 123,3	–	–	–	–	–	820	8 777,8	8 779,2	8 253,9	8 255,3
421	(1) 4 419,4	(1) 4 420,8	(1) (2) 4 125	(1) 4 126,4	–	–	–	–	–	821	(1) 8 780,9	(1) 8 782,3	(1) 8 257	(1) 8 258,4
422	4 422,5	4 423,9	4 128,1	4 129,5	–	–	–	–	–	822	8 784	8 785,4	8 260,1	8 261,5
423	4 425,6	4 427	4 131,2	4 132,6	–	–	–	–	–	823	8 787,1	8 788,5	8 263,2	8 264,6
424	4 428,7	4 430,1	4 134,3	4 135,7	–	–	–	–	–	824	8 790,2	8 791,6	8 266,3	8 267,7
425	4 431,8	4 433,2	4 137,4	4 138,8	–	–	–	–	–	825	8 793,3	8 794,7	8 269,4	8 270,8
426	4 434,9	4 436,3	4 140,5	4 141,9	–	–	–	–	–	826	8 796,4	8 797,8	8 272,5	8 273,9
–	–	–	–	–	–	–	–	–	–	827	8 799,5	8 800,9	8 275,6	8 277
–	–	–	–	–	–	–	–	–	–	828	8 802,6	8 804	8 278,7	8 280,1
–	–	–	–	–	–	–	–	–	–	829	8 805,7	8 807,1	8 281,8	8 283,2
–	–	–	–	–	–	–	–	–	–	830	8 808,8	8 810,2	8 284,9	8 286,3
–	–	–	–	–	–	–	–	–	–	831	8 811,9	8 813,3	8 288	8 289,4
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(1) Fréquences de la appel (voir les numéros 4375 et 4376).
(2) Pour les conditions d'utilisation de la fréquence porteuse 4125 kHz (voir les numéros 2982 et 3030).
(3) Pour les conditions d'utilisations de la fréquence porteuse 6215,5 kHz (voir le numéro 2986).

A

pour l'exploitation duplex (voies à deux fréquences), en kHz

Voie numéro	Bande des 12 MHz				Voie numéro	Bande des 16 MHz				Voie numéro	Bande des 22 MHz			
	Stations côtières		Stations de navire			Stations côtières		Stations de navire			Stations côtières		Stations de navire	
	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées		Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées		Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées
1 201	13 100,8	13 102,2	12 330	12 331,4	1 601	17 232,9	17 234,3	16 460	16 461,4	2 201	22 596	22 597,4	22 000	22 001,4
1 202	13 103,9	13 105,3	12 333,1	12 334,5	1 602	17 236	17 237,4	16 463,1	16 464,5	2 202	22 599,1	22 600,5	22 003,1	22 004,5
1 203	13 107	13 108,4	12 336,2	12 337,6	1 603	17 239,1	17 240,5	16 466,2	16 467,6	2 203	22 602,2	22 603,6	22 006,2	22 007,6
1 204	13 110,1	13 111,5	12 339,3	12 340,7	1 604	17 242,2	17 243,6	16 469,3	16 470,7	2 204	22 605,3	22 606,7	22 009,3	22 010,7
1 205	13 113,2	13 114,6	12 342,4	12 343,8	1 605	17 245,3	17 246,7	16 472,4	16 473,8	2 205	22 608,4	22 609,8	22 012,4	22 013,8
1 206	13 116,3	13 117,7	12 345,5	12 346,9	1 606	17 248,4	17 249,8	16 475,5	16 476,9	2 206	22 611,5	22 612,9	22 015,5	22 016,9
1 207	13 119,4	13 120,8	12 348,6	12 350	1 607	17 251,5	17 252,9	16 478,6	16 480	2 207	22 614,6	22 616	22 018,6	22 020
1 208	13 122,5	13 123,9	12 351,7	12 353,1	1 608	17 254,6	17 256	16 481,7	16 483,1	2 208	22 617,7	22 619,1	22 021,7	22 023,1
1 209	13 125,6	13 127	12 354,8	12 356,2	1 609	17 257,7	17 259,1	16 484,8	16 486,2	2 209	22 620,8	22 622,2	22 024,8	22 026,2
1 210	13 128,7	13 130,1	12 357,9	12 359,3	1 610	17 260,8	17 262,2	16 487,9	16 489,3	2 210	22 623,9	22 625,3	22 027,9	22 029,3
1 211	13 113,8	13 133,2	12 361	12 362,4	1 611	17 263,9	17 265,3	16 491	16 492,4	2 211	22 627	22 628,4	22 031	22 032,4
1 212	13 134,9	13 136,3	12 364,1	12 365,5	1 612	17 267	17 268,4	16 494,1	16 495,5	2 212	22 630,1	22 631,5	22 034,1	22 035,5
1 213	13 138	13 139,4	12 367,2	12 368,6	1 613	17 270,1	17 271,5	16 497,2	16 496,6	2 213	22 633,2	22 634,6	22 037,2	22 038,6
1 214	13 141,1	13 142,5	12 370,3	12 371,7	1 614	17 273,2	17 274,6	16 500,3	16 501,7	2 214	22 636,3	22 637,7	22 040,3	22 041,7
1 215	13 144,2	13 145,6	12 373,4	12 374,8	1 615	17 276,3	17 277,7	16 503,4	16 504,8	2 215	22 639,4	22 640,8	22 043,4	22 044,8
1 216	13 147,3	13 148,7	12 376,5	12 377,9	1 616	17 279,4	17 280,8	16 506,5	16 507,9	2 216	22 642,5	22 643,9	22 046,5	22 047,9
1 217	13 150,4	13 151,8	12 379,6	12 381	1 617	17 282,5	17 283,9	16 509,6	16 511	2 217	22 645,6	22 647	22 049,6	22 051
1 218	13 153,5	13 154,9	12 382,7	12 384,1	1 618	17 285,6	17 287	16 512,7	16 514,1	2 218	22 648,7	22 650,1	22 052,7	22 054,1
1 219	13 156,6	13 158	12 385,8	12 387,2	1 619	17 288,7	17 290,1	16 515,8	16 517,2	2 219	22 651,8	22 653,2	22 055,8	22 057,2
1 220	13 159,7	13 161,1	12 388,9	12 390,3	1 620	17 291,8	17 293,2	16 518,9	16 520,3	2 220	22 654,9	22 656,3	22 058,9	22 060,3
1 221	(1) 13 162,8	(1) 13 164,2	(1) 12 392	(1) 12 393,4	1 621	(1)17 294,9	(1)17 296,3	(1)16 522	(1)16 523,4	2 221	(1) 22 658	(1) 22 659,4	(1) 22 062	(1) 22 063,4
1 222	13 165,9	13 167,3	12 395,1	12 396,5	1 622	17 298	17 299,4	16 525,1	16 526,5	2 222	22 661,1	22 662,5	22 065,1	22 066,5
1 223	13 169	13 170,4	12 398,2	12 399,6	1 623	17 301,1	17 302,5	16 528,2	16 529,6	2 223	22 664,2	22 665,6	22 068,2	22 069,6
1 224	13 172,1	13 173,5	12 401,3	12 402,7	1 624	17 304,2	17 305,6	16 531,3	16 532,7	2 224	22 667,3	22 668,7	22 071,3	22 072,7
1 225	13 175,2	13 176,6	12 404,4	12 405,8	1 625	17 307,3	17 308,7	16 534,4	16 535,8	2 225	22 670,4	22 671,8	22 074,4	22 075,8
1 226	13 178,3	13 179,7	12 407,5	12 408,9	1 626	17 310,4	17 311,8	16 537,5	16 538,9	2 226	22 673,5	22 674,9	22 077,5	22 078,9
1 227	13 181,4	13 182,8	12 410,6	12 412	1 627	17 313,5	17 314,9	16 540,6	16 542	2 227	22 676,6	22 678	22 080,6	22 082
1 228	13 184,5	13 185,9	12 413,7	12 415,1	1 628	17 316,6	17 318	16 543,7	16 545,1	2 228	22 679,7	22 681,1	22 083,7	22 085,1
1 229	13 187,6	13 189	12 416,8	12 481,2	1 629	17 319,7	17 321,1	16 546,8	16 548,2	2 229	22 682,8	22 684,2	22 086,8	22 088,2
1 230	13 190,7	13 192,1	12 419,9	12 421,3	1 630	17 322,8	17 324,2	16 549,9	16 551,3	2 230	22 685,9	22 687,3	22 089,9	22 091,3
1 231	13 193,8	13 195,2	12 423	12 424,4	1 631	17 325,9	17 327,3	16 553	16 554,4	2 231	22 689	22 690,4	22 093	22 094,4
1 232	13 196,9	13 198,3	12 426,1	12 427,5	1 632	17 329	17 330,4	16 556,1	16 557,5	2 232	22 692,1	22 692,5	22 096,1	22 097,5
–	–	–	–	–	1 633	17 332,1	17 333,5	16 559,2	16 560,6	2 233	22 695,2	22 699,6	22 099,2	22 100,6
–	–	–	–	–	1 634	17 335,2	17 336,6	16 562,3	16 563,7	2 234	22 698,3	22 699,7	22 102,3	22 103,7
–	–	–	–	–	1 635	17 338,3	17 339,7	16 565,4	16 566,8	2 235	22 701,4	22 702,8	22 105,4	22 106,8
–	–	–	–	–	1 636	17 341,4	17 342,8	16 568,5	16 569,9	2 236	22 704,5	22 705,9	22 108,5	22 109,9
–	–	–	–	–	1 637	17 344,5	17 345,9	16 571,6	16 573	2 237	22 707,6	22 709	22 111,6	22 113
–	–	–	–	–	1 638	17 347,6	17 349	16 574,7	16 576,1	2 238	22 710,7	22 712,1	22 114,7	22 116,1
–	–	–	–	–	1 639	17 350,7	17 352,1	16 577,8	16 579,2	2 239	22 713,8	22 715,2	22 117,8	22 119,2
–	–	–	–	–	1 640	17 353,8	17 355,2	16 580,9	16 582,3	2 240	22 716,9	22 718,3	22 120,9	22 122,3
–	–	–	–	–	1 641	17 356,9	17 358,3	16 584	16 585,4	–	–	–	–	–

SECTION B

Table des fréquences d'émission à bande latérale unique pour l'exploitation simplex (voies à une fréquence) et pour l'exploitation à bandes croisées entre navires (deux fréquences), en kHz

(Voir le paragraphe 4 du présent appendice)

Bande des 4 MHz		Bande des 6 MHz		Bande des 8 MHz		Bande des 12 MHz		Bande des 16 MHz		Bande des 22 MHz	
Fréquence porteuse	Fréquence assignées	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées	Fréquences porteuses	Fréquences assignées
4 143,6	4 145	6 281,6 6 221,6	6 220 6 223	8 291,1 8 294,2	8 292,5 8 295,2	12 429,2 12 432,3 12 435,4	12 430,6 12 433,7 12 436,8	16 587,1 16 590,2 16 593,3	16 588,5 16 591,6 16 594,7	22 124 22 127,1 22 130,2 22 133,3 22 136,4	22 125,4 22 128,5 22 131,6 22 134,7 22 137,8

MOD AP17A

APPENDICE 17

Caractéristiques techniques des émetteurs à bande latérale unique utilisés dans le service mobile maritime pour la radiotéléphonie dans les bandes comprises entre 1606,5 (1605 Région 2) kHz et 4000 kHz et entre 4000 kHz et 23 000 kHz

(Voir l'article 60, section IV)

1. Puissance le l'onde porteuse:

a) Pour les émissions de la classe R3E, la puissance de l'onde porteuse est la suivant:

Bandes comprises entre 1606,5 (1605 Région 2) kHz et 4000 kHz:

Émetteurs des stations côtières jusqu'au 1er janvier 1982 et émetteurs des stations de navire en service ou installés avant le 2 janvier 1982: 16 ± 2 dB au-dessous de la puissance en crête de l'emission;

Émeteurs des stations côtières à partir du 1er janvier 1982 et émeteurs des stations de navire installés après le 1er janvier 1982: 18 ± 2 dB au-dessous de la puissance en crête de l'emission;

Bandes comprises entre 4000 kHz et 23 000 kHz:

Émetteurs des stations de navire installés avant le 2 janvier 1978: 16 ± 2 dB au-dessous de la puissance en crête de l'emission;

Émeteurs des stations côtières à partir du 1er janvier 1978 et émetteurs des stations de navire installés après le 1er janvier 1978: 18 ± 2 dB au-dessous de la puissance en crête de l'emission;

b) Pour les émissions de la classe J3E, la puissance de l'onde porteuse est inférieure de 40 dB au moins à la puissance en crête de l'émission.

2. Les stations côtières et les stations de navire doivent émettre dans la bande latérale supérieure seulement.

3. La bande des fréquences acoustiques transmise doit s'étendre de 350 Hz à 2700 Hz, la variation de l'amplitude en fonction de la fréquence ne dépassant pas 6 dB.

4. La fréquence de l'onde porteuse des émetteurs doit être maintenue dans les tolérances ci-après:

a) Stations côtières: ± 20 Hz;

b) Stations de navire:

Bandes comprises entre 1606,5 (1605 Région 2) kHz et 4000 kHz:

Tolérance applicable aux émetteurs installés avant le 2 janvier 1982: ± 100 Hz: la dérive maximale à court terme (de l'ordre de 15 minutes) est de ± 40 Hz;

Tolérance applicable aux émetteurs installés avant le 1er janvier 1982 mais avant le 2 janvier 1985: ± 50 Hz;

Tolérance applicable aux émetteurs installés après le 1er janvier 1985 et à tours les émetteurs à partir du 1er janvier 1990: ± 40 Hz.

Bandes comprises entre 4000 kHz et 23 000 kHz:

Tolérance applicable aux émetteurs installés avant le 2 janvier 1982: ± 100 Hz: la dérive maximale à court terme (de l'ordre de 15 minutes) est de ± 40 Hz;

Tolérance applicable aux émetteurs installés après le 1er janvier 1985 et à tours les émetteurs à partir du 1er janvier 1990: ± 40 Hz.

5. La modulation de fréquence parasite de l'onde porteuse doid être suffisamment faible pour ne pas créer de distorsions nuisibles.

6. Dans le cas d'une émission de la classe H3E, R3E ou J3E, la puissance de toute émission non désirée fournie à la ligne d'alimentation de l'antenne sur une fréquence discrète quelconque doit, lorsque l'emetteur fonctionne à sa puissance en crête maximale, rester dans les limites indiquées dans le tableau suivant:

a) Émetteurs en service ou installés avant le 2 janvier 1982 (1):

Diference Δ entre la fréquence du rayonnement non désiré (*a*) et la fréquence assignée (*b*) (kHz)	Affaiblissement minimum par raport à la puissance en crête
1,6 < Δ ≤ 4,8	28 dB
4,8 < Δ ≤ 8	38 dB
8 < Δ	43 dB, sans que la puissance du rayonnement non désiré puisse dépasser 50 mW.

(*a*) *Rayonnement non désiré* (voir la article 1, numéro **140**).
(*b*) La fréquence assignée est supérieure de 1400 Hz à la fréquence porteuse (voir le numéro **4194**).

En ce qui concerne les émissions hors bande (2) et les rayonnements non essentiels (3) qui résultent du processus de modalution mais qui ne tombent pas dans le spectre des émissions hors bande (2), on peut, lorsqu'on désire vérifier si une émission à onde porteuse réduite ou supprimée satisfait aux condition ci-dessus, appliquer à l'entrée de l'émetteur un signal constitué de deux fréquences acoustiques suffisamment éloignées l'une de l'autre pour que tous les produits d'intermodulation tombent sur des fréquences distantes d'au moins 1,6 kHz de la fréquence assignée:

b) Émetteurs installés après le 1er janvier 1982 (1):

Diference Δ entre la fréquence du rayonnement non désiré (*a*) et la fréquence assignée (*b*) (kHz)	Affaiblissement minimum par raport à la puissance en crête
1,5 < Δ ≤ 4,5	31 dB
4,5 < Δ ≤ 7,5	38 dB
7,5 < Δ	43 dB, sans que la puissance du rayonnement non désiré puisse dépasser 50 mW.

(*a*) *Rayonnement non désiré* (voir la article 1, numéro **140**).
(*b*) La fréquence assignée est supérieure de 1400 Hz à la fréquence porteuse (voir le numéro **4194**).

En ce qui concerne les émissions hors bande (2) et les rayonnements non essentiels(3) qui résultent du processus de modalution mais qui ne tombent pas dans le spectre des émissions hors bande (2), on peut, lorsqu'on désire vérifier si une émission à onde porteuse réduite ou supprimée satisfait aux condition ci-dessus, appliquer à l'entrée de l'émetteur un signal constitué de deux fréquences acoustiques suffisamment éloignées l'une de l'autre pour que tous les produits d'intermodulation tombent sur des fréquences distantes d'au moins 1,5 kHz de la fréquence assignée.

NOC **AP18**

APPENDICE 18

Tableau des fréquences d'émission pour les stations du service mobile maritime dans la bande 156-174 MHz

(Voir le numéro **613** et les articles 59 et 60)

Note 1. — Pour faciliter la compréhension du tableau, voir les remarques *a*) à *q*) ci-après.

Note 2. — Les voies 01 à 28, à l'exception des voies 15 et 17, correspondent aux voies de l'appendice **18** au Règlement des radiocommunications de Genève (1959) et les voies 15, 17 et 60 à 88 représentent les voies supplémentaires disponibles pour les assignations selon les dispositions de l'appendice 18 Mar au Règlement des radiocommunications, Génève (1967) (voir la Résolution **308**).

Note 3. — Les numéros 60 à 88 ont été choisis pour les voices supplémentaires afin de les distinguer nettement des voies existant à l'origine.

---

(1) Toutes les administrations reconnaissent la nécessité de réduire le niveau des émissions non désirées et elles s'efforceront en conséquence de faire en sorte que tous les nouveaux émetteurs dont elles sont responsables soient conformes aux nouvelles caractéristiques dès que possible avant le 2 janvier 1982.
(2) *Emissions hors bande* :(voir l'article 1, numéro **138**).
(3) *Rayonnement non essentiel* (voir l'article 1, numéro **139**).

Numéros des voies	Renvois	Fréquences d'emission (MHz)		Navire-navire	Opérations portuaires		Mouvement des navires		Correspondance publique
		Stations de navire	Stations côtières		Une fréquence	Deux fréquences	Une fréquence	Deux fréquences	
60	(*j*)	156,025	160,625			17		9	25
01	(*i*)	156,050	160,650			10		15	8
61		156,075	160,675			23		3	19
02		156,100	160,700			8		17	10
62		156,125	160,725			20		6	22
03	(*i*)	156,150	160,750			9		16	9
63	(*i*)	156,175	160,775			18		8	24
04		156,200	160,800			11		14	7
64		156,225	160,825			22		4	20
05		156,250	160,850			6		19	12
65		156,275	160,875			21		5	21
06	(*h*)	156,300		1					
66		156,325	160,925			19		7	23
07		156,350	160,950			7		18	11
67	(*n*)	156,375	156,375	10	10		9		
08		156,400		2					
68	(*p*)	156,425	156,425		6		2		
09	(*o*)	156,450	156,450	5	5		12		
69	(*p*)	156,475	156,475	9	11		4		
10	(*n*)	156,500	156,500	3	9		10		
70	(*o*)	156,525		6					
11	(*p*)	156,550	156,550		3		1		
71	(*p*)	156,575	156,575		7		6		
12	(*p*)	156,600	156,600		1		3		
72	(*o*)	156,625		7					

Numéros des voies	Renvois	Fréquences d'emission (MHz)		Navire-navire	Operations portuaires		Mouvement des navires		Correspondance publique
		Stations de navire	Stations côtières		Une fréquence	Deux fréquences	Une fréquence	Deux fréquences	
13	(p)	156,650	156,650	4	4		5		
73	(n)	156,675	156,675	8	12		11		
14	(p)	156,700	156,700		2		7		
74	(p)	156,725	156,725		8		8		
15	(g) (l)	156,750	156,750	12	14				
75	(m)		Bande de garde 156,7625-156,7875 MHz						
16		156,800	156,800	Détresse: sécurité et appel					
76	(m)		Bande de garde 156,8125-156,8375 MHz						
17	(g) (l)	156,850	156,850	13	13				
77		156,875		11					
18	(f)	156,900	161,500			3		22	
78		156,925	161,525			12		13	27
19	(f)	156,950	161,550			4		21	
79	(f) (p)	156,975	161,575			14		1	
20	(f)	157,000	161,600			1		23	
80	(f) (p)	157,025	161,625			16		2	
21	(f)(i)	157,050	156,050 ou 161,650				5		20
81		157,075	161,675			15		10	28
22	(f)	157,100	161,700			2		24	
82		157,125	161,725			13		11	26
23	(i)	157,150	156,150 ou 161,750						5
83	(i)	157,175	156,175 ou 161,775						16
24		157,200	161,800						4
84		157,225	161,825			24		12	13

Numéros des voies	Renvois	Fréquences d'émission (MHz)		Navire-navire	Operations portuaires		Mouvement des navires		Correspondance publique
		Stations de navire	Stations côtières		Une fréquence	Deux fréquences	Une fréquence	Deux fréquences	
25		157,250	161,850						3
85		157,275	161,875						17
26		157,300	161,900						1
86	(*q*)	157,325	161,925						15
27		157,350	161,950						2
87		157,375	161,975						14
28		157,400	162,000						6
88	(*j*)	157,425	162,025						18

Remarques relatives au tableau

(*a*) Les chiffres figurant dans la colonne «Navire-navire» indiquent l'ordre normal dans lequel il convient que les voies soint nises en service par la station mobile.

(*b*) Les chiffres figurant dans les colonnes «Opérations portuaires». «Mouvement des navires» et «Correspondance publique» indiquent l'ordre normal dans lequel il convient que les voies soient mises en service par chaque station côtière, il peut cependant être nécessaire dans certains cas d'omettre des voies afin d'éviter des brouillages préjudiciables entre stations côtières voisines.

(*c*) Les administrations peuvent désigner des fréquences du service navire, du service des operations portuaires ou du service du mouvement des navires, qui pourront être utilisées par des aéronefs légers ou des helicoptéres pour entrer en communication avec des navires ou des stations côtières participant a des opérations de soutien essentiellement maritimes, dans les conditions spécifiées aux numéros **4144, 4148, 4149, 4150, 4151, 4152** et **4153**. Cependant, l'emploi des voies partagées avec le service de correspondance publique dépendra d'un accord préalable entre les administrations intéressées et celles dont les services sont susceptibles d'être défavorablement influencés.

(*d*) Les voies du présent appendice, à l'exception des voies 6, 15, 16, 17, 75 et 76, peuvent aussi être utilisées pour la transmission de données à grande vitesse et de fac-similé, sous réserve d'arrangements particuliers entre les administrations intéressées et celles dont les services sont susceptibles d'être défavorablement influencés.

(*e*) Sauf aux États-Unis d'Amerique, les voies du présent appendice, et de préference deux voies adjacentes des séries 87. 28. 88, peuvent, à l'exception des voies 6, 15, 16, 17, 75 et 76, être utilisées pour les systemes à bande étroite de télégraphie à impression directe et la transmission de données, sous réserve d'arrangements particuliers entre les administrations interessées et celles jount les services sont susceptibles d'être défavorablement influencés.

(*f*) Les voies à deux fréquences attribuées au service des opérations portuaires (18, 19, 20, 21, 22, 79 et 80) peuvent être utilisées pour la correspondance, publique, sous réserve d'arrangements particuliers entre les administrations intéressées et celles dont les services sont susceptibles d'être défavorablement influencés.

(*g*) Jusqu'au 1er janvier 1983, sur les voies 15 et 17, la puissance apparente rayonnée par les emetteurs des stations de navire ne doit pas dépasser 1 watt.

(*h*) La fréquence 156,300 MHz (voies 6) (voir les numéros **2993** et **4154**) peut aussi être utilisée pour les communications entre stations de navire et stations d'aéronef participant à ces opérations coordonnées de recherches et de sauvetage. Les stations de navire doivent éviter de causer des brouillages nuisibles à de telles communications sur la voie 6 ainsi qu'aux communications entre les stations d'aéronef, les brise-glace et les navires assistés par ceux-ci pendant la saison des glaces.

(*i*) En France et en Bélgique, les fréquences 156,050 MHz, 156,150 MHz et 156,175 MHz sont utilisées dans les voies 1, 3 et 63 respectivement, par les stations de navire et dans les voies 21, 23 et 83 respectivement, par les stations côtières, dans le cas de systèmes spéciaux semi-duplex de correspondance publique qui fonctionnent avec une séparation de 1 MHz entre les fréquences d'émission de réception. Ces dispositions particulières cesseront d'être utilisées au plus tard le 1er janvier 1983.

(*j*) Les voies 60 et 88 peuvent être utilisées sous réserve d'arrangements particuliers entre les administrations intéressées et celles dont les services sont susceptibles d'être défavorablement influences.

(*k*) Les fréquences énumérées dans ce tableau peuvent être utilisées également pour les radiocommunications sur les voies d'eau intérieures dans les conditions prévues au numéro **613**.

(*l*) Les voies 15 et 17 peuvent être utilisées pour les communications internes à bord des navires, sous réserve que la puissance apparente rayonnée ne dépasse pas 1 watt, et dans les limites de la réglementation nationale de l'administration intéressée lorsque ces voies sont utilisées dans ses eaux territoriales (voir cependant la Recommendation **305**).

(*m*) Cette bande de garde sera applicable à partir du 1er janvier 1983 (voir les numéros **3033, 3033.1, 4393** et **4393.1**).

(*n*) Dans la Zone européenne maritime et au Canada, ces fréquences (voies 10, 67 et 73) peuvent aussi être utilisées, si besoin est, par les administrations intéressées, pour les communications entre les stations de navire, les stations d'aéronef et les stations terrestres participant a des opérations coordonnées de recherches et de sauvetage ainsi qu'à des opérations de lutte contre la pollution dans des zones locales, dans les conditions spécifiées aux numéros **4144, 4148, 4149, 4150, 4151, 4152** et **4153**.

(*o*) Les trois premières fréquences à utiliser de préférence, pour l'emploi indiqué dans la Remarque *c*), sont 156,450 MHz (voie 9), 156,525 MHz (voie 70) et 156,625 MHz (voie 72).

(*p*) Ces voies (68, 69, 11, 71, 12, 13, 14, 74, 79 et 80) sont les voies à utiliser de préférence pour le service du mouvement des navires, mais si le besoin s'en fait sentir dans une zone déterminée elles peuvent être attribuées au service des opérations portuaires, pour autant qu'elles ne sont pas requises pour le service du mouvement des navires.

(*q*) Cette voie (86) pourra être utilisée comme voie d'appel, si une telle voie est requise dans un système radiotéléphonique automatique qu'aura recommandé le CCIR.

NOC **AP19** APPENDICE 19

Caractéristiques techniques des émetteurs et des récepteurs utilisés dans le service mobile maritime dans le bande 156-174 MHz

(Voir les articles 59 et 60, l'appendice **18** et la Résolution **308**)

1. Seule la modulation de fréquence avec préaccentuation de 6 dB par octave (modulation de phase) est utilisée.

2. L'excursion de fréquence qui correspond à une modulation de 100 % doit être aussi voisine que possible de + 5 kHz. Elle ne doit, en aucun cas, dépasser + 5 kHz.

3. La tolérance de fréquence d'une station côtière ou d'une station de navire est de 10 milionièmes [voir le renvoi *(27)* de l'appendice **7**].

4. Sur chacune des fréquences indiquées dans le tableau de l'appendice **18**, le rayonnement de chaque station doit être polarisé verticalement à la source.

5. La bande des fréquences acoustiques ne doit pas s'étendre au-delà de 3000 Hz.

6. La puissance moyenne des émetteurs des stations de navire doit pouvoir être réduite aisément à une valeur inférieure ou égale à 1 watt.

NOC **AP19A** APPENDICE 20

Caractéristiques des appareils utilisés pour les communications de bord dans les bandes de fréquences comprises entre 450 MHz et 470 MHz

(Voir les numéros **669** et **670**)

1. Il convient que les appareils disposent de voies en nombre suffisant pour leur permettre un service satisfaisant dans la zone de service prévue.

2. La puissance apparente rayonnée doit être limitée au minimum nécessaire pour obtenir un service satisfaisant; en aucun cas elle ne doit dépasser 2 W. Lorsque cela est possible en pratique, il convient que les appareils soient équipés d'un dispositif approprié permettant de réduire aisément la puissance de sortie d'au moins 10 dB.

3. Lorsque des appareils sont installés en des points fixes sur le navire, la hauteur de l'antenne ne doit pas dépasser le niveau de la passarelle de plus de 3,50 métres.

4. Seule la modulation de fréquence avec préaccentuation de 6 dB par octave (modulation de phase) est utilisée.

5. L'excursion de fréquence ne doit pas dépasser + 5 kHz.

6. La tolérance de fréquence est de 5 millionièmes.

7. La bande des fréquences acoustiques ne doit pas s'étendre au-delá de 3000 Hz.

8. Les signaux de télécommande, de télémesure, et les signaux autres que téléphoniques doivent être codés de manière à eviter le plus possible la possibilité de fonctionnement intempestif sous l'effet de signaux brouilleurs.

9. Si l'emploi d'une station-relais requis à bord d'un navire, les paires de fréquences à utiliser sont les suivantes (voir également le numéro **670**):

457,525 MHZ et 467,525 MHz;
457,550 MHZ et 467,550 MHz;
457,575 MHZ et 467,575 MHz.

MOD **AP6** APPENDICE 21

Rapports sur les observations de contrôle international des émissions

(Voir l'article 20)

SECTION I

Rapports relatifs aux stations des services de radiocommunication de Terre

1. Il convient que les rapports concernant les résultats des mesures de fréquence contiennent, dans la mesure nécessaire, les renseignements suivants:

a) Identification de la station de contrôle (administration ou organisation, et emplacement):
b) Date de la mesure:
c) Heure de la mesure (UTC):
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre:
e) Classe de l'émission (1);

(1) La classe de l'émission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par les tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

f) Fréquence assignée ou fréquence de référence.
g) Tolérance de fréquence;
h) Fréquence mesurée;
i) Précision de la mesure;
j) Écart par rapport à la fréquence assignée ou par rapport à la fréquence de référence;
k) Renseignements supplémentaires (par exemple, période pendant laquelle les mesures ont été effectuées, dérive de la fréquence mesurée pendant cette période, qualité des signaux reçus et conditions de réception);
l) Observations.

2. Il convient que les rapports concernant les résultats des mesures des valeurs du champ ou de la puissance surfacique contiennent, dans toute la mesure nécessaire, les renseignements suivants:

a) Identification de la station de contrôle (administration ou organisation et emplacement);
b) Date de la mesure:
c) Heure de la mesure (UTC):
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre:
e) Classe de l'émission (1);
f) Fréquence assignée;
g) Valeur mesurée du champ ou de la puissance surfacique;
h) Précision de la mesure (estimation);
i) Valeur de la composante de polarisation mesurée;
j) Autres éléments ou caractéristiques de la mesure;
l) Observations.

3. Il convient que les relevés d'observations concernant le degré d'occupation du spectre soient fournis, dans la mesure pratiquement possible, dans la forme recommandée par l'IFRB et contiennent, si possible, les renseignements suivants:

a) Identification de la station de contrôle (administration ou organisation, et emplacement);
b) Date de la mesure;
c) Heure de la mesure (UTC);
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre;
e) Classe de l'emission (1);
f) Classe de la station et nature du service;
g) Fréquence mesurée;
h) Période pendant laquelle l'émission a été entendue ou enregistrée;
i) Valeur mesurée du champ ou de la puissance surfacique, ou de la force du signal d'aprés l'echelle QSA;
j) Largeur de bande occupée (indiquer si elle a été mesurée ou estimée ou indiquer la largeur de bande nécessaire notifiée à l'IFRB);
k) Renseignements sur la localité ou sur la zone de réception visée;
l) Observations.

4. Il convient d'utiliser, autant que possible, dans la transmission de ces renseignements, les symboles figurant dans le Règlement des radiocommunications ou dans la Préface à la Liste internationale des fréquences.

SECTION II

Rapports relatifs aux stations des services de radiocommunication spatiale

1. Il convient que les rapports concernant les résultats des mesures de fréquence contiennent, dans toute la mesure nécessaire, les renseignements suivants:

a) Identification de la station de contrôle (administration ou organisation, et emplacement);
b) Date de la mesure;

(1) La classe de l'énission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par les tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

c) Heure de la mesure (UTC);
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre;
e) Classe de l'emission (1);
f) Fréquence assignée ou fréquence de référence;
g) Tolérance de fréquence;
h) Fréquence mesurée;
i) Précision de la mesure;
j) Écart par rapport à la fréquence assignée ou par rapport à la fréquence de référence;
k) Renseignements supplémentaires (par exemple, période pendant laquelle les mesures ont été effectuées, dérive de la fréquence mesurée pendant cette période, qualité des signaux reçus et conditions de réception);
l) Observations.

2. Il convient que les rapports concernant les résultats des mesures de champ ou de puissance surfacique contiennent, dans toute la mesure nécessaire, les renseignements suivants:

a) Identification de la station de contrôle (administration ou organisation, et emplacement);
b) Date de la mesure;
c) Heure de la mesure (UTC);
d) Indicatif d'appel ou tout moyen d'identification de la station contrôlée, ou l'un et l'autre;
e) Classe de l'émission (1);
f) Fréquence assignée;
g) Valeur mesurée du champ ou de la puissance surfacique;
h) Précision de la mesure (estimation);
i) Valeur de la composante de polarisation mesurée;
j) Autres éléments ou caractéristiques de la mesure;
k) Observations.

3. Il convient que les relevés d'observations concernant le degré d'occupation du spectre soient fournis, dans la mesure pratiquement possible, dans la forme recommandée par l'IFRB et contiennent, si possible, les renseignements suivants:

3.1. Rapports relatifs aux observations d'émissions de stations spatiales:

a) Identification de la station de contrôle (administration ou organisation, et emplacement);
b) Date de la mesure;
c) Heure de la mesure (UTC);
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre;
e) Classe de l'émission (1);
f) Classe de la station et nature du service;
g) Fréquence mesurée;
h) Période pendant laquelle l'émission a été observée ou enregistrée;
i) Valeur mesurée du champ ou de la puissance surfacique ou de la force du signal d'après l'échelle QSA;
j) Largeur de bande occupée (indiquer si elle a été mesurée ou estimée ou indiquer la largeur de bande nécessaire notifiée à l'IFRB);
k) Polarisation observée;
l) Renseignements concernant l'orbite;
m) Renseignements concernant la localité ou la zone de réception visée, s'ils sont connus;
n) Observations.

3.2. Rapports relatifs aux observations d'émissions de stations terriennes:

a) Identification de la station de contrôle (administration ou organisation, et emplacement);
b) Date de la mesure;
c) Heure de la mesure (UTC);
d) Indicatif d'appel ou tout autre moyen d'identification de la station contrôlée, ou l'un et l'autre;

---

(1) La classe de l'émission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par les tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

e) Classe de l'émission (1);
f) Classe de la station et nature du service;
g) Fréquence mesurée;
h) Période pendant laquelle l'émission a été observée ou enregistrée;
i) Valeur mesurée du champ ou de la puissance surfacique, ou de la force du signal d'après l'échelle QSA;
j) Largeur de bande occupée (indiquer si elle a été mesurée ou estimée ou indiquer la largeur de bande nécessaire notifiée à l'IFRB);
k) Renseignements relatifs à la position orbitale où la réception est prévue;
l) Observations.

4. Il convient d'utiliser, autant que possible, dans la transmission de ces renseignements, les symboles figurant dans le Règlement des radiocommunications ou dans la Préface à la Liste internationale des fréquences.

MOD AP7

APPENDICE 22

Rapport sur une irrégularité ou une infraction à la Convention ou au Règlement des radiocommunications

(Voir les articles 21 et 22)

Renseignements relatifs à la station transgressant le Règlement:

1. Nom (*a*), s'il est connu (en caractères majuscules d'imprimerie)...
2. Indicatif d'appel ou autre forme d'identifications (en caractères majuscules d'imprimerie) ...
3. Nationalité, si ell est connue ...
4. Fréquence employée (kHz, MHz, GHz ou THz) ...
5. Classe de l'émission (*b*) ...
6. Classe de station et nature du service, si elles sont connues ...
7. Emplacement (*c*) (*d*) (*e*) ...

Renseignements relatifs à la station ou au bureau centraliseur ou au service d'inspection signalant l'irrégularité ou l'infraction:

8. Nom (caractères majuscules d'imprimerie) ...
9. Indicatif d'appel ou autre forme d'identification (en caractères majuscules d'imprimerie) ...
10. Nationalité ...
11. Emplacement (*c*) (*d*) ...

Renseignements sur l'irrégularité ou l'infraction:

12. Nom (*f*) de la station (en caractères majuscules d'imprimerie) en communication avec celle qui commet l'irrégularité ou l'infraction ...
13. Indicatif d'appel ou autre forme d'identification (en caractères majuscules d'imprimerie) de la station en communication avec celle qui commet l'irrégularité ou l'infraction ...
14. Date et heure (*g*) ...
15. Nature de l'irrégularité ou de l'infraction (*h*) ...
16. Extraits du journl de bord ou autres informations à l'appui du rapport ...

Renseignements relatifs à la station dont l'émission est brouiullée (i):

17. Nom de la station (en caractères majuscules d'imprimerie) ...
18. Indicatif d'appel ou autre forme d'identification (en caractères majuscules d'imprimerie) ...
19. Fréquence assignée (kHz, MHz, GHz ou THz) ...
20. Fréquence mesurée au moment du brouillage ...
21. Classe de l'émission (*b*) et largeur de bande (indiquer si elle a été mesurée ou estimée ou indiquer la largeur de bande nécessaire notifiée à l'IFRB) ...
22. Lieu de réception (*c*) (*d*) (en caractères majuscules d'imprimerie) où le brouillage a été détecté ...
23. Certificat:

Je certifie que le rapport ci-dessus donne, autant que je sache, le compte rendu complet et exact de ce qui a eu lieu.
...
Signature (*j*) ... Date ...

Indications pour remplir ce formulaire

(*a*) Chaque rapport ne fait mention que d'une seule station (voir la note 6). Il doit être envoyé en double exemplaire et, si possible, dactylographié s'il est envoyé par lettre. Il peut être également envoyé sous forme de télégramme.

(*b*) La classe de l'émission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par des tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

---

(1) La classe de l'émission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par les tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

(*c*) Dans le cas où il s'agit d'une station fixe, terrestre ou terrienne, la position doit être indiquée en latitude et longitude (Greenwich), et en cas d'impossibilité, la zone d'opération doit être indiquée.

(*d*) Dans les cas de stations de navire ou d'aéronef, la position doit être exprimée en latitude et longitude (Greenwich), ou par un relèvement vrai en degrés, et la distance em milles marins ou en kilomètres par rapport à quelque lieu bien connu. En cas d'impossibilité la zone d'opération doit être indiquée.

(*e*) Dans le cas de stations spatiales, donner des renseignements sur l'orbite.

(*f*) Si les deux stations en communication enfreignent le Règlement, un rapport est dressée séparément pour chacune de ces stations.

(*g*) L'heure doit être exprimée en Temps universel coordonné (UTC) par un groupe de quatre chiffres (00.00 à 23.59). Si l'infraction se prolongue ou se répète, les dates et les heures doivent être indiquées.

(*h*) Un rapport séparé est exigé pour chacune des irrégularités ou des infractions, à moins qu'elles se répètent dans une courte période.

(*i*) Ces renseignements n'ont à être fournis que dans le cas d'une plainte en brouillage.

(*j*) Ce rapport doit être signé par l'opérateur qui a relevé l'infraction et contresigné par le commandant du navire ou la personne responsable de l'aéronef ou le chef de la station, lorsqu'il s'agit d'une infraction relevée par une station du service mobile. Lorsque le rapport émane d'un bureau centralisateur ou d'un service d'inspection, il doit être signé par le chef de ce bureau ou de ce service et contresigné par le fonctionnaire de l'administration qui le transmet.

Pour l'usage exclusif de l'administration

1. Compagnie ayant le contrôle de l'installation de la station contre laquelle la plainte est portée ...
2. Nom de l'opérateur de la station tenu pour responsable de l'irrégularité ou de l'infraction aux Règlements ...
3. Mesure prise ...

MOD **AP8**

APPENDICE 23

Rapport sur un brouillage préjudiciable

(Voir l'article 22)

Caractéristiques de la station brouilleuse:

a) Nom ou indicatif d'appel ou autres moyens d'identification ...
b) Fréquence mesurée ... Date ...
Heure (UTC) ...
c) Classe de l'émission (*a*) ...
d) Largeur de bande (indiquer si elle a été mesurée ou estimée) ...
e) Valeur du champ ou de la puissance surfacique mesurés (*b*) ...
Date ...
Heure(UTC) ...
f) Polarisation observée ...
g) Classe de la station et nature du service ...
h) Emplacement/position/zone/relèvement (QTE) ...
i) Emplacement du centre qui a effectué les mesures ci-dessus ...

Caractéristiques de la station dont l'émission est brouillée:

j) Nom ou indicatif d'appel ou autres moyens d'identification ...
k) Fréquence assignée ...
l) Fréquence mesurée ... Date ...
Heure (UTC) ...
m) Classe de l'émission (*a*) ...
n) Largeur de bande (indiquer si elle a été ou estimée ou indiquer la largeur de bande nécessaire notifiée à l'IFRB) ...
o) Emplacement/position/zone ...
p) Emplacement du centre qui a effectué les mesures ci-dessus ...

Renseignements fournis par la station de réception qui a constaté le brouillage:

q) Nom de la station ...
r) Emplacement/position/zone ...
s) Dates et heures (UTC) du brouillage préjudiciable ...
t) Relèvement (QTE) ou autres détails ...
u) Nature du brouillage ...
v) Champ ou puissance surfacique de l'émission désirée à la station de réception subissant le brouillage (*b*) ...
Date ...
Heure (UTC) ...
w) Polarisation de l'antenne de réception ou polarisation observée ...
x) Mesures à prendre ...

Note. — Par souci de commodité et de brièveté, les rapports télégraphiques seront conformes au modèle ci-dessus; on utilisera, dans l'ordre où elles sont énumérées ci-dessus, les lettres désignant chacune des rubriques au lieu de ces rubriques elles-mêmes, mais seulement celles pour lesquelles existent des informations disponibles. Néanmoins, ce rapport doit contenir les informations suffisantes pour permettre à l'administration qui le reçoit d'entreprendre l'enquête appropriée.

(*a*) La classe de l'emission comprend les caractéristiques fondamentales contenues dans l'article 4 et, si possible, les caractéristiques supplémentaires contenues dans l'appendice 6. Les symboles des caractéristiques qui ne peuvent être déterminées sont remplacés par des tirets. Toutefois, en cas d'incertitude pour la classification d'une station entre modulation de fréquence ou modulation de phase, le symbole de modulation de fréquence (F) est utilisé.

(*b*) Lorsque ces mesures ne sont pas possibles, la force du signal selon l'échelle QSA devrait être indiquée.

NOC AP16

APPENDICE 24

Table d'épellation des lettres et des chiffres

(Voir les articles 27 et 65)

1. Lorsqu'il est nécessaire d'épeler des indicatifs d'appel, des abréviations réglementaires ou des mots, on utilise la table d'épellation des lettres ci-dessous:

Lettre à transmettre	Mot de code	Prononciation du mot de code (a)
A	Alfa	AL FAH
B	Bravo	BRA VO
C	Charlie	TCHAH LI ou CHAR LI
D	Delta	DEL TAH
E	Echo	ÈK O
F	Foxtrot	FOX TROTT
G	Golf	GOLF
H	Hotel	HO TÈLL
I	India	IN DI AH
J	Juliett	DJOU LI ÈTT
K	Kilo	KI LO
L	Lima	LI MAH
M	Mike	MA ÏK
N	November	NO VÈMM BER
O	Oscar	OSS KAR
P	Papa	PAH PAH
Q	Quebec	KÉ BEK
R	Romeo	RO MI O
S	Sierra	SI ER RAH
T	Tango	TANG GO
U	Uniform	YOU NI FORM ou *OU* NI FORM
V	Victor	VIK TAR
W	Whiskey	OUISS KI
X	X-ray	EKSS RÉ
Y	Yankee	YANG KI
Z	Zoulou	ZOU LOU

(a) Les syllabes accentuées sont soulignées.

2. Lorsqu'il est nécessaire d'épeler des signes des chiffres ou de signes on utilise la table ci-dessous:

Chiffre ou signe à transmettre	Mot de code	Prononciation du mot de code (a)
0	NADAZERO	NAH-DAH-ZE-ROH
1	UNAONE	OU-NAH-OUANN
2	BISSOTWO	BIS-SO-TOU
3	TERRATHREE	TÉ-RAH-TRI
4	KARTEFOUR	KAR-TE-FO-EUR
5	PANTAFIVE	PAN-TAH-FA-ÏF
6	SOXISIX	SOK-SI-SIKS
7	SETTESEVEN	SE-TE-SEV'N
8	OKTOEIGHT	OK-TOH-EÏT
9	NOVENINE	NO-VE-NAÏ-NEV
Virgule décimale	DECIMAL	DE-SI-MAL
Point	STOP	STOP

(a) Toutes les syllabes sont pareillement accentuées.

3. Cependant les stations d'un même pays peuvent utiliser, lorsqu'elles communiquent entre elles, une autre table établie par l'administration dont elles dépendent.

NOC AP25

APPENDICE 25 MAR2

Plan d'allotissement de fréquence aux stations côtières radiotéléphoniques fonctionnant dans les bandes exclusives du service mobile maritime entre 4000 et 23 000 kHz

(Voir les numéros 4198 et 4212 du Règlement des radiocommunications et l'appendice 16)

Observation. — Note du Secrétaire général: cet appendice n'est pas reproduit dans les présents Actes finals.

NOC **AP26** APPENDICE 26 Aer

Plan d'allotissement de fréquences pour le service mobile aéronautique et renseignements connexes

Cet appendice au Règlement des radiocommunications (Genève, 1959) a été publié dans un fascicule à part. Concernant le service mobile aéronautique (R) un Plan révisé a été adopté en 1966 par la Conférence aéronautique; il est contenu dans l'appendice **27**. *Mais le Plan adopté en 1959 pour le service mobile aéronautique (OR) demeure en vigueur, de sorte que c'est à l'appendice* **26** *qu'il y a lieu de se référer en ce qui concerne ce service. Des exemplaires de l'appendice* **26** *(édition de 1959) sont disponibles au Secrétariat général de l'UIT.*

NOC **AP27** APPENDICE 27 Aer (1)

MOD **Plan d'allotissement de fréquences pour le service mobile aéronautique (R) et renseignements connexes entre 2850 kHz et 17 970 kHz**

Cet appendice est publié dans un fascicule à part. Il contient exclusivement des dispositions concernant le service mobile aéronautique (R), qui remplacent les dispositions concernant ce service qui sont contenues dans l'appendice **26.** *C'est donc exclusivement aux dispositions de l'appendice* **27** *qu'il y a lieu de se référer en ce qui concerne le service mobile aéronautique (R).*

MOD **AP27 Aer2** APPENDICE 27 Aer2 (1)

Plan d'allotissement de fréquences pour le service mobile aéronautique (R) et renseignements connexes entre 2850 kHz et 22 000 kHz

Observation. — Voir l'annexe à la Résolution **404.**

MOD **AP28** APPENDICE 28

Méthode de détermination de la zone de coordination d'une station terrienne dans les bandes de fréquences comprises entre 1 GHz et 40 GHz partagées entre services de radicommunication spatiale et de radiocommunication de Terre

1. *Objectifs.*

On détermine la zone de coordination (voir le numéro **165**) en calculant tous les azimuts à partir de la station terrienne, les distances de coordination (voir le numéro **167**) et en traçant à l'échelle sur une carte appropriée le contour de coordination (voir le numéro **166**).

In faut souligner que l'existence ou l'installation d'une station de Terre à l'intérieur de la zone de coordination d'une station terrienne n'empêche pas forcément le bon fonctionnement de la station terrienne ou de cette station de Terre, car méthode est fondée su les hypothèses le plus défavorables pour ce qui concerne les brouillages.

Pour déterminer la zone de coordination, ou peut envisager deux cas:

1) Celui de la station terrienne à l'émission (susceptible de brouiller des stations de Terre);
2) Celui de la station terrienne à la réception (susceptible d'être brouillée par des stations de Terre).

Quand une station terrienne est destinée à émettre diverses classes d'émission, les paramètres de station terrienne à utiliser pour la détermination du contour de coordination doivent être ceux qui conduisent aux distances de coordination le plus grandes, pour chaque faisceau d'antenne de station terrienne et dans chaque bande de fréquences attribuée que la station terrienne se propose d'utiliser en partage avec les services de Terre.

Quand une station terrienne est destinée à recevoir diverses classes d'émission, les paramètres de station terrienne à utiliser pour la détermination du contour de coordination doivent être ceux qui conduisent aux distances de coordination les plus grandes, pour chaque faisceau d'antenne de station terrienne et dans chaque bande de fréquences attribuée que la station terrienne se propose d'utiliser en partage avec les services de Terre sauf dans le cas où l'administration responsable de la station terrienne constate qu'un contour de coordination plus petit premettrait d'assurer la protection adéquate de toutes les émissions destinées à être reçues par la station terrienne. Lorsque la détermination d'un tel contour de coordination diffère de la procédure décrite dans le présent appendice, l'administration notificatrice doit indiquer avec précision la nature de cette différence.

Si une administration décide ultérieurement de protéger sa station terrienne de réception en notifiant un contour de coordination plus grand que celui qu'elle avait déterminé selon une méthode différente de celle que décrit le présent appendice, elle doit coordonner à nouveau la station terrienne. Toute protection plus grande résultant de cette nouvelle coordination doit prendre effet à partie de la date de publication de la fiche de notification dans la partie II de la circulaire hebdomadaire de l'IFRB.

---

(1) Jusqu'au 31 janvier 1983 à 23.59 UTC puis remplacé par l'appendice **27 Aer2.**

Le présent appendice présente des méthodes permetttant le détermination graphique ou informatique de la zone de coordination.

Il est suggéré de tracer, en plus du contour de coordination, des contours auxiliares fondés sur des hypothèses moins défavorables que celles utilisées pour la détermination du contour de coordination. Ces contours auxiliaires peuvent être utilisés au cours de négociations ultérieures entre les administrations intéressées en vue d'èliminer de ces négociations (sans qu'il soit nécessaire d'avoir recours à des calculs plus précis) le cas de certaines stations existantes ou en project situées à l'intérieur de la zone de coordination. La méthode à appliquer pour obtenir et utiliser ces contours auxiliaires est expliquée dans l'annexe I au présent appendice.

2. *Considérations générales.*

2.1. *Notion d'affaiblissement de transmission minimal admissible.*

La détermination de la distance de coordination — distance à partie d'une station terrienne au-delà de laquelle on peut considérer comme négligeable le brouillage causé ou subi par une station de Terre — repose sur le postulat que l'affaiblissement du signal brouilleur augmente e régulièrement en fonction de la distance.

La valeur de l'affaiblissement requis entre un émetteur brouillIer et un récepteur brouillé est donnée par l'affaiblissement de transmission minimal admissible (dB) pendant p % du temps (valeur que l'affaiblissement de transmision prévu doit dépasser pendant $(100 - p)$ % du temps):

$$L(p) = P_{t'} - P_r(p) \qquad (1)$$

dans cette formule:

$P_{t'}$ (1) — niveau de puissance d'émission maximale disponible (en dBW) dans la largeur de bande de référence, à l'entrée de l'antenne d'une station brouillleuse;

$P_r(p)$ — niveau admissible d'une émission brouilleuse (en dBW) dans la largeur de bande de référence, qui ne doit pas être dépassé pendant plus de p % du temps à la sortie de l'antenne de réception d'une station brouillé, lorsque l'émission brouillleuse a pour origine une source unique.

$P_{t'}$ et $P_r(p)$ sont définis pour la même largeur de bande radioéléctrique (largeur de bande de référence) et $L(p)$ et $P_r(p)$ sont définis pour le même pourcentage de temps, imposé par les critères de qualité du système brouillé.

Pour les faibles pourcentages de temps dont il est question ici, il est nécessaire de distinguer entre deux mécanismes d'affaiblissement nettement différents:

L'affaiblissement de signaux sujets à une propagation troposphérique suivant des trajects voisins du grand cercle: mode (1), voir le § 3;

L'affaiblissement de signaux sujets à la diffusion par des hydrométéores; mode (2), voir le § 4.

2.2. *Notion d'affablissement de transmission de réference minimal admissible.*

Dans le cas du mode de propagation (1), l'affaiblissement de transmission est défini sous forme de paramètres séparables, à savoir un affaiblissement de transmission de référence (c'est-à-dire entre antennes isotropes) et les gains effectifs des antennes à chaque extrémité du traject de brouillage. L'affaiblissement de transmission de référence minimal admissible peut s'exprimer par:

$$L_b(p) = P_{t'} + G_{t'} + G_r - P_r(p) \qquad (2)$$

où:

$L_b(p)$ — affaiblissementd de transmission de référence minimal admissible (dB) pendant p % du temps [valeur que l'affaiblissement de transmission de référence prévu doit dépasser pendant $(100 - p)$ % du temps];

$G_{t'}$ — gain isotrope (dB) de l'antenne d'émission de la station brouilleuse. Si la station brouilleuse est une station terrienne, il s'agit ici du gain de l'antenne vers l'horizon physique dans l'azimut considéré; dans le cas d'une station de Terre, on utilisera le gain maximal de l'antenne de cette station;

G_r — gain isotrope (dB) de l'antenne de réception de la station brouillée. Si la station brouillée est une station terrienne, il s'agit ici du gain vers l'horizon physique dans l'azimut considéré; dans le cas d'une station de Terre, on utilisera le gain maximal de l'antenne de cette station.

L'annexe II décrit des méthodes numérique et graphique permettant de déterminer l'angle formé par les faisceau principal de l'antenne de la station terrienne et l'horizon physique ainsi que le gain de l'antenne en direction de l'horizon, en fonction de l'angle azimutal.

Lorsq'il s'agit du cas de satellites non géostationnaires celui des deux gains $G_{t'}$ et G_r qui se rapporte à une antenne de station terrienne varie avec le temps. Dans ce cas, on doit employer un gain équivalent (2) d'antenne de station terrienne,

---

(1) Les symboles munis d'un signe prime se rapportent aux caractéristiques de la station brouilleuse.

(2) Ce gain équivalent ne doit pas être employé quand l'antenne de station terrienne reste pointée dans la même direction pendant des durées appréciables (par exemple, quand elle travaille avec des sondes spatiales ou des satellites presque géostationnaires).

invariable dans le temps, et qui soit égal à la plus grande des deux quantités; le gain maximal de l'antenne en direction de l'horizon, diminué de 10 dB, le gain de cette antenne en direction de l'horizon, diminué de 10 dB, le gain de cete antenne en direction de l'horizon qui n'est pas dépassé pendant plus de 10 % du temps (si on le connaît).

2.3. *Détermination et tabulation des paramètres de brouillage.*

2.3.1. *Niveau admissible de l'émission brouilleuse.*

Le niveau admissible de l'émission brouilleuse (dBW) dans la largeur de bande de référence, qui ne doit pas être dépassé pendant plus de p % du temps à la sortie de l'antenne de réception d'une station susceptible d'être brouillé, sous l'effect de chaque source de brouillage, est donnée par la relation générale:

$$P_r(p) = 10\ log\ (kT_e\ B) + J + M\ (p) — W \tag{3}$$

où:

$$M\ (p) = M\ (p_0 / n) = M_0\ (p_0) \tag{4}$$

avec:

k — constante de Boltzmann $1{,}38 \times 10^{-23}$ J / K;
T_e — température de bruit thermique du système de réception (K), à la sortie de l'antenne de réception (voir *note 1*);
B — largeur de bande de référence (Hz) (largeur de bande intéressant le système brouillé, dans laquelle on peut déterminer la valeur moyenne de la puissance de l'émission brouilleuse);
J — valeur à long terme (20 % du temps) du rapport (dB) de la puissance admissible de l'émission brouilleuse à la puissance de bruit thermique du système de réception, rappportées aux bornes de sortie de l'antenne de réception (voir *note 2*);
P_0 — pourcentage du temps pendant lequel le brouillage provenant de toutes les sources peut dépasser la valeur admissible;
n — nombre des cas de brouillage supposés non corrélés, auquel on s'attend;
p — pourcentage du temps pendant lequel le brouillage provenant d'une source peut dépasser la valeur admissible; du fair de la non-simultanéité probable des cas de brouillage $p = p_0 / n$;
$M_0\ (p_0)$ — rapport (dB) entre les puissances admissibles de l'émission brouilleuse pour tous les cas de brouillage, d'une part pendant p_0 %, d'autre part pendant 20 % du temps (voir *note 3*);
$M\ (p)$ — rapport (dB) entre les puissances admissibles de l'émission brouilleuse, d'une part pendant p % du temps et pour un cas de brouillage, d'autre pendant 20 % du temps et pour tous les cas de brouillage;
W — facteur d'équivalence (dB) permettant d'établir une relation entre le brouillage provenant d'émission brouilleuses et celui provoqué par l'introdution d'un bruit thermique supplémentaire de même puissance dans la largeur de bande de référence. Ce facteur est positif dans les cas où les émissions brouilleuses causent davantage de dégradation que le bruit thermique (voir *note 4*).

Les tableaux I et II donnent les valeurs des paramètres ci-dessus.

Dans certains cas, une administration peut avoir des raisons de penser que, pour sa station terrienne, il peut être justifié d'adopter des valeurs qui diffèrent de celles qui sont indiquées dans le tableau II. Il convient d'attirer l'atention sur le fait que, pour certains systèmes déterminées, il peut être nécessaire de modifier les largeurs de bandes B ou, par exemple dans le cas des systèmes à assignation en fonction de la demande les pourcentages de temps p et p_0 par rapport aux valeurs indiquées dans le tableau ii. Le § 2.3.2 fournit d'autres renseignements à ce sujet.

Note 1. — La température de bruit du système de réception, en kelvins rapportée aux bornes de sortie de l'antenne de réception, peut être déterminer d'aprés la formule:

$$T_e — T_a + (e — 1)\ 290 + eT_r \tag{5a}$$

où:

T_a — température de bruit (K) produite par l'antenne de réception;
e — valeur numérique de l'affaiblissement sur la ligne de transmisison (par exemple un guide d'ondes) entre l'antenne et les bornes d'entrée du récepteur;
T_r — température de bruit (K), y compris la contribution des étages successifs, rapportée aux bornes d'entrée du récepteur.

Pour les récepteurs de faisceaux hertziens et lorsque l'affaiblisement dans le guide d'ondes d'une station terrienne de réception n'est pas connu, on utilisera une valeur de e égale à 1,0.

Note 2. — Le facteur J (dB) est défini comme le rapport de la puissance totale admissible à long terme d'émissions brouilleuses (pendant 20 % du temps) dans le système, à la puissance de bruit radioélectrique thermique à long terme dans un seul récepteur. Lorsqu'on calcule le facteur J, on considère que l'émissions brouilleuse a une densité spectrale de puissance uniforme et on tient compte de la forme réelle de son spectre au moyen du facteur W (voir ci-dessous). Par exemple, dans un circuit fictif de référence pour faisceaux hertizens à 50 bonds, la puissance totale admissible de brouillage cumulé est de 1000 pW0p (Avis 357-3 du CCIR) et la puissance moyenne de bruit thermique par bond peut être supposée de 25 pW0p. En conséquence, puisque, dan un système à multiplexage par répartition en fréquence et modulation de fréquence (MRF/MF), le rapport entre une puissance de bruit de brouillage uniforme et le bruit thermique dans la même bande de référence est le même avant et aprés démodulation, J est donnée par la rapport 1000/25, sout 16 dB si on l'exprime en décibels. Dans un système du service fixe par satellite, la puissance totale de brouillage admissible est aussi de 1000 pW0p (Avis 356-4 du CCIR), alors que la contribution de bruit thermique de la liaison descendante ne doit pas dépasser 7000 pW0p, ce qui entraine $J \geq -8{,}5$ dB.

Dans les systèmes numériques, on spécifie et en mesure le brouillage par le taux d'erreur sur les bits ou par l'argumentation admissible de ce taux d'erreur. Si l'argumentation du taux d'erreur sur les bits est cumulative dans un circuit de référence comprenant des liaisons en tandem, la puissance radioélectrique des émissions brouilleuses qui est la cause de cette augmentation du taux d'erreur sur les bits n'est pas cumulative, car le taux d'erreur sur les bits n'est pas une fonction linéaire du niveau de puissance radioélectrique des émissions brouilleuses. Il peut donc être nécessaire de protéger séparément chaque récepteur. Dans les faisceaux hertziens numériques fonctionnnant au-dessus de 10 GHz et pour tous les systèmes numériques à satellites, la puissance de brouillage à long terme peut être du même ordre de grandeur que le bruit thermique à long terme, d'où $J = 0$ dB. Dans les faisceaux hertziens numériques fonctionnant au-dessous de 10 GHz, il convient que la puissance de brouillage à long terme ne réduise pas de plus d'environ 1 dB la marge d'évanouissement du récepteur. Ainsi il convient que la puissance de brouillage à long terme soit inférieure d'environ 6 dB à la puissance de bruit thermique, d'où $J = -6$ dB.

Note 3. — M_0 (p_0) est la «marge de brouillage» (dB) entre les puissances admissibles à court terme (p_0 %) et à long terme (20 %) d'une émission brouilleuse.

Dans le cas des système analogiques de faisceaux hertziens et de ceux du service fixe par satellite entre 1 GHz et 15 GHz, cette marge est égale au rapport (dB) entre 50 000 et 1000 pW0p, soit 17 dB.

Dans les cas des systèmes numériques et dans la plupart des régions du monde, on peut, dans beaucoup de cas, définir utilement les caractéristiques d'un système fonctionnant aux fréquences supérieures à 10 GHz par le pourcentage de temps p_0 pendant lequel le niveau du signal utile peut descendre en dessous du seil de fonctinnement, spécifié par un taux d'erreur sur les bits donnée. Pendant le fonctionnement sans évanouissement du système, le niveau du signal utile dépasse le seuil d'une marge M_s qui dépend de la zone hydrométéorologique dans laquelle la station fonctionne. Plus cette marge est grande, plus est grande l'élevation du niveau de l'émission brouilleuse qui dégraderait le système jusqu'au niveau du seuil. Comme première approximation, on suppose que, pour de faibles pourcentages du temps (de l'ordre de 0,001 % à 0,003 %), le niveau tólerable des émissions brouilleuses est égal, en puissance, au bruit thermique qui existe à l'entrée du démodulateur en presénce d'évanouissement. On peut donc supposer, que, pour les systèmes numériques fonctionnant au-dessus de 10 GHz, M_0 (tableaux I et II) est égal à la marge d'evanouissement M_s du système. Dans les faisceaux hertziens numériques fonctionnant au-dessous de 10 GHz, on suppose que l'on peut admettre que la puissance à court terme d'une émission brouilleuse dépasse la puissance à long terme de cette émission d'une quantité égale à la marge d'évanouissement du système moins J, c'est-à-dire 41 dB, si $J = -6$ dB.

Note 4. — Le facteur W (dB) est le rapport de la puissance de bruit thermique radioélectrique à la puissance de l'émission brouilleuse dans la largeur de bande de référence, lorsqu'elles produisent toutes deux le même brouillage après démodulation (dans un système MRF/MF, on exprimerait que les puissances de bruit sont identiques dans une voie téléphonique et, dans un système numérique que les probabilités d'erreur sur les bits sont identiques). Pour les signaux à modulation de fréquence, ce facteur est défini comme suit:

$$W = 10 \log \left\{ \frac{\text{Puissance de bruit thermique à la sortie de l'antenne de réception dans la largeur de bande de référence}}{\text{Puissance de L'émission brouilleuse à la sortie de l'antenne de réception aux fréquences radioélectriques dans la largeur de bande de référence}} \times \frac{\text{Puissance de brouillage dans le système de réception après démodulation}}{\text{Puissance de bruit thermique dans le système de réception après démodulation}} \right\} \quad (5b)$$

Le facteur W dépend des caractéristiques du signal utile et du signal brouilleur. Cependant, pour éviter d'avoir à considérer une large gamme de caractéristiques, on a déterminé pour ce facteur une valeur maximale. Quand le signal utile est modulé en fréquence, et pour des taux de modulation efficaces supérieures à l'unité, W ne dépasse pas 4 dB. En pareil cas, on fixera, par prudence, à 4 dB la valeur du facteur W dans la relation (3) indépendamment des caractéristiques du signal brouilleur. Pour des systèmes MRF/MF à faible indice, une largeur de bande de référence très étroite (4 kHz) implique pour W des valeurs ne dépassant pas 0 dB. En pareil cas, on fixera, par prudence, à 0 dB la valeur du facteur W dans la relation (3), indépendamment des caractéristiques du signal brouilleur.

Quand le signal utile est numérique, W est habituellement inférieur ou égal à 0 dB, quelles que soient les caractéristiques du signal brouilleur.

2.3.2. *Paramètres de coordination pour les émissions à bande très étroite (station terrienne de réception).*

2.3.2.1. *Généralités.*

Dans le cas d'une station terrienne qui reçoit à la fois des émissions à large bande et des émissons à bande très étroite (par exemple dans les systèmes à une seule voie par porteuse, SPPC), il peut être souhaitable de tracer deux contours de coordination séparés, l'un pour les émissions à bande étroite et l'autre pour les émissions à large bande, en indiquant spécifiquement les parties de bande restreintes utilisées pour les émissions à bande très étroite.

2.3.2.2. *Emissions à bande étroite avec préassignation.*

Pour ces émissions, il convient de remplacer la valeur de la largeur de bande de référence par celle de la largeur de bande occupée par une émission à bande étroite du type considéré.

2.3.2.3. *Emissions à bande étroite à assignation en fonction de la demande.*

Pour ces émissions, il peut être utile en outre de tenir compte de la probabilité réduite pour qu'une voie donnée subisse des brouillages au moment même où elle est choisie en vue d'être utilisée dans une station terrienne.

Les administrations doivent fournir toutes les données techniques pertinentes utilisées pour la détermination du (des) contour(s) de coordination pour de telles émissions.

3. *Détermination de la distance de coordination pour le mode de propagation (1) — Mécanismes de propagation le long du grand cercle:*

3.1. Zones radioclimatiques.

Pour calculer la distance de coordination dans le cas du mode de propagation (1), on divise la Terre en trois grandes zones radioclimatiques, les Zones A, B et C, qui se définissent comme suit:

Zone A — terres;

Zone B — mers, océans et grandes étendues d'eau (comme critère, une étendue d'eau pouvant couvrir un cercle de 100 km de diamètre), à des latitudes supérieures à 23° 30' N ou S, à l'exception de la mer Noire et de la mer Méditerranée;

Zone C — mers, océans et grandes étendues d'eau (comme critère, une étendue d'eau pouvant couvrir un cercle de 100 km de diamètre), à des latitudes inférieures à 23° 30' N ou S, y compris la mer Noire et de la mer Méditerranée.

3.2. *Calcul de la distance de coordination sur des trajects compris dans une seule zone radioclimatique.*

3.2.1. *Généralités.*

La formule (2) donne la valeur de l'affaiblissement de transmission de référence minimal admissible L_b (p) pendant p % du temps. A partir de cette valeur, on calcule la distance de coordination dans chaque zone radioclimatique en utilisant l'une ou l'autre des deux méthodes suivantes: la première, décrite au § 3.2.2, est une méthode numérique qui fait appel à plusieurs formules mathématiques et qui est surtout conçue pour être utilisée avec un ordinateur; la seconde, décrite au § 3.2.3, est une méthode graphique.

Lorsque la distance déterminée à l'aide des méthodes respectivements décrites aux § 3.2.2 ou 3.2.3 tient entièrement dans les limites de la zone radioclimatique à laquelle appartient la station terrienne cette distance est considérée comme la distance effective de coordination pour le mode de propagation (1). Si cette distance ne tient pas dans les limites d'une seule zone radioclimatique, la distance globale de coordination se calcule en appliquant la méthode décrite ai § 3.3.

3.2.2. *Méthode numérique.*

La relation entre l'affaiblissement de transmission de référence minimal admissible et la distance de coordination s'exprime par la formule:

$$L_h\,(p) - A_0 + Bd_1 + A_h \tag{6}$$

où:

$A_0 = 120 + 20\ log\ f$ (dB);
β — taux d'affaiblissement (dB/km);
d_1 — distance de coordination pour le mode de propagation (1) (km);
A_h — correction due à l'angle de l'horizon (dB);
f — fréquence (GHz);
A_h — se calcule comme suit:

$$A_h\ 20 \log\ (1 + 4{,}5 f^{1/2}\varepsilon) + f^{1/3} \text{ pour } \varepsilon > 0° \ (^1) \tag{7a}$$

$$A_h = 8\varepsilon \text{ pour } -0{,}5° \le \varepsilon \le 0° \tag{7b}$$

$$A_h = -4 \text{ pour } \varepsilon \le -0{,}5° \tag{7c}$$

où ε: angle de l'horizon (2) (degrés).

A partir de la formule (6), la distance de coordination d_1 se calcule comme suit:

$$d_1 = (L_b\,(p) - A_0 - A_h)/\beta \tag{8}$$

La valeur de β dépend de la zone radioclimatique et du pourcentage de temps p; elle est répresentée comme la somme de trois éléments:

$$\beta = \beta_z + \beta_v + \beta_o \tag{9}$$

où:

β_z — taux d'affaiblissement (dB/km) dû à tous les effets, sauf celui des gaz atmophériques;
β_v — taux d'affaiblissement (dB/km) dû à la vapeur d'eau atmophérique;
β_o — taux d'affaiblissement (dB/km) dû à l'oxygène.

β, dépend de la zone radioclimatique, de la fréquence et du pourcentage de temps. Sa valeur est donnée par les formules:

pour la Zone A:

$$\beta_{zA} = 0{,}154\ (1 + 3{,}05\ log\ f)^{0.4}\ (0{,}9028 + 0{,}0486\ log\ p)^2 \tag{10}$$

---

(1) On doit utiliser l'équation (7a) et donc la fig. 1 avec précaution aux fréquences supérieures à environ 20 GHz ou aux angles de l'horizon supérieures à 5° jusqu'à ce que le CCIR ait entrepris des études sur ce sujet conformément à la Rèsolution 60.

(2) On définit ici «l'angle de l'horizon» comme étant l'angle vu du centre de l'antenne de la station terrienne, formé par le plan horizontal et un rayon qui passe sous incidence rasante à l'horizon physique visible dans la direction considérée.

pour las Zones B et C:

$$\beta_{zB} = \beta_{zC} = (0{,}272 + 0{,}047\ log\ p)^2 \tag{11}$$

β_v dépend de la fréquence et de la densité de la vapeur d'eau atmosphérique (β_v est négligeable si $f < 15$ GHz). Sa valeur est donnée par la formule:

$$\beta_v = 3{,}5 \times 10^{-4}\ \rho \left[\frac{1}{\left(1 - \frac{22{,}3}{f}\right)^2 + \frac{9}{f^2}} + \frac{1}{\left(1 - \frac{22{,}3}{f}\right)^2} \right] + 3 \times 10\text{-}6\ \rho f^2 \tag{12}$$

où ρ représente la densité de la vapeur d'eau (g/m³) et dépend de la zone radioclimatique. Il y a lieu d'utiliser les valeurs suivantes:

Zone A, $\rho = 1$ g/m³;
Zone B, $\rho = 2$ g/m³;
Zone C, $\rho = 5$ g/m³.

β_o dépend de la fréquence, sa valeur est donnée par la formule:

$$\beta_o = 68 \times 10^{-4} \times f^2 \left\{ \frac{1}{(60 - f)^2} + \frac{1}{(60 + f)^2} + \frac{1}{(f^2 + 0{,}36} \right\} \tag{13}$$

On calcule donc la distance de coordination dans la Zone A, pour la fréquence, le pourcentage de temps et l'angle de l'horizon appropriés, en appliquant les formules (7), (8), (9), (10), (12) et (13). D'une façon similaire, on calcule la distance de coordination dans la Zone B ou dans la Zone C au moyen des formules (7), (8), (9), (11), (12) et (13).

3.3.2. *Méthode graphique.*

Les formules du § 3.2.2 ont été converties sous forme de courbes, ce qui constitue la seconde méthode d'évaluation de la distance de coordination pour le mode de propagation (1). Il est à noter que la méthode ghaphique peut se substituer à la méthode du § 3.2.2 et qu'il appartient à chaque administration d'utiliser la méthode qui lui paraît la plus commode.

L'affaiblissement de transmission de référence minimal admissible L_b (p) se calcule à l'aide de la formule (2). On déduit l'«affaiblissement de coordination», L_l, en soustrayant de l'affaiblissement de transmission de référence minimal admissible de la correction A_h due à l'angle de l'horizon:

$$L_l = L_b\ (p) - A_h \tag{14}$$

Les valeurs de la correction due à l'angle de l'horizon se déduisent de la figure 1, pour la fréquence et l'angle de l'horizon appropriés (1).

On détermine de la façon suivante la distance de coordination dans chaque zone radioclimatique. Prenons d'abord la Zone A: la distance de coordination pendant 0,01 % du temps, d_A (0,01), est tirée de la figure 2 en se fondant sur les valeurs appropriées de l'affaiblissement de coordination L_l et la fréquence. Pour p % du temps, la distance de coordination en Zone A s'obtient alors en multipliant la distance associée à 0,01 % du temps par le facteur Δp_A que donne la fig. 3.

$$d_A = d_A\ (0{,}01) \times \Delta p_A \tag{15}$$

D'une manière similaire, la distance de coordination dans la Zone B est fondée sur les valeurs de d_B (0,01) et de Δp_{BC} respectivement tirées des figures 4 et 3; la distance de coordination, dan la Zone C est fondée sur les valeurs de d_c (0,01) et de Δp_{BC} respectivement tirées des figures 5 et 3.

3.3. *Trajets mixtes.*

Si la distance à calculer s'étend sur plusieurs zones radioclimatiques (trajet mixte), la prévision se fait-de la manière suivante:

Si l'on désigne par les indices *i, j, k* ... les sections successives du trajet dans des zones différentes, on a:

$$L_h\ (p) - A_0 - A_h = \beta_i\ d_i \tag{16}$$

où β_i est la taux d'affaiblissement dans le première zone (i).

Si d est supérieur à la distance D_i dans a première zone (i) pour la direction considérée, le trajet se prolonge dans la deuxième zone (j) et on peut écrire:

$$L_b\ (p) - A_0 - A_h - \beta_i D_i = \beta_j d_j \tag{17}$$

(1) On définit ici «l'angle de l'horizon» commne étant l'angle vu du centre de l'antenne de la station terrienne, formé par le plan horizontal et un rayon qui passe sous incidence rasante à l'horizon physique visible dans la direction considérée.

d'où l'on tire d_j. Si d_j est supérieur à la longeur D_j du traject dans la deuxième zone (j), on peut écrire:

$$L_h(p) - A_0 - A_h - \beta_i D_i - \beta_j D_j = \beta_k d_k \quad (18)$$

d'ou l'on tire d_k. La méthode peut être répétée aussi souvent qu'on le désire: dans le cas considéré, la distance totale d_1 a pour expression:

$$d_1 = D_j + D_j + d_k \quad \text{(km)} \quad (19)$$

On trouvera dans l'annexe III des exemples d'application graphique ce cette méthode.

3.4. *Distance de coordination maximale pour le mode de propagation (1).*

Si, en déterminant la distance de coordination pour le mode de propagation (1), on obtient des valeurs supérieures à la valeur indiquée à la figure 6 ou dans la tableau III, la distance de coordination pour le mode de propagation (1) sera la valeur indiquée à la figure 6 ou dans la tableau III. Dans le cas de trajects mixtes, les valeurs à considérer sont celles indiquées pour les Zones B ou C, selon le cas. Dans le cas de trajects mixtes avec plusieurs portions dans la Zone A, la distance totale dans la Zone A ne doit pas dépasser la valeur indiquée pour cette Zone à la figure 6 ou dans le tableau III.

4. *Détermination du contour de coordination pour le mode de propagation (2) — Diffusion par les hydrométéores.*

Dans le cas du mécanisme de propagation par diffusion par les hydrométérores (pluie), le contour de coordination est déterminé au moyen d'un traject dont la configuration est sensiblement différente de celle qui intervient dans les mécanismes de la propagation sur l'arc de grand cercle. En première approximation, la pluie entraîne une diffusion isotrope de l'énergie de telle sorte que le brouillage peut se manisfester dans de très grands angles de diffusion et dans des intersections de faisceaux éloignés de l'arc de grand cercle.

4.1. *Affaiblissement de transmission normalisé L_2 (0,01).*

Pour déterminer le contour de coordination correspondant à la diffusion par la pluie, il faut calculer l'«affaiblissement de transmission normalisé» en appliquant la formule suivante:

$$L_2(0{,}01) = P_{r'} + DG - P_r(p) - F(p, f) \quad (20)$$

Dans cette formule:

ΔG — différence (dB) entre la valeur du gain maximal des antennes de stations de Terre fonctionnant dans la bande de fréquences considérée et la valeur de 42 dB. Lorsque la station terrienne est une station d'émission, ΔG est donnée par le tableau I: lorsque la station terrienne est une station de réception, ΔG est donnée par le tableau II;

$F(p, f)$ — correction (dB) à appliquer pour passer du pourcentage de 0,01 % au pourcentage de temps effectif p dans la bande de fréquences considérée (voir le figure 7).

Les autres paramètres sont définis au § 2. Pour les stations de Terre, les valeurs de $P_{r'}$ sont indiquées dans le tableau II.

4.2. *Zones hydrométéorologiques.*

La surface terrestre a été divisée en cinq zones hidrométéorologiques principales (Zones 1 à 5). Ces zones sont représentées sur la figure 8. On trouvera au tableau IV les caractéristiques climatiques de ces zones pour 0,01 % du temps.

4.3. *Calcul de la distance de diffusion par la plui d_r*

4.3.1. *Méthode numérique.*

L'affaiblissement de transmission normalisé se compose de six termes:

$$L_2(0{,}01) = A_1 - A_2 + A_3 - A_4 - A_5 + A_6 \quad (21)$$

où

$$A_1 = 157 + 20 \log d_r - 20 \log f \text{ (dB)} \quad (22)$$

où d_r est la distance de diffusion par la plui (km).

$$A_2 = 26 + 14 \log R - 5{,}88 \times 10^{-5} (d_r - 40)^2 \text{ (dB)} \quad (23)$$

où R est l'intensité de précipitation à la surface de la Terre en mm/h (tableau IV).

On prend 40 km comme distance à l'horizon de la station de Terre.

$$A_3 = 0{,}005 (f - 10)^{1{,}7} R^{0{,}4} \text{ (dB) pour } 10 < f < 40 \text{ GHz} \quad (24a)$$
$$= 0 \text{ (dB) pour } f \leq 10 \text{ GHz} \quad (24b)$$

$$A_4 = 10\ log\left[\frac{2,17}{\gamma D}\left(1 - 10^{-(\gamma D/5)}\right)\right]\ (\text{dB})\ \text{pour}\ f > 5\ \text{GHz} \quad (25a)$$

$$= 0\ (\text{dB})\ \text{pour}\ f \leq 5\ \text{GHz} \quad (25b)$$

où D est le diamètre de la cellule de précipitation en km (tableau IV) et

$$\gamma = 0,008\ R\ (f - 5)\ \text{pour}\ f > 5\ \text{GHz} \quad (26a)$$

$$= 0\ \text{pour}\ f \leq 5\ \text{GHz} \quad (26b)$$

$$A_5 = 10\ \log D\ (\text{dB}) \quad (27)$$

$$A_6 = d_o\beta_o + d_v\beta_v \quad (28)$$

où

$$d_o = 0,7\ d_r + 32\ \text{km pour}\ d_r < 340\ \text{km} \quad (29a)$$

$$= 270\ \text{km pour}\ d_r \geq 340\ \text{km} \quad (29b)$$

$$d_v = 0,7\ d_r + 32\ \text{km pour}\ d_r < 240\ \text{km} \quad (30a)$$

$$= 200\ \text{km pour}\ d_r\ 240\ \text{km} \quad (30b)$$

β_v est donné dans la formule (12), où il faut remplacer ρ par ρ_m (tableau IV).

β_o est donné dans la formule (13).

Ainsi, pour une zone hydrométéorologique donnée, on utilise les paramètres du tableau IV pour calculer la distance de diffusion par la pluie d_r, en appliquent un procédé itératif.

4.3.2. *Méthode graphique.*

Les formules du § 4.3.1 ont été converties sous forme graphique pour donner une autre méthode de détermination de la distance d_r.

Pour calculer la distance de diffusion par la pluie et pour la Zone hydrométéorologique 1, on utilise l'affaiblissement de transmission normalisé obtenu par application de la formule (20) pour la fréquence appropriée (voir la figure 9), d'où l'on déduit la distance de diffusion par la plui d_r.

Les figures 10 à 13 contiennent des courbes correspondant aux zones 2 à 5. Dans tous les cas, on choisit la zone hidrométéorologique correspondant à l'emplacement de la situation terrienne.

4.4. *Distances maximales de diffusion par la pluie.*

Si, lors de la détermination de la distance de diffusion par la pluie pour le mode de propagation (2), on aboutit à des valeurs qui dépassent la valeur appropriée indiquée dans le tableau V, on prendra pour d_r la valeur dudit tableau.

4.5. *Tracé du contour de coordination dans le cas de la diffusion par la pluie.*

En raison de la géométrie de propagation particulière à la diffusion par la pluie, le centre du contour de coordination correspondant à ce mode ne coïncide pas avec l'emplacement de la station terrienne; la distance qui les sépare est désignée par Δd.

On utilise la distance de diffusion par la pluie, d_r, ainsi que l'angle de site ε_s, du faisceau principal de l'antenne de la station terrienne pour déterminer Δd; on utilise la formule:

$$\Delta d = 5,88 \times 10^{-5}\ (d_r - 40)^2\ \text{cotg}\ \varepsilon_s\ (\text{km}) \quad (31)$$

On peut encore déterminer Δd au moyen de la figure 14.

Cette distance Δd est mésurée à partir de la station terrienne, sur une carte tracée à une échelle appropriée, dans l'azimut du faisceau principal de son antenne; on trace un cercle de rayon d_r, ayant pour centre le point ainsi obtenu. Ce cercle est le contour de coordination dans le cas de la diffusion par la pluie.

La distance de coordination dans le cas de la diffusion par la pluie, qu'on appelle d_2, est la distance comprise entre l'emplacement de la station terrienne et le contour de coordination dans l'azimut considéré.

4.6. *Absence d'effets des trajets mixtes.*

Comme le seul effet notable de la diffusion par la pluie est celui qui est produit dans la région de la station terrienne, la question des trajets mixtes ne se pose pas. On tient compte de la zone hydrométéorologique correspondant à la station terrienne ainsi que de la distance maximale appropriée de diffusion par la pluie (tableau V).

5. *Valeurs minimales de la distance de coordination.*

Si la méthode de détermination de la distance de coordination pour le mode de propagation (1) d_1 conduit à un résultat dont la valeur est inférieure à 100 km, d_1 doit être prise égale à 100 km. De même, si la méthode de détermination de la distance de diffusion par la pluie d_r conduit à un resultat dont la valeur est inférieure à 100 km, d_r doit être prise égale à 100 km.

6. *Distance de coordination.*

Dans un azimut quelconque, la plus grande des distances de coordination d_1 ou d_2 est la distance de coordination à utiliser pour la procédure de coordination.

La figure 15 donne un exemple de contour de coordination.

7. *Stations terriennes mobiles (sauf stations mobiles aéronautiques).*

Pour établir s'il y a lieu de rechercher, avec une autre administration, l'accord préalable prévu par les dispositions des numéros **1108** à **1111**, il est nécessaire de déterminer la zone de coordination qui engloberait toutes les zones de coordination relatives à chaque emplacement à l'antérieur de la zone de service dans laquelle on envisage d'exploiter des stations terriennes mobiles.

On peut utiliser la méthode précédente dans ce but en déterminant les contours de coordination individuels appropriés pour un nombre suffisamment élevé d'emplacements, à l'intérieur et à la périphérie de la zone de service proposée et en déterminant à partir de ces contours une zone de coordination composite qui englobe toutes les zones de coordination individuelles possibles.

8. *Révision des données relatives à la propagation.*

Les renseignements données aux sections 3, 4, 6 et dans l'annexe III du présent appendice sont fondés, directement ou indirectement, sur des données de propagation rassemblées, interprétées et illustrées dans les Rapports et les Avis pertinents du CCIR. Les connaissances en matière de propagation sont sujettes à modifications à mesure que l'on dispose de données nouvelles: il peut alors être nécessaire ou vivement recommandé d'apporter des amendements correspondant aux renseignements sur la propagation contenus dans le présent appendice.

La Résolution **60** fixe la marche à suivre pour mettre à jour les éléments du présent appendice ayant trait à la propagation.

TABLEAU I

Caractéristiques requises pour la détermination de la distance de coordination dans le cas d'une station terrienne d'émission

Designation du service de radiocommunication spatiale		Exploitation spatiale	Fixe par satellite — Mobile par satellite	Fixe par satellite	Recherche spatiale	Fixe par satellite — Mobile par satellite — Météorologie par satellite	Fixe par satellite (2)	Fixe par satellite	Fixe par satellite (2)	Fixe par satellite (2)	Fixe par satellite
Bande de fréquences (GHz)		1,427-1,429	2,655-2,690	5,725 7,075	7,145-7,235	7,900-8,400	10,7-11,7	12,5-14,5	14,5-14,8	17,7-18,1	27-37,5
Type de modulation à la station de Terre (1)		A	A	A	A	A	A	A	A	N	N
Caractéristiques et critéres de brouillage	p_o (%)	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,003	0,003
	n	2	1	2	2	2	2	2	2	1	1
	p (%)	0,005	0,01	0,005	0,005	0,005	0,005	0,005	0,005	0,003	0,003
	J (dB)	16	9	16	16	16	16	16	16	0	0
	$M_o(p_o)$ (dB)	17	17	17	17	17	17	17	17	30	30
	W (dB)	0	0	0	0	0	0	0	0	0	0
Caractéristiques de la station de Terre	B (Hz)	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^4	4×10^4
	G_r (dB) (3)	35	52 (3)	45	47	47	50	50	50	50	50
	ΔG (dB)	–7	10 (3)	3	5	5	8	8	8	8	8
	T_r (K)	750	500 (3)	750	750	750	1 500	1 500	1 500	3 200	3 200
Caractéristiques auxiliaires	S (dBW) (4)	166	192	176	178	178	178	178	178	154	154
	$P_r(p)$ (dBW) *dans B*	– 131	– 140	– 131	– 131	– 131	– 128	– 128	– 128	– 104	– 104

(1) A = modulation analogique; N = modulation numérique.
(2) Non compris les pertes dans les lignes d'alimentation.
(3) Dans ces bandes, on a indiqué les caractéristiques des stations de Terre correspondant aux systèmes transhorizon.
(4) Pour la définition de S, voir l'annexe 1.
(5) Les caractéristiques indiquées pour ces colonnes sont valables pour les lixison de connexion vers les satellites de radiodiffusion; leur valeur est donnée à titre provisoire, en attendant les résultats des futures études du CCIR: voir la Résolution 101.

TABLEAU II

Caractéristiques requises pour la détermination de la distance de coordination dans le cas d'une station terrienne de réception

Designation du service de radiocommunication espatiale		Exploitation espatiale (1)	Météorologie par satellite (1)	Météorologie par satellite	Recherche espatiale		Fixe par satellite		Fixe par satellite		Fixe par satellite		Fixe par satellite — Météorologie par satellite — Mobile par satellite		Exploitation de la Terre par satellite (1)	Recherche espatiale		Fixe par satellite		Météorologie par satellite	Fixe par satellite	Mobile par satellite
					Au voisinage de la Terre	Espace lointain et engins habités										Au voisinage de la Terre	Espace lointain					
Bandes de fréquences (GHz)		1,525-1,535	1,670-1,700	1,700-1,790	1,700-1,710-2,290-2,300		2,500-2,690		3,400-4,200		4,500-4,800		7,250-7,750		8,025-8,400	8,400-8,500		10,7-12,75		17,7-40,0		
Type de modulation à la station terrienne (2)		–	–	–	–	–	A	N	A	N	A	N	A	N	–	–	–	A	N	–	N	–
Caracteristiques et critères de brouillage	p_0 (%)	–	–	–	0,1	0,001	0,03	0,003	0,03	0,003	0,03	0,003	0,03	0,003	1,0	0,1	0,001	0,03	0,003	–	0,003	–
	n	–	–	–	2	1	3	3	3	3	3	3	3	3	–	2	1	2	1	–	1	–
	p (%)	–	–	–	0,05	0,001	0,01	0,001	0,01	0,001	0,01	0,001	0,01	0,001	–	0,05	0,001	0,015	0,003	–	0,003	–
	J (dB)	–	–	–	–	–	—8	0	—8	0	—8	0	—8	0	–	–	–	—8	0	–	0	–
	$M_0(p_0)$(dB)	–	–	–	–	–	17	5	17	(3) 5	17	(3) 5	17	(3) 5	–	–	–	17	(3) 5	–	(3) 5	–
	W (dB)	–	–	–	–	–	4	0	4	0	4	0	4	0	–	–	–	4	0	–	0	–
Cactéristiques de la station de Terre	E (dBW) en B (1)	55	55	(4) 92	(4)(5) 62	(4)(5)62	(4) 92	(4) 92	55	55	(4) 92	(4) 92	55	55	55	(4) 25	(4) 25	55	55	–	(4) 35	–
	P_t (dBW) en B	13	13	(4) 40	(4)(5) 10	(4)(5) 10	(4) 40	(4) 40	13	13	(4) 40	(4) 40	13	13	13	(4) —17	(4) —17	10	10	–	(4) —10	–
	ΔG (dB)	0	0	(4) 10	(4)(5) 10	(4)(5) 10	(4) 10	(4) 10	0	0	(4) 10	(4) 10	0	0	0	0	0	3	3	–	3	–
Largeur de bande de référence (1)	B (Hz)	–	–	10^4	1	1	10^4	10^4	10^4	10^4	10^4	10^4	10^4	10^4	10^4	1	1	10^4	10^4	–	10^4	–
Puissance de brouillage admissible	P_r (p) (dBW) en B	–	–	–	— 220	— 222	–	–	–	–	–	–	–	–	— 154	— 220	— 220	–	–	–	–	–

(1) Les caractéristiques correspondant à ces services peuvent varier dans des limites assez grandes. Un complément d'étude est nécessaire pour fournir des valeurs significatives.

(2) A = modulation analogique; N = modulation numérique.

(3) Voir le note (3) du paragraphe 2, $M_0(p_0)$ peut prendre des valeurs comprises entre 5 dB et 40 dB, selon la fréquence utilisée, la zone hydrométéorologique et la conception du système.

(4) Valeurs estimées pour une bande de largeur 1 Hz, et inférieure de 30 dB à la puissance totale admise pour chaque émission.

(5) Les valeurs enpposent que les largeurs de bande radioélectrique sont d'au moins 100 Mhz, et sont inférieure de 20 dB à la puissance totale admise pour chaque émission.

(6) Dans ces bandes ne a indiqué des caractéristiques des station de Terre correspondant aux système transhorizon. Si une administration estime qu'il n'est pas nécessaire de prendre en considération les systèmes transhorizon, en peut utiliser les caractéristques de falaceaux hertziens à visibiillité directe correspondant à la bande de fréquence 3400-4200 MHz, pour déterminer la zone de coordination conformément au paragraphe 2.3.1.

(7) Dans certains systèmes du service fixe par satellite, il peut être souhaitable de choisir une largeur de bande de référence B plus large lorsque les exigences du système montrent que c'est possible. Cependant, le choix d'une bande plus large entrainers des distances de coordination plus patites et il sera peut être nécessaire de procéder à une nouvelle coordination de la sation terrienne si on décide ultériorement de réduire le bande de référence. Pour les émissions à bande étroite, on doit prendre pour la bande de référence B la même largeur que celle de la bande occupée par la portueuse utile.

(8) Pour le définition de B, voie l'annexe 1.

TABLEAU III

Distance de coordination maximale pour le mode de propagation

	Pourcentage du temps			
	p = 0,001	p = 0,01	p = 0,1	p = 1
Zone A	375	350	300	200
Zone B	1 050	1 000	900	700
Zone C	1 400	1 350	1 200	950

TABLEAU IV

Valeurs caractéristiques des paramètres pour les cinq zones hydrométéorologiques (pour 0,01 % du temps)

Paramètre	Zone hydrométéorologique					Unité
	1	2	3	4	5	
Intensité de précipitacion (R) à surface	75	55	37	26	14	mm/h
Diamètre de la cellule de précipitacion (D)	2,5	2,8	3	3	4,5	km
Densité de la vapeur d'eau (p_m)	10	5	2	2	2	g/m³

TABLEAU V

Distance maximale de diffusion par la pluie (km)

Zone hydrométéorologique	Pourcentage du temps		
	$0{,}001 \leq p < 0{,}01$	$0{,}01 \leq p < 0{,}1$	p = 0,1
1	540	470	390
2	470	390	330
3,4 e 5	390	330	270

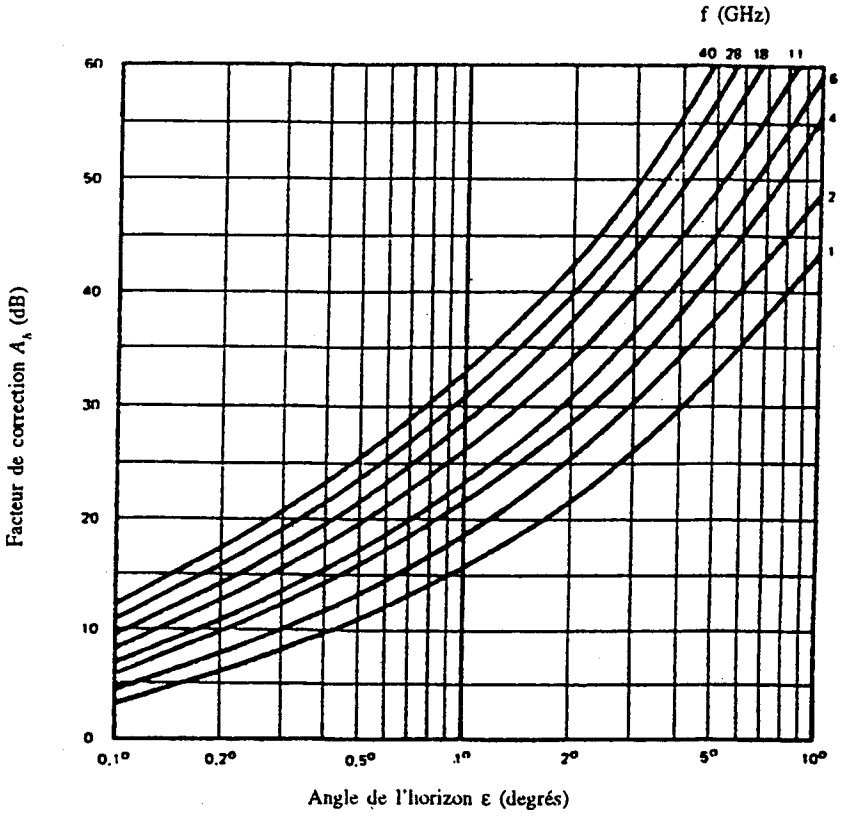


Figure 1 — Correction A_h en fonction de l'angle de l'horizon et de la fréquence

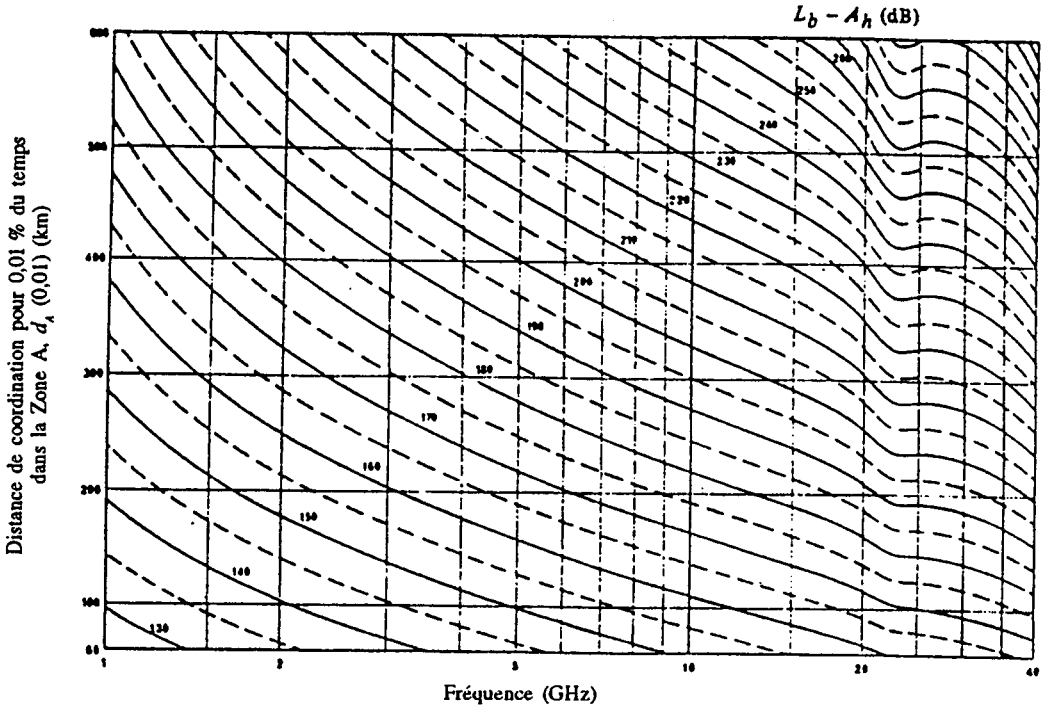


Figure 2 — Distance de coordination d_A (0,01) pour 0,01 % du temps due au mode de propagation (1), en fonction de la fréquence et de l'affaiblissement de coordination dans la Zone A

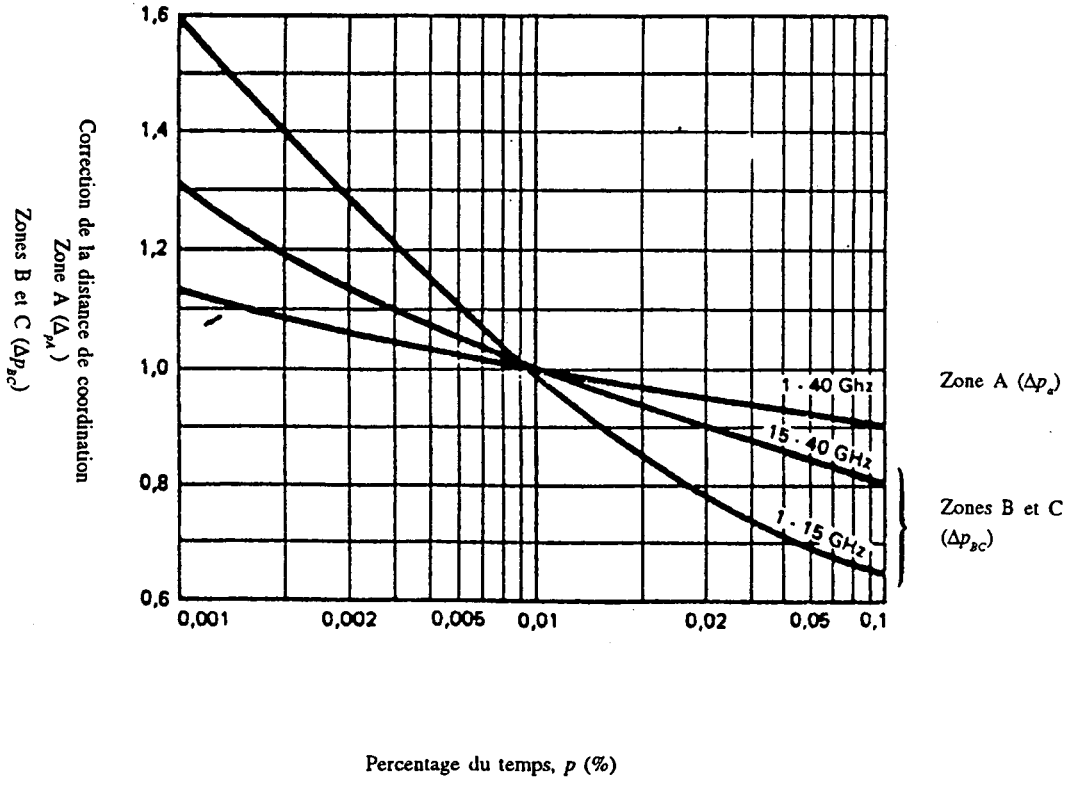


Figure 3 — Correction de la distance de coordination — mode de propagation (1) pour des pourcentages du temps différents de 0,01

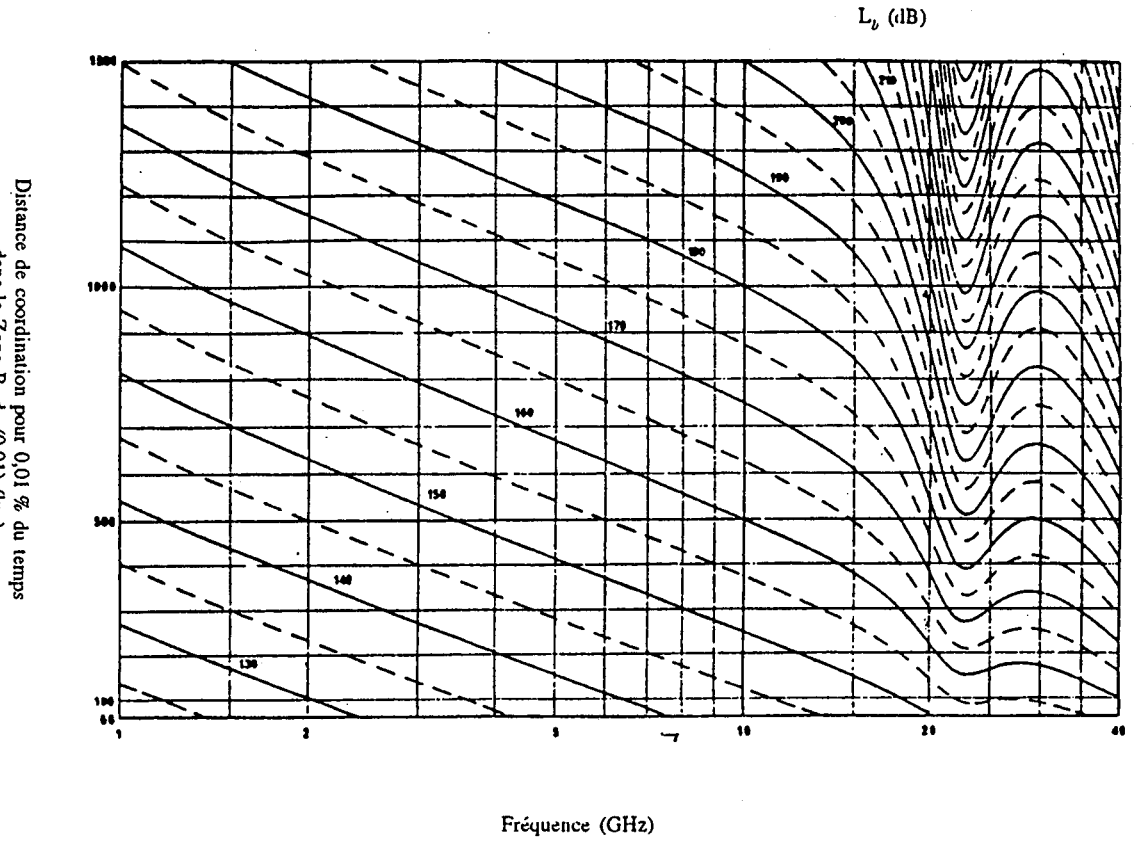


Figure 4 — Distance de coordination d_B (0,01) pour 0,01 % du temps, due au mode de propagation (1), en fonction de la fréquence et de l'affaiblissement de coordination dans la Zone B

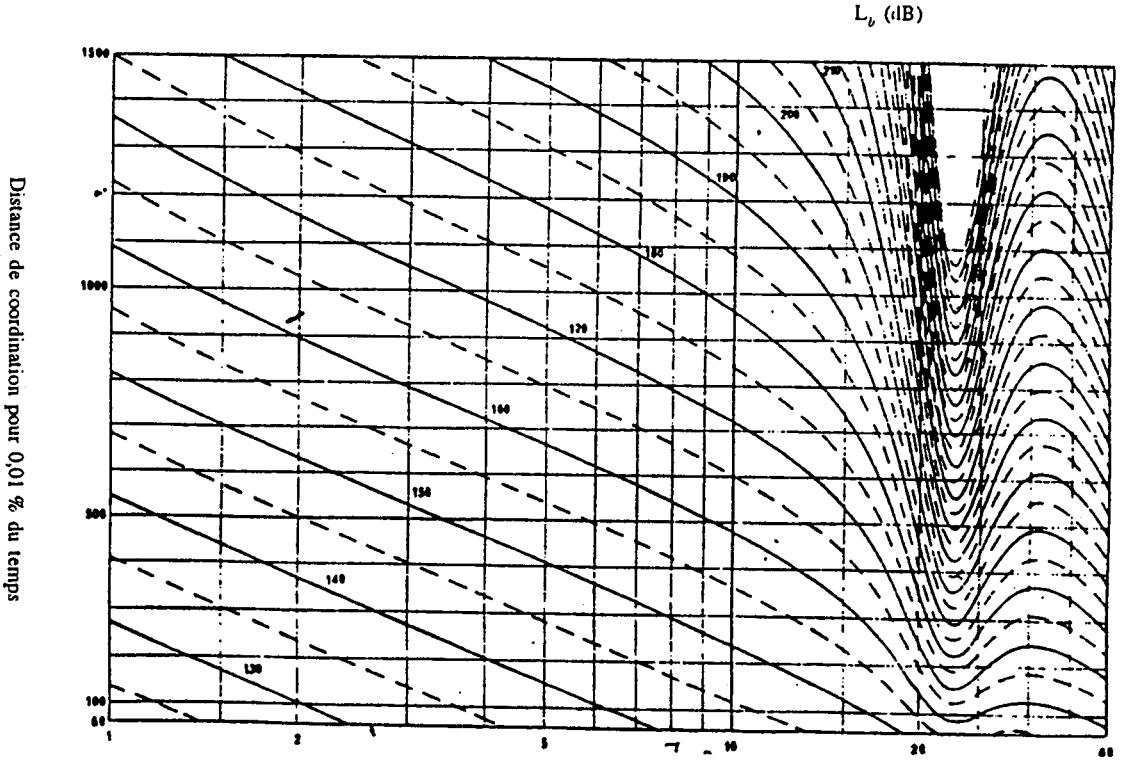


Figure 5 — Distance de coordination d_C (0,01) pour 0,01 % du temps, due au mode de propagation (1), en fonction de la fréquence et de l'affaiblissement de coordination dans la Zone C

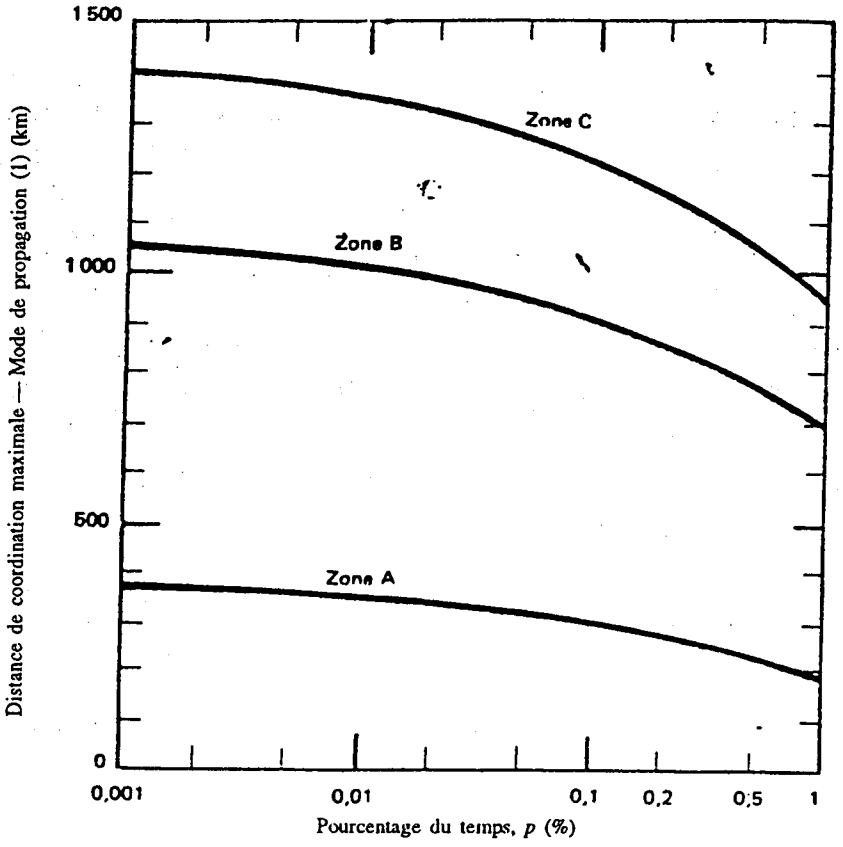


Figure 6 — Distance de coordination maximale en fonction du pourcentage du temps — Mode de propagation (1)

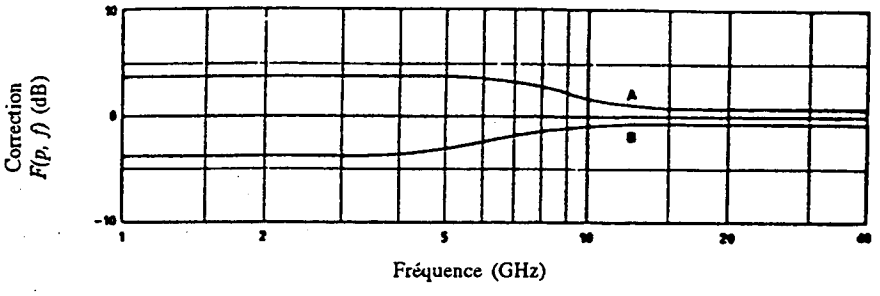


Figure 7 — Correction pour la conversion à partir du pourcentage de temps 0,01 %, pour toutes les zones hydrométéorologiques: conversion à 0,1 % (courbe A); conversion à 0,001 % (courbe B)

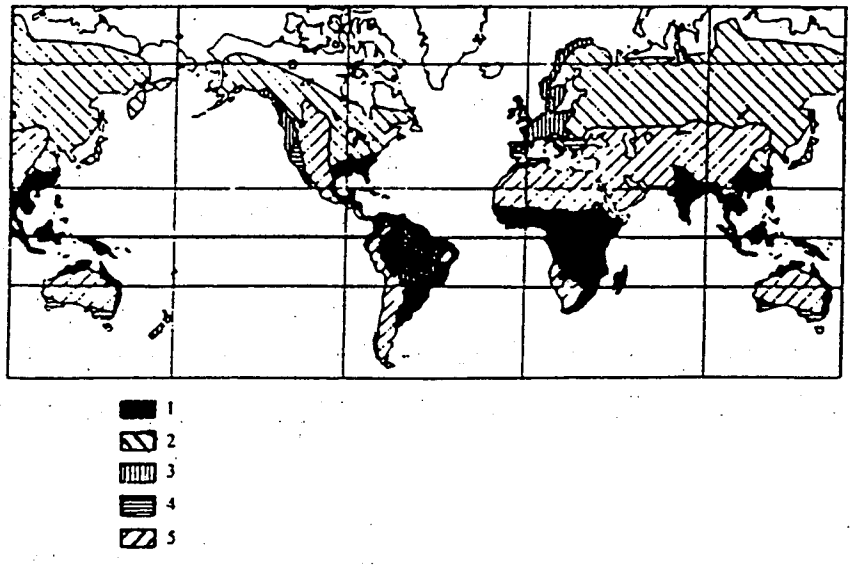


Figure 8 — Régions correspondant aux cinq zones hydrométéorologiques (voir le § 4.2)

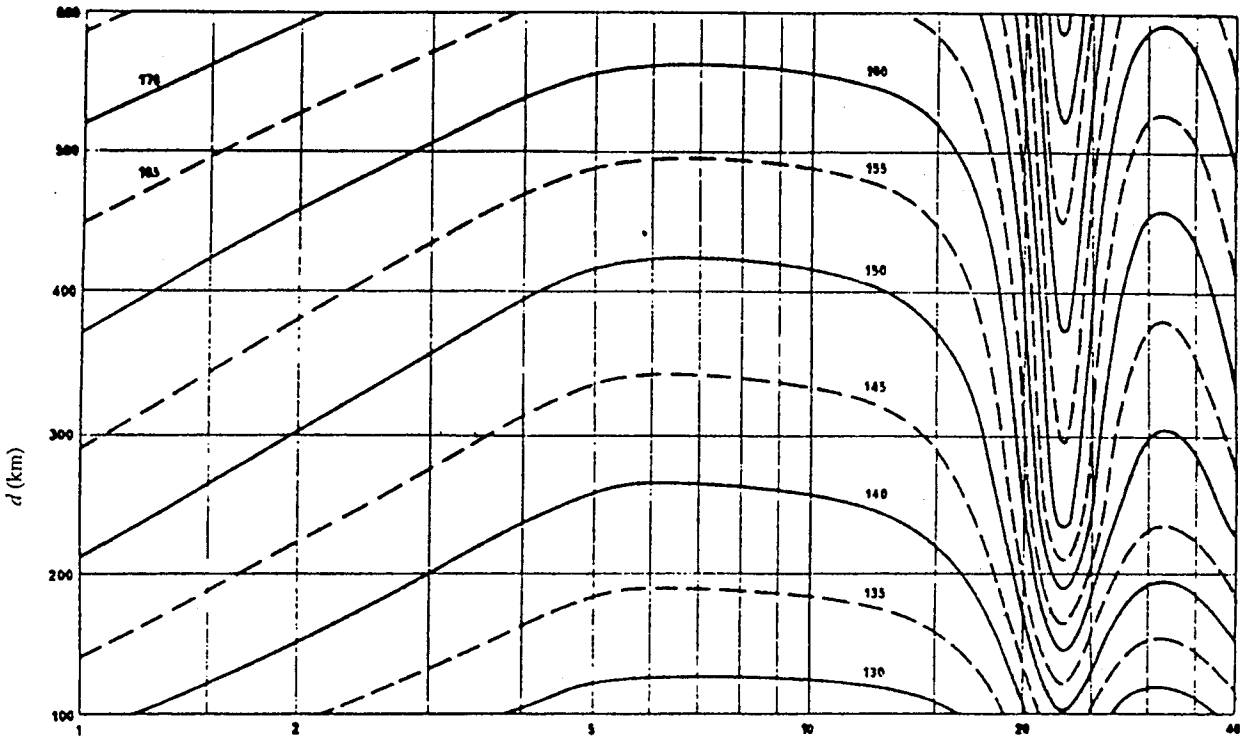


Figure 9 — Distance de diffusion par la pluie en fonction de la fréquence — Zone hydrométéorologique 1 — pour 0,01 % du temps
Les chiffres portés sur les courbes indiquent l'affaiblissement de transmission en dB.

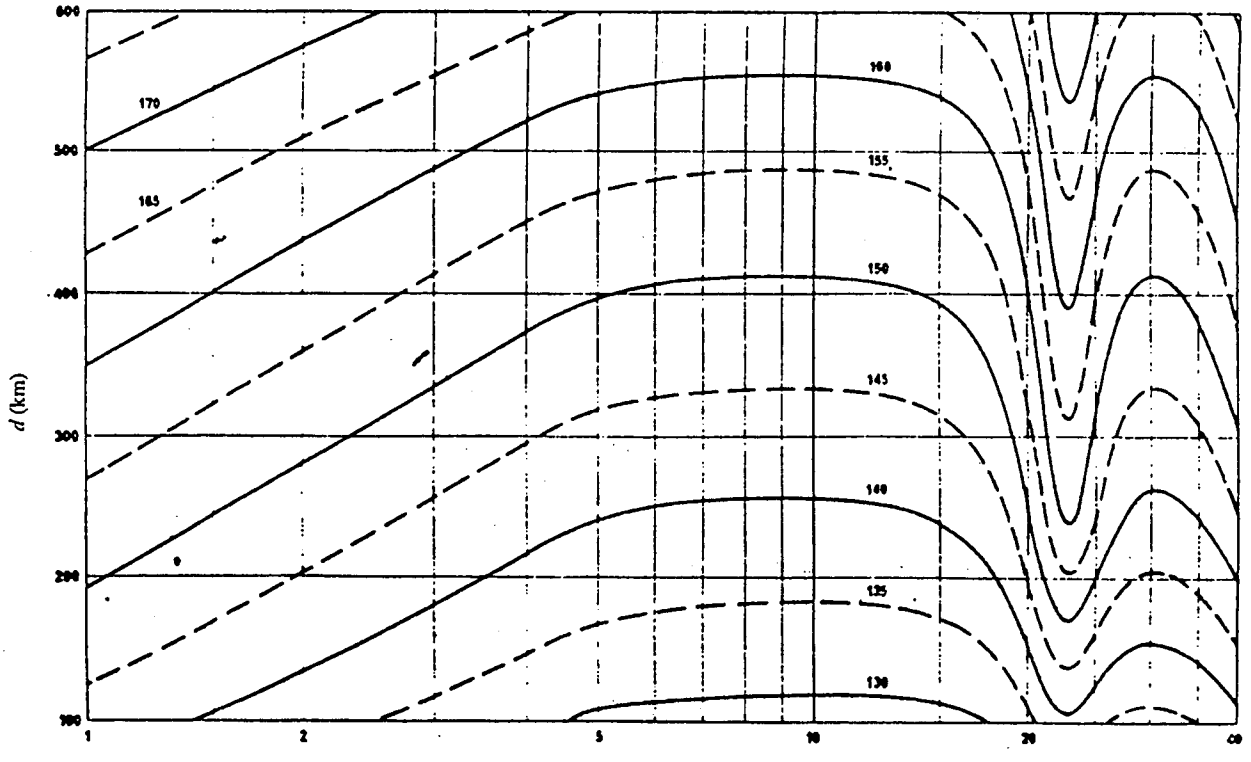


Figure 10 — Distance de diffusion par la pluie en fonction de la fréquence — Zone hydrométéorologique 2 — pour 0,01 % du temps
Les chiffres portés sur les courbes indiquent l'affaiblissement de transmission en dB.

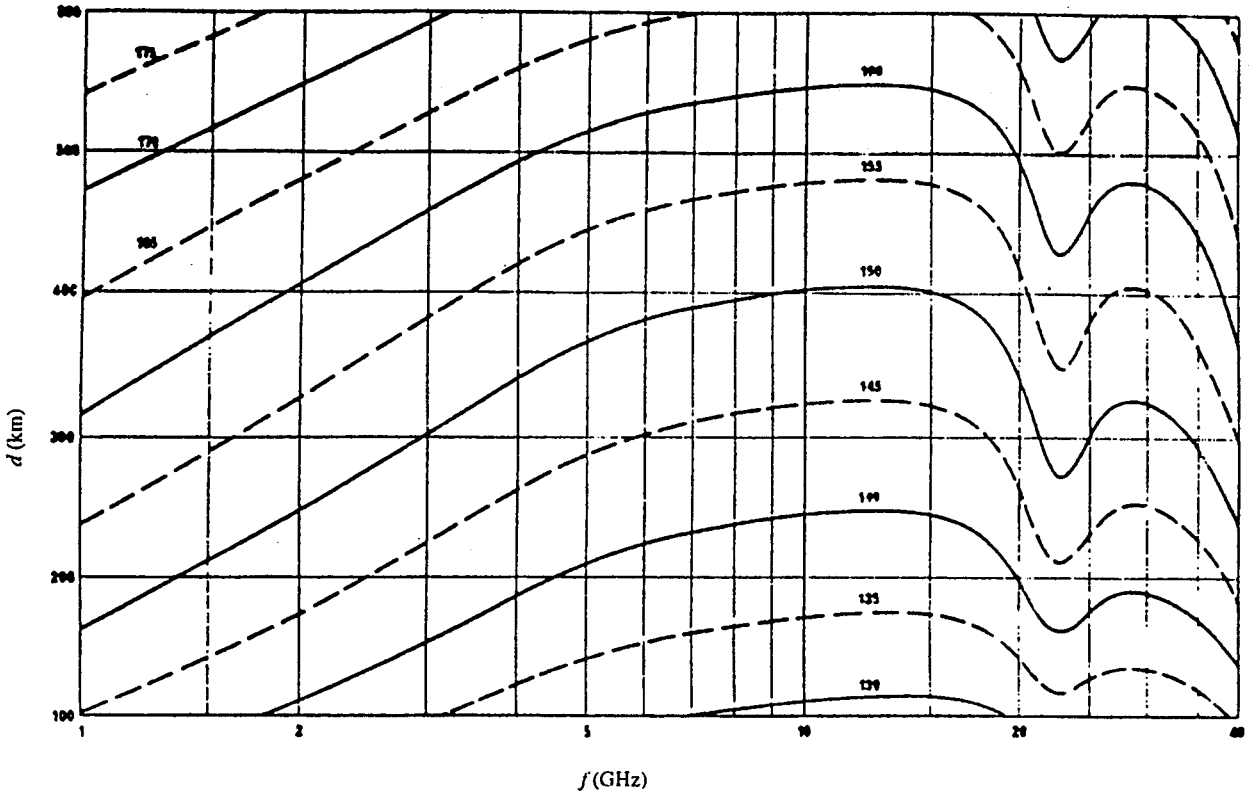


Figure 11 — Distance de diffusion par la pluie en fonction de la fréquence — Zone hydrométéorologique 3 — pour 0,01 % du temps

Les chiffres portés sur les courbes indiquent l'affaiblissement de transmission en dB.

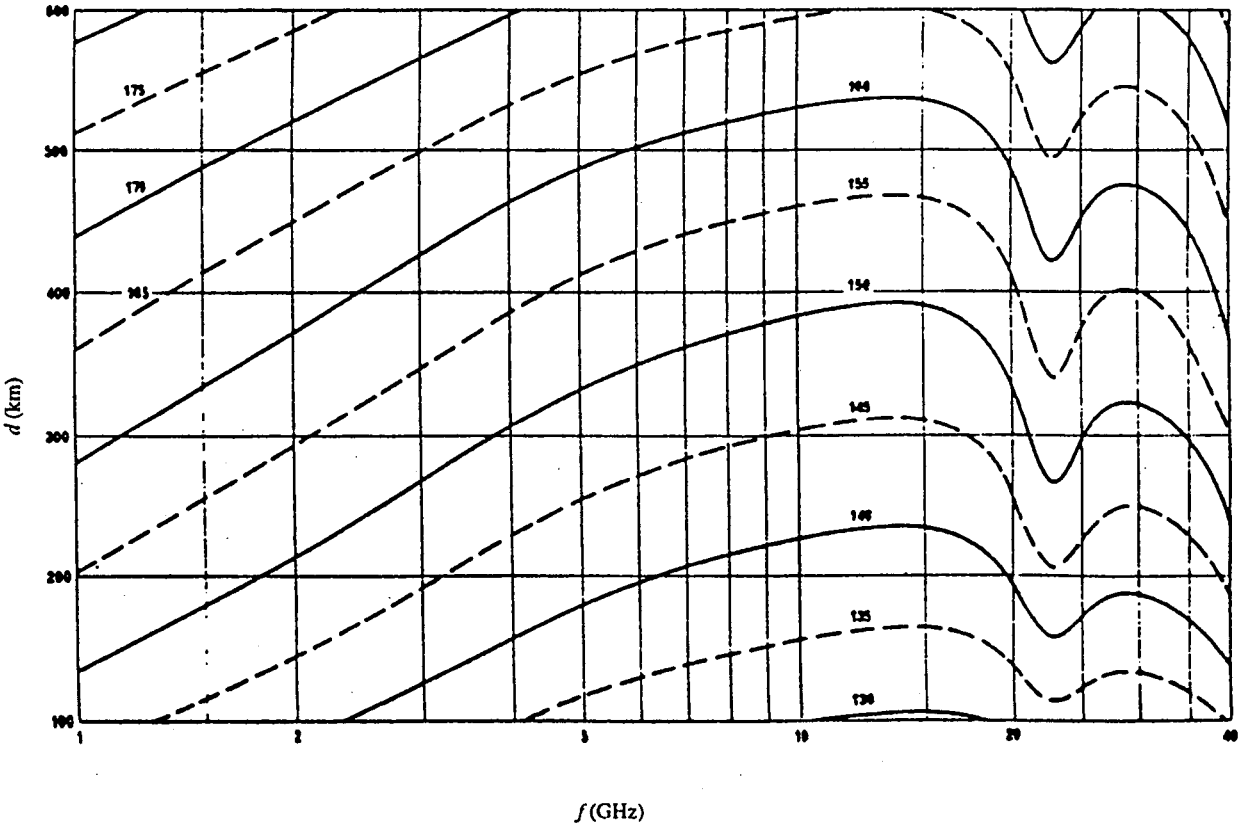


Figure 12 — Distance de diffusion par la pluie en fonction de la fréquence — Zone hydrométéorologique 4 — pour 0,01 % du temps

Les chiffres portés sur les courbes indiquent l'affaiblissement de transmission en dB

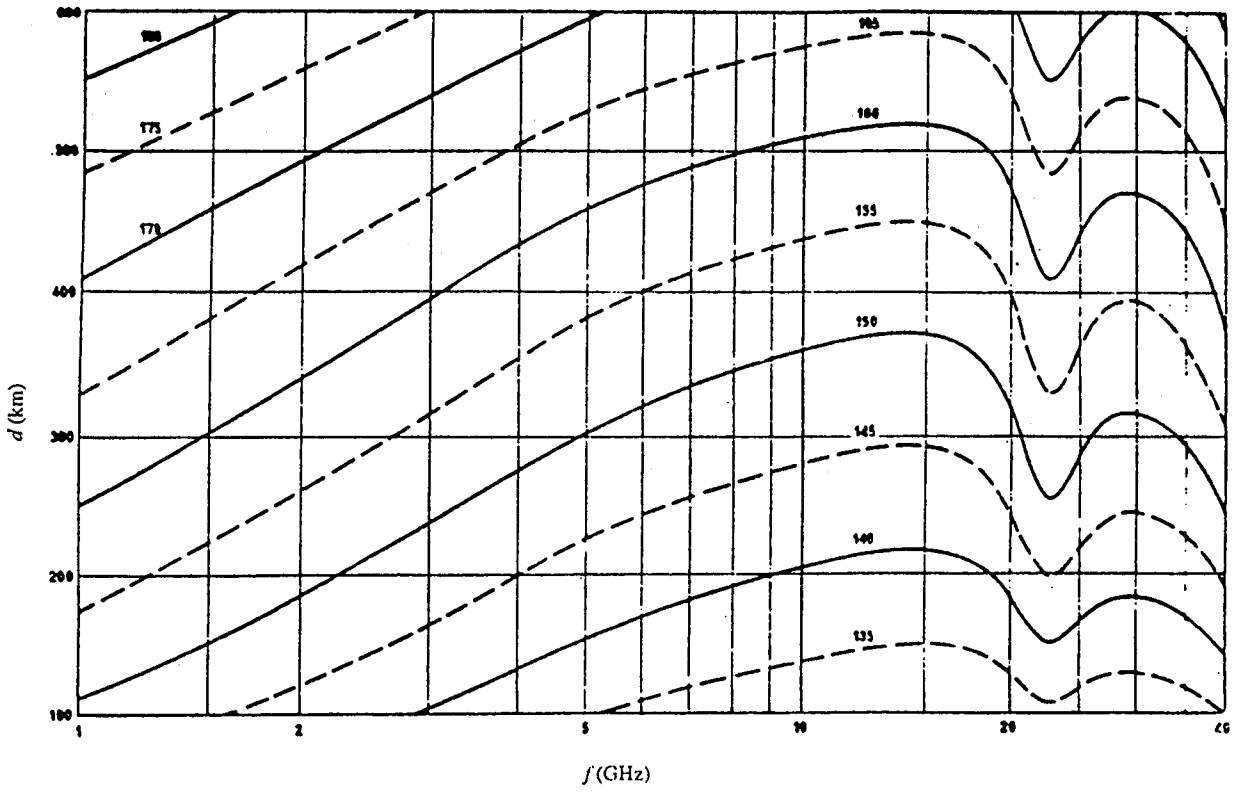


Figure 13 — Distance de diffusion par la pluie en fonction de la fréquence — Zone hydrométéorologique 5 — pour 0,01 % du temps
Les chiffres portés sur les courbes indiquent l'affaiblissement de transmission en dB.

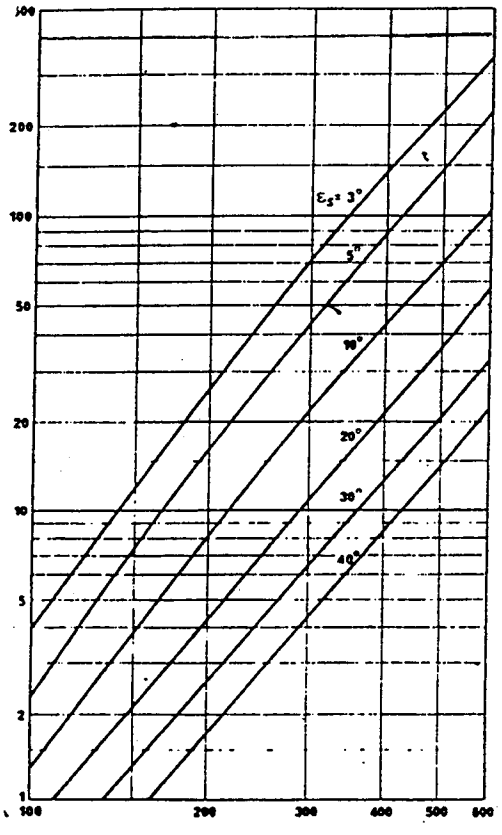


Figure 14 — Distance Δd en fonction de la distance de diffusion par la pluie d_r et de l'angle de site ε_s du faisceau principal de l'antenne de la station terrienne

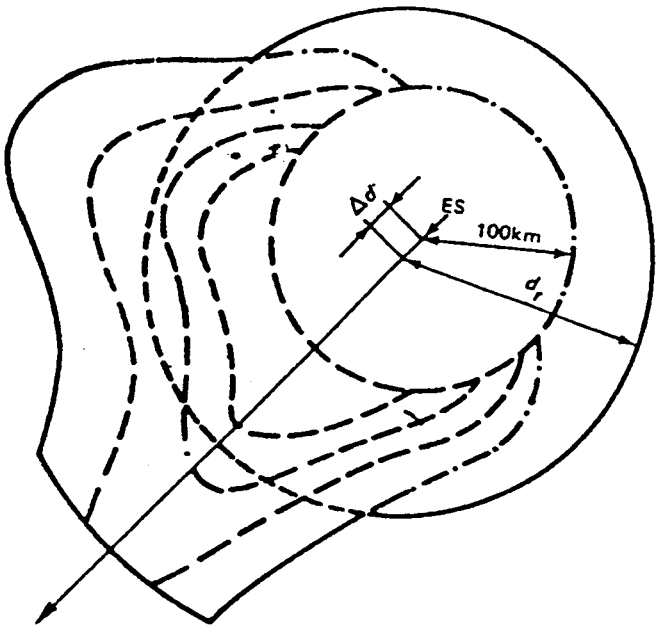


Figure 15 — Exemple de contour de coordination

ES: Station terrienne.

———————— Contour de coordination.
—·—·—·—·— Contour pour le mode de propagation (1).
- - - - - - - - - - - - Contour pour le mode de propagation (2).
— — — — — — — — Contours auxiliaires pour le mode de propagation (1).

Note. — Si, en utilisant les contours auxiliaires, on constate que, du point de vue du mode de propagation (1), on peut éliminer une station de Terre, il s'ensuit que:

Ai la station de Terre se trouve à l'extérieur du contour correspondant au mode de propagation (2), on peut ne plus en tenir compte;
Ai la station de Terre se trouve à l'intérieur du contour correspondant au mode de propagation (2), ou continuera à en tenir compte, mais pour ce mode seulement.

ANNEXE 1

Détermination et utilisation des contours auxiliaires

1. *Introduction.*

Pour les mécanismes de propagation de long du grand cercle mode (1), les contours auxiliaires sont d'un grand intérêt pour éliminer des études certaines des stations de Terre, existantes ou en projet, qui se trouvent à l'intérieur de la zone de coordination, cela sans avoir à faire des calculs précis et ardus. Aussi, les travaux de l'administration responsable de la station terrienne et ceux des administrations concernées se trouvent facilités, au cours des négociations ultérieures, si ces contours auxiliaires leur sont fournis.

2. *Détermination des contours auxiliaires.*

On peut déterminer deux types de contour, selon que la station terrienne fonctionne comme station d'émission ou de réception.

2.1. *Station terrienne d'émission.*

Dans l'équation (2), on peut isoler le terme $G_r - P_r(p)$ et définir un facteur de sensibilité au brouillage S (dBW) pour les stations de Terre brouillées:

$$S = G_r - P_r(p) \qquad (32)$$

Le tableau I donne des valeurs de ce facteur pour plusieurs types de stations de Terre.

On associe le contour de coordination á un facteur de sensibilité (maximal) S, dont on porte la valeur sur la courbe.

La détermination des contours auxiliaires se fait de la même manière que pour le contour de coordiantion correspondant au mode de propagation (1), mais on utilise pour le facteur de sensibilité au brouillage S (dBV) de la station de Terre des valeurs inférieures de 5, 10, 15, 20 dB, etc., à la valeur (donnée dans le tableau I) qui correspond au contour de coordination.

2.2. *Station terrienne de réception.*

Dans l'équation (2), on peut aussi isoler le terme $P_t \cdot + G_t \cdot$ et définir la p. i. r. e. E (dBW) des stations de Terre brouilleuses:

$$E = P_t \cdot + G_t \cdot$$

dont on trouve des valeurs dans le tableau II.

On associe le contour de coordination à une valeur maximale de E que l'on porte sur la courbe.

La détermination des contours auxiliaires se fait de la même manière que pour le contour de coordination correspondant au mode de propagation (1) mais on utilise, pour la p. i. r. e. E (dBW) de la station de Terre, des valeurs inférieures de 5, 10, 15, 20 dB, etc., à la valeur (donnée dans le tableau II) qui correspond au contour de coordination.

3. *Utilisation des contours auxiliaires.*

Pour une bande partagée donnée, on trace sur le même graphique les contours auxiliaires, le contour de coordination pour la propagation le long du grand cercle, mode (1), et le contour de coordination pour la diffusion par les hydrométéores, mode (2). A titre d'illustration, un exemple est donné à la figure 15.

Pour chaque station de Terre située à l'intérieur de la zone de coordination, on peut appliquer une méthode en deux temps, d'une part pour la propagation le long de l'arc de grand cercle, d'autre-part pour la diffusion par les hydrométéores.

3.1. *Mécanismes de propagation le long du grand cercle — mode (1).*

Si une station de Terre d'émission se trouve à l'intérieur de la zone de coordination correspondant au mode (1), il est inutile d'en tenir compte plus avant en ce qui concerne ce mode.

Pour chaque station de Terre d'émission située à l'intérieur de la zone de coordination correspondant au mode (1), on détermine la p. i. r. e. dans la direction de la station terrienne. Si cette valeur est inférieure à celle qui correspond au contour le plus proche définissant une zone à l'extérieur de lequelle se trouve la station, on peut considérer que celle--ci ne cause pas de brouillage dépassant un niveau admissible, et que par conséquent on n'a pas à en tenir compte plus avant en ce qui concerne le mode (1).

La même méthode peut être appliquée pour chaque station de Terre de récéption, en utilisant le facteur de sensibilité au brouillage en lieu et place de la p. i. r. e.

3.2. *Elimination d'une station de Terre et mécanisme de diffusion par les hydrométéores — mode (2).*

Les stations de Terre qui se trouvent éliminées par la méthode ci-dessus et dont il n'y a plus lieu de tenir compte pour le mode (1) doivent néanmoins être prises en considération pour le mode (2), si ces stations se trouvent à l'intérieur de la zone de coordination pour la diffusion par les hydrométéores.

ANNEXE II

Gain d'antenne pour la direction de l'horizon de la station terrienne par les satellites géostationnaires

1. *Généralités.*

La composante du gain de l'antenne d'une station terrienne dans la direction de l'horizon physique tout autour de la station terrienne est une fonction de l'angle de séparation φ entre l'axe du faisceau principal et la direction de l'horizon considérée. Il s'ensuit qu'il est nécessaire de connaitre l'angle φ pour chaque azimut.

Il existe une relation univoque entre l'angle de site ε, et l'azimut ε, des satellites géostationnaires vus d'une station terrienne qui se trouve à la latitude. La figure II-1 présent, dans un diagramme rectangulaire site/azimut, les portions d'arc possibles de Porbite des satellites géostationnaires: chaque arc correspond à une latitude de station terrienne.

Il est possible quie l'on ne connaisse pas à l'avance les longitudes relatives exactes des satellites. Mais, même si ces longitudes sont connues, la possibilité d'ajouter un nouveau satellite ou la possibilité de déplacer un satellite suggère que tout ou partie de l'arc correspondant doive être considéré comme contenant des satellites.

2. *Méthode de détermination graphique de φ (α):*

Après avoir choisi et marqué l'arc approprié ou la portion d'arc appropriée sur la figure II-1, on superpose comme le montre la fig. II-2 au graphique de la fig II-1 le tracé de l'horizon φ (α). On en a un exemple dans la figure II-2 pour une station terrienne située à 45° de latitude Nord et pour un satellite que l'on envisage de placer entre les longitudes relatives 10° Est et 45° Ouest.

Pour chaque point situé sur l'horizon local ε (α), on détermine et on mesure la plus courte distance à l'arc, sur l'échelle des angles de site. L'exemple de la figure II-2 montre comment on détermine l'angle hors faisceau φ pour un azimut α (= 210°), avec un angle de site ε (= 4°). La mesure donne pour φ la valeur 26°.

Si l'on opère ainsi pour tous les azimuts (par échelons appropriés, par exemple de 5° en 5°), on obtient une relation φ (α).

3. *Méthode de détermination numérique de* $\varphi(\alpha)$:

On utilise alors les formules suivantes:

$$\psi = \text{arc cos } (\cos \zeta \cdot \cos \delta); \quad (34)$$

$$\alpha'_s = \text{arc cos } (\text{tg } \zeta \cdot \text{cotg } \psi); \quad (35)$$

$\alpha_s = \alpha'_s + 180°$ pour des stations terriennes situées dans l'hémisphère nord et des satellites situés à l'ouest de la station terrienne; (36a)

$\alpha_s = 180° - \alpha'_s$ pour des stations terriennes situées dans l'hémisphère nord et des satellites situés à l'est de la station terrienne; (36b)

$\alpha_s = 360° - \alpha'_s$ pour des stations terriennes situées dans l'hémisphère sud et des satellites situés à l'ouest de la station terrienne; (36c)

$\alpha_s = \alpha'_s$ pour des stations terriennes situées dans l'hémisphère sud et des satellites situés à l'est de la station terrienne; (36d)

$$\varepsilon_s = \text{arc tg } \left(\frac{K - \cos \psi}{\sin \psi}\right) - \psi; \quad (37)$$

$$\varphi(\alpha) = \text{arc cos } [\cos \varepsilon \cdot \cos \varepsilon_s \cdot \cos (\alpha - \alpha_s) + \sin \varepsilon \cdot \sin \varepsilon_s]. \quad (38)$$

où:

ζ — latitude de la station terrienne;
δ — différence de longitude entre le satellite et la station terriene;
ψ — arc du grand cercle entre la station terrienne et le point à la verticale du satellite;
α_s — azimut du satellite vu de la station terrienne;
ε_s — angle de site du satellite vu la station terrienne;
α — azimut de la direction considérée;
ε — angle de site de l'horizon dans l'azimut α considéré;
$\varphi(\alpha)$ — angle entre l'axe du faiceau principal et la direction de l'horizon correspondant à l'azimut α considéré;
K — rapport du rayon de l'orbite au rayon de la Terre, égal à 6,62.

Tous les arcs ci-dessus mentionnés sont exprimés en degrés.

4. *Détermination du gain d'antenne.*

On peut utiliser la relation $\varphi(\alpha)$ pour obtenir le gain d'antenne dans la direction de l'horizon G (dB), en fonction de l'azimut α, à l'aide du diagramme de rayonnement effectif de l'antenne de la station terrienne ou par application d'une formule donnant une bonne aproximation. Par exemple, dans les cas où le rapporte entre le diamètre de l'antenne et la longueur d'onde est supérieur ou égal à 100, il convient d'utiliser la formule:

$$G(\varphi) = G_{max} - 2{,}5 \times 10\text{-}3 \left(\frac{D}{\lambda}\varphi\right)^2 \quad \text{pour } 0 < \varphi < \varphi_m \quad (39a)$$

$$G(\varphi) = G_1 \text{ pour } \varphi_m \leq \varphi < \varphi_r \quad (39b)$$

$$G(\varphi) = 32\text{-}25 \log \varphi \text{ pour } \varphi_r \leq \varphi < 48° \quad (39c)$$

$$G(\varphi) = -10 \text{ pour } 48° \leq \varphi \leq 180° \quad (39d)$$

où

D = diamètre de l'antenne
λ = longueur d'onde
} exprimés dans la même unité;

G_1 = gain du premier lobe latéral = $2 + 15 \log \frac{D}{\lambda}$.

$$\varphi_m = \frac{20\lambda}{D}\sqrt{G_{max} - G_1} \text{ (degrés)}$$

$$\varphi_r = 15{,}85 \left(\frac{D}{\lambda}\right)^{-0{,}6} \text{ (degrés)}$$

Pour les antennes dont le rapport $\frac{D}{\lambda}$ est inférieur à 100, lorqu'il n'est pas possible d'utiliser le diagramme de rayonnement de référence susmentionné et qu'on ne peut avoir recours à sa place ni à une donnée mesurée nu à un Avis pertinent du CCIR, accepté par les administrations concernées, les administrations peuvent utiliser le diagramme de référence représenté par:

$$G(\varphi) = G_{max} - 2{,}5 \times 10\text{-}3 \left(\frac{D}{\lambda}\varphi\right)^2 \quad \text{pour } 0 < \varphi < \varphi_m \quad (40a)$$

$$G(\varphi) = G_1 \text{ pour } \varphi_m \leq \varphi < \varphi < 100 \frac{\lambda}{D} \quad (40b)$$

$$G(\varphi) = 52 - 10 \log \frac{D}{\lambda} - 25 \log \varphi \text{ pour } 100 \frac{D}{\lambda} \leq \varphi < 48° \quad (40c)$$

$$G(\varphi) = 10 - 10 \log \frac{D}{\lambda} \text{ pour } 48° \leq \varphi \leq 180° \quad (40d)$$

où

D = diamètre de l'antenne
λ = longueur d'onde
} exprimés dans la même unité;

G_1 = gain du premier lobe latéral = $2 + 15 \log \frac{D}{\lambda}$.

$$\varphi_m = \frac{20\lambda}{D}\sqrt{G_{max} - G_1} \text{ (degrès)}$$

Les diagrammes ci-dessus peuvent être modifiés selon le cas pour obtenir une meilleure représentation du diagramme de rayonnement réel.

Dans les cas où $\frac{D}{\lambda}$ n'est pas donné, il peut être estimé à partir de l'expression $20 \log \frac{D}{\lambda} \approx G_{max} - 7{,}7$, dans laquelle G_{max} est, en dB, le gain du lobe principal de l'antenne.

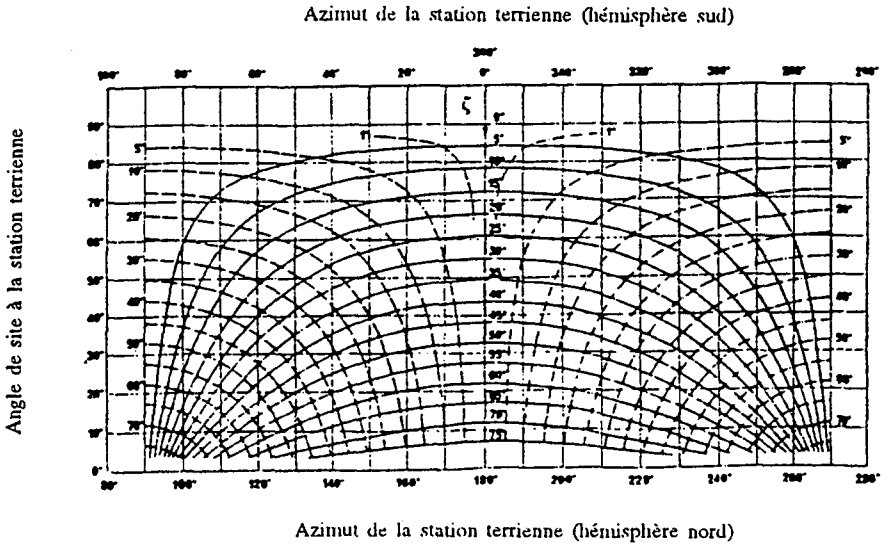


Figure II-1 — Arcs contenant les positions des satellites géostationnaires

_____ Arc de l'orbite des satellites géostationnaires visible de la station terrienne située à la latitude terrestre ζ;

Différence de longitude entre la station terrienne et le point à la verticale du satellite;

- - - - - Longitude du satellite à l'est de la longitude de la station terriénne;
..... Longitude du satellite à l'ouest de la longitude de la station terrienne;
..... Longitude du satellite égale à la longitude de la station terrienne.

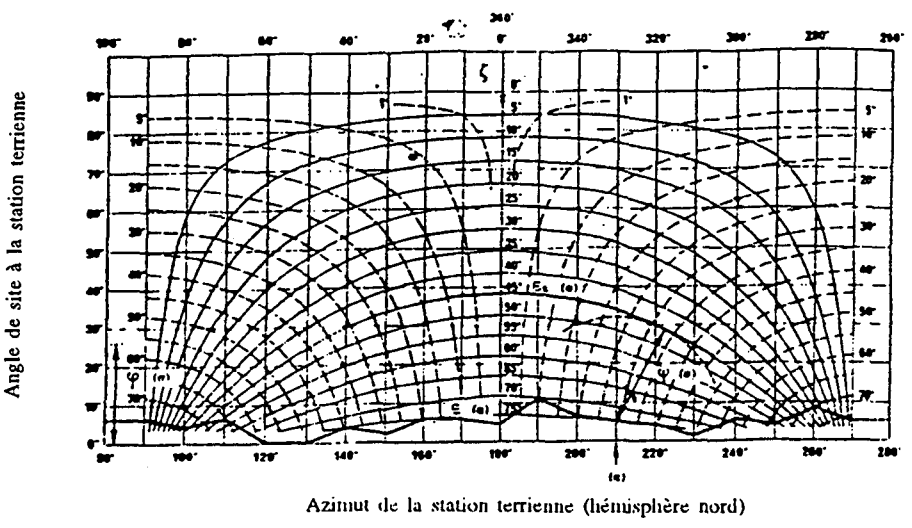


Figure II-2 — Exemple de détermination de 'φ

_____ Arc de l'orbite des satellites géostationnaires visible de la station terrienne sitée à la latitude terrestre ζ;
.....Profil de l'horizon ε α;.

Différence de longitude entre la station terrienne et le point à la verticale du satellite;

- - - - - Longitude du satellite à l'est de la longitude de la station terrienne;
..... Longitude du satellite à l'ouest de la longitude de la satation terrienne;
..... Longitude du satellite égale à la longitude de la station terrienne.

ANNEXE III

Méthode graphique de détermination de la distance de coordination dans le cas des trajets mixtes

1. *Deux zones.*

La méthode à utiliser dans le cas d'un trajet mixte mettant en jeu deux zones est illustrée par l'exemple de la figure III-1(a). La station terrienne est située dans la Zone A à une distance de 75 km de la Zone B. La méthode graphique décrite ci-dessus est particulièrement utile quand il y a, comme dans cet exemple, plus d'une frontière entre zones.

Dans l'exemple ci-dessus, on suppose que l'affaiblissement de coordination est de 180 dB, la fréquence de 20 GHz et le pourcentage du temps de 0,01 %. La suite des opérations est la suivante:

1.1. Déterminer la distance qui, entièrement dans la Zone A, donnerait la valeur de l'affaiblissement de coordination; reporter cette distance (ici 160 km), à partir de l'origine, sur l'axe des abscisses d'une feuille de papier milimétré, ce qui donne le point A [fig. III-1(b)].

1.2. Déterminer la distance qui, entièrement dans la Zone B, donnerait la même valeur de l'affaiblissement de coordination; reporter cette distance (ici 530 km), à partir de l'origine, sur l'axe des ordonnées de la même feuille, ce qui donne le point B.

1.3. Joindre les points A et B par un segment de droite;

1.4. Porter sur l'axe des abscisses, à partir de l'origine, la distance de 75 km entre la station terrienne et la Zone B, ce qui donne le point A_1.

1.5. Partant du point A_1, porter parallèlement à l'axe des ordonnées la distance de 150 km entièrement comprise dans la Zone B, ce qui donne le point B_1.

1.6. La distance qui reste à parcourir dans la deuxième partie de la Zone A se détermine en menant de B_1 une parallèle à l'axe des abscisses jusqu'au point X où elle rencontre la courbe à utiliser dans le cas d'un trajet mixte. Sur la figure III-1(b), on lit: $B_1 X = 40$ km.

1.7. La distance de coordination est la somme des distances $0A_1$, A_1B_1 et B_1X, soit:

$$75 + 150 + 40 = 265 \text{ km}$$

2. *Trois zones.*

Dans certains cas particuliers, le trajet mixte traverse les trois zones radioclimatiques A, B et C. On peut résoudre le problème en ajoutant une troisième dimension à la méthode suivie dans le cas où le trajet mixte de traverse que deux zones. Théoriquement, cela revient à dire que l'on doit chercher la troisième coordonée d'un point dont les deux premières coordonnées correspondent aux distances connues dans les deux premières zones et qui se trouve dans le plan passant par les trois points des axes 0x, 0y et 0z correspondant aux distances qui, dans les Zones A, B et C respectivement, donneraient la valeur requise de l'affaiblissement de transmission de référence.

Dans la pratique, on peut ramener cette détermination à la méthode graphique simple représentée sur la figure III-2(a) pour laquelle on suppose par exemple que l'affaiblissement de coordination (L_1) est égal à 180 dB pour une fréquence de 20 GHz. Le problème consiste à trouver la distance de coordination à partir de la station terrienne dans la direction indiquée sur la figure III-2(a). Dans cette direction et à partir de 0, station terrienne située dans la Zone A, la longueur du trajet dans la Zone A est de 75 km ($0A_1$); elle est suivie d'une longueur de 150 km dans la Zone B (A_1B_1), dans la même direction, puis d'une longueur inconnue qu'il s'agit précisément de déterminer dans la Zone C [figure III-2(a)].

La méthode à appliquer est alors la suivante [figure III-2(b)]:

2.1. Commencer par appliquer la même méthode que dans le cas où deux zones seulement sont en jeu, en appliquant seulement les étapes 1.1 à 1.5 et continuer comme suit.

2.2. Du point B_1, tracer une parallèle à la droite AB; elle coupe l'axe des abscisses en D.

2.3. Déterminer la distance qui, située toute entière dans la Zone C, donnerait la même valeur de l'affaiblissement de coordination. Porter cette distance (ici: 350 km) sur l'axe des ordonnées en 0C. Joindre les points C et A par un segment de droite.

2.4. Du point D, tracer la parallèle à l'axe des ordonnées; elle coupe CA en X.

2.5. La distance DX est la longueur cherchée du trajet dans la zone C: on trouve qu'elle est égale à 85 km.

2.6. La distance de coordination est la somme des longueurs OA_1, A_1B_1 et DX. Elle vaut:

$$75 + 150 + 85 = 310 \text{ km}$$

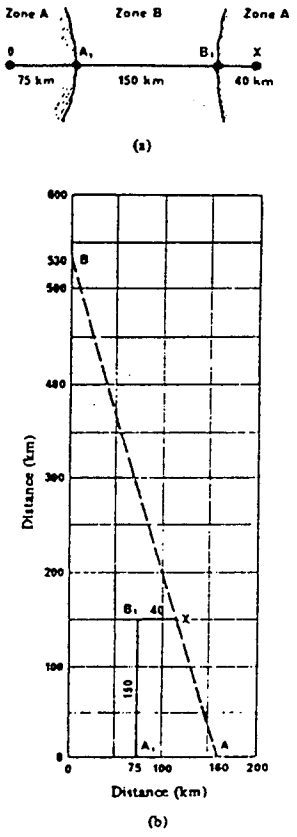


Figure III-1 — Exemple de détermination de la distance de coordination dans le cas d'un trajet mixte mettant en jeu les Zones A et B

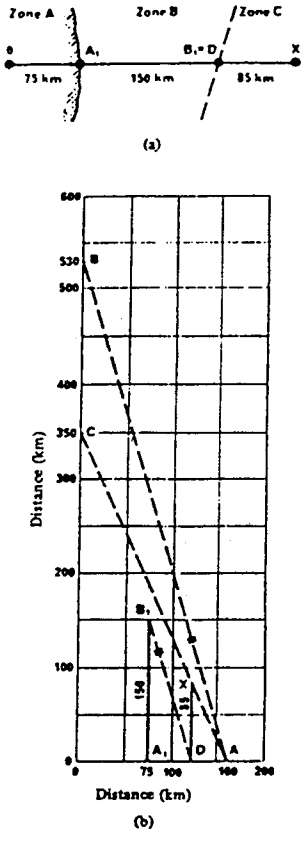


Figure III-2 — Exemple de détermination de la distance de coordination dans le cas d'un trajet mixte mettant en jeu les Zones A, B et C

MOD **AP29** APPENDICE 29

Méthode de calcul pour déterminer si une coordination est nécessaire entre des réseaux á satellite géostationnaire partageant les mêmes bandes de fréquences

1. Introduction.

La méthode de calcul pour déterminer si une coordination est nécessaire selon le numéro **1060** repose sur le fait que la température de bruit d'un systéme brouillé augmente avec le niveau de l'émission brouilleuse. Cette méthode est donc applicable quelles que soient les caractéristiques de modulation des réseaux à satellite en jeu, et quelles que soient les fréquences exactes qu'ils utilisent.

Selon cette méthode, on calcule pour une liaison par satellite donnée l'accroissement apparent de la température de bruit équivalente, résultante de l'émission brouilleuse d'un système donné (voir § ci-dessous), et on compare le rapport exprimé en pourcent entre cet accroissement et la température de bruit équivalent de la liaison à une valeur limite (voir § 3 ci-dessous).

2. *Calcul de l'accroissement apparent de la température de bruit équivalent d'une liaison par satellite subissant un brouillage.*

On considère deux cas possibles:

Cas I — réseaux utile et brouilleur partageant une ou plusieurs bandes de fréquences, chacune dans le même sens de transmission;

Cas II — réseaux utile et brouilleur partageant une ou plusieurs bandes de fréquences, chacune dans les sens de transmission opposés (utilisations bidirectionnelle).

Ces deux cas sont applicables à toutes les positions relatives des satellites depuis des positions rapprochées jusqu'à des positions quasi-antipodales.

2.1. *Notations.*

Soit A une liaison par satellite du réseau R associé au satellite S et A' une liaison por satellite du réseau R' associé au satellite S'. Les symboles relatifs à la liaison par sattelite A' sont affectés de la notation prime et ceux relatifs à la liaison par satellite A n'en sont pas effectés.

Les notations utilisées pour la liaison par satellite A sont les suivantes:

T — température de bruit équivalente de la liaison par satellite, rapportée à la sortie de l'antenne de réception de la station terrienne (K);

T_s — température de bruit du système de réception de la station spatiale, rapportée à la sortie de l'antenne de réception de la station spatiale (K);

T_e — Température de bruit du systéme de réception de la station terrienne, rapportée à la sortie de l'antenne de réception de la station terrienne (K);

ΔT_s — accroissement apparent de la température de bruit du système de réception du satellite S causé par une émission brouilleuse, rapporté à la sortie de l'antenne de réception de ce satellite (K);

ΔT_e — accroissement apparent de la température de bruit du système de réception de la station terrienne e_R, causé par une émission brouilleuse, rapporté à la sortie de l'antenne de réception de cette station (K);

p_s — densité maximale de puissance par Hz fournie à l'antenne du satellite S (moyenne prise dans da bande de 4 kHz la plus défavorisée lorsque la fréquence de la porteuse est inférieure à 15 GHz, ou prise dans la bande de 1 MHz la plus défavorisée lorsque la fréquence de la porteuse est supérieure à 15 GHz) (W/Hz);

$g_3(\eta)$ — gain de l'antenne d'emision du satellite S dans la direction η (rapport numérique de puissance);

η_A — direction, à partir du satellite S, de la station terrienne de réception e_R pour la liaison par satellite A;

η_e — direction à partir du satellite S, de la station terrienne de réception e'_R pour la liaison par satellite A';

Note —Le produit $p_s\ g_3(\eta_e)$ est la p. i. r. e. maximale par Hz du satellite S dans la direction de la station terrienne de réception e'_R pour la liaison par satellite S';

η_S — direction, à partir du satellite S, du satellite S';

P_c — densité maximale de puissance par Hz fournie à l'antenne de la station terrienne d'émission e_R (moyenne prise dans la bande de 4 kHz la plus défavorisée lorsque la fréquence de la porteuse est inférieure à 15 GHz, ou prise dans la bande de 1 MHz la plus défavorisée lorsque la fréquence de la porteuse est supérieure à 15 GHz) (W/Hz);

$g_2(\delta)$ — gain de l'antenne de réception du satellite S, dans la direction δ (rapport numérique de puissances);

δ_A — direction, à partir du satellite S, de la station terrienne d'émission e_T pour la liaison par satellite A;

$\delta_{e'}$ — direction, à partir du satellite S, de la station terrienne d'émission e'_T pour la liaison par satellite A';

$\delta_{S'}$ — direction, à partir du satellite S, du satellite S';

θ_t — écart angulaire topocentrique en degrés entre les deux satellites (1), compte tenu des tolérances longitudinales de maintien en position;

Note. — Seul l'angle topocentrique θ_t, doit être utilisé dans le traitement du cas I.

θ_g — écart angulaire géocentrique en degrés entre les deux satellites, compte tenu des tolérances longitudinales de maintien en position;

Note. — Seul l'angle géocentrique θ_g doit être utilisé dans le traitement du cas II.

$g_1(\theta_t)$ — gain de l'antenne d'émission de la station terrienne e_T dans la direction du satellite S' (rapport numérique de puissances);

$g_4(\theta_t)$ — gain de l'antenne de réception de la station terrienne e_R dans la direction du satellite S' (rapport numérique de puissances);

k — constante de Boltzmanne ($1{,}38 \times 10^{-23}$ J/K);

I_d — affaiblissement de transmission en espace libre (2) sur la liaison descendante (rapport numérique de puissances), entre le satellite S et la station terrienne de réception e_R pour la liaison par satellite A;

Note. — On consideré que l'affaiblissement de transmission en espace libre sur une liaison descendante quelconque, entre satellites S ou S' et les stations terriennes de réception e_R ou e'_R, est égal à I_d.

I_u — affaiblissement de transmission en espace libre (2) sur la liaison montante (rapport numérique de puissances), entre la station terrienne e_T et satellite S pour la liaison par satellite A;

Note. — On consideré que l'affaiblissement de transmission en espace libre sur une liaison montante quelconque, entre les stations terriennes e_T ou e'_T et les satellites S ou S', est égal à I_u.

I_S — affaiblissement de transmission en espace libre (2) sur la liaison inter-satellite (rapporte numérique de puissances) entre le satellite S' et le satellite S;

γ — gain de transmission d'une liaison spécifique par satellite subissante un brouillage, évalué entre la sortie de l'antenne de réception du satellite S et la sortie de l'antenne de réception de la station terrienne e_R (rapport numérique de puissances, habituellement inférieur à 1).

2.2. *Méthode générale.*

Dans les expressions qui suivent, la fréquence à utiliser pour le calcul de I_d, I_u et I_s est la fréquence moyenne de la bande commune aux deux réseaux dans le sens consideré. Si, dans un sens donné, il n'y a pas de chevauchement entre les bandes de fréquences assignées aux deux réseaux, la valeur correspondante (ΔT_s ou ΔT_e) est prise comme étant égale à zéro. Dans le cas où, pour un réseau, les données de l'appendice 3 n'ont pas été publiées, la bande de fréquences assignée à ce réseau este considerée étant la gamme de fréquences publiée au titre de l'appendice 4.

2.2.1. Cas I —*Réseaux utile et brouiller partageant une bande de fréquences dans le même sens de transmission.*

Les gains $g_1(\theta_1)$ et $g_4(\theta_1)$ sont ceux des stations terriennes considérées. Lorsqu'on ne dispose ni de données mesurées ni d'un Avis pertinent du CCIR accepté par les administrations concernées, il faut utiliser les diagrammes de rayonnement donnés dans l'annexe III.

2.2.1.1. *Simple répéteur-changeur de fréquence à bord du satellite.*

ΔT et ΔT_e peuvent être calculés d'aprés les expressions suivantes:

$$\Delta T_s = \frac{p'_e g'_1(\theta_t)\, g_2(\delta_e)}{K l_u} \tag{1}$$

$$\Delta T_e = \frac{p'_e g'_3(\eta_e)\, g_4(\theta_t)}{K l_d} \tag{2}$$

On utilise le symbole ΔT pour représenter l'accroissement apparent, causé par l'émission brouilleuse de la liaison A', de la température de bruit équivalente pour la liaison par satellite tout entière rapportée à la sortie de l'antenne de réception de la station terrienne de réception e_R.

Cet accroissement de la température de bruit résulte des émissions brouilleuses qui affectent à la fois le récepteur du satellite de la liaison A et celui de la station terrienne de cette liaison. On peut done écrire:

$$\Delta T = \gamma \Delta T_s + \Delta T_e \tag{3}$$

(1) L'annexe I décrit une méthode de calcul de l'écart angülaire topocentrique.

(2) L'annexe II décrit une méthode de calcul de l'affaiblissement de transmission en espace libre.

d'où:

$$\Delta T = \gamma \frac{p'_e g'_1(\theta_e) g_2(\delta_e)}{kl_u} + \frac{p'_e g'_3(\eta_e) g_4(\theta_1)}{kl_d} \quad (4)$$

On trouvera à l'annexe IV un exemple de calcul pour l'application dans de cas I, de la méthode formulée dans le présent appendice.

On peut obtenir de la même façon la valeur $\Delta T'$ de l'accroissement de la température de bruit équivalent pour la liaison par satellite tout entière, rapportée à la sortie de l'antenne de réception de la station terrienne de réception e'_R subissant les brouillages causés par la liaison par satellite A, en utilisant les expressions suivantes:

$$\Delta T'_s = \frac{p_e g_1(\theta_e) g'_2(\delta_e)}{Kl_u} \quad (5)$$

$$\Delta T'_e = \frac{p_e g_3(\eta_e) g'_4(\theta_1)}{Kl_d} \quad (6)$$

$$\Delta T'_e = \gamma \frac{p'_e g_1(\theta_1) g'_2(\delta_e)}{kl_u} + \frac{p'_e g'_3(\eta_e) g'_4(\theta_e)}{kl_d} \quad (7)$$

2.2.1.2. *Cas nécessitant un traitement séparé de la liaison montante et de la liaisons descendante.*

S'il y a un changement de modulation à bord du satellite ou si la transmission a lieu à partir du satellite, l'accroissement apparent de la température de bruit doit être rapporté à la température totale de bruit du système de réception de la liaison considerée (à la station spatiale ou à la station terrienne, selon le cas). En pareil cas, la température de bruit équivalent de la liaison totale par satellite et le gain de transmission ne sont pas utilisés et les expressions (1) et (2) ci-dessus sont utilisées séparément comme il convient (voir le § 2.3).

2.2.2. Cas II — *Réseaux utile et brouiller partageant une bande de fréquences dans des sems de transmission opposés (utilisation bidirectionnelle).*

La méthode de calcul ci-dessous ne s'applique qu'aux émissions brouilleuses entre satellites.

Les brouillages entre les stations terriennes utilisant une même bande de fréquences dans des sens de transmission opposés (utilisation bidirectionnelle) doivent être traités selon des méthodes de coordination analogues à celles utilisées pour la coordination entre stations terriennes et stations de Terre.

Toutes les expressions relatives au cas II doivent utiliser l'angle géocentrique θg.

2.2.2.1. *Simple répéteur-changeur de fréquence à bord du satellite.*

L'accroissement de la température de bruit ΔT_s, rapporté à la sortie de l'antenne de réception du satellite de la liaison Δ est donné par:

$$\Delta T_s = \frac{p'_s g'_3(\eta_s) g_2(\delta_s)}{Kl_s} \quad (8)$$

L'accroissement apparent de la température de bruit équivalent de la liaison est alors donné par:

$$\Delta T = \gamma \Delta T_s \quad (9)$$

La valeur $\Delta T'$ de l'accroissement de la température de bruit équivalent de la liaison A' causé par les émissions brouilleuses du satellite associé à la liaison A est donnée par:

$$\Delta T' = \gamma \Delta T'_s = \frac{\gamma' P_s g_3(\eta_s) g'_2(\delta_s)}{KL_s} \quad (10)$$

2.2.2.2. *Cas nécessitant un traitement séparé de la liaison montante et de la liaisons descendante.*

Dans ce cas, on utilise directement l'expression (8) avec T_s, pour obtenir le pourcentage d'accroissement. La valeur $\Delta T'_s$ de l'accroisement de la température de bruit de la liaison A' causé par les émissions brouilleuses du satellite associé à une liaison A s'obtient de la même façon.

2.2.3. *Prise en compte éventuelle de la discrimination de polarisation.*

Le facteur de discrimination de polarisation décrit dans ce paragraphe doit être pris en considération seulement si chacune des administrations responsables des réseaux a été d'accord pour cela et a notifié sa polarisation, ou l'a publiée, aux

fins de coordination conformément aux dispositions du numéro **1060**. Dans ce cas, l'accroissement apparent de la température de bruit équivalent de la liaison s'obtient par les formules ci-après:

Cas I:

$$\Delta T = \frac{\gamma \Delta T_s}{Y_u} + \frac{\Delta T_e}{Y_d}$$

Cas II:

$$\Delta T = \frac{\gamma \Delta T_s}{Y_{ss}}$$

où ΔT_s et ΔT_e ont les valeurs données en 2.2.1 et 2.2.2 et les valeurs des facteurs de discrimination de polarisation Y_u, Y_d et Y_{ss} sont données para le tableau ci-dessous:

Polarisation		Facteur de discrimination de polarisation (rapport numérique $\overline{Y}$)
Réseau *R*	Réseau *R'*	
CG	*CD*	4
CG	*R*	1,4
CD	*R*	1,4
CG	*CG*	1
CD	*CD*	1
R	*R*	1

où:

CG = circulaire gauche (levogyre);
CD = circulaire droite (dextrogyre);
R = rectiligne.

2.3. *Détermination des liaisons par satellite à pendre en considération pour le calcul de l'accroissement de la température de bruit équivalente (cas I seulement).*

Il faut déterminer le plus grand accroissement de température de bruit équivalente causé à n'importe quelle liaison de tout réseau à satellite existant ou en projet, sous l'effet des émissions brouilleuses du réseau à satellite considéré.

Pour chaque antenne de réception du satellite du réseau brouillé, il convient de déterminer l'emplacement le plus défavorable de la station terrienne d'émission du réseau brouilleur en superposant, sur une carte de la surface terrestre, les zones de service «Terre vers espace» du réseau brouilleur aux contours de gain de l'antenne de réception de la station spatiale. L'emplacement le plus défavorable de la station terrienne d'émission est celui en direction duquel le gain de l'antenne de réception du satellite du réseau brouillé est le plus élevé.

De même, pour chaque zone de service «espace vers Terre» du réseau brouillé, il convient de déterminer de façon analogue l'emplacement le plus défavorable de la station terrienne de réception de ce réseau. L'emplacement le plus défavorable de la station terrienne de réception est celui en direction duquel le gain de l'antenne d'émission du satellite du réseau brouilleur est le plus élevé.

2.4. *Utilisation des renseignements fournis au tire d l'appendice* **4**.

Lorsqu'une administration décide d'utiliser les renseignements fournis au titre de l'appendice **4** avec les procédures de calcul décrites dans les sections 2.2.1.1 et 2.2.2.1, en vue de formuler des observations concernant la publication anticipée d'un nouveau réseau, les calculs doivent être effectués pour les deux séries de valeurs fournies pour γ et T. La plus grande des deux valeurs de $\Delta T/T$ résultant de ces calculs est celle qu'il convient d'utiliser.

3. *Comparaison entre l'accroissement relatif calculé de la température de bruit et la valeur de seuil.*

3.1. *Simple répéteur-changeur de fréquence à bord du satellite.*

Les valeurs calculées de $\frac{\Delta T}{T}$ et $\frac{\Delta T'}{T'}$, exprimées en pourcent, doivent être comparées à la valeur de seuil de 4 %.

Si la valeur calculée de $\frac{\Delta T}{T}$, exprimée en pourcent, due à tout émission brouilleuse causée par la liaison A' à la liaison A, n'est pas supérieure à la valeur de seuil, une coordination en ce qui concerne le brouillage de la liaison A por la liaison A' n'est pas nécessaire.

Si la valeur calculée de $\frac{\Delta T}{T}$, exprimée en pourcent, est supérieure à la valeur de seuil, une coordination est nécessaire.

La comparaison entre la valeur calculée de $\frac{\Delta T'}{T'}$ et la valeur de seuil, exprimées en pour cent, doit être faite de la même façon.

3.2. *Cas nécessitant un traitement sépare de la liaison montante et de la liaison descendante.*

a) Dans un cas de brouillage affectant une seule liaison, la liaison montante ou la liaison descendente, la valeur de $\Delta T_e/T_e$ ou de $\Delta T_s/T_s$, exprimée en pourcent, doit être comparée à la valeur de seuil de 4 %;

b) Dans un cas de brouillage affectant à la fois la liaison montante et la liaison descendante, entre lesquelles il y a un changement de modulation à bord du satellite, leurs valeurs de $\Delta T_e/T_e$ et de $\Delta T_s/T_s$, exprimées en pourcent, doivent être comparées à la valeur de seuil de 4 %.

Lorsqu'aucune des valeurs calculées dues à toute émission brouillage causée par la liaison A' à la liaison A n'est supérieure à la valeur de seuil, une coordination en ce qui concerne le brouillage de la liaison A par la liaison A' n'est pas nécessaire.

Si l'une au moins des valeurs calculées est supérieure à la valeur de seuil, une coordination est nécessaire.

La comparaison des valeurs de $\frac{\Delta T_e'}{T_e'}$ ou de $\frac{\Delta T_s'}{T_s'}$, exprimés en pourcent, avec la valeur de seuil doit être faite de la même façon.

4. *Examen des porteuses à bande étroite.*

Il se peut que la méthode de calcul décrite dans cet appendice sous-estime le brouillage causé à certaines émissions à bande étroite (à une seule voie par porteuse — SCPC) par des émissions de télévision à balayage lent.

Pour faciliter la procédure de coordination entre systèmes à satellite et réduire le nombre des administrations impliquées dans cette procédure, les administrations dont les assignations à des stations utilisant des systèmes SCPC sont soit inscrites dans le Fichier de référence, soit en cours de coordination, peuvent faire connaître à l'administration qui notifie une nouvelle assignation les canaux radioélectriques utilisés dans leurs systèmes pour les émissions SCPC. L'administration notificatrice peut ainsi, le cas échéant, éviter d'employer ces canaux pour les émissions de télévision à modulation de fréquence.

Réciproquement, les administrations qui prévoient de nouveaux systèmes à émissions SCPC peuvent chercher à obtenir auprès d'autres administrations les renseignements appropriés sur leurs émissions de télévision à modulation de fréquence.

ANNEXE I

Calcul de l'écart angulaire topocentrique entre deux satellites géostationnaires

L'écart angulaire topocentrique θ, entre deux satellites géostationnaires à partir d'une station terrienne donnée peut être calculé à l'aide de la formule:

$$\theta_t = \text{arc cos} \left[\frac{d_1^2 + d_2^2 - \left(84\,332 \sin \frac{\theta_s}{2}\right)^2}{2\,d_1 \cdot d_2} \right]$$

dans laquelle d_1 et d_2 sont les distances respectives, en km, entre la station terrienne et les deux satellites, évaluées par la méthode décrite pour le calcul de d dans l'annexe II, et θ_s a la valeur définie au § 2.1.

ANNEXE II

Calcul de l'affaiblissement de transmission en espace libre

L'affaiblissement de transmission L en espace libre peut être calculé à l'aide de la formule:

$$L = 20\ (\log f + \log d) + 32{,}45\ \text{(dB)}$$

dans laquelle:

f — Fréquence (MHz);
d — Distance (km).

a) La distance d entre une station terrienne et un satellite géostationnaire est donnée par la formule:

$$d = 42\,644\ \sqrt{1 - 0{,}2954 \cos \psi}\ \text{(km)}$$

dans laquelle:

$$\cos \psi = \cos \zeta \times \cos \beta$$

où:

ζ — Latitude de la station terrienne;
β — Différence de longitude entre le satellite et la station terrienne.

Remarque — Si $\cos \psi < 0{,}151$, le satellite est au-dessus du plan horizontal.

b) La distance d_s entre deux satellites géostationnaires est donnée par:

$$d_s = 84\,322 \sin \frac{\theta_g}{2} \text{ (km)}$$

θ_g — Écarte angulaire géocentrique, selon la définition donnée au § 2.1.

ANNEXE III

Diagrammes de rayonnement à utiliser pour les antennes de station terrienne lorsqu'ils ne sont pas publiés

S'il n'existe ni données mesurées ni Avis pertinent du CCIR acceptés par les administrations concernées, celles-ci doivent utiliser les diagrammes de référence représentés, en dB, par:

a) Pour des valeurs de $\frac{D}{\lambda} \geq 100$ (1) (gain maximum ≥ 48 dB environ):

$G(\varphi) = G_{max} - 2{,}5 \times 10^{-3} \left(\frac{D}{\lambda}\varphi\right)^2$ pour $0 < \varphi < \varphi_m$
$G(\varphi) = G_1$ pour $\varphi_m \leq \varphi < \varphi_r$
$G(\varphi) = 32 - 25 \log \varphi$ pour $\varphi_r \leq \varphi < 48°$
$G(\varphi) = -10$ pour $48° \leq \varphi < 180°$

où

D — Diamètre de l'antenne
λ — Longueur d' onde
} exprimés dans la même unité;
φ — Angle par rapport à l'axe principal de l'antenne en degrés, égal à 0, ou θ_g, selon le cas;
G_1 — Gain du premier lobe latéral = $2 + 15 \log \frac{D}{\lambda}$

$$\varphi_m = \frac{20\lambda}{D} \sqrt{G_{max} - G_1} \text{ (degrés)}$$
$$\varphi_r = 15{,}85 \left(\frac{D}{\lambda}\right)^{-0.6} \text{ (degrés)}$$

b) Pour les valeurs de $\frac{D}{\lambda} < 100$ (1) (gain maximum < 48 dB environ):

$G(\varphi) = G_{max} - 2{,}5 \times 10^{-3} \left(\frac{D}{\lambda}\varphi\right)^2$ pour $0 < \varphi < \varphi_m$
$G(\varphi) = G_1$ pour $\varphi_m \leq \varphi < 100 \frac{\lambda}{D}$
$G(\varphi) = 52 - 10 \log \frac{D}{\lambda} - 25 \log \varphi$ pour $100 \frac{\lambda}{D} \leq \varphi < 48°$
$G(\varphi) = 10 - 10 \log \frac{D}{\lambda}$ pour $48° \leq \varphi \leq 180°$

Les diagrammes ci-dessus peuvent être modifiés si nécessaire pour obtenir une meilleure représentation du diagramme de rayonnement réel.

ANNEXE IV

Exemple d'application de l'appendice 29

1. *Considérations générales:*

Dans le présent exemple relatif au cas I (voir le § 2.2.1), on admet, par hypothèse, deux réseaux à satellite identiques comportant chacun un simple répéteur-changeur de fréquence et une antenne à couverture mondiale.

Tous les angles topocentriques θ_t sont supposés avoir une valeur de 5°.

Pour cet écart angulaires et pour une antenne de station terrienne dont le rapport $\frac{D}{\lambda}$ est plus grand que 100, le diagramme de rayonnement de référence ($32 - 25 \log \theta_t$) indique un gain de 14,5 dB dans la direction du satellite de l'autre réseau.

Les données de départ, indiquées dans le § 2 ci-dessus, sont exprimés en décibels, exception faite pour les paramètres T et θ_t. Dans le § 3 ci-dessus, les calculs sont effectués en décibels.

(1) Dans les cas où $\frac{D}{\lambda}$ n'est pas donné, il peut être évalué à partir de l'expression $20 \log \frac{D}{\lambda} \approx G_{max} - 7{,}7$ dans laquelle G_{max} est, en dB, le gain du lobe principal de l'antenne.

On peut noter que, puisque les deux satellites utilisent des faisceaux à couverture mondiale, l'antenne du satellite n'aporte pratiquement pas de discrimination entre le signal utile et le signal brouilleur; il s'agit donc d'un cas défavorable à l'extrême.

2. *Données de départ:*

Les valeurs des caractéristiques du réseau données dans le tableau ci-dessus sont tirées des valeurs publiées au titre de l'appendice 3 ou de l'appendice 4.

	Symbole (a)	Valeur	Unité
Liaison montante à 6175 MHz	P'_e	— 37	dB (W/Hz)
	$G'_1(0_r)$	14,5	dB
	$G_2(\delta_e)$	15,5	dB
	L_u	200	dB
Liaison descendante à 3950 MHz	P'_s	— 57	dB (W/Hz)
	$G'_3(\eta_e)$	15,5	dB
	$G_4(0_r)$	14,5	dB
	L_d	196	dB
—	10 log γ	— 15	dB
	T	105	K
	θ_r	5	degrés

(a) Tous les symboles en lettres majuscules, à l'exception de T, se rapportent aux caractéristiques données en unités logarithmiques.

3. *Calcul de* $\frac{\Delta T}{T}$.

A partir de la formule (1):

$$10 \log \Delta T_s = P_e + G_1(\theta_r) + G_2(\delta_e) + 228{,}6 - L_u$$
$$= -37 + 14{,}5 + 15{,}5 + 228{,}6 - 200 = 21{,}6 \text{ dBK}$$

on obtient:

$$\Delta T_s = 145 \text{ K}$$

A partir de la formule (2):

$$10 \log \Delta T_e = P'_s + G'_3(\eta_e) + G_4(\theta_r) + 228{,}6 - L_d$$
$$= -57 + 15{,}5 + 14{,}5 + 228{,}6 - 196 = 5{,}6 \text{ dBK}$$

on obtient,

$$\Delta T_e = 3{,}6 \text{ K}$$

La formule (3) donne:

$$\Delta T = \gamma \Delta T_s + \Delta T_e$$
$$= 0{,}032 \times 145 + 3{,}6 = 8{,}2 \text{ K}$$

d'où:

$$\frac{\Delta T}{T} \times 100 = \frac{8{,}2 \times 100}{105} = 7{,}8\ \%$$

4. *Conclusion:*

Dans l'exemple ci-dessus, le pourcentage d'argumentation de la température de bruit équivalent de la liaison par satellite est 7,8 %. Etant donné que cette valeur dépasse la valeur de seuil de 4 %, une coordination des deux réseaux est nécessaire.

(MOD) **AP29A** APPENDICE 30

Dispositions applicables à tous les services et Plan associé concernant le service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7-12,5 GHz (dans la Région 1) (1)

(Voir l'article 15)

ARTICLE 1

Définitions générales

Aux fins du présent appendice, les termes ci-dessous sont définis comme suit:

Conférence. — Conférence administrative mondiale des radiocommunications chargée d'établir un plan pour le service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7-12,5 GHz (dans la Région 1), dénommée en abrégé Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

Plan. — Le Plan pour les Régions 1 et 3 ses annexes.

Assignation de fréquence conforme au plan. — Assignation de fréquence figurant dans le Plan ou pour laquelle la procédure de l'article 4 du présent appendice a été appliquée avec succés.

ARTICLE 2

Bandes de fréquences

2.1. Les dispositions du présent appendice s'appliquent au service de radiodiffusion par satellite dans les bandes de fréquences comprises entre 11,7 GHz et 12,5 GHz dans la Région 1, et entre 11,7 GHz et 12,2 GHz dans les Régions 2 et 3 aux autres services auxquels ces bandes sont attribuées, en ce qui concerne les relations de ces services avec le service de radiodiffusion par satellite dans ces bandes.

ARTICLE 3

Exécution des dispositions et du plan associé

3.1. Les Membres de l'Union faisant partie des Régions 1 et 3 adoptent, pour leurs stations spatiales de radiodiffusion fonctionnant dans les bandes de fréquences faisant l'objet du présent appendice, les caractéristiques spécifiées dans le Plan de ces Régions.

3.2. Les Membres de l'Union faisant partie de la Région 2 appliquent les dispositions transitoires contenues das l'article 12 du présent appendice. Ces dispositions régissent le service de radiodifusion par satellite dans la Région 2, jusqu'à l'entrée en vigueur des plans détaillés de la Région 2, qui seront établis par une future conférence administritive régionale des radiocommunications.

3.3. Les Membres de l'Union ne pourront modifier les caractéristiques spécifiées dans le Plan ou mettre en service de nouvellese stations spatiales de radiodiffusion par satellite des autres services auxquels ces bandes de fréquences sont attribuées que dans les conditions indiquées dans le Règlement des radiocommunications et aux articles et annexes pertinents du présent appendice.

ARTICLE 4

Prócedure relative aux modifications apportées au Plan

4.1. Lorsqu'une administration se propose d'apporter une modification (2) au plan, c'est-à-dire:

Soit de modifier les caractéristiques de l'une de ses assignations de fréquence à une station spatiale (3) du service de radiodiffusion par satellite figurant dans le Plan ou pour laquelle la procédure définie dans le présent article a été appliquée avec succès, que cette soit en service ou non;

Soit d'inscrire dans le Plan une nouvelle assignation de fréquence à une station spatiale du service de radiodiffusion par satellite;

Soit d'annuler une assignation de fréquence à une station spatiale du service de radiodiffusion par satellite.

---

(1) Les dispositions et le Plan associé du présent appendice sont entrés en vigeur le 1er janvier 1979 en application de l'article 15 des Actes Finals de la Conférence Administrative Mondiale des Radiocommunications pour la Rediodiffusion par Satellite (Génève, 1977)

(2) L'utilisation d'une valeur de la dispersion de l'énergie différent de celle au paragraphe 3.18 de l'annexe 8 est considerée comme une modification; en conséquence, les dispositions pertinentes du présent article lui sont applicables.

(3) L'expression «assignation de fréquence à une station spatiale», partout ou elle figure dans le présent article, doit être entendue comme se réfèrant à une assignation de fréquence associée à une position sur l'orbite donnée. Voir en annexe 10 les restrictions applicables aux positions sur l'orbite.

La procédure suivante est appliquée avant toute notification pertinente au Comité International d'Enregistrement des Fréquences (voir l'article 5 du présent appendice).

4.2. L'expression «assignation de fréquence conforme au Plan», utilisée dans cet article et les suivants, est définie dans l'article 1.

4.3. *Project de modification d'une assignation de fréquence conforme au Plan ou projet d'inscription d'une nouvelle assignation de fréquence dans le Plan.*

4.3.1. Toute administration qui envisage la modification des caractéristiques d'une assignation de fréquence conforme au Plan ou l'inscription d'une nouvelle assignation de fréquence dans le Plan l'accord de toute autre administration:

4.3.1.1. Dont une assignation de fréquence à une station spatiale du service de radiodiffusion par satellite, conforme ao Plan, est inscrite dans le même canal ou dans un canal adjacent, ou pour laquelle des modifications au Plan ont été publiées, par le Comité conformément aux dispositions du présent article.

4.3.1.2. Dont une assignation de fréquence à une station spatiale du service de radiodiffusion par satellite dans la Région 2 a une largeur de bande nécessaire recouvrant partiellement celle de l'assignation envisagée, et est inscrite dans le Fichier de référence, ou:

Fait ou fait l'objet de la coordination selon les dispositions de la Résolution **33** (1), ou

Figure dans un plan pour la Région 2 (2) qui sera adopté lors d'une future conférence administrative régionale des radiocommunications, compte tenu des modifications qui pourraient être apportées à ce plan conformément aux actes finals de ladite conférence.

4.3.1.3. N'ayant aucune assignation de fréquence du service de radiodiffusion par satellite dans le canal considéré, mais sur le territoire duquel la puissance surfacique dépasse la limite prescrite du fait de ce projet de modification.

4.3.1.4 Dont une assignation de fréquence à une station spatiale du service fixe par satellite est inscrite dans le Fichier de référence dans la bande 11,7-12,2 GHz ou fait, ou a fait, l'objet d'une coordination aux termes du numéro **1060** du Règlement des radiocommunications ou du paragraphe 7.2.1 du présent appendice et qui est considérée comme défavorablement influencée.

Une assignation de fréquence est considérée comme défavorablement influencée lorsque les limites indiquées dans l'annexe 1 sont dépassées.

4.3.2. Toute administration qui envisage d'apporter une modification au Plan doit envoyer au Comité, au plus tôt cinq ans, mais au plus tard dix-huits mois, avant la date à laquelle l'assignation doit être mise en service, les renseignements pertinents énumérés dans l'annexe 2. Si l'assignation n'est pas mise en service au plus tard à cette date, la modification est considérée comme nulle.

4.3.2.1. Si projet de modification n'entraîne pas un dépassement des limites spécifiées dans l'annexe 1, il y a lieu de le préciser lors de l'envoi au Comité des renseignements demandés au paragraphe 4.3.2. Le Comité publiera ces renseignements dans une section spéciale de sa circulaire hebdomadaire.

4.3.2.2. Dans les autres cas, afins de parvenir à l'accord prévu au paragraphe 4.3.1, l'administration communicque au Comité le nom des administrations auprès desquelles elle estime qu'un accord doit être recherché ainsi que le nom des administrations avec lesquelles un accord a déjà été conclu.

4.3.3. Le Comité détermine, d'après l'annexe 1, les adminstrations dont les assignations de fréquence sont considérées comme étant défavorablement influencées au sens du paragraphe 4.3.1. Le Comité inclut le nom de ces administrations dans les renseignements reçus en application du paragraphe 4.3.2.2 et publie l'ensemble des renseignements dans une section spéciale de sa circulaire hebdomadaire. Le Comité communique immédiatement les résultats de ses calculs à l'administration qui envisage d'apporter la modification au Plan.

4.3.4. Le Comité adresse un télégramme aux administrations énumérées dans la section spéciale de sa circulaire hebdomadaire en attirant leur attention sur la publication de ces renseignements et leur communique le résultat de ses calculs.

4.3.5. Toute administration qui considère qu'elle aurait dú figurer dans la liste des administrations dont les services sont considérés comme étant défavorablement influencés peut demander au Comité de l'inclure dans cette liste: elle fournit au Comité les raisons techniques à l'appui de sa demande. Le Comité étudie cette demande sur la base de l'annexe 1 et envoie une copie de ladite demande, accompagnée d'une recommandation appropriée, à l'administration qui envisage la modification au Plan.

4.3.6. Toute modification d'une assignation de fréquence conforme au Plan, ou toute inscription dans le Plan d'une nouvelle assignation de fréquence qui entrainerait le dépassement des limites spécifées dans l'annexe 1, est subordonnée à l'accord de toutes les administrations défavorablement influencées.

4.3.7. L'administration qui recherche un accord ou l'administration auprès de laquelle un accord est recherché peut demander les renseignements techniques supplémentaires qu'elle estime nécessaires. Les administrations portent ces demandes à la connaissance du Comité.

4.3.8. Les observations des administrations concernant les renseignements publiés em vertu du paragraphe 4.3.3 sont adressées à l'administration qui envisage la modification, soit directement, soit par l'intermédiaire du Comité. Dans touts les cas, le Comité doit être informé que des observations ont été formulées.

---

(1) Remplace la Résolution Spa2-3 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

(2) Le plan pour la Région 2, qui será adopté lors d'une future conférence administrative régionale des radiocommunications, ne devra pas abaisser le degré de protection aux assignations figurant dans le Plan, au-dessous des limites spécifiées dans le présent appendice.

4.3.9. Toute administrations n'ayant pas adressé ses observations à l'administration notificatrice, soit directement, soit par l'intermédiaire du Comité, dans un délai de cent vingt jours après da date de circulaire hebdomadaire mentionnée au paragraphe 4.3.2.1 ou 4.3.3 est réputée avoir donné son accord à la modification envisagée. Ce délai peut être prorogé de quatre-vingts jours pour une administration qui a demandé des renseignements supplémentaires conformément aux dispositions du paragraphe 4.3.7 ou l'aide du Comité conformément au paragraphe 4.3.17. Dans ce dernier cas, le Comité porte cette demande à la connaissance des administrations intéressées.

4.3.10. Lorsque, pour parvenir à un accord, une administration est conduite à modifier son projet initial, des applique à nouveau les dispositions du paragraphe 4.3.2. et la procédure qui en découle vis-à-vis de toute administration dont les services pourraient être défavorablement influencés à la suite des modifications apportées au projet initial.

4.3.11. Si aucune observation ne lui est parvenue dans les délais spécifiés au paragraphe 4.3.9, ou si un accord est intervenu avec les administrations ayant formulé des observations et dont l'accord est nécessaire, l'administration qui envisage la modification peut continuer à appliquer la procédure appropriée de l'article 5; elle en informe le Comité en lui indiquant les caractéristiques définitives de l'assignation de fréquence ainsi que le nom des administrations avec lesquelles un accord a été conclu.

4.3.12. L'accord des administrations concernées peut également être obtenu, aux termes du présent article, pour une période déterminée.

4.3.13. Lorsqu'un project de modification au Plan intéressee des pays en voie de développement, les administrations recherchent toute solution pratique permettant d'assurer le développement économique du système de radiodiffusion par satellite desdits pays.

4.3.14. Le Comité publie dans une section spéciale de sa circulaire hebdomadaire les renseignements qu'il reçoit aux termes du paragraphes 4.3.11, en les accompagnant, le cas échéant, du nom des administrations avec lesquelles les dispositions du présent article ont été appliquées avec succés. L'assignation de fréquence bénéficiera du même statut que celles figurant dans le plan et sera considérée comme une assignation de fréquence conform au Plan.

4.3.15. Lorsqu'une administration qui envisage de modifier les caractéristiques d'une assignation de fréquence ou de mettre en service une nouvelle assignation de fréquence reçoit un avis de désaccord d'une autre administration dont elle a demandé l'accord, elle doit s'efforcer tout d'abord de résoudre le problème en recherchant tout les moyens possibles pour satisfaire à ses besoins. Si le problème ne peut pas encore être résolu par le mise en œuvre de ces moyens, l'administration dont l'accord a été recherché doit s'efforcer de surmonter les difficultés dans toute la mesure du possible et donne les raisons techniques du désaccord si l'administration qui recherche l'accord lui demande de la faire.

4.3.16. Si aucun accord n'intervient entre les administrations intéressées, le Comité procéde à toute étude que peuvent lui demander ces administrations; il les informe du résultat de cette étude et leur présente les recommandations qu'il peut formuler en vue de résoudre le problème.

4.3.17. Toute administration peut, à n'importer quel stade de la procédure décrite ou avant d'appliquer cette procédure, demander l'aide du Comité, notamment dans la recherche de l'accord d'une autre administration.

4.3.18. Les dispositions pertinents de l'article 5 du présent appendice sont appliquées lors de la notification des assignations de fréquence au Comité.

4.4. *Annulation d'une assignation de fréquence.*

Lorsqu'une assignation de fréquence conforme au Plan est définitivement abandonnée, qu'il s'agisse ou non des conséquences d'une modification, l'administration intéressée en informe immédiatement le Comité. Celui-ci publie ce renseignement dans une section spéciale de sa circulaire hebdomadaire.

4.5. *Exemplaire de référence du Plan.*

4.5.1. Le Comité tient à jour un exemplaire de référence du plan en tenant compte de l'application de la procédure décrite dans le présent article. Le Comité préparera un document indiquant les amendements à apporter au Plan à la suite des modifications effectuées conformément à la procédure du présent article.

4.5.2. Le Secrétaire général est informé par le Comité de toute modification apportée au Plan; il publie sous une forme appropriée une version à jour du Plan lorsque les circonstances le justifient.

ARTICLE 5

Notification, examen et inscription dans le Fichier de référence des assignations de fréquence aux stations spatiales du service de radiodiffusion par satellite dans les Régions 1 et 3

5.1. *Notification.*

5.1.1. Toute administration qui se propose de mettre en service une assignation de fréquence à une station spatiale du service de radiodiffusion par satellite doit notifier cette assignation de fréquence au Comité. L'administration notificatrice applique à cet effet les dispositions suivantes.

5.1.2. Toute assignation de fréquence notifiée en exécution du paragraphe 5.1.1 doit faire l'objet d'une fiche individuelle de notification établie dans la forme prescrite à l'annexe 2 dont les diverses sections spécifient les caractéristiques fondamentales à fournir selon le cas. Il est recommandé que l'administration notificatrice communique également au Comité tout autre renseignements qu'elle peut juger utile.

5.1.3. La fiche de notification doit parvenir au Comité au plus tôt ans avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir en tout cas au plus tard quatre-vingt-dix jours avant cette date (1).

5.1.4. Toute assignation de fréquence dont la notification parvient au Comité après l'expiration des délais prescrits au paragraphe 5.1.3 porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions du paragraphe 5.1.3.

5.1.5. Lorsque le Comité reçoit une fiche de notification, établie en exécution du paragraphe 5.1.1,. qui ne contient pas les caractéristiques fondamentales spécifiées dans l'annexe 2, il la retourne immédiatement par poste aérienne à l'administration dont elle émane, accompagnée des motifs de ce renvoi.

5.1.6. Lorsque le Comité reçoit une fiche de notification complète, il inclut les renseignements qu'elle contient, avec sa date de réception, dans sa circulaire hebdomadaire; cette circulaire les renseignements figurant dans toutes les fiche de notification complétes reçues par le Comité depuis la publication de la circulaire précédente.

5.1.7. La circulaire tient lieu d'accusé de réception par le Comité, à l'administration notificatrice d'une fiche de notification complète.

5.1.8. Le Comité examine les fiches de notifications complètes dans l'ordre où il les reçoit. Il ne peut ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement, et encore en cours d'examen, avant d'avoir pris une décision en ce qui concerne cette dernière.

5.2. *Examen et inscription.*

5.2.1. Le Comité examine chaque fiche de notification:

a) Du point de vue de sa conformité avec les clauses de la Convention, des dispositions pertinentes du Règlement des radiocommunications et de l'annexe 1 au présent appendice (à l'exception de celles qui ont trait à la conformité avec le Plan);

b) Du point de vue de sa conformité avec le Plan.

5.2.2. Lorsque le Comité formule une conclusion favorable relativement au paragraphe 5.2.1, l'assignation de fréquence notifiée par l'administration est inscrite dans le Fichier de référence; la date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d. En ce qui concerne les relations entre les administrations, toutes les assignations de fréquence mises en service conformément au Plan et inscrites dans le Fichier de référence seront considérés comme bénéficiant du même statut, quelle que soit la date inscrite dans la colonne 2d en regard de chacune d'elles.

5.2.3. Chaque fois le Comité inscrit une assignation de fréquence dans le Fichier de référence, il indique sa conclusion au moyen d'un symbole placé dans la colonne 13a.

5.2.4. Lorsque le Comité formule une conclusion défavorable relativement au paragraphe 5.2.1, la fiche de notification est retournée immédiatement par poste à l'administration notificatrice avec um exposé des raisons qui motivent la conclusion et avec les suggestions qu'il peut faire en vue de parvenir à une solution satisfaisante du problème.

5.2.5. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification et si la conclusion du Comité devient favorable relativement au paragraphe 5.2.1, la fiche est traitée comme il est indiqué au paragraphe 5.2.2.

5.2.6. Si l'administration présente à nouveau sa fiche non modifiée en insistant pour un nouvel examen de cette fiche, mais si la conclusion du Comité relativement ao paragraphe 5.2.1 reste défavorable, la fiche de notification est retournée à l'administration notificatrice conformément au paragraphe 5.2.4. Dans ce cas, l'administration notificatrie s'engage à ne pas mettre en service l'assignation de fréquence tant que la condition spécifiée au paragraphe 5.2.5 n'a pas été remplie. L'accord des administrations concernées peut également être obtenu, aux termes de l'article 4, pour une période déterminée. Dans ce cas, l'accord est notifié au Comité et l'assignation de fréquence est inscrite dans le Ficher de référence avec une note précisant qu'elle n'est valable que pour la période spécifiée. L'administration notificatrice qui utilise l'assignation de fréquence pendant la durée ainsi déterminée ne doit pas prendre ultérieurement prétexte de cette utilisation pour maintenir l'assignation en service à l'issue de cette période si elle n'obtient pas l'autorisation de la ou des administrations intéressées.

5.2.7. Si l'assignation de fréquence notifiée avant sa mise en service conformément aux dispositions du paragraphe 5.1.3 est l'objet d'une conclusion favorable du Comité relativement aux dispositions du paragraphe 5.2.1, elle est inscrite provisoirement dans le Fichier de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractère provisoire de cette inscription.

5.2.8. Lorque le Comité a reçu la confirmation de la mise en service de l'assignation de fréquence, il supprime le symbole dans le Fichier de référence.

5.2.9. La date à inscrire dans la colopnne 2c est la date de mise en service notifiée par l'administration intéressée. Elle es donnée à titre d'information seulement.

5.3. *Annulation des inscriptions du Fichier de référence.*

5.3.1. Si une administration n'a pas conformé la mise en service d'une assignation de fréquence comme prévu au paragraphe 5.2.8, le Comité effectue une enquête auprès de cette administration au plus tôt six mois après l'expiration du délai indiqué au paragraphe 5.1.3. Lorqu'il reçoit les renseignements pertinents, le Comité modifie la date de mise en service ou annule l'inscription.

5.3.2. Si l'utilisation d'une assignation de fréquence inscrite au Fichier de référence vient à être abandonée dèfinitivement, l'administration notificatrice doit en informer le Comité dans um délai de quatre-vingt-dix jours, à la suite de quoi l'inscription au Fichier de référence est annulée.

---

(1) L'administration notificatrice engage, le cas échéant, la procédure relative aux modifications apportées au Plan en temps voulu pour que cette date limite soit respectée.

ARTICLE 6

Coordination, notification et inscription dans le Fichier de référence international des fréquences d'assignations de fréquence à des stations de Terre affectant des assignations de fréquence à des stations de radiodiffusion par satellite dans les bandes 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7-12,5 GHz (dans la Région 1) (1) (2).

SECTION I

Procédure de coordination à appliquer

6.1.1. Avant de notifier au Comité une assignation de fréquence à une station d'émission de Terre, une administration doit engager une coordination avec toute autre administration ayant une asssignation de fréquence à une station de radiodiffusion par satellite conforme au Plan si:

Les largeurs de bande nécessaires des deux émissions se chevauchent; et
Si la puissance surfacique que produirait la station d'émission de Terre en projet dépassait la valeur calculée conformément à l'annexe 3 en un ou plusieurs points situés à la limite de la zone de service comprise dans la zone de couverture de la station de radiodiffusion par satellite.

6.1.2. En vue de cette coordination, l'administration dont dépend la station de Terre envoie aux administrations intéressées, par les voies les plus rapides, en graphique à échelle convenable indiquant l'emplacement de la station de Terre et elle lui communique toutes les autres données concernant l'assignation de fréquence en projet, ainsi que la date approximative prévue pour la mise en service de la station.

6.1.3. Toute administration auprès de laquelle la coordination est recherchée accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'accusé de réception dans le délai de quinze jours qui suite l'envoi des données concernant la coordination, elle peut envoyer um télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit doit répondre. Au reçu des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question du point de vue des brouillages (3) qui seraient causés à ses assignations de fréquence conformes au Plan. Puis, dans un délai global de soixante jours à partir de l'envoi des données concernant la coordination, cette administration, ou bien communique à l'administration qui recherche la coordination son accord sur l'assignation en projet, ou bien, en cas d'impossibilité, lui indique les motifs de son désaccord et lui présent les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

6.1.4. Aucune coordination n'est requise lorsqu'une administration se propose de modifier les caractéristiques d'une assignation existante de telle sorte que le niveau des brouillages causés aux services devant être assurée par les stations du service de radiodiffusion par satellite d'autres administrations, dont les assignations sont conformes au Plan, ne s'en trouve pas accru.

6.1.5. L'administration qui recherche la coordenation peut demander au Comité de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

a) Une administration auprès de laquelle la coordination est recherchée n'envoie pas d'accusé de réception, aux termes du paragraphe 6.1.3, dans um délai de trente jours à partir de la date de l'envoi des données concernant la coordination;
b) Une administration qui a envoié un accusé de réception conformément aux dispositions du paragraphe 6.1.3 ne communique pas sa décision dans un délai de quatre-vingt-dix jours à partir de l'envoi des données concernant la coordination;
c) L'administration qui recherche la coordination et une administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le niveau de brouillage acceptable;
d) Ou encore la coordination n'est pas possible pour toute autre raison.

En présentant sa demande au Comité, l'administration intéressée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

6.1.6. L'administration qui recherche la coordination, ou toute administration auprès de laquelle la coordination est recherchée, ou bien le Comité, peuvent demander les renseignements supplémentaires dont ils estiment avoir besoin pour évaluer le niveau des brouillages causés aux services intéressés.

6.1.7. Lorsque le Comité reçoit une demande aux termes de l'alinéa *a*) du paragraphe 6.1.5, il envoie sans délai un télégramme à l'administration intéressée en lui demandant d'en accuser réception immédiatement.

---

(1) Ces procédures ne dispensent pas de l'application des procédures prescrites pour les stations de Terre dans l'article 12 du Règlement des radiocommunications, lorsque des stations autres que celles du service de radiodiffusion par satellite sont impliquées.

(2) Les précedures de coordination, de notification et d'inscription des assignations aux stations de Terre affectant des stations de radiodifusion par satellite dans la Région 2 sont stipulées à l'article 12 du Règlement des radiocommunications, sauf que la nécessité de la coordination mentionnée aux numéros **1148** à **1154** du Règlement des radiocommunications est déterminée d'après les régles de l'annexe 3.

(3) Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les Avis pertinents du CCIR ou, en l'absence de tels Avis, font l'objet d'un accord entre les administrations intéressées.

6.1.8. Lorsque le Comité reçoit um accusé de réception à la suite de la mesure qu'il a prise aux termes du paragraphe 6.1.7. ou lorsque le Comité reçoit une demande aux termes de l'alinéa *b*) du paragraphe 6.1.5, il envoie sans délai um télégramme à l'administration intéressée en lui demandant de prendre rapidement une décision sur la question.

6.1.9. Lorsque le Comité reçoit une demande aux termes de l'alinéa *d*) du paragraphe 6.1.5 il s'efforce d'effectuer la coordination conformément aux dispositions du paragraphe 6.1.2. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de coordination dans le délai spécifié au paragraphe 6.1.3, il agit conformément aux dispositions du paragraphe 6.1.7.

6.1.10. Lorsqu'une administration ne répond pas dans le délai de trente jours qui suit l'envoi du télégramme que le Comité lui a envoyé aux termes du paragraphe 6.1.7 en lui demandant un accusé de réception, ou lorsqu'une administration ne communique pas sa décision sur la question dans le délai de soixante jours qui suit l'envoi du télégramme du Comité aux termes du paragraphe 6.1.8, l'administration auprès de laquelle la coordination est recherchée est réputée s'être engagés à ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés part la station de Terre en voie de coordination au service assuré ou devant être assuré par sa station de radiodiffusion par satellite.

6.1.11. S'il y a lieu, le Comité évalue, au titre de la procédure spécifiée au paragraphe 6.1.5, le niveau de brouillage. En tout état de cause, il communique aux administrations intéressées les résultats obtenus.

6.1.12. En cas de désaccord persistant entre l'administration qui recherche la coordination et une administration auprès de laquelle la coordination est recherchée, les administrations intéressées peuvent envisager la possibilité de conclure un accord sur l'utilisation, pendant une période donnée de l'assignation de fréquence proposée.

SECTION II

Procédure de notification des assignations de fréquence

6.2.1. Toute assignation de fréquence à une station fixe, terrestre ou de radiodiffusion doit être notifiée au Comité international d'enregistrement des fréquences si l'utilisation de la fréquence en question est susceptible d'entraîner des brouillages préjudiciables au service assuré ou devant être assuré par une station de radiodiffusion par satellite de toute autre administration, ou si l'on désire obtenir une reconnaissance internationale de l'utiliusation de cette fréquence (1).

6.2.2. Cette assignation de fréquence doit faire l'objet d'une fiche individuelle de notification établie dans la forme prescrite à l'appendice 1 au Règlement des radiocommunications dont la section A spécifie les caractéristiques fondamentales à fournir selon le cas. Il est recommandé que l'administration notificatrice communique également au Comité les autres renseignements indiqués dans cet appendice, ainsi que tout autre renseignement qu'elle peut juger utile.

6.2.3. Chaque fiche de notification doit, autante que faire se peut, parvenir au Comité avant la date de mise en service de l'assignation de fréquence intéressée. Toute fiche établie conformément aux dispositions du paragraphe 6.2.2 doit parvenir au Comité au plus tôt trois ans et au plus tard quatre-vingt-dix jours avant la date de mise en service de l'assignation de fréquence intéressée.

6.2.4. Toute assignation de fréquence dont la notification parvient au Comité moins de quatre-vingt-dix jours avant la date notifiée de mise en service, porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions du paragraphe 6.2.3.

SECTION III

Procédure pour l'examen des fiches de notification et l'inscription des assignations de fréquence dans le Fichier de référence

6.3.1. Quel que soit le moyen de communication, y compris le télégraphe, par lequel une fiche de notification est transmise au Comité, elle est considérée comme complète lorsqu'elle contient au moins les caractéristiques fondamentales appropriées, telles qu'elles sont spécifiées à la section A de l'appendice 1 au Règlement des radiocommunications.

6.3.2. Le Comité examine les fiches de notification complètes dans l'ordre où il les reçoit.

6.3.3. Lorque le Comité reçoit une fiche de notification incomplète, il la retourne immédiatement par poste aérienne à l'administration dont elle émane, en indiquant les motifs de ce renvoi.

6.3.4. Lorsque le Comité reçoit une fiche de notification complète, il inclut les renseignements qu'elle contient, avec sa date de réception, dans sa circulaire hebdomadaire; cette circulaire contient les renseignements figurant dans toutes les fiches de notification complètes reçues par le Comité depuis la publication de la circulaire précédente.

6.3.5. La circulaire tient lieu d'accusé de réception par le Comité, à l'administration notificatrice, d'une fiche de notification complète.

6.3.6. Chaque fiche de notification complète est examinée par le Comité dans l'ordre spécifié au paragraphe 6.3.2. Le Comité ne peut pas ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une

---

(1) L'attention des administrations est spécialement attirée sur l'application des dispositions de la section 1 du présent article.

décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement et encore en cours d'examen avant d'avoir pris une décision en ce qui concerne cette dernière.

6.3.7. Le Comité examine chaque fiche de notification:

6.3.8. *a*) Du point de vue de sa conformité avec les clauses de la Convention, les clauses pertinentes du Règlement des radiocommunications et les clauses du present appendice (à l'exception de celles qui sont relatives à la procédure de coordination et à la probabilité de brouillages préjudiciables).

6.3.9. *b*) Du point de vue de sa conformité avec les dispositions du paragraphe 6.1.1, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées.

6.3.10. *c*) Le cas échéant, du point de vue de la probabilité d'un brouillage préjudiciable au détriment d'une station dont l'assignation de fréquence est conforme au Plan.

6.3.11. Selon les conclusions auxquelles le Comité parvient à la suite de l'examen prévu aux paragraphes 6.3.8, 6.3.9 et 6.3.10, la procédure se poursuit comme suit.

6.3.12. *Conclusion défavorable relativement au parágraphe 6.3.8.*

6.3.13. Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications elle est examinée immédiatement du point de vue des paragraphes 6.3.9 et 6.3.10.

6.3.14. Si la conclusion est favorable relativement aux paragraphes 6.3.9 ou 6.3.10, selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

6.3.15. Si la conclusion est défavorable relativement aux paragraphes 6.3.9 ou 6.3.10. selon de cas, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent la conclusion du Comité. Dans cer cas, l'administration notificatrice s'engage à ne pas utiliser l'assignation de fréquence jusqu'à ce que la condition définе au paragraphe 6.3.14 puisse être remplie. Mais les administrations intéressées peuvent envisager la possibilité de conclure un accord sur l'utilisation, pendant une période donnée, de l'assignation de fréquence proposée.

6.3.16. Lorsque la fiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent la conclusion du Comité et avec les suggestions qu'il peut faire, le cas échéant, pour arriver à une solution satisfaisant du problème.

6.3.17. Si l'administration notificatrice présente de nouveau sa fiche non modifiée, celle-ci est traitée selon les dispositions du paragraphe 6.3.16.

6.3.18. Si l'administration notificatrice présente de nouveau sa fiche avec une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications, la fiche de notification est traitée selon les dispositions des paragraphes 6.3.13 et 6.3.14 ou 6.3.15, selon le cas.

6.3.19. Si l'administration notificatrice présente de nouveau sa fiche avec des modifications telles que, après un nouvel examen, la conclusion du Comité devient favorable relativement au paragraphe 6.3.8, la fiche de notification est traitée selon les dispositions des paragraphes 6.3.20 à 6.3.32. S'yl y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée de nouveau est inscrite dans la colonne 2d.

6.3.20. *Conclusion favorable relativement au paragraphe 6.3.8.*

6.3.21. Lorsque le Comité conclut que la procédure de coordination dont il est question au paragraphe 6.3.9 as été appliquée avec succés auprès de toutes les administrations dont les services de radiodiffusion par satellite peuvent être défavorablement influencés, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

6.3.22. Lorsque le Comité conclut que la procédure de coordination dont il est question au paragraphe 6.3.9 n'a pas été appliquée et si l'administration notificatrice lui demande d'effectuer la coordination requise, le Comité prend les mesures nécessaires à cet effet et communique aux administrations intéressées les résultats obtenus. Si les tentatives du Comité en vue de mener à bien la coordination sont couronnées de succès, la fiche de notification est traitée conformément aux dispositions du paragraphe 6.3.21. Si les tentatives du Comité ne sont pas couronnées du succès, il examine la fiche de notification du point de vue du paragraphe 6.3.10.

6.3.23. Lorsque le Comité conclut que la procédure de coordination dont il est question au paragraphe 6.3.9 n'a pas été appliquée et si l'administration notificatrice lui demande pas d'effectuer la coordination requise, la fiche de notification est renvoyée immédiatement par poste aérienne à l'administration avec un exposé des raisons qui motivent ce renvoi et avec les suggestions que le Comité peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

6.3.24. Lorsque l'administration notificatrice présente de nouveau sa fiche de notification et le Comité conclut que la procédure de coordination dont il est question au paragraphe 6.3.9 a été appliquée avec succès auprès de toutes les administrations dont les services de radiodiffusion par satellite peuvent être défavorablement influencés, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification initiale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée de nouveau est indiquée dans la colonne Observations.

6.3.25. Lorsque l'administration notificatrice présente de nouveau sa fiche de notification en demandant au Comité d'effectuer la coordination requise, la fiche de notification est traitée conformément aux dispositions du paragraphe

6.3.22. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée de nouveau est indiquée dans la colonne Observations.

6.3.26. Lorsque l'administration notificatrice présente de nouveau sa fiche de notification en déclarant qu'elle n'a pas eu de succès en tentant d'effectuer la coordination, le Comité examine la fiche du point de vue des dispositions du paragraphe 6.3.10. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée de nouveau est indiquée dans la colonne Observations.

6.3.27. *Conclusion favorable relativement aux paragraphes 6.3.8 et 6.3.10.*

6.3.28. L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

6.3.29. *Conclusion favorable au paragraphe 6.3.8, mais défavorable relativement au paragraphe 6.3.10.*

6.3.30. La fiche de notification est retournée immédiatement par poste aérienne à l'administration dont elle émane avec un exposé des raisons qui motivent la conclusion du Comité et avec les suggestions qu'il peut faire, le cas échéant, en vue d'arriver à une solution satisfaisant du problème.

6.3.31. Si l'administration notificatrice présente de nouveau sa fiche avec des modifications qui, après nouvel examen, entraînent de la part du Comité une conclusion favorable relativement au paragraphe 6.3.10, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de modification (initiale) est inscrite dans la colonne 2d. Las date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

6.3.32. Dans le cas où l'administration notificatrice présente de nouveau sa fiche de notification, soit non modifiée, soit avec des modifications dont l'effet est de diminuer la probabilité de brouillages préjudiciables mais dans des proportions insuffisantes pour permettre l'aplication des dispositions du paragraphe 6.3.31, et où cette administration insiste pour un nouvel examen de la fiche de notification, mais où les conclusions du Comité restent les mêmes, la fiche de notification est de nouveau retournée à l'administration notificatrice conformément au paragraphe 6.3.30. Dans ce cas, l'administration notificatrice s'engage à ne pas utiliser l'assignation de fréquence proposée jusqu'à ce que la condition définie au paragraphe 6.3.31 puisse être remplie. Mais les administrations intéressées peuvent envisager la possibilité de conclure un accord sur l'utilisation, pendant une période spécifiée, de l'assignation de fréquence proposée. Dans ce cas, le Comité est averti de l'accord et l'assignation de fréquence est inscrite dans le Fichier de référence, accompagnée d'une note indiquant que sa validité ne s'étende pas au-delà de la période spécifiée. L'administration notificatrice qui utilise l'assignation de fréquence pendant une durée spécifiée ne doit pas prendre ultérieurement prétexte de cette utilisation pour maintenir l'assignation en service à l'issue de cette période, si elle n'obtient pas l'autorisation de la ou des administrations intéressées.

6.3.33. *Modification aux caractéristiques fondamentales des assignations déjà inscrites dans le Fichier de référence.*

6.3.34. Toute notification de modification aux caractéristiques fondamentales d'une assignation déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice 1 au Règlement des radiocommunications (à l'exception toutefois de celles qui figurent dans les colonnes 3 et 4a du Fichier de référence), est examinée par le Comité selon les dispositions des paragraphes 6.3.8 et 6.3.9 et, le cas échéant, du paragraphe 6.3.10, et les dispositions des paragraphes 6.3.12 à 6.3.32 sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation initiale est modifiée selon la notification.

6.3.35. Cependant, dans le cas d'une modification aux caractéristiques fondamentales d'une assignation conforme aux dispositions du paragraphe 6.3.8 où le Comité formule une conclusion favorable relativement au paragraphe 6.3.9 et relativement au paragraphe 6.3.10, lorsque les dispositions de celui-ci sont applicables, ou conclut que cette modification n'accroit pas la probabilité de brouillages préjudiciables au détriment d'assignations de fréquence déjà inscrites dans le Fichier de référence, l'assignation de fréquence modifiée conserve la date initialement inscrite dans la colonne 2d. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est indiquée dans la colonne Observations.

6.3.36. Dans l'application des dispositions de la présente section, toute fiche de notification présentée de nouveau au Comité et qui lui parvient plus de deux ans après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.

6.3.37. *Inscription des assignations de fréquence notifiées avant leur mise en service.*

6.3.38. Si une assignation de fréquence notifiée avant sa mise en service fait l'objet d'une conclusion favorable formulée par le Comité relativement aux paragraphes 6.3.8 et 6.3.9 et, le cas échéant, 6.3.10, elle est inscrite provisoirement dans le Fichier de référence avec, dans la colonne Observation, un symbole spécial indiquant le caractère provisoire de cette inscription.

6.3.39. Si, dans un délai de trente jours après la date prévue pour la miuse en service, le Comité reçoit de l'administration notificatrice la confirmation de la date de mise en service, il supprime le symbole spécial inséré dans la colonne Observations. Au cas où, à la suite d'une demande reçue de l'administration notificatrice avant l'expiration de ce délai de trente jours, le Comité conclut que des circonstances exceptionnelles motivent um délai supplémentaire, celui-ci ne doit en aucun cas dépasser 150 jours.

6.3.40. Si l'utilisation, par une station de Terre, d'une assignation non conforme aux dispositions ci-dessus, cause un brouillage préjudiciable à la réception des émissions d'une station spatiale du service de radiodiffusion par satellite utilisant une assignation conforme au Plan, l'administration dont dépend la station de Terre doit, une fois avisée, prendre immédiatement des mesures pour éliminer ledit brouillage.

ARTICLE 7

Procédures préliminaires, notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence aux stations du service fixe par satellite dans la bande 11,7-12,2 GHz (dans la Région 2) lorsque des assignations de fréquence à des stations de radiodiffusion par satellite conformes au Plan sont impliquées (1).

SECTION I

Procédure pour la publication antecipée de renseignements concernant les systèmes du service fixe par satéllite en projet

7.1.1. Toute administration qui se propose d'établir un système du service fixe par satellite envoie au Comité international d'enregistrement des fréquences, avant d'engager, le cas échéant, la procédure décrite au paragraphe 7.2.1, et au plus tôt cinq ans avant la mise en service de chaque réseau à satellite du système en projet, les renseignements énumérés à l'appendice **4** au Règlement des radiocommunications.

7.1.2. Toute modification aux renseignements communiqués conformément aux dispositions du pasragraphe 7.1.1 au sujet d'un système à satellites en projet est également communiquée au Comité dès le moment où elle est disponible.

7.1.3. Le Comité publie les renseignements dont il est question aux paragraphes 7.1.1 et 7.1.2. dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire.

7.1.4. Si après avoir étudié les renseignements publiés aux termes du paragraphe 7.1.3, une administration quelle qu'elle soit est d'avis que des brouillages qui peuvent être inacceptables pourront être causés à ses assignations de fréquence conformes ao Plan, elle communique ses observations à l'administrations intéressée dans le délai de quatre-vingt-dix jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements énumérés à l'appendice **4** au Règlement des radiocommunications ont été publiés. Elle envoie également au comité une copie de ces observations. Si l'administration intéressée ne reçoit d'une autre administration aucune observation de cette nature pendant la période susmentionnée, elle peut supposer que cette dernière n'a pas d'objection majeure à formuler à l'encontre du ou des réseaux en projet du système du service fixe par satellite à l'égard desquels des renseignements ont été publiés.

7.1.5. Une administration qui reçoit des observations formulées aux du paragraphe 7.1.4 s'efforce de résoudre les dificultés de toute nature qui peuvent se présenter sans prendre en considération la possibilité de remaniement des stations du service de radiodiffusion par satellite relevant d'autres administrations. Si elle ne peut pas trouver de tels moyens, l'administration intéressée peut alors s'adresser aux autres administrations concernées afin de résoudre ces dificcultés sous réserve que les modifications au Plan qui pourraient en résulter soient conformes à l'article 4.

7.1.6. Les administrations peuvent demander l'aide du Comité dans leurs tentatives pour résoudre les difficultés mentionées ci-dessus.

7.1.7. En se conformant aux dispositions des paragraphes 7.1.5 et 7.1.6, une administration responsable d'un système du service fixe par satellite en projet diffère, si c'est nécessaire, le début de la procédure de coordination définie au paragraphe 7.2.1 ou, si celle-ci n'est pas applicable, l'envoi de ses fiches de notification au Comité, jusqu'à une date postérieure de cent cinquante jours á la date de la circulaire hebdomadaire contenant les renseignements énumérés à l'appendice **4** au Règlement des radiocommunications et concernant le réseau à satellite pertinent. Cependant, vis-à-vis des administrations avec lesquelles les dificultés ont été résolues ou qui ont répondu favorablement, la procédure de coordination peut, le cas échéant, être engagée avant l'expiration du délai de cent cinquant jours précité.

7.1.8. Toute administration au nom de laquelle des renseignements sur les réseaux en projet de son système du service fixe par satellite ont été publiés conformément aux dispositions des paragraphes 7.1.1 à 7.1.3. fait périodiquement connaître au Comité si elle a reçu ou non des observations et elle lui communique l'état d'avancement du règlement, avec d'autres administrations, des dificultés éventuelles. Le Comité publie ces renseignements dans une station spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire.

SECTION II

Procédures de coordination à appliquer mdans certains cas

7.2.1. Avant de notifier au Comité ou de mettre en service une assignation de fréquence à une station spatiale du service fixe par satellite, une administration doit rechercher l'accord de toute autre administration ayant une assignation de fréquence conforme au Plan si:

Une portion qualconque de la largeur de bande nécessaire prévue pour la station spatiale du service fixe par satellite recouvre au moins partiellement la largeur de bande nécessaire associée à l'assignation de la station de radiodiffusion par satellite; et

La puissance surfacique qui serait produite par la station spatiale du service fixe par satellite dépasse la valeur spécifiée à l'annexe 4.

---

(1) Ces dispositions ne dispensent pas de l'application des procédures prescrites par les articles 11 et 13 du Règlement des radiocommunications lorsque des stations autres que celles du service de radiodiffusion par satellite qui ont des assignations conformes au Plan sont impliquées.

A cet effet, l'administration qui recherche la coordination envoie à toute autre administration visée ci-dessus les renseignements énumérés à l'appendice 3 au Règlement des radiocommunications.

7.2.2. Aucun accord supplémentaire n'est nécessaitre lorsqu'une administration se propose de modifier les caractéristiques d'une assignation existante de telle sorte que les conditions du paragraphe 7.2.1, ci-dessus n'entraînent pas la recherche d'un accord à l'égard du service de radiodiffusion par satellite d'une autre administration ou lorsque cette assignation a déjà fait l'objet d'un accord et que sa modification ne causera pas de brouillage éventuel dépassant les valeurs convenues lors de cet accord.

7.2.3. En même temps qu'une administration recherche la coordination, conformément au paragraphe 7.2.1, elle envoie au Comité une copie de la demande de coordination, accompagnée des renseignements énumérés à l'appendice 3 au Règlement des radiocommunications ainsi que du nom de la ou des administrations dont elle recherche l'accord. Le Comité détermine, en se fondant sur l'annexe 4, quelles sont les assignations de fréquence conformes au Plan qui sont considérées comme étant effectées. Le Comité ajoute le nom de ces administrations aux renseignements communiqués par l'administration qui recherche la coordination et publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire, avec une référence à la circulaire hebdomadaire dans laquelle les renseignements concernant le système à satellites ont été publiés aux termes de la section I du présent article. Lorsque la circulaire hebdomadaire contient des renseignements de cette nature, le Comité en avise les administrations par télégramme-circulaire.

7.2.4. Toute administration qui estime qu'elle aurait dû être incluse dans la procédure dont il est question au paragraphe 7.2.1 a le droit de demander à être partie à cette procédure.

7.2.5. Toute administration dont l'accord est recherché aux termes du paragraphe 7.2.1 accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'accusé de réception dans le délai de trente jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés conformément aux dispositions du paragraphe 7.2.3, elle envoie um télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans um nouveau dálai de trente jours. Au reçu des renseignements concernant la coordination, compte tenu de la date prévue de mise en service de l'assignation pour laquelle la coordination est recherchée, l'administration dont l'accord est recherché étudie rapidement la question, du point de vue des brouillages (1) qui seraient causés au service par celles de ses stations pour lesquelles un accord est recherché aux termes du paragraphe 7.2.1; puis, dans le délai de quatre-vingt-dix jours qui suit la date de la circulaire hebdomadaire pertinent, elle communique son accord à l'administration qui recherche la coordination. Dans le cas contraire, elle envoie dans le même délai à l'administration qui recherqhe la coordination de renseignements techniques indiquant les raisons qui motivent son désaccord et elle lui présente les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème. Une copie de ces observations est envoyée également au Comité.

7.2.6. L'administration qui recherche la coordination peut demander mau Comité de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

a) Une administration dont l'accord est recherché aux termes du paragraphe 7.2.1 n'envoie pas d'accusé de réception, aux termes du paragraphe 7.2.5, dans un délai de soixante jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements relatifs à la demande de coordination ont été publiés;

b) Une administration a envoyé un accusé de réception aux termes du paragraphe 7.2.5, mais ne communique pas sa décision dans um délai de quatre-vingt-dix jours à partir de la date de la circulaire hebdomadaire pertinente;

c) L'administration qui recherche la coordination et l'administration dont l'accord est recherché ne sont pas du même avis en ce qui concerne le niveau de brouillage acceptable;

d) Ou encore la coordination n'est pas possible pour toute raison.

En présentant sa demande au Comité, l'administration intéressée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

7.2.7. L'administration qui recherche la coordination, ou toute administration dont l'accord est recherché, ou bien le Comité, peuvent demander les renseignements supplémentaires dont ils estiment avoir besoin pour évaluer le niveau des brouillages causés aux services intéressés.

7.2.8. Lorsque le Comité reçoit une demande aux termes de l'alinea *a*) du paragraphe 7.2.6, il envoie sans délai un télégramme à l'administration dont l'accord est recherché en lui demandant d'en accuser réception immédiatement.

7.2.9. Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il a prise aux termes du paragraphe 7.2.8 ou lorsque le Comité reçoit une demande aux termes de l'alinéa *b*) du paragraphe 7.2.6, il envoie sans délai um télégramme à l'administration dont l'accord est recherché en lui demandant de prendre rapidement une décision sur la question.

7.2.10. Lorsque le Comité reçoit une demande aux termes de l'alinéa *d*) du paragraphe 7.2.6, il s'efforce d'effectuer la coordination conformément aux dispositions du paragraphe 7.2.1. Le Comité prend également, le cas échéant, les mesures prévues au paragraphe 7.2.3. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de coordination dans le délai spécifié au paragraphe 7.2.5, il agit conformément aux dispositions du paragraphe 7.2.8.

---

(1) Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les renseignements techniques contenus dans le présent appendice ou sur les Avis pertinents du CCIR et font l'objet d'un accord entre les administrations intéressées.

7.2.11. Lorsqu'une administration ne répond pas dans um délai de trente jours qui suit l'envoi du télégramme que le Comité lui a envoyé aux termes du paragraphe 7.2.8 en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suit l'envoi du télégramme du Comité aux termes du paragraphe 7.2.9, l'administration dont l'accord a été recherché est réputée s'être engagée:

a) À ne pas formuler de plainte concernant les brouillages préjudiciables qui pourraient être causés au service assuré par ses stations de radiodiffusion par satellite par l'utilisation de l'assignation de fréquence pour laquelle la coordination a été recherchée;

b) À faire en sorte que ses stations de radiodiffusion par satellite ne causeront pas de brouillages préjudiciables à l'utilisation de l'assignation de fréquence pour laquelle la coordination a été recherchée.

7.2.12. S'il y a lieu, le Comité évalue, dans le cadre de la procédure spécifiée au paragraphe 7.2.6, le niveau de brouillage. En tout état de cause, il communique aux administrations intéressées les résultats obtenus.

7.2.13. En cas de désaccord persistant entre l'administration qui recherche la coordination et l'administration dont l'accord a été recherché, l'administration qui recherche la coordination est en droit, cent cinquante jours après la date à laquelle elle a demandé la coordination, et compte tenu des dispositions du paragraphe 7.3.4, d'envoyer au Comité sa fiche de notification concernant l'assignation proposée, sous réserve que l'aide du Comité ait été demandée. Dans ces conditions, l'administration notificatrice s'engage à ne pas mettre en œuvre son assignation tant que la condition stipulée au paragraphe 7.4.11.2 ne peut être remplie. Cependant, les administrations intéressées peuvent étudier la possibilité de parvenir à un accord sur l'emploi de l'assignation proposée pendant une durée déterminée.

SECTION III

Notification des assignations de fréquence

7.3.1. Toute assignation de fréquence à une station spatiale du service fixe par satelite doit être notifiée au Comité:

a) Si l'utilisation de la fréquence en question est susceptible d'entraîner des brouillages préjudiciables à une assignation de fréquence conforme au Plan (1) appartenant à une autre administration;

b) Ou encore si l'on désire obtenir une reconnaissance internationale officielle de l'utilisation de cette fréquence.

7.3.2. Une notification analogue doit être faite dans le cas de toute fréquence destinée à être utilisée à la réception par une station terrienne, chaque fois que l'une au moins des circonstances spéficiées au paragraphe 7.3.1 se présente.

7.3.3. Toute assignation de fréquence notifiée en exécution des paragraphes 7.3.1 ou 7.3.2 doit faire l'objet d'une fiche individuelle de notification établie dans la forme pescrite à l'appendice **3** au Règlement des radiocommunications, dont les diverses sections spécifient les caractéristiques fondamentales à fournir selon le cas. L'administration notificatrice communique également tout autre renseignement qu'elle juge utile.

7.3.4. Chaque fiche de notification doit parvenir au Comité au plus tôt trois ans avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir en tout cas au plus tard quatre-vingt-dix jours (2) avant cette date.

7.3.5. Toute assignation de fréquence à une station terrienne ou spatiale dont la notification parvient au Comité après l'expiration des délais voulus spécifiés au paragraphe 7.3.4 porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, una observation indiquant que la fiche de notification n'est pas conforme aux dispositions du paragraphe 7.3.4.

SECTION IV

Procédure pour l'examen des fiches de notification et l'inscription des assignations de fréquence dans le Fichier de référence

7.4.1. Lorsque le Comité reçoit une fiche de notification qui ne contient pas au moins les caractéristiques fondamentales spécifiées à l'appendice **3** au Règlement des radiocommunications, il la retourne immédiatement par poste aérienne à l'administration dont elle émane, accompagnée des motifs de ce renvoi.

7.4.2. Lorsque le Comité reçoit une fiche de notification complète, il inclut les renseignements que'elle contient, avec sa date de réception, dans sa circulaire hebdomadaire: cette circulaire contient les renseignements figurant dans toutes les fiches de notification complètes reçues par le Comité depuis la publication de la circulaire précédente.

7.4.3. La circulaire tient lieu d'accusé de réception par le Comité, à l'administration notificatrice, d'une fiche de notification complète.

7.4.4. Le Comité examine les fiches de notification complètes dans l'ordre où il les reçoit. Il ne peut pas ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement et encore en cours d'examen, avant d'avoir pris une décision en ce qui concerne cette dernière.

---

(1) L'attention des administrations est spécialment attirée sur l'application du paragraphe 7.2.1 ci-dessus.

(2) L'administration notificatrice engage, le cas échéant, la ou les procédures de coordination en temps voulu pour que cette date limite soit respectée.

7.4.5. Le Comité examine chaque fiche de notification:

7.4.5.1. Du point de vue de sa conformité avec les clauses de la Convencion, les dispositions pertinentes du Règlement des radiocommunications et les dispositions du présent appendice (à l'exception de celles qui sont relatives aux procédures de coordination et à la probabilité de brouillages préjudiciables).

7.4.5.2. Le cas échéant, du point de vue de sa conformité avec les dispositions du paragraphe 7.2.1 lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées ayant une assignation conforme au Plan.

7.4.5.3. Le cas échéant, du point de vue de la probabilité d'un brouillage préjudiciable au détriment du service assuré ou devant être assuré par une station de radiodiffusion par satellite dont l'assignation de fréquence est conforme au Plan.

7.4.6. Selon les conclusions auxquelles le Comité parvient à la suite de l'axamen prévu aux paragraphe 7.4.5.1, 7.4.5.2, et 7.4.5.3, selon le cas, la procédure se poursuit comme suit:

7.4.7. *Conclusion favorable relativement au paragraphe 7.4.5.1 dans les cas où les dispositions du paragraphe 7.4.5.2 ne sont pas applicables.*

7.4.7.1. L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notafication est inscrite dans la colonne 2d.

7.4.8. *Conclusion défavorable relativement au paragraphe 7.4.5.1.*

7.4.8.1. Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications et que la conclusion est favorable relativement aux paragraphes 7.4.5.2 et 7.4.5.3, selon le cas, l'asignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

7.4.8.2. Lorsque la fiche comporte une référence selon laquelle la station fonctinnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications et que la conclusion est défavorable relativement aux paragraphes 7.4.5.2 et 7.4.5.3, selon le cas, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent la conclusion du Comité. Dans ces conditions, l'administration notificatrice s'engage à ne pas utiliser l'assignation de fréquences jusqu'à ce que la condition spécifiée au paragraphe 7.4.8.1 puisse être remplie. L'accord des administrations intéressées peut également être obtenu pour une durée déterminée conformément à cet article. Dans ce cas, l'accord sera notifié au Comité et l'assignation de fréquence sera inscrite dans le Fichier de référence avec une note précisant qu'elle est valable pour la période spécifiée. L'administration notificatrice qui utilise l'assignation de fréquence pendant la durée spécifiée ne doit pas prendre ultérieurement prétexte de cette utilisation pour maintenir l'assignation en service à l'issue de cette période si elle n'obtient pas l'autorisation de la ou des administrations intéressées. La date de réception par le Comité de la fiche de notification initiale est inscrite dans la colonne 2d.

7.4.8.3. Lorsque la fiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent la conclusion du Comité et avec les suggestions qu'il peut faire, le cas échéant, pour arriver à une solution satisfaisante du problème.

7.4.8.4. Si l'administration notificatrice présente de nouveau sa fiche non modifiée, celle-ci est traitée selon les dispositions du paragraphe 7.4.8.3. Si l'administration notificatrice présente à nouveau sa fiche avec une réference selon laquelle la station fontionnera conformément aux dispositions du numéro **342** du Règlement des radiocommunications, la fiche de notification est traitée conformément aux dispositions du paragraphe 7.4.8.1 ou 7.4.8.2 selon le cas. Si la fiche est présentée à nouveau avec des modifications telles que, après un nouvel examen, la conclusion du Comité devient favorable relativement au paragraphe 7.4.5.1, la fiche est traitée comme une nouvelle fiche de notification.

7.4.9. *Conclusion favorable relativement au paragraphe 7.4.5.1 dans les cas où les dispositions du paragraphe 7.4.5.2 sont applicables.*

7.4.9.1. Lorsque le Comité conclut que les procédures de coordination dont il est question au paragraphe 7.4.5.2 ont été appliquées avec succès en ce qui concerne toutes les administrations dont les assignations de fréquence conformes au Plan peuvent être défavorablement influencées, l'assignation est inscrite dans le Fichier de réference. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

7.4.9.2. Lorsque le Comité conclut que la procédure de coordination dont il est question au paragraphe 7.4.5.2 n'a pas été appliquée et si l'administration notificatrice lui demande d'effectuer la coordination requise, le Comité prend les mesures nécessaires à cet effet et communique aux administrations intéressées les résultats obtenus. Si les tentatives du Comité en vue de mener à bien la coordination sont couronnées de succés, la fiche de notification est traitée conformément aux dispositions du paragraphe 7.4.9.1. Si les tentatives du Comité ne sont pas couronnées de succés, il examine la fiche de notification du point de vue des dispositions du paragraphe 7.4.5.3.

7.4.9.3. Lorsque le Comité conclut que la procédure de coordination dont il est question au paragraphe 7.4.5.2 n'a pas été appliquée et si l'administration notificatrice ne lui demande pas d'effectuer la coordination requise, la fiche de notification est renvoyée immédiatement par poste aérienne à l'administration notificatrice avec un expose des raisons qui motivent ce renvoi et les suggestions que le comité peut faire, le cas échéant, pour arriver a une solution satisfaisant du problème.

7.4.9.4. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification et si le Comité conclut que la procédure de cordination dont il est question au paragraphe 7.4.5.2 a été appliquée avec succés en ce qui concerne toutes les administrations dont les assignations conformes au Plan peuvent être défavorablement influencées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification initiale est inscrite

dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

7.4.9.5. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en demandant au Comité d'effectuer la coordination requise aux termes du paragraph 7.2.1, la fiche de notification est traitée conformément aux dispositions du paragraph 7.4.9.2. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

7.4.9.6. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en déclarant qu'elle n'a pas eu de succés en tentant d'effectuer la coordination, le Comité en informe les administrations intéressées. Le Comité examine la fiche de notification du point de vue des dispositions du paragraphe 7.4.5.3. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

7.4.10. *Conclusion favorable aux paragraphes 7.4.5.1. et 7.4.5.3.*

7.4.10.1. L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

7.4.11. *Conclusion favorable relativement au paragraphe 7.4.5.1, mais défavorable relativement au paragraphe 7.4.5.3.*

7.4.11.1. La fiche de notification est retournée immédiatement par poste aérienne à l'administration dont elle émane, avec un exposé des raisons qui motivent la conclusion du Comité et avec les suggestions qu'il peut faire, le cas échéant, pour arriver à une solution satisfaisante du problème.

7.4.11.2. Si l'administration notificatrice présente à nouveau sa fiche avec des modifications qui, après nouvel examen, entraînent de la part du Comité une conclusion favorable relativement au paragraphe 7.4.5.3, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification initiale est inscrite dans la colonne 2d. La date de récéption par le Comité de la fiche de notification présentée á nouveau est indiquée dans la colonne Observations.

7.4.11.3. Dans le cas où l'administration notificatrice présente de nouveau sa fiche de notification, soit non modifiée, soir avec des modifications dont l'effet est diminuer la probabilité de brouillages préjudiciables mais dans des proportions insuffisantes pour permettre l'application des dispositions du paragraphe 7.4.11.2 et où cette administration insiste pour un nouvel examen de la fiche de notification, mais où les conclusions du Comité restent les mêmes, la fiche de notification doit à nouveau être retournée á l'administration notificatrice conformément au paragraphe 7.4.11.1. Dans ces conditions, l'administration notificatrice s'engage à ne pas utiliser l'assignation de fréquence jusqu'à ce que la condition définie au paragraphe 7.4.11.2 puisse être remplie. Mais les administrations intéressées peuvent envisager la possibilité de conclure un accord sur l'utilisation, pendant une période donnée, de l'assignation de fréquence proposée. Dans ce cas, l'IFRB sera averti de l'accord et l'assignation de fréquence sera inscritte dans le Fichier de référence; accompagnée d'une note dans la colonne Observations indiquant que sa validité ne s'étend pas au-delà de la période spécifiée. L'administration notificatrice qui utilise l'assignation de fréquence pendant la durée spécifiée ne doit pas prendre ultérieurement prétexte de cette utilisation pour maintenir l'assignation en service à l'issue de cette période si elle n'obtient pas l'autorisataion de la ou des administrations intéressées. La date de réception par le Comité de la fiche de notification initiale est inscrite dans la colonne 2d.

7.4.12. *Modifications aux caractéristiques fondamentales des assignations déjà inscrites dans le Fichier de référence.*

7.4.12.1. Toute notification de modification aux caractéristiques fondamentales d'une assignation du service fixe par satellite déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice 3 au Règlement des radiocommunications (à l'exception toutefois du nom de la station et du nom de la localité dans laquelle elle est située), est examinée par le Comité selon des dispositions du paragraphe 7.4.5.1 et, le cas échéant, des paragraphes 7.4.5.2 et 7.4.5.3 et les dispositions des paragraphes 7.4.7 a 7.4.11.3 inclus sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation initiale est modifiée en conséquence.

7.4.12.2. Cependent, dans le cas d'une modification aux caractéristiques d'une assignation conforme aux dispositions du paragraphe 7.4.5.1 et où les Comité formule une conclusion favorable relativement aux paragraphe 7.4.5.2 et 7.4.5.3, le cas échéant, ou conclut que cette modification n'accroit pas la probabilité de brouillages préjudiciables au détriment d'assignations de fréquence conformes au Plan, l'assignation de fréquence modifiée conserve la date primitivement inscrite dans la colonne 2d. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est indiquée dans la colonne Observations.

7.4.12.3. Dans l'application des dispositions de la présente section, toute fiche de notification présentée de nouveau au Comité et reçue par lui plus de deux ans après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.

7.4.13. *Inscription des assignations de fréquence du service fixe par satellite notifiées avant leur mise en service.*

7.4.13.1. Si une assignation de fréquence notifiée avant sa mise en service est l'objet de conclusions favorables formulées par le Comité relativement au paragraphe 7.4.5.1 et, le cas échéant, aux paragraphes 7.4.5.2 et 7.4.5.3, elle est inscrite provisoirement dans le Fichier de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractère provisoire de cette inscription.

7.4.13.2. Si, dans un délai de trente jours après la date prévue pour la mise en service, le Comité reçoit de l'administration notificatrice la confirmation de la date de mise en service, il biffe le symbole spécial inséré dans la colonne Observations. Au cas où, á la suite d'une demande reçue de l'administration notificatrice avant l'expiration de ce délai de trente jours, le Comité conclut que des circonstances exceptionnelles motivant un délai supplémentaire, ce dernier ne doit en aucun cas dépasser cent cinquant jours.

7.4.13.3. Si le Comité ne reçoit pas la confirmation dans les délais prévus au paragraphe 7.4.13.2, l'inscription en question est annulée. Le Comité avise l'administration intéressée avant de prendre cette mesure.

SECTION V

Inscription des conclusions dans le Fichier de référence

7.5. Chaque fois que le Comité inscrit une assignation de fréquence dans le Fichier de reférence, il indique sa conclusion par un symbole placé dans la colonne 13a. De plus, il porte dans la colonne Observations l'indication des motifs de toute conclusion défavorable.

SECTION VI

Catégories d'assignation de fréquence

7.6.1. La date à inscrire dans la colonne 2c est la date de mise en service notifiée par l'administration intéresseé. Elle est donnée à titre d'information seulement.

7.6.2. Si l'utilisation d'une assignation de fréquence à une station de radiocommunication spatiale qui a été inscrite au Fichier de référence conformément aux dispositions du paragraphe 7.4.11.3 cause effectivement un brouillage préjudiciable à la réception d'un station de radiodiffusion par satellite dont l'assignation de fréquence est conforme au Plan, la station utilisant l'assignation de fréquence inscrite conformément aux dispositions du paragraphe 7.4.11.3 doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

7.6.3. Si l'utilisation d'une assignation de fréquence non conforme aux dispositions du paragraphe 7.4.5.1 cause effectivement un brouillage préjudiciable à la reception d'une station de radiodiffusion par satellite quelconque dont l'assignation de fréquence est conforme au Plan, la station utilisant l'assignation de fréquence non conforme aux dispositions du paragraphe 7.4.5.1 doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

SECTION VII

Réexamen des conclusions

7.7.1. Une conclusion peut être réexaminée par le Comité:

À la demande de l'administration notificatrice;

À la demande de toute autre administration intéresée à la question, mais uniquement en raison d'un brouillage préjudiciable constaté;

Sur la propre initiative du Comité lui-même lorsqu'il estime cette mesure justifiée.

7.7.2. Le Comité, se fondant sur tous les renseignements dont il dispose, réexamine la question en tenant compte des dispositions du paragraphe 7.4.5.1 et, le cas échéant; des dispositions des paragraphes 7.4.5.2 et 7.4.5.3 et il formule une conclusion appropriée, puis informe de cette conclusion l'administration notificatrice, soit avant de publier la conclusion, soit de la reporter dans le Fichier de référence.

7.7.3. Si la conclusion du Comité est alors favorable, il apporte au Fichier de référence les modifications requises pour que l'inscriptions y figure désormais comme si la conclusion initiale avait été favorable.

7.7.4. Si la conclusion relative à la probabilité d'un brouillage préjudiciable reste défavorable, l'inscription initiale n'est pas modifiée.

SECTION VIII

Modification, annulation et révision des inscriptions du Fichier de référence

7.8.1. Lorsque l'utilisation d'une assignation de fréquence à une station du service fixe par satellite inscrite au Fichier de référence est suspendue pendant une période de dix-huit mois, l'administration notificatrice informe le Comité, au cours de cette période de dix-huit mois, de la date à laquelle cette utilisation a été suspendue et de la date á laquelle l'utilisation régulière de cette assignation reprendra.

7.8.2. Chaque fois qu'il apparaît au Comité, qu'il s'agisse ou non du résultat des mesures prises aux termes du paragraphe 7.8.1, qu'une assignation de fréquence à une station du service fixe par satellite inscrite au Fichier de référence n'a pas été utilisée régulièrement pendant plus de dix-huit mois, le Comité s'enquiert auprès de l'administration notificatrice de la date á laquelle l'utilisation régulière de cette assignation reprendra.

7.8.3. Si, dans un délai de six mois, le Comité ne reçoit aucune réponse à sa demande de renseignements aux termes du paragraph 7.8.2, ou si la réponse qu'il reçoit ne confirme pas que l'utilisation régulière de cette assignation

à une station du service fixe par satellite reprendra dans un délai de six mois, un symbole est inséré dans le Fichier de référence en regard de l'inscription.

7.8.4. Si l'utilisation d'une fréquence inscrite au Fichier de référence vient à être abandonnée définitivement, l'administration notificatrice doit en informer le Comité dans un délai de quatre-vingt-dix jours, à la suite de quoi l'inscription au Fichier de réference est annulée.

7.8.5. Chaque fois qu'il apparaît au Comité, d'après les renseignements dont il dispose, qu'une assignation inscrite dans le Fichier de référence n'a pas été mise en service régulier conformémant aux caractéristiques fondamentales notifiées, on n'est pas utilisée conformément à ses caractéristiques fondamentales notifiées, ou n'est pas utilisée conformément à ses caractéristiques fondamentales, le Comité consulte l'administration notificatrice et, sous réserve de son accord, il annule l'inscription ou lui apporte les modifications qui conviennent.

7.8.6. Si, à la suite d'une enquête faite par le Comité aux termes du paragraphe 7.8.5, l'administration notificatrice n'a pas fourni au Comité dans les 45 jours les renseignements nécessaires ou pertinents, le Comité porte dans la colonne Observations du Fichier de référence, des Observations indiquant la situation.

ARTICLE 8

Dispositions diverses relatives aux procédures

8.1. Si la demande lui en est faite par une administration quelconque et si les circonstances paraissant le justifier, le Comité utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, procède à une étude des cas de présomption de contravention aux présentes dispositions ou de non-observation de celles-ci, ou des cas de brouillage préjudiciable.

8.2. Le Comité établit ensuite un rapport qu'il communique aux administrations intéressées et dans lequel il consigne ses conclusions et ses recommandations pour la solution du problème.

8.3. Dans le cas, où à la suite d'une étude, le Comité présente à une ou plusieurs administrations des propositions ou recommandations tendant á la solution d'une question et où, dans un délai de 90 jours, il n'a pas reçu de réponse d'une ou de plusieurs de ces administrations, il considère que ses propositions ou recommendations ne sont pas acceptables par la ou les administrations qui n'ont pas répondu. Si l'administration requérente elle-même n'a pas répondu dans ce délai, le Comité ne poursuit pas l'étude.

8.4. Si la demande lui en est faite par une administration quelconque et, en particulier, par l'administration d'un pays qui a besoin d'assistance spéciale et si les circonstances paraissent le justifier, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

a) Calcul nécessaire pour l'application des annexes 1, 3 et 4;

b) Toute autre assistance de caractère technique afin que les procédures décrites dans le présent appendice puissant être ménées á bien.

ARTICLE 9

Limites de la puissance surfacique entre 11,7 GHz et 12,2 GHz pour la protection, dans les Régions 1 et 3, des services de Terre contre les brouillages provenant de stations spatiales de radiodiffusion pasatellites de la Région 2.

9.1. Quelles que soient les conditions et les méthodes de modulation, la puissance surfacique produite à la surface de la Terre dans les Régions 1 et 3 par les émissions d'une station spatiale du service de radiodiffusion par satellite de la Région 2 ne doit pas dépasser, sur le territoire d'un pays quelconque, les limites indiquées à l'annexe 5, sauf si l'administration de ce pays accepte le dépassement.

ARTICLE 10

Limites de la puissance surfacique entre 11,7 GHz et 12,2 GHz pour la protection des services spatiaux de la Région 2 contre les brouillages provenant des stations spatiales du service de radiodiffusion par satellitedes Régions 1 et 3

10.1. Les stations spatiales du service de radiodiffusion par satellite des Régions 1 et 3 doivent utiliser des antennes dont les caractéristiques des lobes latéraux n'excédent pas le diagramme de rayonnement de référence de la figure 6 de l'annexe 8. En conséquence, la puissance surfacique rayonnée sur le territoire d'une quelconque administration de la Région 2 dans la bande 11,7-12,2 GHz avant toute modification au Plan ne devra pas dépasser, quelles que soient les conditions et les méthodes de modulation, les valeurs produites par les stations de radiodiffusion par satellite fonctionnant conformément au Plan à la date de son entrée en vigueur et utilisant les caractéristiques techniques spécifiées dans celui-ci. Les valeurs de la puissance surfacique doivent être calculées selon la méthode décrite dans l'annexe 11.

10.2. En particulier, en un point de référence (35° de longitude Ouest, 8° de latitude Sud) avant toute modification au Plan, les puissances surfaciques ne doivent pas dépasser les valeurs indiquées dans l'annexe 11.

ARTICLE 11

Plan pour le service de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz dans la Région 3 et 11,7-12,5 GHz dans la Région 1

11.1. Renseignements inclus dans les colonnes du plan.

Colonne 1 — *Symbole désignant le pays et numéro de référence de l'IFRB* (la colonne 1 contient le symbole désignant le pays ou la zone géographique tiré du tableau N° 1 de la Préface à la liste internationale des fréquences).

Colonne 2 — *Position nominale sur l'orbite,* en degrés.

Colonne 3 — *Numéro du canal* (voir le tableau ci-après pour la correspondance entre les numéros des canaux et les fréquences assignées).

Colonne 4 — *Coordonnées géographiques du point de visée,* en degrés et dixièmes de degrés.

Colonne 5 — *Ouverture du faisceau d'antenne.* La colonne comporte deux valeurs représentant respectivement le grande axe et le petit axe de la section droite du faisceau elliptique entre les points à demi-puissance; ces valeurs sont exprimées en degrés et dixièmes de degrés.

Colonne 6 — *Orientation de l'ellipse* déterminée comme suit: dans un plan perpendiculaire à l'axe du faisceau, la direction du grande axe de l'ellipse est définie par l'angle, mesuré dans le sens inverse des aiguilles d'une montre, à partir d'une ligne parallèle au plan équatorial jusqu'au grand axe de l'ellipse, au degré près le plus proche.

Colonne 7 — *Polarisation* (1 = directe; 2 = indirecte) (1).

Colonne 8 — *P. i. r. e.* dans la direction du rayonnement maximal, en dBW.

Colonne 9 — *Observations.*

11.2. Notes relatives au plan.

1. Le ΔG de cette assignation est ... dB.

2. A affecter au programme islamique prévu dans les documents de la Conférence (2).

3. Cette assignation résulte d'un besoin commun des Administrations du Danemark et de l'Islande. La zone de service comprend les îles Féroé et l'Islande. L'assignation peut, à l'issue des consultations entre les deux Administrations, être utilisée par l'une ou l'autre d'entre elles.

4. IFB — IFRB. Cette assignation a été incluse dans le Plan par la Conférence.

5. Assignation destinée à assurer la couverture de l'Algérie, de la Libye, du Maroc, de la Mauritanie et de la Tunisie, après accord de ces pays. En cas de besoin, elle peut être utilisée avec les caractéristiques du faisceau TUN 150.

6. Les assignations inscrites dans le Plan au nom de la Somalie doivent être coordonnées avec chacun des pays interessées et en particulier avec l'Ethiopie.

11.3. Tableau de correspondance entre le numéro du canal et la fréquence assignée:

Canal numéro	Fréquence assignée (MHz)	Canal numéro	Fréquence assignée (MHz)
1	11 727,48	21	12 111,08
2	11 747,66	22	12 130,26
3	11 765,84	23	12 149,44
4	11 785,02	24	12 168,62
5	11 804,20	25	12 187,80
6	11 823,38	26	12 206,98
7	11 842,56	27	12 226,16
8	11 861,74	28	12 245,34
9	11 880,92	29	12 264,52
10	11 900,10	30	12 283,70
11	11 919,28	31	12 302,88
12	11 938,46	32	12 322,06
13	11 957,64	33	12 341,24
14	11 976,82	34	12 360,42
15	11 996,00	35	12 379,60
16	12 015,18	36	12 398,78
17	12 034,36	37	12 417,96
18	12 053,54	38	12 437,14
19	12 072,72	39	12 456,32
20	12 091,90	40	12 475,50

(1) Voir paragraphe 3.2.3 de l'annexe 8.

(2) Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

11 727,48 MHz (1)

1		2	3	4		5		6	7	8	9
AFG	246A	50,0	1	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005A	98,0	1	133,5	— 18,8	2,70	1,40	76	2	64,3	
CAR	338A	122,0	1	149,5	8,0	5,36	0,77	178	1	62,5	
CHN	155A	62,0	1	88,3	31,5	3,38	1,45	162	2	62,9	
CHN	162A	92,0	1	115,9	21,0	2,74	2,42	23	2	63,9	
CHN	163A	80,0	1	116,0	39,2	1,20	0,83	132	1	64,4	
CME	300A	— 13,0	1	12,7	6,2	2,54	1,68	87	1	63,4	
F	093A	— 19,0	1	2,6	45,9	2,50	0,98	160	1	63,8	
FJI	193A	152,0	1	179,4	— 17,9	1,04	0,98	67	1	63,7	
GUI	192A	— 37,0	1	— 11,0	10,2	1,58	1,04	147	2	63,4	
IND	039A	56,0	1	72,7	11,2	1,26	0,60	107	1	63,1	
IND	044A	68,0	1	79,5	22,3	2,19	1,42	146	1	63,3	
INS	035A	104,0	1	124,3	— 3,2	3,34	1,94	82	1	63,2	
J	111A	110,0	1	134,5	31,5	3,52	3,30	68	1	63,2	
LBY	280A	— 25,0	1	21,4	26,0	2,50	1,04	119	2	63,5	
MDG	236A	29,0	1	46,6	— 18,8	2,72	1,14	65	2	63,3	
NZL	055A	158,0	1	172,3	— 39,7	2,88	1,56	47	1	63,3	
PLM	337A	170,0	1	— 161,4	7,0	0,60	0,60	0	1	62,4	
POL	132A	—1,0	1	19,3	51,8	1,46	0,64	152	2	64,1	
QAT	247A	17,0	1	51,1	25,3	0,60	0,60	0	1	61,8	1/1,6
SMA	335A	170,0	1	— 170,1	— 14,2	0,60	0,60	0	2	61,1	1/0,9
SMR	311A	— 37,0	1	12,6	43,7	0,60	0,60	0	1	62,4	1/0,8
SWZ	313A	— 1,0	1	31,5	— 26,5	0,62	0,60	66	1	62,8	1/1,7
THA	142A	74,0	1	100,7	13,2	2,82	1,54	106	2	63,6	
TUR	145A	5,0	1	34,4	38,9	2,68	1,04	168	1	63,7	
URS	064A	23,0	1	45,6	40,8	2,16	0,60	163	2	63,9	
URS	067A	44,0	1	62,4	58,5	3,20	1,52	169	1	66,3	
WAK	334A	140,0	1	166,5	19,2	0,60	0,60	0	1	63,6	
YMS	267A	11,0	1	48,8	15,2	1,76	1,54	176	2	62,8	

11 746,66 MHz (2)

1		2	3	4		5		6	7	8	9
AGL	251A	— 25,0	2	4,2	33,2	2,45	1,25	172	1	63,4	
ARS	275A	17,0	2	48,3	24,6	3,84	1,20	138	2	62,7	
AUS	006A	98,0	2	135,4	— 30,3	2,00	1,40	44	1	63,2	
AUS	008A	128,0	2	145,9	— 21,5	2,90	2,00	120	2	63,7	
BOT	297A	— 1,0	2	23,3	— 22,2	2,13	1,50	36	2	63,7	
CHN	154A	62,0	2	83,9	40,5	2,75	2,05	177	1	63,2	
CHN	161A	92,0	2	118,1	31,1	2,49	1,69	117	1	64,4	
CKH	052A	158,0	2	— 161,0	— 19,8	1,02	0,64	132	2	64,6	
CLN	219A	50,0	2	80,6	7,7	1,18	0,60	106	2	63,6	
D	087A	— 19,0	2	9,6	49,9	1,62	0,72	147	2	65,5	
FNL	103A	5,0	2	22,5	64,5	1,38	0,76	171	2	67,7	
GNP	304A	— 31,0	2	— 15,0	12,0	0,90	0,60	172	2	63,1	
GUM	331A	122,0	2	144,5	13,1	0,60	0,60	0	2	63,3	
IND	037A	68,0	2	93,0	25,5	1,46	1,13	40	2	63,9	
IND	045A	— 56,0	2	76,2	19,5	1,58	1,58	21	1	63,5	
INS	028A	80,0	2	101,5	0,0	3,00	1,20	133	2	63,3	
IRL	211A	— 31,0	2	— 8,2	53,2	0,84	0,60	162	1	64,2	
KOR	112A	110,0	2	127,5	36,0	1,24	1,02	168	2	63,6	
LAO	284A	74,0	2	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	242A	29,0	2	59,8	— 18,9	1,62	1,24	55	1	64,0	
MLA	228A	86,0	2	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	327A	— 37,0	2	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333A	146,0	2	166,7	7,9	1,50	1,50	177	1	63,3	
NCL	100A	140,0	2	166,0	— 21,0	1,14	0,72	146	1	63,7	
PAK	127A	38,0	2	69,6	29,5	2,30	2,16	14	1	63,9	
PNG	131A	110,0	2	147,7	— 6,3	2,50	2,18	169	1	64,4	
ROU	136A	— 1,0	2	25,0	45,7	1,38	0,66	155	1	63,8	
TCD	143A	— 13,0	2	18,1	15,5	3,40	1,72	107	2	64,0	
TGO	225A	— 25,0	2	0,8	8,6	1,52	0,60	105	2	63,4	
WAL	102A	140,0	2	— 176,8	— 14,0	0,74	0,60	29	1	64,4	
YEM	266A	11,0	2	44,3	15,1	1,14	0,70	109	1	62,6	
ZAI	323A	— 19,0	2	21,3	— 6,8	2,80	1,52	149	1	64,6	

11 765,84 MHz (3)

1		2	3	4		5		6	7	8	9
AFG	245A	50,0	3	70,2	35,5	1,32	1,13	53	1	62,8	
AUS	004A	98,0	3	121,8	— 24,9	3,60	1,90	54	2	63,0	
AUS	009A	128,0	3	147,2	— 32,0	2,10	1,40	15	1	64,1	
AZR	134A	— 31,0	3	— 23,4	36,1	2,56	0,70	155	2	63,0	
BEN	233A	— 19,0	3	2,2	9,5	1,44	0,68	97	2	63,3	
CHN	157A	62,0	3	102,3	27,8	2,56	1,58	127	2	65,1	
CHN	160A	92,0	3	122,8	45,3	2,50	1,45	150	2	65,1	
COM	207A	29,0	3	44,1	—12,1	0,76	0,60	149	2	63,1	
GAB	260A	— 13,0	3	11,8	— 0,6	1,43	1,12	64	1	63,3	
GMB	302A	— 37,0	3	— 15,1	13,4	0,79	0,60	4	2	63,3	
GRC	150A	5,0	3	24,7	38,2	1,78	0,98	156	1	63,3	
IND	043A	56,0	3	77,8	11,1	1,36	1,28	172	1	63,3	
IND	047A	68,0	3	93,3	11,1	1,92	0,60	96	1	63,4	
INS	036A	104,0	3	135,2	— 3,8	2,46	2,00	147	1	63,8	
IRN	109A	34,0	3	54,2	32,4	3,82	1,82	149	2	62,8	
J	111B	110,0	3	134,5	31,5	3,52	3,30	68	1	64,2	
LBN	279A	11,0	3	35,8	33,9	0,60	0,60	0	2	61,6	1/1,8
LBR	244A	— 31,0	3	— 93	6,6	1,22	0,70	133	1	63,2	
LBY	321A	— 25,0	3	13,1	27,2	2,36	1,12	129	2	63,0	
LIE	253A	— 37,0	3	9,5	47,1	0,60	0,60	0	1	62,4	1/0,7
LUX	114A	— 19,0	3	6,0	49,8	0,60	0,60	0	1	62,9	1/2,0
MRA	332A	122,0	3	145,9	16,9	1,20	0,60	76	1	63,5	
NHB	128A	140,0	3	168,0	— 26,4	1,52	0,68	87	2	62,8	
NRU	309A	134,0	3	167,0	— 0,5	0,60	0,60	0	2	62,5	
POR	133A	— 31,0	3	— 8,0	39,6	0,92	0,60	112	2	63,4	
SMO	057A	158,0	3	—172,3	— 13,7	0,60	0,60	0	1	63,6	
SNG	151A	74,0	3	103,8	1,3	0,60	0,60	0	2	63,5	
SOM	312A	23,0	3	45,0	6,4	3,26	1,54	71	1	62,3	
TCH	144A	— 1,0	3	17,3	49,3	1,47	0,60	170	2	63,8	
UGA	061A	11,0	3	32,3	1,2	146	1,12	66	1	63,2	
URS	061A	23,0	3	24,7	56,6	0,86	0,64	1,2	2	65,0	
URS	073A	44,0	3	54,3	63,5	1,58	0,66	3	1	66,9	
VTN	325A	86,0	3	105,3	16,1	3,03	1,40	116	2	63,4	
ZMB	314A	— 1,0	3	27,5	— 13,1	2,38	1,48	39	1	63,7	

11 785,02 MHz (4)

1		2	3	4		5		6	7	8	9
AGL	252A	— 25,0	4	1,6	25,5	3,64	2,16	152	1	62,8	
AND	341A	— 37,0	4	1,6	42,5	0,60	0,60	0	2	61,5	1/0,5
ARS	003A	17,0	4	41,1	23,8	3,52	1,68	134	2	62,7	
AUS	007A	128,0	4	145,0	— 38,1	1,83	1,39	134	2	63,3	
AUT	016A	—19,0	4	12,2	47,5	1,14	0,63	166	2	64,1	
BUL	020A	— 1,0	4	25,0	43,0	1,04	0,60	165	1	63,6	
CHN	156A	62,0	4	97,8	36,3	2,56	1,58	157	1	63,5	
CHN	161B	92,0	4	118,1	31,1	2,49	1,69	117	1	64,4	
CKN	053A	158,0	4	— 163,0	— 11,2	1,76	0,72	30	2	64,3	
CPV	301A	— 31,0	4	— 24,0	16,0	0,86	0,70	144	2	62,2	
EGY	026A	— 7,0	4	29,7	26,8	2,33	1,72	136	2	63,1	
G	027A	— 31,0	4	— 3,5	53,8	1,84	0,72	142	1	65,0	
IND	040A	56,0	4	73,0	25,0	1,82	1,48	58	2	63,6	
IND	048A	68,0	4	86,2	25,0	1,56	0,90	120	2	63,7	
INS	028B	80,0	4	101,5	0,0	3,00	1,20	133	2	63,3	
KOR	112B	110,0	4	127,5	36,0	1,24	1,02	168	2	63,6	
LAO	248B	74,0	4	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	243A	29,0	4	56,8	— 13,9	1,56	1,38	65	1	63,7	
MLA	228B	86,0	4	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	328A	— 37,0	4	— 7,6	13,2	1,74	1,24	171	1	63,7	
MLT	147A	— 13,0	4	14,3	35,9	0,60	0,60	0	1	61,0	1/0,7
MOZ	307A	— 1,0	4	34,0	— 18,0	3,57	1,38	55	2	64,2	
OCE	101A	— 160,0	4	— 145,0	— 16,3	4,34	354	4	2	63,5	
PAK	283A	38,0	4	74,7	33,9	1,34	1,13	160	1	64,3	
PNG	271A	128,0	4	148,0	— 6,7	2,80	2,05	155	1	63,4	
RRW	310A	11,0	4	30,0	— 2,1	0,66	0,60	42	2	64,8	
E	138A	5,0	4	16,2	61,0	1,04	0,98	14	2	67,1	
STP	241A	13,0	4	7,0	0,8	0,60	0,60	0	2	61,4	1/1,3
TON	215A	170,0	4	— 174,7	— 18,0	1,41	0,68	85	1	63,3	
URS	060A	23,0	4	41,5	57,4	3,08	1,56	153	1	66,7	
ZAI	322A	— 19,0	4	22,4	0,0	2,16	1,88	48	1	64,7	

11 804,20 MHz (5)

1		2	3	4		5		6	7	8	9
AFG	246B	50,0	5	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005B	98,0	5	133,5	— 18,8	2,70	1,40	76	2	64,3	
CAR	338B	122,0	5	149,5	8,0	5,36	0,77	178	1	62,5	
CHN	155B	62,0	5	88,3	31,5	3,38	1,45	162	2	62,9	
CHN	162B	92,0	5	115,9	21,0	2,74	2,42	23	2	64,0	
CHN	164A	80,0	5	112,2	37,4	1,06	0,76	111	1	64,2	
CME	300B	— 13,0	5	12,7	6,2	2,54	1,68	87	1	63,5	
F	093B	— 19,0	5	2,6	45,9	2,50	0,98	160	1	63,8	
FJI	193B	152,0	5	179,4	— 17,9	1,04	0,98	67	1	63,7	
GUI	192B	— 37,0	5	— 11,0	10,2	1,58	1,04	147	2	63,5	
IND	039B	56,0	5	72,7	11,2	1,26	0,60	107	1	63,1	
IND	044B	68,0	5	79,5	22,3	2,19	1,42	146	1	63,4	
INS	035B	104,0	5	124,3	— 3,2	3,34	1,94	82	1	63,2	
J	111C	110,0	5	134,5	31,5	3,52	3,30	68	1	64,2	
LBY	280B	— 25,0	5	21,4	26,0	2,50	1,04	119	2	63,5	
MDG	236B	29,0	5	46,6	— 18,8	2,72	1,14	65	2	63,4	
NZL	055B	158,0	5	172,3	— 39,7	2,88	1,56	47	1	63,4	
PLM	337B	170,0	5	— 161,4	7,0	0,60	0,60	0	1	62,4	
POL	132B	—1,0	5	19,3	51,8	1,46	0,64	162	2	64,2	
QAT	247B	17,0	5	51,1	25,3	0,60	0,60	0	1	61,8	1/1,6
SMA	335B	170,0	5	— 170,1	— 14,2	0,60	0,60	0	2	61,2	1/0,9
SMR	311B	— 37,0	5	12,6	43,7	0,60	0,60	0	1	62,5	1/0,8
SWZ	313B	— 1,0	5	31,5	— 26,5	0,62	0,60	66	1	62,8	1/1,7
THA	142B	74,0	5	100,7	13,2	2,82	1,54	106	2	63,7	
TUR	145B	5,0	5	34,4	38,9	2,68	1,04	168	1	63,8	
URS	064B	23,0	5	45,6	40,8	2,16	0,60	163	2	63,9	
URS	067B	44,0	5	62,4	58,5	3,20	1,52	169	1	66,4	
WAK	334B	140,0	5	166,5	19,2	0,60	0,60	0	1	63,6	
YMS	267B	11,0	5	48,8	15,2	1,76	1,54	176	2	62,9	

11 823,38 MHz (6)

1		2	3	4		5		6	7	8	9
AGL	251B	— 25,0	6	4,2	33,2	2,45	1,25	172	1	63,4	
ARS	275B	17,0	6	48,3	24,6	3,84	1,20	138	2	62,8	
AUS	006B	98,0	6	135,4	— 30,3	2,00	1,40	44	1	63,3	
AUS	008B	128,0	6	145,9	— 21,5	2,90	2,00	120	2	63,7	
BOT	297B	— 1,0	6	23,3	— 22,2	2,13	1,50	36	2	63,8	
CHN	154B	62,0	6	83,9	40,5	2,75	2,05	177	1	63,3	
CHN	161C	92,0	6	118,1	31,1	2,49	1,69	117	1	64,5	
CKH	052B	158,0	6	— 161,0	— 19,8	1,02	0,64	132	2	64,6	
CLN	219B	50,0	6	80,6	7,7	1,18	0,60	106	2	63,6	
D	087B	— 19,0	6	9,6	49,9	1,62	0,72	147	2	65,6	
FNL	103B	5,0	6	22,5	64,5	1,38	0,76	171	2	67,8	
GNP	304B	— 31,0	6	— 15,0	12,0	0,90	0,60	172	2	63,2	
GUM	331B	122,0	6	144,5	13,1	0,60	0,60	0	2	63,4	
IND	037B	68,0	6	93,0	25,5	1,46	1,13	40	2	64,0	
IND	045B	— 56,0	6	76,2	19,5	1,58	1,58	21	2	63,6	
INS	028C	80,0	6	101,5	0,0	3,00	1,20	133	2	63,3	
IRL	211B	— 31,0	6	— 8,2	53,2	0,84	0,60	162	1	64,3	
KOR	112C	110,0	6	127,5	36,0	1,24	1,02	168	1	63,6	
LAO	284C	74,0	6	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	242B	29,0	6	59,8	— 18,9	1,62	1,24	55	1	64,0	
MLA	228C	86,0	6	114,1	3,9	2,34	1,12	45	1	63,6	
MLI	327B	— 37,0	6	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333B	146,0	6	166,7	7,9	1,50	1,50	177	1	63,3	
NCL	100B	140,0	6	166,0	— 21,0	1,14	0,72	146	1	63,8	
PAK	127B	38,0	6	69,6	29,5	2,30	2,16	14	1	64,0	
PNG	131B	110,0	6	147,7	— 6,3	2,50	2,18	169	1	64,4	
ROU	136B	— 1,0	6	25,0	45,7	1,38	0,66	155	1	63,9	
TOD	143B	— 13,0	6	18,1	15,5	3,40	1,72	107	2	64,0	
TGO	226B	— 25,0	6	0,8	8,6	1,52	0,60	105	2	63,4	
WAL	102B	140,0	6	— 176,8	— 14,0	0,74	0,60	29	1	64,4	
YEM	266B	11,0	6	44,3	15,1	1,14	0,70	109	1	62,7	
ZAI	323B	— 19,0	6	21,3	— 6,8	2,80	1,52	149	1	64,7	

11 842,56 MHz (7)

1		2	3	4		5		6	7	8	9
AFG	245B	50,0	7	70,2	35,5	1,32	1,13	53	1	62,9	
AUS	004B	98,0	7	121,8	— 24,9	3,60	1,90	54	2	63,1	
AUS	009B	128,0	7	147,2	— 32,0	2,10	1,40	15	1	64,1	
AZR	134B	— 31,0	7	— 23,4	36,1	2,56	0,70	158	2	63,1	
BEN	233B	— 19,0	7	2,2	9,5	1,44	0,68	97	2	63,3	
CHN	157B	62,0	7	102,3	27,8	2,56	1,58	127	2	65,1	
CHN	160B	92,0	7	122,8	45,3	2,50	1,45	150	2	65,1	
COM	207B	29,0	7	44,1	—12,1	0,76	0,60	149	2	63,1	
GAB	260B	— 13,0	7	11,8	— 0,6	1,43	1,12	64	1	63,4	
GMB	302B	— 37,0	7	— 15,1	13,4	0,79	0,60	4	2	63,4	
GRC	150B	5,0	7	24,7	38,2	1,78	0,98	156	1	63,4	
IND	043B	56,0	7	77,8	11,1	1,36	1,28	172	1	63,4	
IND	047B	68,0	7	93,3	11,1	1,92	0,60	96	1	63,5	
INS	036B	104,0	7	135,2	— 3,8	2,46	2,00	147	1	63,8	
IRN	109B	34,0	7	54,2	32,4	3,82	1,82	149	2	62,8	
J	111D	110,0	7	134,5	31,5	3,52	3,30	68	1	64,2	
LBN	279B	11,0	7	35,8	33,9	0,60	0,60	0	2	61,7	1/1,8
LBR	244B	— 31,0	7	— 9,3	6,6	1,22	0,70	133	1	63,3	
LBY	321B	— 25,0	7	13,1	27,2	2,36	1,12	129	2	63,1	
LIE	253B	— 37,0	7	9,5	47,1	0,60	0,60	0	1	62,5	1/0,7
LUX	114B	— 19,0	7	6,0	49,8	0,60	0,60	0	1	63,0	1/2,0
MRA	332B	122,0	7	145,9	16,9	1,20	0,60	76	1	63,5	
NHB	128B	140,0	7	168,0	— 16,4	1,52	0,68	87	2	62,9	
NRU	309B	134,0	7	167,0	— 0,5	0,60	0,60	0	2	62,6	
POR	133B	— 31,0	7	— 8,0	39,6	0,92	0,60	112	2	63,4	
SMO	057B	158,0	7	—172,3	— 13,7	0,60	0,60	0	1	63,7	
SNG	151B	74,0	7	103,8	1,3	0,60	0,60	0	2	63,6	
SOM	312B	23,0	7	45,0	6,4	3,26	1,54	71	1	62,4	
TCH	144B	— 1,0	7	17,3	49,3	1,47	0,60	170	2	63,9	
UGA	051B	11,0	7	32,3	1,2	1,46	1,12	60	1	63,3	
URS	061B	23,0	7	24,7	56,6	0,88	0,64	12	2	65,1	
URS	072A	44,0	7	70,1	61,5	2,38	0,66	173	1	67,1	
VTN	325B	86,0	7	105,3	16,1	3,03	1,40	116	2	63,5	
ZMB	314B	— 1,0	7	27,5	— 13,1	2,38	1,48	39	1	63,8	

11 861,74 MHz (8)

1		2	3	4		5		6	7	8	9
AGL	252B	— 25,0	8	1,6	25,5	3,64	2,16	152	1	62,8	
AND	341B	— 37,0	8	1,6	42,5	0,60	0,60	0	2	61,5	1/0,5
ARS	003B	17,0	8	41,1	23,8	3,52	1,68	134	2	62,8	
AUS	007B	128,0	8	145,0	— 38,1	1,83	1,39	134	2	63,4	
AUT	016B	—19,0	8	12,2	47,5	1,14	0,63	166	2	64,2	
BUL	020B	— 1,0	8	25,0	43,0	1,04	0,60	165	1	63,7	
CHN	156B	62,0	8	97,8	36,3	2,56	1,58	157	1	63,5	
CHN	173A	92,0	8	115,7	27,4	1,14	0,94	99	1	64,0	
CKN	053B	158,0	8	— 163,0	— 11,2	1,76	0,72	30	2	64,3	
CPV	301B	— 31,0	8	— 24,0	16,0	0,86	0,70	144	2	62,2	
EGY	026B	— 7,0	8	29,7	26,8	2,33	1,72	136	2	63,2	
G	027B	— 31,0	8	— 3,5	53,8	1,84	0,72	142	1	65,1	
IND	040B	56,0	8	73,0	25,0	1,82	1,48	58	2	63,7	
IND	048B	68,0	8	86,2	25,0	1,56	0,90	120	2	63,7	
INS	028D	80,0	8	101,5	0,0	3,00	1,20	133	2	63,4	
KOR	112D	110,0	8	127,5	36,0	1,24	1,02	168	2	63,7	
LAO	248D	74,0	8	103,7	18,1	2,16	0,78	133	1	63,8	
MAU	243B	29,0	8	56,8	— 13,9	1,56	1,38	65	1	63,8	
MLA	228D	86,0	8	114,1	3,9	2,34	1,12	45	1	63,7	
MLI	328B	— 37,0	8	— 7,6	13,2	1,74	1,24	171	1	63,8	
MLT	147B	— 13,0	8	14,3	35,9	0,60	0,60	0	1	61,0	1/0,7
MOZ	307B	— 1,0	8	34,0	— 18,0	3,57	1,38	55	2	64,2	
OCE	101B	— 160,0	8	— 145,0	— 16,3	4,34	3,54	4	2	63,6	
PAK	283B	38,0	8	74,7	33,9	1,34	1,13	160	1	64,3	
PNG	271B	128,0	8	148,0	— 6,7	2,80	2,05	155	1	63,4	
RRW	310B	11,0	8	30,0	— 2,1	0,66	0,60	42	2	64,9	
S	138B	5,0	8	16,2	61,0	1,04	0,98	14	2	67,1	
STP	241B	—13,0	8	7,0	0,8	0,60	0,60	0	2	61,5	1/1,3
TON	215B	170,0	8	— 174,7	— 18,0	1,41	0,68	85	1	63,3	
URS	060B	23,0	8	41,5	57,4	3,08	1,56	153	1	66,8	
ZAI	322B	— 19,0	8	22,4	0,0	2,16	1,88	48	1	64,8	

11 880,92 MHz (9)

1		2	3	4		5		6	7	8	9
AFG	246C	50,0	9	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005C	98,0	9	133,5	— 18,8	2,70	1,40	76	2	64,4	
CAR	338C	122,0	9	149,5	8,0	5,36	0,77	178	1	62,6	
CHN	155C	62,0	9	88,3	31,5	3,38	1,45	162	2	63,0	
CHN	162C	92,0	9	115,9	21,0	2,74	2,42	23	2	64,0	
CHN	165A	80,0	9	111,4	41,8	1,58	1,20	15	1	63,6	
CME	300C	— 13,0	9	12,7	6,2	2,54	1,68	87	1	63,5	
F	093C	— 19,0	9	2,6	45,9	2,50	0,98	160	1	63,9	
FJI	193C	152,0	9	179,4	— 17,9	1,04	0,98	67	1	63,8	
GUI	192C	— 37,0	9	— 11,0	10,2	1,58	1,04	147	2	63,5	
IND	039C	56,0	9	72,7	11,2	1,26	0,60	107	1	63,2	
IND	044C	68,0	9	79,5	22,3	2,19	1,42	146	1	63,5	
INS	035C	104,0	9	124,3	— 3,2	3,34	1,94	82	1	63,3	
J	111E	110,0	9	134,5	31,5	3,52	3,30	68	1	64,3	
LBY	280C	— 25,0	9	21,4	26,0	2,50	1,04	119	2	63,6	
MDG	236C	29,0	9	46,6	— 18,8	2,72	1,14	65	2	63,4	
NZL	055C	158,0	9	172,3	— 39,7	2,88	1,56	47	1	63,4	
PLM	337C	170,0	9	— 161,4	7,0	0,60	0,60	0	1	62,5	
POL	132C	—1,0	9	19,3	51,8	1,46	0,64	162	2	64,2	
QAT	247C	17,0	9	51,1	25,3	0,60	0,60	0	1	61,9	1/1,6
SMA	335C	170,0	9	— 170,1	— 14,2	0,60	0,60	0	2	61,3	1/0,9
SMR	311C	— 37,0	9	12,6	43,7	0,60	0,60	0	1	62,5	1/0,8
SWZ	313C	— 1,0	9	31,5	— 26,5	0,62	0,60	66	1	62,9	1/1,7
THA	142C	74,0	9	100,7	13,2	2,82	1,54	106	2	63,7	
TUR	145C	5,0	9	34,4	38,9	2,68	1,04	168	1	63,8	
URS	064C	23,0	9	45,6	40,8	2,16	0,60	163	2	64,0	
URS	067C	44,0	9	62,4	58,5	3,20	1,52	169	1	66,4	
WAK	334C	140,0	9	166,5	19,2	0,60	0,60	0	1	63,7	
YMS	267C	11,0	9	48,8	15,2	1,76	1,54	176	2	62,9	

11 900,10 MHz (10)

1		2	3	4		5		6	7	8	9
AGL	251C	— 25,0	10	4,2	33,2	2,45	1,25	172	1	63,5	
ARS	275C	17,0	10	48,3	24,6	3,84	1,20	138	2	62,9	
AUS	006C	98,0	10	135,4	— 30,3	2,00	1,40	44	1	63,3	
AUS	008C	128,0	10	145,9	— 21,5	2,90	2,00	120	2	63,8	
BOT	297C	— 1,0	10	23,3	— 22,2	2,13	1,50	36	2	63,9	
CHN	154C	62,0	10	83,9	40,5	2,75	2,05	177	1	63,3	
CHN	171A	92,0	10	117,2	32,0	1,20	0,74	126	1	64,2	
CHN	187A	80,0	10	106,6	26,7	1,14	0,94	179	2	64,0	
CKH	052C	158,0	10	— 161,0	— 19,8	1,02	0,64	132	2	64,7	
CLN	219C	50,0	10	80,6	7,7	1,18	0,60	106	1	63,7	
D	087C	— 19,0	10	9,6	49,9	1,62	0,72	147	2	65,6	
FNL	103C	5,0	10	22,5	64,5	1,38	0,76	171	2	67,9	
GNF	304C	— 31,0	10	— 15,0	12,0	0,90	0,60	172	2	63,2	
GUM	331C	122,0	10	144,5	13,1	0,60	0,60	0	2	63,4	
IND	037C	68,0	10	93,0	25,5	1,46	1,13	40	2	64,0	
IND	045C	56,0	10	76,2	19,5	1,58	1,58	21	2	63,6	
IRL	211C	— 31,0	10	— 8,2	53,2	0,84	0,60	162	1	64,4	
KOR	112E	110,0	10	127,5	36,0	1,24	1,02	168	2	63,7	
LAO	284E	74,0	10	103,7	18,1	2,16	0,78	133	1	63,9	
MAU	242C	29,0	10	59,8	— 18,9	1,62	1,24	55	1	64,1	
MLI	327C	— 37,0	10	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333C	146,0	10	166,7	7,9	1,50	1,50	177	1	63,4	
NCL	100C	140,0	10	166,0	— 21,0	1,14	0,72	146	1	63,8	
PAK	127C	38,0	10	69,6	29,5	2,30	2,16	14	1	64,0	
PNG	131C	110,0	10	147,7	— 6,3	2,50	2,18	169	1	64,5	
ROU	136C	— 1,0	10	25,0	45,7	1,38	0,66	155	1	63,9	
TCD	143C	— 13,0	10	18,1	15,5	3,40	1,72	107	2	64,1	
TGO	226C	— 25,0	10	0,8	8,6	1,52	0,60	105	2	63,5	
WAL	102C	140,0	10	— 176,8	— 14,0	0,74	0,60	29	1	64,5	
YEM	266C	11,0	10	44,3	15,1	1,14	0,70	109	1	62,7	
ZAI	323C	— 19,0	10	21,3	— 6,8	2,80	1,52	149	1	64,7	

11 919,28 MHz (11)

1		2	3	4		5		6	7	8	9
AFG	245C	50,0	11	70,2	35,5	1,32	1,13	53	1	62,9	
AUS	004C	98,0	11	121,8	— 24,9	3,60	1,90	54	2	63,1	
AUS	009C	128,0	11	147,2	— 32,0	2,10	1,40	15	1	64,2	
AZR	134C	— 31,0	11	— 23,4	36,1	2,56	0,70	158	2	63,1	
BEN	233C	— 19,0	11	2,2	9,5	1,44	0,68	97	2	63,4	
CHN	157C	62,0	11	102,3	27,8	2,56	1,58	127	2	65,2	
CHN	160C	92,0	11	122,8	45,3	2,50	1,45	150	2	65,2	
COM	207C	29,0	11	44,1	—12,1	0,76	0,60	149	2	63,2	
GAB	260C	— 13,0	11	11,8	— 0,6	1,43	1,12	64	1	63,4	
GMB	302C	— 37,0	11	— 15,1	13,4	0,79	0,60	4	2	63,4	
GRC	150C	5,0	11	24,7	38,2	1,78	0,98	156	1	63,4	
IND	043C	56,0	11	77,8	11,1	1,36	1,28	172	1	63,5	
IND	047C	68,0	11	93,3	11,1	1,92	0,60	96	1	63,5	
INS	036C	104,0	11	135,2	— 3,8	2,46	2,00	147	1	63,9	
IRN	109C	34,0	11	54,2	32,4	3,82	1,82	149	2	62,9	
J	111F	110,0	11	134,5	31,5	3,52	3,30	68	1	64,3	
LBN	279C	11,0	11	35,8	33,9	0,60	0,60	0	2	61,7	1/1,8
LBR	244C	— 31,0	11	— 9,3	6,6	1,22	0,70	133	1	63,3	
LBY	321C	— 25,0	11	13,1	27,2	2,36	1,12	129	2	63,1	
LIE	253C	— 37,0	11	9,5	47,1	0,60	0,60	0	1	62,5	1/0,7
LUX	114C	— 19,0	11	6,0	49,8	0,60	0,60	0	1	63,0	1/2,0
MRA	332C	122,0	11	145,9	16,9	1,20	0,60	76	1	63,6	
NHB	128C	140,0	11	168,0	— 16,4	1,52	0,68	87	2	63,0	
NRU	309C	134,0	11	167,0	— 0,5	0,60	0,60	0	2	62,6	
POR	133C	— 31,0	11	— 8,0	39,6	0,92	0,60	112	2	63,5	
SMO	057C	158,0	11	—172,3	— 13,7	0,60	0,60	0	1	63,8	
SNG	151C	74,0	11	103,8	1,3	0,60	0,60	0	2	63,7	
SOM	312C	23,0	11	45,0	6,4	3,26	1,54	71	1	62,4	
TCH	144C	— 1,0	11	17,3	49,3	1,47	0,60	170	2	63,9	
UGA	051C	11,0	11	32,3	1,2	1,46	1,12	60	1	63,3	
URS	061C	23,0	11	24,7	56,6	0,88	0,64	12	2	65,1	
VTN	325C	86,0	11	105,3	16,1	3,03	1,40	116	2	63,5	
ZMB	314C	— 1,0	11	27,5	— 13,1	2,38	1,48	39	1	63,8	

11 938,46 MHz (12)

1		2	3	4		5		6	7	8	9
AGL	252C	— 25,0	12	1,6	25,5	3,64	2,16	152	1	62,9	
AND	341C	— 37,0	12	1,6	42,5	0,60	0,60	0	2	61,6	1/0,5
ARS	003C	17,0	12	41,1	23,8	3,52	1,68	134	2	62,8	
AUS	007C	128,0	12	145,0	— 38,1	1,83	1,39	134	2	63,4	
AUT	016C	—19,0	12	12,2	47,5	1,14	0,63	166	2	64,2	
BRU	330A	74,0	12	114,7	4,4	0,60	0,60	0	1	62,5	1/1,3
BUL	020C	— 1,0	12	25,0	43,0	1,04	0,60	165	1	63,8	
CHN	156C	62,0	12	97,8	36,3	2,56	1,58	157	1	63,6	
CHN	170A	92,0	12	119,5	33,0	1,34	0,64	155	1	64,4	
CHN	178A	80,0	12	111,5	27,4	1,22	0,86	130	2	64,4	
CKN	053C	158,0	12	— 163,0	— 11,2	1,76	0,72	30	2	64,4	
CPV	301C	— 31,0	12	— 24,0	16,0	0,86	0,70	144	2	62,3	
DNK	089A	5,0	12	12,3	57,1	1,20	060	177	2	64,3	
EGY	026C	— 7,0	12	29,7	26,8	2,33	1,72	136	2	63,2	
G	027C	— 31,0	12	— 3,5	53,8	1,84	0,72	142	1	65,1	
IND	040C	56,0	12	73,0	25,0	1,82	1,48	58	2	63,8	
IND	048C	68,0	12	86,2	25,0	1,56	0,90	120	2	63,8	
KOR	112F	110,0	12	127,5	36,0	1,24	1,02	168	2	63,7	
MAU	243C	29,0	12	56,8	— 13,9	1,56	1,38	65	1	63,8	
MLD	306A	44,0	12	73,1	6,0	0,96	0,60	90	1	63,7	
MLI	328C	— 37,0	12	— 7,6	13,2	1,74	1,24	171	1	63,8	
MLT	147C	— 13,0	12	14,3	35,9	0,60	0,60	0	1	61,1	1/0,7
MOZ	307C	— 1,0	12	34,0	— 18,0	3,57	1,38	55	2	64,3	
OCE	101C	— 160,0	12	— 145,0	— 16,3	4,34	3,54	4	2	63,6	
PAK	210A	38,0	12	72,1	30,6	1,16	0,72	90	1	63,5	
PNG	271C	128,0	12	148,0	— 6,7	2,80	2,05	155	1	63,5	
RRW	310C	11,0	12	30,0	— 2,1	0,66	0,60	42	2	64,9	
STP	241C	—13,0	12	7,0	0,8	0,60	0,60	0	2	61,5	1/1,3
TON	215C	170,0	12	— 174,7	— 18,0	1,41	0,68	85	1	63,4	
URS	060C	23,0	12	41,5	57,4	3,08	1,56	153	1	66,9	
URS	069A	44,0	12	70,8	38,5	1,36	0,74	161	2	64,1	
ZAI	322C	— 19,0	12	22,4	0,0	2,16	1,88	48	1	64,8	

11 957,64 MHz (13)

1		2	3	4		5		6	7	8	9
AFG	246D	50,0	13	64,5	33,1	1,44	1,40	21	1	63,4	
AUS	005D	98,0	13	133,5	— 18,8	2,70	1,40	76	2	64,4	
CAR	338D	122,0	13	149,5	8,0	5,36	0,77	178	1	62,6	
CHN	155D	62,0	13	88,3	31,5	3,38	1,45	162	2	63,0	
CHN	180A	92,0	13	113,7	12,9	3,76	2,18	72	2	63,6	
CME	300D	— 13,0	13	12,7	6,2	2,54	1,68	87	1	63,6	
F	093D	— 19,0	13	2,6	45,9	2,50	0,98	160	1	64,0	
GUI	192D	— 37,0	13	— 11,0	10,2	1,58	1,04	147	2	63,6	
IND	039D	56,0	13	72,7	11,2	1,26	0,60	107	1	63,3	
IND	044D	68,0	13	79,5	22,3	2,19	1,42	146	1	63,5	
INS	035D	104,0	13	124,3	— 3,2	3,34	1,94	82	1	63,4	
J	111G	110,0	13	134,5	31,5	3,52	3,30	68	1	64,3	
LBY	280D	— 25,0	13	21,4	26,0	2,50	1,04	119	2	63,6	
MDG	236D	29,0	13	46,6	— 18,8	2,72	1,14	65	2	63,5	
NZL	055D	158,0	13	172,3	— 39,7	2,88	1,56	47	1	63,5	
NZL	287D	128,0	13	173,0	— 41,0	3,30	1,28	48	1	64,8	
PLM	337D	170,0	13	— 161,4	7,0	0,60	0,60	0	1	62,6	
POL	132D	—1,0	13	19,3	51,8	1,46	0,64	162	2	64,3	
QAT	247D	17,0	13	51,1	25,3	0,60	0,60	0	1	62,0	1/1,6
SMA	335D	170,0	13	— 170,1	— 14,2	0,60	0,60	0	2	61,3	1/0,9
SMR	311D	— 37,0	13	12,6	43,7	0,60	0,60	0	1	62,6	1/0,8
SWZ	313D	— 1,0	13	31,5	— 26,5	0,62	0,60	66	1	63,0	1/1,7
THA	142D	74,0	13	100,7	13,2	2,82	1,54	106	2	63,8	
TUR	145D	5,0	13	34,4	38,9	2,68	1,04	168	1	63,9	
URS	064D	23,0	13	45,6	40,8	2,16	0,60	163	2	64,1	
URS	067D	44,0	13	62,4	58,5	3,20	1,52	169	1	66,5	
WAK	334D	140,0	13	166,5	19,2	0,60	0,60	0	1	63,7	
YMS	267D	11,0	13	48,8	15,2	1,76	1,54	176	2	63,0	

11 976,82 MHz (14)

1		2	3	4		5		6	7	8	9
AGL	251D	— 25,0	14	4,2	33,2	2,45	1,25	172	1	63,6	
ARS	275D	17,0	14	48,3	24,6	3,84	1,20	138	2	63,0	
AUS	006D	98,0	14	135,4	— 30,3	2,00	1,40	44	1	63,4	
AUS	008D	128,0	14	145,9	— 21,5	2,90	2,00	120	2	63,9	
BOT	297D	— 1,0	14	23,3	— 22,2	2,13	1,50	36	2	63,9	
BRU	330B	74,4	14	114,7	4,4	0,60	0,60	0	1	62,6	1/1,3
CHN	154D	62,0	14	83,9	40,5	2,75	2,05	177	1	63,4	
CHN	172A	92,0	14	120,4	29,1	0,96	0,84	123	1	64,3	
CHN	181A	80,0	14	108,5	23,8	1,41	1,08	153	2	64,1	
CKH	052D	158,0	14	— 161,0	— 19,8	1,02	0,64	132	2	64,8	
CLN	219D	50,0	14	80,6	7,7	1,18	0,60	106	1	63,8	
D	087D	— 19,0	14	9,6	49,9	1,62	0,72	147	2	65,7	
GNP	304D	— 31,0	14	— 15,0	12,0	0,90	0,60	172	2	63,3	
GUM	331D	122,0	14	144,5	13,1	0,60	0,60	0	2	63,5	
IND	037D	68,0	14	93,0	25,5	1,46	1,13	40	2	64,1	
IND	045D	56,0	14	76,2	19,5	1,58	1,58	21	2	63,7	
IRL	211D	— 31,0	14	— 8,2	53,2	0,84	0,60	162	1	64,4	
KRE	286A	110,0	14	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	242D	29,0	14	59,8	— 18,9	1,62	1,24	55	1	64,1	
MLI	327D	— 37,0	14	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333D	146,0	14	166,7	7,9	1,50	1,50	177	1	63,5	
NCL	100D	140,0	14	166,0	— 21,0	1,14	0,72	146	1	63,9	
NOR	120A	5,0	14	13,1	64,1	1,84	0,88	10	2	65,0	
PAK	210B	38,0	14	72,1	30,8	1,16	0,72	90	1	63,6	
PNG	131D	110,0	14	147,7	— 63,3	2,50	2,18	169	1	64,6	
ROU	136D	— 1,0	14	25,0	45,7	1,38	0,66	155	1	64,0	
TCD	143D	— 13,0	14	18,1	15,5	3,40	1,72	107	2	64,1	
TGO	226D	— 25,0	14	0,8	8,6	1,52	0,60	105	2	63,5	
WAL	102D	140,0	14	— 176,8	— 14,0	0,74	0,60	29	1	64,6	
YEM	266D	11,0	14	44,3	15,1	1,14	0,70	109	1	62,8	
ZAI	323D	— 19,0	14	21,3	— 6,8	2,80	1,52	149	1	64,8	

11 966,00 MHz (15)

1		2	3	4		5		6	7	8	9
AFG	245D	50,0	15	70,2	35,5	1,32	1,13	53	1	63,0	
AUS	004D	98,0	15	121,8	— 24,9	3,60	1,90	54	2	63,2	
AUS	009D	128,0	15	147,2	— 32,0	2,10	1,40	15	1	64,2	
AZR	134D	— 31,0	15	— 23,4	36,1	2,56	0,70	158	2	63,2	
BEN	233D	— 19,0	15	2,2	9,5	1,44	0,68	97	2	63,4	
BGD	220A	74,0	15	90,3	23,6	1,46	0,84	135	1	63,7	
CHN	158A	80,0	15	111,8	38,0	2,60	1,74	124	1	64,9	
CHN	174A	92,0	15	118,1	25,9	1,02	0,84	82	2	64,1	
COM	207D	29,0	15	44,1	— 12,1	0,76	0,60	149	2	63,3	
GAB	260D	— 13,0	15	11,8	— 0,6	1,43	1,12	64	1	63,5	
GMB	302D	— 37,0	15	— 15,1	13,4	0,79	0,60	4	2	63,5	
GRC	105D	5,0	15	24,7	38,2	1,78	0,98	156	1	63,5	
IND	043D	56,0	15	77,8	11,1	1,36	1,28	172	1	63,5	
IND	047D	68,0	15	93,3	11,1	1,92	0,60	96	1	63,6	
INS	036D	104,0	15	135,2	— 3,8	2,46	2,00	147	1	63,9	
IRN	109D	34,0	15	54,2	32,4	3,82	1,82	149	2	63,0	
J	111D	110,0	15	134,5	31,5	3,52	3,30	68	1	64,4	
LBN	279D	11,0	15	35,8	33,9	0,60	0,60	0	2	61,8	1/1,8
LBR	244D	— 31,0	15	— 9,3	6,6	1,22	0,70	133	1	63,4	
LBY	321D	— 25,0	15	13,1	27,2	2,36	1,12	129	2	63,2	
LIE	253D	— 37,0	15	9,5	47,1	0,60	0,60	0	1	62,6	1/0,7
LUX	114D	— 19,0	15	6,0	49,8	0,60	0,60	0	1	63,1	1/2,0
MRA	332D	122,0	15	145,9	16,9	1,20	0,60	76	1	63,6	
NHB	128D	140,0	15	168,0	— 16,4	1,52	0,68	87	2	63,0	
NRU	309D	134,0	15	167,0	— 0,5	0,60	0,60	0	2	62,7	
POR	133D	— 31,0	15	— 8,0	39,6	0,92	0,60	112	2	63,6	
SMO	057D	158,0	15	— 172,3	— 13,7	0,60	0,60	0	1	63,8	
SNG	151D	74,0	15	103,8	1,3	0,60	0,60	0	2	63,7	
SOM	312D	23,0	15	45,0	6,4	3,26	1,54	71	1	62,5	
TCH	044D	— 1,0	15	17,3	49,3	1,47	0,60	170	2	64,0	
UGA	051D	11,0	15	32,3	1,2	1,46	1,12	60	1	63,4	
URS	061D	23,0	15	24,7	56,6	0,88	0,64	12	2	65,2	
VTN	325D	86,0	15	105,3	16,1	3,03	1,40	116	2	63,6	
ZMB	314D	— 1,0	15	27,5	— 13,1	2,38	1,48	39	1	63,9	

12 015,18 MHz (16)

1		2	3	4		5		6	7	8	9
AGL	252D	— 25,0	16	1,6	25,5	3,64	2,16	152	1	63,0	
AND	341D	37,0	16	1,6	42,5	0,60	0,60	0	2	61,6	1/0,5
ARS	003D	17,0	16	41,1	23,8	0,52	1,68	134	2	62,8	
AUS	007D	128,0	16	145,0	— 38,1	1,83	1,39	134	2	63,5	
AUT	016D	— 19,0	16	12,2	47,5	1,14	0,63	166	2	64,3	
BUL	020D	— 1,0	16	25,0	43,0	1,04	0,60	165	1	63,8	
CHN	169A	92,0	16	118,5	36,4	1,16	0,76	11	1	64,7	
CHN	186A	62,0	16	102,5	30,2	1,91	1,23	147	2	65,5	
CKN	053D	158,0	16	— 163,0	— 11,2	1,76	0,72	30	2	64,5	
CPV	301D	— 31,0	16	— 24,0	16,0	0,86	0,70	144	2	62,4	
DNK	089D	5,0	16	12,3	57,1	1,20	0,60	177	2	64,4	
EGY	026D	— 7,0	16	29,7	26,8	2,33	1,72	136	2	63,3	
G	027D	— 31,0	16	— 3,5	53,8	1,84	0,72	142	1	65,2	
IND	040D	56,0	16	73,0	25,0	1,82	1,48	58	2	63,8	
IND	048D	68,0	16	86,2	25,0	1,56	0,90	120	2	65,5	
KRE	286B	110,0	16	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	243D	29,0	16	56,8	— 13,9	1,56	1,38	65	1	63,9	
MLA	227A	86,0	16	102,1	4,1	1,62	0,82	135	1	63,2	2
MLD	306B	44,0	16	73,1	6,0	0,96	0,60	90	1	63,7	
MLI	328D	— 37,0	16	— 7,6	13,2	1,74	1,24	171	1	63,9	
MLT	147D	— 13,0	16	14,3	35,9	0,60	0,60	0	1	61,2	1/0,7
MOZ	307D	— 1,0	16	34,0	— 18,0	3,57	1,38	55	2	64,4	
OCE	101D	— 160,0	16	145,0	— 16,3	4,34	3,54	4	2	63,7	
PHL	285A	98,0	16	121,3	11,1	3,46	1,76	99	2	63,7	
RRW	310D	11,0	16	30,0	— 2,1	0,66	0,60	42	2	65,0	
STP	241D	— 13,0	16	7,0	0,8	0,60	0,60	0	2	61,6	1/1,3
TON	215D	170,0	16	— 174,7	— 18,0	1,41	0,68	85	1	63,5	
URS	060D	23,0	16	41,5	57 4	3,08	1,56	153	1	66,9	
URS	069B	44,0	16	70,8	38,5	1,36	0,74	161	2	64,1	
ZAI	322D	— 19,0	16	22,4	0,0	2,16	1,88	48	1	64,9	

12 034,36 MHz (17)

1		2	3	4		5		6	7	8	9
AUS	005E	98,0	17	133,5	— 18,8	2,70	1,40	76	2	64,5	
BRM	298A	74,0	17	97,1	19,1	3,58	1,48	104	2	63,9	
CAR	338E	122,0	17	149,5	8,0	5,36	0,77	178	1	62,7	
CHN	167A	92,0	17	124,3	43,7	1,98	0,72	156	2	64,7	
CHN	182A	80,0	17	108,7	35,1	1,42	0,88	109	1	64,2	
CME	300E	— 13,0	17	12,7	6,2	2,54	1,68	87	1	63,6	
F	093E	— 19,0	17	2,6	45,9	2,50	0,98	160	1	64,0	
GUI	192E	— 37,0	17	— 11,0	10,2	1,58	1,04	147	2	63,7	
IND	038A	56,0	17	75,9	33,4	1,52	1,08	33	1	64,3	
IND	046A	68,0	17	84,7	20,5	1,60	0,86	30	1	63,6	
INS	032A	80,0	17	112,3	— 0,3	2,66	2,32	109	2	64,0	
LBY	280E	— 25,0	17	21,4	26,0	2,50	1,04	119	2	63,7	
MDG	236E	29,0	17	46,6	— 18,8	2,72	1,14	65	2	63,5	
NPL	122A	50,0	17	83,7	28,3	1,72	0,60	163	2	64,6	
NZL	287B	128,0	17	— 173,0	— 41,0	3,30	1,28	48	1	64,8	
PLM	337E	170,0	17	161,4	7,0	0,60	0,60	0	1	62,6	
POL	132E	— 1,0	17	19,3	51,8	1,46	0,64	162	2	64,3	
QAT	247E	17,0	17	51,1	25,3	0,60	0,60	0	1	62,0	1/1,6 2
SMA	335E	170,0	17	— 170,1	— 14,2	0,60	0,60	0	2	61,4	1/0,9
SMR	311E	— 37,0	17	12,6	43,7	0,60	0,60	0	1	62,7	1/0,8
SWZ	313E	— 1,0	17	31,5	— 26,5	0,62	0,60	66	1	63,0	1/1,7
TUR	145E	5,0	17	34,4	38,9	2,68	1,04	168	1	63,9	
URS	064E	23,0	17	45,6	40,8	2,16	0,60	163	2	64,1	
WAK	334E	140,0	17	166,5	19,2	0,60	0,60	0	1	63,8	
YMS	267E	11,0	17	48,8	15,2	1,76	1,54	176	2	63,0	

12 053,54 MHz (18)

1		2	3	4		5		6	7	8	9
AGL	251E	— 25,0	18	4,2	33,2	2,45	1,25	172	1	63,6	
ARS	275E	17,0	18	48,3	24,6	3,84	1,20	138	2	63,0	
AUS	006E	98,0	18	135,4	— 30,3	2,00	1,40	44	1	63,4	
AUS	008E	128,0	18	145,9	— 21,5	2,90	2,00	120	2	63,9	
BGD	220B	74,0	18	90,3	23,6	1,46	0,84	135	1	63,7	
BOT	297E	— 1,0	18	23,3	— 22,2	2,13	1,50	36	2	64,0	
CBG	299A	68,0	18	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159A	80,0	18	109,4	27,3	2,14	1,72	107	2	64,5	
CHN	185A	62,0	18	95,7	35,4	2,10	1,14	156	1	63,4	
D	087E	— 19,0	18	9,6	49,9	1,62	0,72	147	1	65,7	
GNP	304E	— 31,0	18	— 15,0	12,0	0,90	0,60	172	2	63,3	
GUM	331E	122,0	18	144,5	13,1	0,60	0,60	0	2	63,5	
IND	041A	56,0	18	78,4	16,0	2,08	1,38	35	2	63,8	
IND	042A	68,0	18	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030A	80,0	18	112,3	— 8,1	3,14	1,46	169	1	64,2	
IRL	211E	— 31,0	18	— 8,2	53,2	0,84	0,60	162	1	64,5	
KRE	286C	110,0	18	127,0	39,1	1,30	1,10	31	2	64,0	
MAU	242E	29,0	18	59,8	— 18,9	1,62	1,24	55	1	64,2	
MLA	227B	86,0	18	102,1	4,1	1,62	0,82	135	1	63,3	
MLI	327E	— 37,0	18	— 2,0	19,0	2,66	1,26	127	1	63,2	
MRL	333E	146,0	18	166,7	7,9	1,50	1,50	177	1	63,5	
NOR	120B	5,0	18	13,1	64,1	1,84	0,88	10	2	65,0	
PAK	281A	38,0	18	65,2	27,9	1,52	1,42	28	1	63,0	
PHL	285B	98,0	18	121,3	11,1	3,46	1,76	99	2	63,7	
ROU	136E	— 1,0	18	25,0	45,7	1,38	0,66	155	1	64,0	
TCD	143E	— 13,0	18	18,1	15,5	3,40	1,72	107	2	64,2	
TGO	226E	— 25,0	18	0,8	8,6	1,52	0,60	105	2	63,6	
URS	070A	44,0	18	73,9	41,0	1,34	0,84	5	2	64,5	
YEM	266E	11,0	18	44,3	15,1	1,14	0,70	109	1	62,8	
ZAI	322E	— 19,0	18	21,3	— 6,8	2,80	1,52	149	1	64,9	

12 072,72 MHz (19)

1		2	3	4		5		6	7	8	9
AUS	004E	98,0	19	121,8	— 24,9	3,60	1,90	54	2	63,2	
AUS	009E	128,0	19	147,2	— 32,0	2,10	1,40	15	1	64,3	
AZR	134E	— 31,0	19	23,4	36,1	2,56	0,70	158	2	63,2	
BEN	233E	19,0	19	2,2	9,5	1,44	0,68	97	2	63,5	
BRM	298B	74,0	19	97,1	19,1	3,58	1,48	104	2	63,9	
CHN	158B	80,0	19	111,8	38,0	2,60	1,74	124	1	64,9	
CHN	179A	92,0	19	112,2	21,9	1,84	1,22	37	2	63,8	
GAB	260E	— 13,0	19	11,8	— 0,6	1,43	1,12	64	1	63,6	
GMB	302E	— 37,0	19	— 15,1	13,4	0,79	0,60	4	2	63,5	
GRC	105E	5,0	19	24,7	38,2	1,78	0,98	156	1	63,5	
IND	038B	56,0	19	75,9	33,4	1,52	1,08	33	1	64,3	
IND	046B	68,0	19	84,7	20,5	1,60	0,86	30	1	63,6	
INS	032B	80,0	19	112,3	— 0,3	2,66	2,32	109	2	64,1	
INS	036E	104,0	19	135,2	— 3,8	2,46	2,00	147	1	64,0	2
IRN	109E	34,0	19	54,2	32,4	3,82	1,82	149	2	63,0	
LBN	279E	11,0	19	35,8	33,9	0,60	0,60	0	2	61,8	1/1,8
LBY	321E	— 25,0	19	13,1	27,2	2,36	1,12	129	2	63,3	
LIE	253E	— 37,0	19	9,5	47,1	0,60	0,60	0	1	62,6	1/0,7
LUX	114E	— 19,0	19	6,0	49,8	0,60	0,60	0	1	63,1	1/2,0
MRA	332E	122,0	19	145,9	16,9	1,20	0,60	76	1	63,7	
NIU	054A	158,0	19	— 169,8	— 19,0	0,60	0,60	0	2	64,1	
NPL	122B	50,0	19	83,7	28,3	1,72	0,60	163	2	64,6	
POR	133E	— 31,0	19	— 8,0	39,6	0,92	0,60	112	2	63,6	
SOM	312E	23,0	19	45,0	6,4	3,26	1,54	71	1	62,6	
TCH	144E	— 1,0	19	17,3	49,3	1,47	0,60	170	2	64,0	
UGA	061E	11,0	19	32,3	1,2	1,46	1,12	60	1	63,4	
URS	061E	23,0	19	24,7	56,6	0,88	0,64	12	2	65,2	
URS	077A	110,0	19	112,7	57,3	2,67	1,75	2	1	64,1	
ZMB	314E	— 1,0	19	27,5	— 13,1	2,38	1,48	39	1	63,9	

12 091,90 MHz (20)

1		2	3	4		5		6	7	8	9
ALG	252E	— 25,0	20	1,6	25,5	3,64	2,16	152	1	63,0	
AND	341E	— 37,0	20	1,6	42,5	0,60	0,60	0	2	61,7	1/0,5
ARS	003E	17,0	20	41,1	23,8	3,52	1,68	134	2	62,9	
AUS	007E	128,0	20	145,0	— 38,1	1,83	1,39	134	2	63,5	
AUT	016E	— 19,0	20	12,2	47,5	1,14	0,63	166	2	64,3	
BGD	220C	74,0	20	90,3	23,6	1,46	0,84	135	1	63,7	
BUL	020E	— 1,0	20	25,0	43,0	1,04	0,60	165	1	63,9	
CBG	299B	68,0	20	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159B	80,0	20	109,4	27,3	2,14	1,72	107	2	64,6	
CHN	184A	62,0	20	101,0	37,9	2,78	0,82	144	1	63,7	
CPV	301E	— 31,0	20	— 24,0	16,0	0,86	0,70	144	2	62,4	
DNK	089C	5,0	20	12,3	57,1	1,20	0,60	177	2	64,4	
EGY	026E	— 7,0	20	29,7	26,8	2,33	1,72	136	2	63,3	
G	027E	— 31,0	20	— 3,5	53,8	1,84	0,72	142	1	65,2	
IND	041B	56,0	20	78,4	16,0	2,06	1,38	35	2	63,8	
IND	042B	68,0	20	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030B	80,0	20	112,3	— 8,1	3,14	1,46	169	1	64,2	
KRE	286D	110,0	20	127,0	39,1	1,30	1,10	31	2	64,0	
MLA	227C	86,0	20	102,1	4,1	1,62	0,82	135	1	63,3	
MLI	328E	— 37,0	20	— 7,6	13,2	1,74	1,24	171	1	63,9	
MOZ	307E	— 1,0	20	34,0	— 18,0	3,57	1,38	55	2	64,4	
PAK	282A	38,0	20	68,5	25,8	1,32	0,62	133	1	63,3	
PHL	285C	98,0	20	121,3	11,1	3,46	1,76	99	2	63,7	
RRW	310E	11,0	20	30,0	— 2,1	0,66	0,60	42	2	65,0	
STP	241E	— 13,0	20	7,0	0,8	0,60	0,60	0	2	61,7	1/1,3
TKL	058A	158,0	20	— 171,8	— 8,9	0,70	0,60	35	1	63,8	
URS	065A	23,0	20	32,4	63,1	1,18	0,60	175	1	66,6	
URS	066A	44,0	20	64,3	44,6	4,56	2,48	169	2	65,4	
URS	079A	140,0	20	138,0	53,6	3,16	2,12	62	2	67,7	
ZAI	322E	— 19,0	20	22,4	0,0	2,16	1,88	48	1	64,9	

12 111,08 MHz (21)

1		2	3	4		5		6	7	8	9
AFI	099A	23,0	21	42,5	11,6	0,60	0,60	0	1	62,5	
AUS	005F	98,0	21	133,5	— 18,8	2,70	1,40	76	2	64,5	
BEL	018A	— 19,0	21	4,6	50,6	0,82	0,60	167	1	64,2	
BLR	062A	23,0	21	27,8	52,6	1,08	0,72	1	2	64,8	
BRM	298C	74,0	21	97,1	19,1	3,58	1,48	104	2	63,9	
CHN	175A	92,0	21	121,4	23,8	1,14	0,82	64	2	64,3	
CHN	176A	80,0	21	113,7	33,9	1,20	0,80	141	1	64,3	
CYP	086A	5,0	21	33,3	35,1	0,60	0,60	0	1	63,6	
DDR	216A	— 1,0	21	12,6	52,1	0,83	0,63	172	2	64,2	
HVO	107A	— 31,0	21	— 1,5	12,2	1,45	1,14	29	1	64,0	
IFB	021A	5,0	21	24,5	— 28,0	3,13	1,68	27	2	64,1	4
IND	038C	56,0	21	75,9	33,4	1,52	1,08	33	1	64,4	
IND	046C	68,0	21	84,7	20,5	1,60	0,86	30	1	63,7	
INS	032C	80,0	21	112,3	— 0,3	2,66	2,32	109	2	64,1	
ISL	049A	— 31,0	21	— 19,0	64,9	1,00	0,60	177	2	65,8	
KEN	249A	11,0	21	37,9	1,1	2,29	1,56	94	1	63,7	
MCO	116A	— 37,0	21	7,4	43,7	0,60	0,60	0	1	62,4	1/0,5
MRC	209A	— 25,0	21	— 9,0	29,2	2,72	1,47	43	2	63,3	
NPL	122C	50,0	21	83,7	28,3	1,72	0,60	163	2	64,6	
NZL	287C	128,0	21	173,0	— 41,0	3,30	1,28	48	1	64,9	
SEN	222A	— 37,0	21	— 14,4	13,8	1,46	1,04	139	2	63,6	
UAE	274A	17,0	21	53,6	24,2	0,96	0,80	162	1	63,2	2
YUG	148A	— 7,0	21	18,4	43,7	1,68	0,66	154	1	65,2	

12 130,26 MHz (22)

1		2	3	4		5		6	7	8	9
ALB	296A	— 7,0	22	19,8	41,3	0,68	0,60	146	2	63,8	
AUS	006F	98,0	22	135,4	— 30,3	2,00	1,40	44	1	63,5	
AUS	008F	128,0	22	145,9	— 21,5	2,90	2,00	120	2	64,0	
BDI	270A	11,0	22	29,9	— 3,1	0,71	0,60	80	2	63,4	
BGD	220D	74,0	22	90,3	23,6	1,46	0,84	135	1	63,8	
CBG	299C	68,0	22	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	159C	80,0	22	109,4	27,3	2,14	1,72	107	2	64,6	
CHN	168A	92,0	22	124,8	48,1	2,68	0,92	157	2	65,4	
CHN	183A	62,0	22	104,8	39,0	1,48	0,60	142	1	63,8	
COG	235A	— 13,0	22	14,6	— 0,7	2,02	1,18	59	2	63,8	
CTI	237A	— 31,0	22	— 5,6	7,5	1,60	1,22	108	2	63,7	
ETH	092A	23,0	22	39,7	9,1	3,50	2,40	124	2	63,4	
FNL	104A	5,0	22	17,0	61,5	2,00	1,00	10	2	67,7	
HNG	106A	— 1,0	22	19,5	47,2	0,92	0,60	176	1	64,0	
IFB	135A	— 1,0	22	29,6	— 18,8	1,46	1,36	37	2	64,2	4
IND	041C	56,0	22	78,4	16,0	2,08	1,38	35	2	63,8	
IND	042C	68,0	22	79,3	27,7	2,14	1,16	147	2	63,8	
INS	030C	80,0	22	112,3	— 8,1	3,14	1,46	169	1	64,2	
KRE	286E	110,0	22	127,0	39,1	1,30	1,10	31	2	64,1	
KWT	113A	17,0	22	47,6	29,2	0,68	0,60	145	2	63,1	
MLA	227D	86,0	22	102,1	4,1	1,62	0,82	135	1	63,3	
MTN	223A	— 37,0	22	— 12,2	18,5	2,62	1,87	150	1	62,8	
NIG	119A	— 19,0	22	7,8	9,4	2,16	2,02	45	1	63,9	
PAK	281A	38,0	22	65,2	27,9	1,52	1,42	28	1	63,1	
PHL	285D	96,0	22	121,3	11,1	3,46	1,76	99	2	63,7	
REU	097A	29,0	22	55,6	— 19,2	1,56	0,78	96	1	63,9	
SDN	231A	— 7,0	22	28,9	12,7	2,26	1,96	159	1	63,5	
SUI	140A	— 19,0	22	8,2	46,6	0,98	0,70	171	2	64,1	
SYR	229A	11,0	22	38,3	34,9	1,04	0,90	7	1	63,2	
TUN	150A	— 25,0	22	9,5	33,5	1,88	0,72	135	1	63,8	
URS	070B	44,0	22	73,9	41,0	1,34	0,84	5	2	64,6	
URS	081A	140,0	22	168,5	65,5	1,96	0,60	168	1	68,1	

12 149,44 MHz (23)

1		2	3	4		5		6	7	8	9
AGL	295A	— 13,0	23	16,5	— 12,0	3,09	2,26	84	1	64,1	
ARS	340A	17,0	23	52,3	24,8	2,68	0,70	143	1	63,2	
AUS	004F	98,0	23	121,8	— 24,9	3,60	1,90	54	2	63,3	
AUS	009F	128,0	23	147,2	— 32,0	2,10	1,40	15	1	64,3	

1		2	3	4		5		6	7	8	9
BRM	298D	74,0	23	97,1	19,1	3,58	1,48	104	2	64,0	
CHN	158C	80,0	23	111,8	38,0	2,60	1,74	124	1	65,0	
CNR	130A	— 31,0	23	— 15,7	28,4	1,54	0,60	5	2	62,8	
CVA	085A	— 37,0	23	10,8	41,5	2,00	0,60	138	1	63,6	1/1,5
E	129A	— 31,0	23	— 3,1	39,9	2,10	1,14	154	2	63,9	
GHA	108A	— 25,0	23	— 1,2	7,9	1,48	1,06	102	1	63,6	
GNE	303A	— 19,0	23	10,3	1,5	0,68	0,60	10	2	63,8	
HOL	213A	— 19,0	23	5,4	52,0	0,76	0,60	171	1	64,4	
IND	038D	56,0	23	75,9	33,4	1,52	1,08	33	1	64,4	
IND	046D	68,0	23	84,7	20,5	1,60	0,86	30	1	63,7	
INS	032D	80,0	23	112,3	— 0,3	2,66	2,32	109	2	64,1	
ISL	050A	5,0	23	— 19,5	61,0	2,20	0,80	4	1	66,3	3
JOR	224A	11,0	23	35,8	31,4	0,84	0,78	114	2	63,1	
NIU	054B	158,0	23	— 169,8	— 19,0	0,60	0,60	0	2	64,1	
SDN	230A	— 7,0	23	29,2	7,5	2,34	1,12	148	2	64,4	
SRL	259A	— 31,0	23	— 11,8	8,6	0,78	0,68	114	1	63,4	
TGK	225A	11,0	23	34,6	— 6,2	2,41	1,72	129	1	63,7	
URS	061F	23,0	23	24,7	56,6	0,88	0,64	12	2	65,3	
URS	064F	23,0	23	45,6	40,8	2,16	0,60	163	1	64,2	
URS	077B	110,0	23	112,7	57,3	2,67	1,75	2	1	66,1	
YUG	149A	— 7,0	23	18,4	43,7	1,68	0,66	154	1	65,2	

12 168,62 MHz (24)

1		2	3	4		5		6	7	8	9
AUS	007F	128,0	24	145,0	— 38,1	1,83	1,39	134	2	63,6	
BGD	220E	74,0	24	90,3	23,6	1,46	0,84	135	1	63,8	
CAF	258A	— 13,0	24	21,0	6,3	2,25	1,68	31	2	64,3	
CBG	299D	68,0	24	105,0	12,7	1,01	0,90	110	1	64,3	
CHN	166A	92,0	24	121,1	41,7	1,52	0,78	154	2	64,5	
CHN	177A	80,0	24	111,8	30,8	1,42	0,82	160	2	64,7	
CHN	188A	62,0	24	101,5	25,1	1,86	1,08	132	2	65,0	
DNK	090A	5,0	24	17,0	61,5	2,00	1,00	10	2	67,5	
I	082A	— 19,0	24	12,3	41,3	2,38	0,98	137	2	64,1	
IND	041D	56,0	24	78,4	16,0	2,08	1,38	35	2	63,9	
IND	042D	68,0	24	79,3	27,7	2,14	1,16	147	2	63,9	
INS	030D	80,0	24	112,3	— 8,1	3,14	1,46	169	1	64,3	
IRQ	256A	11,0	24	43,6	32,8	1,88	0,96	143	1	63,3	2
LSO	305A	5,0	24	27,8	— 29,8	0,66	0,60	36	1	64,2	
MLA	227E	86,0	24	102,1	4,1	1,62	0,82	135	1	63,4	
MTN	288A	— 37,0	24	— 7,8	23,4	1,63	1,10	141	1	63,0	
MWI	308A	— 1,0	24	34,1	— 13,0	1,54	0,60	86	2	64,2	
MYT	098A	29,0	24	45,1	— 12,8	0,60	0,60	0	1	63,4	
NGR	115A	— 25,0	24	8,3	16,8	2,54	2,08	44	2	64,5	
OMA	123A	17,0	24	55,6	21,0	1,88	1,02	100	2	63,3	
PAK	282B	38,0	24	68,5	25,8	1,32	0,62	133	1	63,4	
PHL	285E	98,0	24	121,3	11,1	3,46	1,76	99	2	63,8	
SDN	232A	— 7,0	24	30,4	19,0	2,44	1,52	176	1	63,3	
TKL	058B	158,0	24	— 171,8	— 8,9	0,70	0,60	35	1	63,9	
URS	066B	44,0	24	64,3	44,6	4,56	2,48	169	2	65,4	
URS	079B	140,0	24	138,0	53,6	3,16	2,12	62	2	67,8	

12 187,80 MHz (25)

1		2	3	4		5		6	7	8	9
AFI	099B	23,0	25	42,5	11,6	0,60	0,60	0	1	62,6	
BEL	018B	— 19,0	25	4,6	50,6	0,82	0,60	167	1	64,1	
BLR	062B	23,0	25	27,6	52,6	1,08	0,72	1	2	64,9	
CYP	086B	5,0	25	33,3	35,1	0,60	0,60	0	1	63,6	
DDR	216B	— 1,0	25	12,6	52,1	0,83	0,63	172	2	64,3	
HVO	107B	— 31,0	25	— 1,5	12,2	1,45	1,14	29	1	64,0	
IFB	021B	5,0	25	24,5	— 28,0	3,13	1,68	27	2	64,1	4
ISL	049B	— 31,0	25	— 19,0	64,9	1,00	0,60	177	2	65,9	
IRS	110A	— 13,0	25	34,9	31,4	0,94	0,60	117	2	63,8	
KEN	249B	11,0	25	37,9	1,1	2,29	1,56	94	1	63,8	
MCO	116B	— 37,0	25	7,4	43,7	0,60	0,60	0	1	62,5	1/0,5
MNG	248A	74,0	25	102,2	46,6	3,60	1,13	169	1	64,1	
MRC	209B	— 25,0	25	— 9,0	29,2	2,72	1,47	43	2	63,3	

1		2	3	4		5		6	7	8	9
NMB	025A	— 19,0	25	17,5	— 21,6	2,66	1,90	48	2	64,7	
SEN	222B	— 37,0	25	— 14,4	13,8	1,46	1,04	139	2	63,7	
UAE	274B	17,0	25	53,6	24,2	0,98	0,80	162	1	63,2	
URS	078A	110,0	25	108,2	53,4	2,16	0,78	10	1	65,0	
YUG	148B	— 7,0	25	18,4	43,7	1,68	0,66	154	1	65,3	

12 206,98 MHz (26)

1		2	3	4		5		6	7	8	9
ALB	296B	— 7,0	26	19,8	41,3	0,68	0,60	146	2	63,8	
BDI	270B	11,0	26	29,9	— 3,1	0,71	0,60	80	2	63,4	
COG	235B	— 13,0	26	14,6	— 0,7	2,02	1,18	59	2	63,8	
CTI	237B	— 31,0	26	— 5,6	7,5	1,60	1,22	108	2	63,7	
ETH	092B	23,0	26	39,7	9,1	3,50	2,40	124	2	63,5	
FNL	104B	5,0	26	17,0	61,5	2,00	1,00	10	2	67,5	
HNG	106B	— 1,0	26	19,5	47,2	0,92	0,60	176	1	64,0	
IFB	135B	— 1,0	26	29,6	— 18,8	1,46	1,36	37	2	64,2	4
KWT	113B	17,0	26	47,6	29,2	0,68	0,60	145	2	63,1	
MTN	223B	— 37,0	26	— 12,2	18,5	2,62	1,87	150	1	62,9	
NIG	119B	— 19,0	26	7,8	9,4	2,16	2,02	45	1	63,9	
REU	097B	29,0	26	55,6	— 19,2	1,56	0,78	96	1	64,0	
SDN	231B	— 7,0	26	28,9	12,7	2,26	1,96	159	1	63,5	
SUI	140B	— 19,0	26	8,2	46,6	0,98	0,70	171	2	64,1	
SYR	229B	11,0	26	38,3	34,9	1,04	0,90	7	1	63,3	
TUN	150B	— 25,0	26	9,5	33,5	1,88	0,72	135	1	63,9	
URS	068A	44,0	26	59,0	38,8	2,24	1,00	164	2	64,0	
URS	074A	74,0	26	88,8	57,6	3,08	1,68	162	2	67,9	
URS	080A	140,0	26	155,3	55,4	2,90	2,36	35	1	67,9	

12 226,16 MHz (27)

1		2	3	4		5		6	7	8	9
AGL	295B	— 13,0	27	16,5	— 12,0	3,09	2,26	84	1	64,2	
BHR	255A	17,0	27	50,5	26,1	0,60	0,60	0	1	60,8	1/0,7
CNR	130B	— 31,0	27	— 15,7	28,4	1,54	0,60	5	2	62,8	
CVA	083A	— 37,0	27	12,4	41,8	0,60	0,60	0	1	65,2	
DNK	091A	5,0	27	— 19,5	61,0	2,20	0,80	4	1	66,2	3
E	129B	— 31,0	27	— 3,1	39,9	2,10	1,14	154	2	64,0	
GHA	108B	—25,0	27	— 1,2	7,9	1,48	1,06	102	1	63,7	
GNE	303B	— 19,0	27	10,3	1,5	0,68	0,60	10	2	63,8	
HOL	213B	— 19,0	27	5,4	52,0	0,76	0,60	171	1	64,5	
JOR	224B	11,0	27	35,8	31,4	0,84	0,78	114	2	63,1	
SDN	230B	— 7,0	27	29,2	7,5	2,34	1,12	148	2	64,5	
SRL	259B	— 31,0	27	— 11,8	8,6	0,78	0,68	114	1	63,5	
TGK	225B	11,0	27	34,6	— 6,2	2,41	1,72	129	1	63,8	
URS	059A	23,0	27	36,0	47,0	3,70	1,43	153	2	65,2	
URS	077C	110,0	27	112,7	57,3	2,67	1,75	2	1	67,2	
YUG	149B	— 7,0	27	18,4	43,7	1,68	0,66	154	1	65,3	

12 245,34 MHz (28)

1		2	3	4		5		6	7	8	9
CAF	258B	— 13,0	28	21,0	6,3	2,25	1,68	31	2	64,3	
I	082B	— 19,0	28	12,3	41,3	2,38	0,98	137	2	64,2	
IRQ	256B	11,0	28	43,6	32,8	1,88	0,96	143	1	63,4	
LSO	305B	5,0	28	27,8	— 29,8	0,66	0,60	36	1	64,2	
MTN	288B	— 37,0	28	— 7,8	23,4	1,63	1,10	141	1	63,0	
MWI	308B	— 1,0	28	34,1	— 13,0	1,54	0,60	87	2	64,3	
MYT	098B	29,0	28	45,1	— 12,8	0,60	0,60	0	1	63,5	
NGR	115B	— 25,0	28	8,3	16,8	2,54	2,08	44	2	64,5	
NOR	121A	5,0	28	17,0	61,5	2,00	1,00	10	2	66,8	
OMA	123B	17,0	28	55,6	21,0	1,88	1,02	100	2	63,3	
SDN	232B	— 7,0	28	30,4	19,0	2,44	1,52	176	1	63,3	
URS	066C	44,0	28	64,3	44,6	4,56	2,48	169	2	65,5	
URS	076A	74,0	28	98,0	63,2	1,84	0,69	170	2	68,1	
URS	079C	140,0	28	138,0	53,6	3,16	2,12	62	2	67,8	

12 264,52 MHz (29)

1		2	3	4		5		6	7	8	9
AFI	099C	23,0	29	42,5	11,6	0,60	0,60	0	1	62,6	
BEL	018C	— 19,0	29	4,6	50,6	0,82	0,60	167	1	63,5	
CYP	086C	5,0	29	33,3	35,1	0,60	0,60	0	1	63,7	
DDR	216C	— 1,0	29	12,6	52,1	0,83	0,63	172	2	64,3	
HVO	107C	— 31,0	29	— 1,5	12,2	1,45	1,14	29	1	64,1	
IFB	021C	5,0	29	24,5	— 28,0	3,13	1,68	27	2	64,2	4
ISL	049C	— 31,0	29	— 19,0	64,9	1,00	0,60	177	2	65,9	
ISR	110B	— 13,0	29	34,9	31,4	0,94	0,60	117	2	63,9	
KEN	249C	11,0	29	37,9	1,1	2,29	1,56	94	1	63,8	
MCO	116C	— 37,0	29	7,4	43,7	0,60	0,60	0	1	62,5	1/0,5
MNG	248B	74,0	29	102,2	46,6	3,60	1,13	169	1	64,2	
MRC	209C	— 25,0	29	— 9,0	29,2	2,72	1,47	43	2	63,4	
NMB	025B	— 19,0	29	17,5	— 21,6	2,66	1,90	48	2	64,8	
SEN	222C	— 37,0	29	— 14,4	13,8	1,46	1,04	139	2	63,7	
UAE	274C	17,0	29	53,6	24,2	0,98	0,80	162	1	63,3	
UKR	063A	23,0	29	31,2	48,4	2,32	0,96	172	2	64,6	
YUG	148C	— 7,0	29	18,4	43,7	1,68	0,66	154	1	65,3	

12 283,70 MHz (30)

1		2	3	4		5		6	7	8	9
ALB	296C	— 7,0	30	19,8	41,3	0,68	0,60	146	2	63,9	
BDI	270C	11,0	30	29,9	— 3,1	0,71	0,60	80	2	63,5	
COG	235C	— 13,0	30	14,6	— 0,7	2,02	1,18	59	2	63,9	
CTI	237C	— 31,0	30	— 5,6	7,5	1,60	1,22	108	2	63,8	
ETH	092C	23,0	30	39,7	9,1	3,50	2,40	124	2	63,6	
HNG	106C	— 1,0	30	19,5	47,2	0,92	0,60	176	1	64,1	
IFB	135C	— 1,0	30	29,6	— 18,8	1,46	1,36	37	2	64,3	4
KWT	113C	17,0	30	47,6	29,2	0,68	0,60	145	2	63,2	
MTN	223C	— 37,0	30	— 12,2	18,5	2,62	1,87	150	1	62,9	
NIG	119C	— 19,0	30	7,8	9,4	2,16	2,02	45	1	64,0	
REU	097C	29,0	30	55,6	— 19,2	1,56	0,78	96	1	64,1	
S	139A	5,0	30	17,0	61,5	2,00	1,00	10	2	67,1	
SDN	231C	— 7,0	30	28,9	12,7	2,26	1,96	159	1	63,6	
SUI	140C	— 19,0	30	8,2	46,6	0,98	0,70	171	2	64,2	
SYR	229C	11,0	30	38,3	34,9	1,04	0,90	7	1	63,3	
TUN	150C	— 25,0	30	9,5	33,5	1,88	0,72	135	1	63,9	
URS	068B	44,0	30	59,0	38,8	2,24	1,00	164	2	64,1	
URS	074B	74,0	30	88,8	57,6	3,08	1,68	162	2	68,0	
URS	080B	140,0	30	155,3	55,4	2,90	2,36	35	1	67,9	

12 302,88 MHz (31)

1		2	3	4		5		6	7	8	9
AGL	295C	— 13,0	31	16,5	— 12,0	3,09	2,26	84	1	64,2	
BHR	255B	17,0	31	50,5	26,1	0,60	0,60	0	1	60,9	1/0,7
CNR	130C	— 31,0	31	— 15,7	28,4	1,54	0,60	5	2	62,9	
CVA	083B	— 37,0	31	12,4	41,8	0,60	0,60	0	1	65,3	
E	129C	— 31,0	31	— 3,1	39,9	2,10	1,14	154	2	64,0	
GHA	108C	— 25,0	31	— 1,2	7,9	1,48	1,06	102	1	63,7	
GNE	303C	— 19,0	31	10,3	1,5	0,68	0,60	10	2	63,9	
HOL	213C	— 19,0	31	5,4	52,0	0,76	0,60	171	1	64,6	
ISL	050B	5,0	31	— 19,5	61,0	2,20	0,80	4	1	66,4	3
JOR	224C	11,0	31	35,8	31,4	0,84	0,78	114	2	63,2	
SDN	230C	— 7,0	31	29,2	7,5	2,34	1,12	148	2	64,5	
SRL	259C	— 31,0	31	— 11,8	8,6	0,78	0,68	114	1	63,6	
TGK	225C	11,0	31	34,6	— 6,2	2,41	1,72	129	1	63,8	
URS	059B	23,0	31	36,0	47,0	3,70	1,43	153	2	65,2	
URS	077D	110,0	31	112,7	57,3	2,67	1,75	2	1	67,2	
YUG	149C	— 7,0	31	18,4	43,7	1,68	0,66	154	1	65,4	

12 322,06 MHz (32)

1		2	3	4		5		6	7	8	9
CAF	258C	— 13,0	32	21,0	6,3	2,25	1,68	31	2	64,4	
I	082C	— 19,0	32	12,3	41,3	2,38	0,98	137	2	64,2	
IRQ	256C	11,0	32	43,6	32,8	1,89	0,96	143	1	63,4	
LSO	305C	5,0	32	27,8	— 29,8	0,68	0,60	36	1	64,3	
MTN	288C	— 37,0	32	— 7,8	23,4	1,63	1,10	141	1	63,1	
MWI	308C	— 1,0	32	34,1	— 13,0	1,54	0,60	87	2	64,4	
MYT	098C	29,0	32	45,1	— 12,8	0,60	0,60	0	1	63,5	
NGR	115C	— 25,0	32	8,3	16,8	2,54	2,08	44	2	64,6	
NOR	121B	5,0	32	17,0	61,5	2,00	1,00	10	2	66,9	
OMA	123C	17,0	32	55,6	21,0	1,88	1,02	100	2	63,4	
SDN	232C	— 7,0	32	30,4	19,0	2,44	1,52	176	1	63,4	
URS	066D	44,0	32	64,3	44,6	4,56	2,48	169	2	65,5	
URS	075A	74,0	32	94,0	51,7	1,52	0,60	172	2	65,1	
URS	079D	140,0	32	138,0	53,6	3,16	2,12	62	2	67,9	

12 341,24 MHz (33)

1		2	3	4		5		6	7	8	9
AFI	099D	23,0	33	42,5	11,6	0,60	0,60	0	1	62,7	
BEL	018D	— 19,0	33	4,6	50,6	0,82	0,60	167	1	63,9	
CYP	086D	5,0	33	33,3	35,1	0,60	0,60	0	1	63,7	
DDR	216D	— 1,0	33	12,6	52,1	0,83	0,63	172	2	64,4	
HVO	107D	— 31,0	33	— 1,5	12,2	1,45	1,14	29	1	64,1	
IFB	021D	5,0	33	24,5	— 28,0	3,13	1,68	27	2	64,2	4
ISL	049D	— 31,0	33	— 19,0	64,9	1,00	0,60	177	2	66,0	
ISR	110C	— 13,0	33	34,9	31,4	0,94	0,60	117	2	63,9	
KEN	249D	11,0	33	37,9	1,1	2,29	1,56	94	1	63,9	
MCO	116D	— 37,0	33	7,4	43,7	0,60	0,60	0	1	62,6	1/0,5
MNG	248C	74,0	33	102,2	46,6	3,60	1,13	169	1	64,2	
MRC	209D	— 25,0	33	— 9,0	29,2	2,72	1,47	43	2	63,4	
NMB	025C	— 19,0	33	17,5	— 21,6	2,66	1,90	48	2	64,8	
SEN	222D	— 37,0	33	— 14,4	13,8	1,46	1,04	139	2	63,8	
UAE	274D	17,0	33	53,6	24,2	0,98	0,80	162	1	63,3	
UKR	063B	23,0	33	31,2	48,4	2,32	0,96	172	2	64,7	
YUG	148D	— 7,0	33	18,4	43,7	1,68	0,66	154	1	65,4	

12 360,42 MHz (34)

1		2	3	4		5		6	7	8	9
ALB	296D	— 7,0	34	19,8	41,3	0,68	0,60	146	2	63,9	
BDI	270D	11,0	34	29,9	— 3,1	0,71	0,60	80	2	63,5	
COG	235D	— 13,0	34	14,6	— 0,7	1,02	1,18	59	2	63,9	
CTI	237D	— 31,0	34	— 5,6	7,5	1,60	1,22	108	2	63,9	
ETH	092D	23,0	34	39,7	9,1	3,50	2,40	124	2	63,6	
HNG	106D	— 1,0	34	19,5	47,2	0,92	0,60	176	1	64,1	
IFB	135D	— 1,0	34	29,6	— 18,8	1,46	1,35	37	2	64,3	4
KWT	113D	17,0	34	47,6	29,2	0,68	0,60	145	2	63,2	
MTN	223D	— 37,0	34	— 12,2	18,5	2,62	1,87	150	1	63,0	
NIG	119D	— 19,0	34	7,8	9,4	2,16	2,02	45	1	64,1	
REU	097D	29,0	34	55,6	— 19,2	1,56	0,78	96	1	64,1	
S	138C	5,0	34	16,2	61,0	1,04	0,98	14	2	67,4	
SDN	231D	— 7,0	34	28,9	12,7	2,26	1,96	159	1	63,6	
SUI	140D	— 19,0	34	8,2	46,6	0,98	0,70	171	2	64,3	
SYR	229D	11,0	34	38,3	34,9	1,04	0,90	7	1	63,4	
TUN	150D	— 25,0	34	9,5	33,5	1,88	0,72	135	1	64,0	
URS	071A	44,0	34	63,1	42,0	2,64	0,84	170	2	64,4	
URS	074C	74,0	34	88,8	57,6	3,08	1,68	162	2	68,0	
URS	080C	140,0	34	155,3	55,4	2,90	2,36	35	1	68,0	

12 379,60 MHz (35)

1		2	3	4		5		6	7	8	9
AGL	295D	— 13,0	35	16,5	— 12,0	3,09	2,26	84	1	64,3	
BHR	255C	17,0	35	50,5	26,1	0,60	0,60	0	1	61,0	1/0,7
CNR	130D	— 31,0	35	— 15,7	28,4	1,54	0,60	5	2	63,0	
CVA	063C	— 37,0	35	12,4	41,8	0,60	0,60	0	1	65,3	
DNK	091B	5,0	35	— 19,5	61,0	2,20	0,80	4	1	66,3	3
E	129D	— 31,0	35	— 3,1	39,9	2,10	1,14	154	2	64,1	
GHA	108D	— 25,0	35	— 1,2	7,9	1,48	1,06	102	1	63,8	
GNE	303D	— 19,0	35	10,3	1,5	0,68	0,60	10	2	63,9	
HOL	213D	— 19,0	35	5,4	52,0	0,76	0,60	171	1	64,6	
JOR	224D	11,0	35	35,8	31,4	0,84	0,78	114	2	63,2	
SDN	230D	— 7,0	35	29,2	7,5	2,34	1,12	148	2	64,6	
SRL	259D	— 31,0	35	— 11,8	8,6	0,78	0,68	114	1	63,6	
TGK	225D	11,0	35	34,6	— 6,2	2,41	1,72	129	1	63,9	
URS	059C	23,0	35	36,0	47,0	3,70	1,43	153	2	65,3	
URS	077E	110,0	35	112,7	57,3	2,67	1,75	2	1	67,3	
YUG	149D	— 7,0	35	18,4	43,7	1,68	0,66	154	1	65,4	

12 398,78 MHz (36)

1		2	3	4		5		6	7	8	9
CAF	258D	— 13,0	36	21,0	6,3	2,25	1,68	31	2	64,4	
DNK	090B	5,0	36	17,0	61,5	2,00	1,00	10	2	68,2	
I	082D	— 19,0	36	12,3	41,3	2,38	0,98	137	2	64,3	
IRQ	256D	11,0	36	43,6	32,8	1,88	0,96	143	1	63,5	
LSO	305D	5,0	36	27,8	— 29,8	0,66	0,60	36	1	64,3	
MTN	288D	— 37,0	36	— 7,8	23,4	1,63	1,10	141	1	63,1	
MWI	308D	— 1,0	36	34,1	— 13,0	1,54	0,60	87	2	64,4	
MYT	098D	29,0	36	45,1	— 12,8	0,60	0,60	0	1	63,6	
NGR	115D	— 25,0	36	8,3	16,8	2,54	2,08	44	2	64,7	
OMA	123D	17,0	36	55,6	21,0	1,88	1,02	100	2	63,4	
SDN	232D	— 7,0	36	30,4	19,0	2,44	1,52	176	1	63,4	
URS	066E	44,0	36	64,3	44,6	4,56	2,48	169	2	65,6	
URS	079E	140,0	36	138,0	53,6	3,16	2,12	62	2	68,0	

12 417,96 MHz (37)

1		2	3	4		5		6	7	8	9
AFI	099E	23,0	37	42,5	11,6	0,60	0,60	0	1	62,7	
BEL	018E	— 19,0	37	4,6	50,6	0,82	0,60	167	1	64,4	
CYP	086E	5,0	37	33,3	35,1	0,60	0,60	0	1	63,8	
DDR	216E	— 1,0	37	12,6	52,1	0,83	0,63	172	2	64,4	
HVO	107E	— 31,0	37	— 1,5	12,2	1,45	1,14	29	1	64,2	
IFB	021E	5,0	37	24,5	— 28,0	3,13	1,68	27	2	64,3	4
ISL	049E	— 31,0	37	— 19,0	64,9	1,00	0,60	177	2	66,0	
ISR	110D	— 13,0	37	34,9	31,4	0,94	0,60	117	2	64,0	
KEN	249E	11,0	37	37,9	1,1	2,29	1,56	94	1	63,0	
MCO	116E	— 37,0	37	7,4	43,7	0,60	0,60	0	1	62,6	1/0,5
MNG	248D	74,0	37	102,2	46,6	3,60	1,13	169	1	64,3	
MRC	209E	— 25,0	37	— 9,0	29,2	2,72	1,47	43	2	63,5	
NMB	025D	— 19,0	37	17,5	— 21,6	2,66	1,90	48	2	64,9	
SEN	222E	— 37,0	37	— 14,4	13,8	1,46	1,04	139	2	63,9	
UAE	274E	17,0	37	53,6	24,2	0,98	0,80	162	1	63,4	
UKR	063C	23,0	37	31,2	48,4	2,32	0,96	172	2	64,7	
YUG	148E	— 7,0	37	18,4	43,7	1,68	0,66	154	1	65,4	

12 437,14 MHz (38)

1		2	3	4		5		6	7	8	9
ALB	296E	— 7,0	38	19,8	41,3	0,68	0,60	146	2	64,0	
BDI	270E	11,0	38	29,9	— 3,1	0,71	0,60	80	2	63,6	
COG	235E	— 13,0	38	14,6	— 0,7	2,02	1,18	59	2	64,0	
CTI	237E	— 31,0	38	5,6	7,5	1,60	1,22	108	2	63,9	
ETH	092E	23,0	38	39,7	9,1	3,50	2,40	124	2	63,7	
HNG	106E	— 1,0	38	19,5	47,2	0,92	0,60	176	1	64,2	
IFB	135E	— 1,0	38	29,6	— 18,8	1,46	1,36	37	2	64,4	4
KWT	113E	17,0	38	47,6	29,2	0,68	0,60	145	2	63,3	
MTN	223E	— 37,0	38	— 12,2	18,5	2,62	1,87	150	1	63,0	
NIG	119E	— 19,0	38	7,8	9,4	2,16	2,02	45	1	64,1	
NOR	120C	5,0	38	13,1	64,1	1,84	0,88	10	2	67,0	
REU	097E	29,0	38	55,6	— 19,2	1,56	0,78	96	1	64,2	
SDN	231E	— 7,0	38	28,9	12,7	2,26	1,96	159	1	63,7	
SUI	140E	— 19,0	38	8,2	46,6	0,98	0,70	171	2	64,3	
SYR	339A	11,0	38	37,6	34,2	1,32	0,88	74	1	63,4	2
TUN	272A	— 25,0	38	2,5	32,0	3,59	1,75	175	1	61,9	5
URS	071B	44,0	38	63,1	42,0	2,64	0,84	170	2	64,5	
URS	074D	74,0	38	88,8	57,6	3,08	1,68	162	2	68,1	
URS	080D	140,0	38	155,3	55,4	2,90	2,36	35	1	68,1	

12 456,32 MHz (39)

1		2	3	4		5		6	7	8	9
AGL	295E	— 13,0	39	16,5	— 12,0	3,09	2,26	84	1	64,4	
BHR	255D	17,0	39	50,5	26,1	0,60	0,60	0	1	61,0	1/0,7
CNR	130E	— 31,0	39	— 15,7	28,4	1,54	0,60	5	2	63,0	
CVA	083D	— 37,0	39	12,4	41,8	0,60	0,60	0	1	65,4	
E	129E	— 31,0	39	— 3,1	39,9	2,10	1,14	154	2	64,2	
GHA	108E	— 25,0	39	— 1,2	7,9	1,48	1,06	102	1	63,8	
GNE	303E	— 19,0	39	10,3	1,5	0,68	0,60	10	2	64,0	
HOL	213E	— 19,0	39	5,4	52,0	0,76	0,60	171	1	64,7	
ISL	050C	5,0	39	— 19,5	61,0	2,20	0,80	4	1	66,5	3
JOR	224E	11,0	39	35,8	31,4	0,84	0,78	114	2	63,3	
MNG	248E.	74,0	39	102,2	46,6	3,60	1,13	169	1	64,3	
SDN	230E	— 7,0	39	29,2	7,5	2,34	1,12	148	2	64,6	
SRL	259E	— 31,0	39	— 11,8	8,6	0,78	0,68	114	1	63,7	
TGK	225E	11,0	39	34,6	— 6,2	2,41	1,72	129	1	63,9	
URS	059D	23,0	39	36,0	47,0	3,70	1,43	153	2	65,3	
URS	077F	110,0	39	112,7	57,3	2,67	1,75	2	1	67,4	
YUG	149E	— 7,0	39	18,4	43,7	1,68	0,66	154	1	65,5	

12 475,50 MHz (40)

1		2	3	4		5		6	7	8	9
CAF	258E	— 13,0	40	21,0	6,3	2,25	1,68	31	2	64,5	
I	082E	— 19,0	40	12,3	41,3	2,38	0,98	137	2	64,3	
IRQ	256E	11,0	40	43,6	32,8	1,88	0,96	143	1	63,5	
LSO	305E	5,0	40	27,8	— 29,8	0,66	0,60	36	1	64,4	
MTN	288E	— 37,0	40	— 7,8	23,4	1,63	1,10	141	1	63,2	
MWI	308E	— 1,0	40	34,1	— 13,0	1,54	0,60	87	2	64,5	
MYT	098E	29,0	40	45,1	— 12,8	0,60	0,60	0	1	63,6	
NGR	115E	— 25,0	40	8,3	16,8	2,54	2,08	44	2	64,7	
OMA	123E	17,0	40	55,6	21,0	1,88	1,02	100	2	63,5	
S	139B	5,0	40	17,0	61,5	2,00	1,00	10	2	68,2	
SDN	232E	— 7,0	40	30,4	19,0	2,44	1,52	176	1	63,5	
URS	066F	44,0	40	64,3	44,6	4,56	2,48	169	2	65,6	
URS	079F	140,0	40	138,0	53,6	3,16	2,12	62	2	68,0	

ARTICLE 12

Dispositions régissant le service de radiodiffusion par satellite dans la Région 2 en attendant l'établissement d'un plan détaillé

12.1. Conformément aux principes énoncés dans l'annexe 6, on appliquera les dispositions temporaires suivantes jusqu'à ce qu'un plan détaillé soit établi, en vertu des paragraphes 12.9 à 12.12 ci-dessous, pour le service de radiodifussion par satellite fonctionnant dans la bande 11,7-12,2 Ghz dans la Région 2.

12.2. Les stations spatiales du service de radiodiffusion par satellite seront placées dans les portions suivantes de l'orbite:

Entre 75° ouest et 100° Ouest de longitude (toutefois pour la desserte du Canada, des États-Unis et du Mexique, la portion utile sera comprise seulement entre 75° Ouest et 95° Ouest de longitude);
Entre 140° Ouest et 170° Ouest de longitude.

12.2.1. Les stations spatiales du service de radiodiffusion par satellite pourront également être placées en dehors des portions d'orbite indiquées ci-dessus; elles devront alors fonctionner conformément aux dispositions des numéros **420** à **423** du Règlement des radiocommunications. Exceptionnellement, l'utilisation, pour la desserte du Groenland, d'une position sur l'orbite des satellites géostationnaires comprise entre 55° Ouest et 60° Ouest peut être acceptée pour le service de radiodiffusion par satellite (service primaire). Les administrations intéressées doivent faire tous leurs efforts pour permettre le partage de cette portion de l'arc entre un satellite de radiodiffusion destiné au Groenland et des stations spatiales du service fixe d'autres administrations de la Région 2.

12.3. Les stations spatiales du service fixe par satellite seront situées dans les protions d'orbite extérieures aux portions mentionnées dans le paragraphe 12.2; elles pourront également être placées dans les portions d'orbite mentionnées auditi paragraphe 12.2. Dans ce cas, elles devront fonctionner conformément aux dispositions des numéros **420** à **423** du Règlement des radiocommunications.

12.3.1. Les stations spatiales du service de radiodiffusion par satellite situées dans les portions d'orbite mentionnées dans le paragraphe 12.2 et celles du service fixe par satellite situées dans les autres portions de l'orbite devront fonctionner de telle manière que les stations d'un service ne causent aucun brouillage inacceptable aux stations des autres services. Le niveau de brouillage inacceptable sera déterminé par accord entre les administrations intéressés, sur la base des Avis les plus récents du CCIR et des annexes 8 et 9 au présent appendice. Toutefois, les stations spatiales du service de radiodiffusion par satellite pouront être placées à la limite de la portion d'orbite mentionnée dans le paragraphe 12.2, dans la mesure où elles seront conformes aux caractéristiques techniques pertinentes, pour la Région 2, exposées dans l'annexe 8.

12.4. Avant la conférence administrative régionale des radiocommunications mentionnée dans le paragraphe 12.9, les systèmes du service de radiodiffusion par satellite seront considérés comme expérimentaux et ils seront exploités conformément aux critères de partage en aux paramètres techniques figurant dans les annexes 8 et 9.

12.5. Les administrations pourront mettre en oeuvre des systèmes fondés sur des valeurs des caractéristiques techniques qui différent de celles figurant dans l'annexe 8 au présent appendice, à condition qu'il n'en résulte pas, pour les systèmes en service ou prévus des autres administrations, un brouillage plues intense que celui calculé conformément à l'annexe 9.

12.6. La mise en oeuvre de système du service fixe par satellite s'effectuera conformément aux dispositions pertinentes du Règlement des radiocommunications, notamment à celles des articles 11 et 13 et le cas échéant aux dispositions de l'article 7 du présent appendice.

12.7. Dans le bande 11,7-12,2 GHz, les systèmes saptiaux utiliseront, dans toute la mesure ou les questions techniques et économiques le permettront, les techniques qui conduisent à l'utilisation la plus efficace possible de l'orbite des satellites géostationnaires et du spectre des fréquences. A titre d'exemple, on trouvera dans l'annexe 7 la description de telles techniques.

12.8. Les dispositions de la Rèsolution **33** (1) continueront à s'appliquer, dans la Région 2, au service de radiodiffusion par satellite dans la bande 11,7-12,2 GHz jusqu'au moment où un plan détaillé aura pu être adopté pour ce service.

12.9. Une conférence administrative régionale des radiocommunications devra se réunir au plus tard en 1982 afin de procéder à la planification détaillée du service de radiodiffusion par satellite et du service fixe par satelite conformément aux dispositions énoncées aux paragraphes suivants.

12.9.1. Au cours de ladite conférence, on élaborera un plan détaillé de l'utilisation de la ressource orbite/spectre disponible pour le service de radiodiffusion par satellite dans le bande des 11,7-12,2 GHz. Ce plan précisera l'assignation détaillé des positions orbitales et des canaux disponibles, garantissant ainsi que les besoins en matière de radiodiffusion par satellite présentés par chaque administration seront satisfaits de façon équitable pour tous les pays intéressés. Il conviendra de garantir, par principe, à chaque administration de la Région un nombre minimal (4) de canaux pour l'exploitation du service de radiodiffusion par satellite. Au-delà de ce minimum, on tiendra compte des caractéristiques particulières des pays (superfície, zones horaires, diversité linguistique, etc.).

---

(1) Remplace la Résolutionl Spa 2-3 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

12.9.2. La planification sera fondée sur la réception individuelle, bien que chaque administration puisse utiliser le système de réception qui satisfait le mieux ses besoins (réception individuelle, communautaire ou les deux). En outre, ou tiendra compte des décisions des Conférences administratives mondiales des radiocommunications de 1977 et 1979 er des Avis les plus récents du CCIR en ce qui concerne les paramètres qu'il étudie.

12.9.3. Lorsqu'on établira un plan pour le service de radiodiffusion par satellite, il conviendra que les systèmes soient conçus de telle manière que les différences et les incompatiblités techniques avec les autres systèmes des autres Régions soient rèduites au minimum.

12.9.4. La conférence tiendra également compte, de façon équitable, des besoins du service fixe par satellite auquel cette bande de fréquences est aussi attribuée dans la Région 2.

12.10. Toutes les administrations de la Région 2 devront présent à l'IFRB leurs besoins en ce qui concerne le service de radiodiffusion par satellite au plus tard un an avant le début de la conférence administrative régionale des radiocommunications chargée d'établir un plan pour ce service dans la Région 2. Ces besoins pourront être mis à jour au gré des administrations. Elles devront indiquer le nombre et les limites de chaque zone de service ainsi que le nombre de canaux nécessaires pour chaque zone. Six mois avant la date limite fixée pour envoyer les demandes, l'IFRB rappellera aux administrations, par lettre-circularire et ou télégramme, qu'elles sont dans l'obligation de faire connaître leurs besoins.

12.11. Tout système existante ou prévu avant la mise en service d'un plan détaillé tel que le plan ci-dessus mentionné ne devra pas causer de brouillage au détriment d'un système exploité conformément à un tel plan.

12.12. Au moment d'effectuer la planification détaillée du service de radiodiffusion par satellite dans la bande 11,7-12,2 GHz pour la Région 2, il ne sera pas nécessairement tenu compte des systèmes de radiodiffusion par satellite existants ou prévus. Par conséquent, l'établissement ou la planification de tels systèmes par une administration avant l'élaboration du plan ne confère à ces systèmes ni droit ni reconnaissance.

ARTICLE 13

Relation avec la Résolution (1)

13.1. Les dispositions et le Plan associé figurant dans le présent appendice sont considérés comme contenant um acoord mondial et un Plan associé pour les Régions 1 et 3 en vertu du point 1 du dispositif de la Résolution **507** qui demande que les stations du service de radiodiffusion par satellite soient établies et exploitées conformément à des accords et des plans associés.

ARTICLE 14

Brouillages

14.1. Les Membres de l'Union s'efforceront d'étudier de concert les mesures nécessaires en vue de réduire les broouillages préjudiciables qui résulter de la mise en application des présentes dispositions et du Plan associé.

ARTICLE 15 (2)

Entrée en viguer des Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977)

ARTICLE 16

Durée de validité des dispositions et du Plan associé

16.1. Les dispositions et le Plan associé cont été établis en vue de satisfaire les besoins du service de radiodiffusion par satellite dans les bandes concernées pour une durée de quinze annés au moins à partir du 1er janvier 1979.

16.2. En tout état de cause, les dispositions et le plan associé demeureront en viguer jusqu'à leur révision par une conférence administrative des radiocommunications competente, convoquée conformément aux dispositions pertinentes de la Convention en vigueur.

ANNEXE I

Limites à prendre en considération pour déterminer si un service d'une administration est défavorablement influencé par un projet de modification au Plan (article 4, paragraphe 4.3.1) (3)

1. *Limites imposées à la modification du rapport signal utile/signal brouilleur vis-à-vis des asssignations de fréquence conformes au Plan.*

En relation avec le paragraphe 4.3.1.1, une administration est considérée comme étant défavorablement influencés si le project de modification au Plan a pour conséquence d'abaisser le rapport signal utile/signal brouilleur, en un point quelconque situé à l'interieur de la zone de service associée l'une de ses assignations de fréquence conforme au Plan, soit au-dessous de 30 dB, soit au-dessous de la valeur résultant des assignations de fréquence du Plan à la date d'entrée en viguer des Actes finals (4) en prenante celle de ces deux valeurs qui est la plus petite.

Note. — Pour effectuer le calcul, l'effect, à l'entrée du récepteur, de tous les signaux dans le même canal ou dans les canaux adjacents, est exprimé en fonction d'un signal brouiller équivalent dans le même canal. Cette valuer est habituellement exprimée en décibels.

---

(1) Remplace la Résolution Spa 2-3 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

(2) Cet article n'est pas reproduit dans le présent appendice; voir la note de bas de page se rapportant au titre du présent appendice.

(3) Les limites specifiées dans cette annexe se rapportent à la puissance surfacique obtenue en supposant une propagation en espace libre.

(4) Actes finals de la Conférence administrative mondiale des radiocommunication pour la radiodiffusion par satellite (Génève, 1977) entrés en viguer le 1er janvier 1979.

2. *Limites imposées à la modification de la puissance surfacique en vue de la protection du service de radiodiffusion par satellite dans la bande 11,7-12,2 GHz, dans la Région 2.*

En relation avec le paragraphe 4.3.1.2, une administration de la Région 2 est considérée comme étant défavorablement influencée si le project de modification au Plan se traduit par un dépassement des valuers suivantes de la puissance surfacique en un point quelconque de la zone de service défavorablement influencée:

147 dB(W/m2/27 MHz) $0° \leq \theta < 0,48°$
$139 + 25 \log \theta$ dB(W/m^2/27 MHz) $0,48° \leq \theta < 27,25°$
103 dB(W/m^2/27 MHz) $\theta \geq 27,25°$

θ représent la différence en degrés entre la longitude de la sation de radiodiffusion de la Région 1 ou de la Région 3 et la longitude de la station spatiale de radiodiffusion de l'administration défavorablement influencée dans la Région 2.

3. *Limites imposées à la modification de la valeur de a puissance surfacique en vue de la protection des services de Terre des autres administrations.*

En relation avec la paragraphe 4.3.1.3, une administrations de la Région 1 ou de la Région 3 est considérée comme étant défavorablement influencée si le projet de modification au Plan a pour conséquence d'acroître la valuer de la puissance surfacique, sur une partie quelconque du territoire de cette administration, de plus de 0,25 dB par rapport à celle résultant des assignations de fréquence conformes au Plan au moment de l'entrée en vigueur des Actes finals ([1]).

La même administration est considérée comme n'étant pas défavorablement influencée si la valeur de la puissance surfacique produite sur toutes les parties de son territoire ne dépasse pas les limites spécifiées dans l'annexe 5.

Une administration de la Région 2 est condidérée comme étant défavorablement influencée si le projet de modification au Plan se traduit par le fait que, en un point quelconque du territoire relevant de cette administration et pour tous les angles d'arrivée, la puissance surfacique dépasserait — 125 dB(W/m2/4 kHz) lorsque la station de radiodiffusion par satellite fonctionne avec polarisation circulaire, et — 128 dB(W/m^2/4 kHz) lorsqu'elle fonctionne avec polarisation rectiligne.

4. *Limites imposées à la modification de la puissance surfacique en vue de la portection du service fixe par satellite de la Région 2, dans la bande 11,7-12,2 GHz*

En relation avec le paragraphe 4.3.1.4, une administration de la Région 2 est considérée comme étant défavorablement influencée si le projet de modification au Plan a pour effet d'augmenter, sur son territoire, la puissance surfacique de 0,25 dB ou plus par rapport à la valeur résultant des assignations de fréquence du Plan au moment de l'entrée en viguer des Actes finals ([1]).

Toutefois, dans le cas ou une assignation de fréquence du Plan, ou ses modifications ultérieures, produit une puissance surfacique inférieure à — 138 dB(W/m2/27 MHz) dans une partie quelconque du territoire dune administrations de la Région 2, cette administrations n'est pas considérée comme étant défavorablement influencée.

ANNEXE 2

Caractéristiques fondamentales à inscrire dans les notifications relatives aux stations spatiales du service de radiodiffusion par satellite

1. Pays et numéro IFRB.
2. Position nominale sur l'orbite (en degrés à partie du méridien de Greenwich).
3. Fréquence assignée ou numéro de canal.
4. Date de mise en service.
5. Identité de la station spatiale.
6. Zone de service (la zone de service peut être défine, si nécessaire, par un certain nombre de «points de calcul»).
7. Coordonnés géographiques de l'intersection de l'axe du faisceau d'antenne avec la surface de la Terre.
8. Zone hydrométéorologique.
9. Classe de la station.
10. Classe d'emission et largeur de bnde nécessaire.
11. Puissance délivrée à l'antenne (dBW).
12. Caractéristiques de l'antenne:

Gain de l'antenne par rapport à une antenne isotropoe;
Forme du faieceau (elliptique ou circulaire);

Grand axe (degrés) aux points à — 3 dB;
Petit axe (degrés) aux points à — 3 dB;

([1]) Actes finals de la Conférence administrative mondiale des radiocommunication pour la radiodiffusion par satellite (Génève, 1977) entrés en viguer le 1er janvier 1979.

Orientation de l'ellipse;
ΔG (différence entre le gain maximal entre le gain vers le point de la zone de service où la puissance surfacique est minimale;
Précision de pointage;
Type de polarisation;
Sens de polarisation;
Diagramme de rayonnement et caractéristiques de la composante contrapolaire.

13. Précision du maintien en position.
14. Caractéristiques de modulation:

Type de modulation;
Caractéristiques de préaccentuation;
Norme de télévision;
Caratéristiques de radiodiffusion sonore;
Excursion de fréquence;
Composition de la bande de base;
Type de multiplexage des signaux image et son;
Caractéristiques de la dispersion de l'énergie.

15. Angle de site minimal dans la zone de service.
16. Type de réception (individuelle ou communautaire).
17. Horaire de fonctionnement (UTC).
18. Coordination.
19. Accords.
20. Autres renseignements.
21. Administration ou compagnie exploitant la station.

ANNEXE 3

Méthode permettant de déterminer la valeur limite de la puissance surfacique brouilleuse à la limite de la zone de service d'une station spatiale de radiodiffusion par satellite dans les bandes de fréquences 11,7-12,2 GHz (dans les Régions 2 et 3) et 11,7-12,5 Ghz (dans la Région 1) et calcul de la puissance surfacique produite à cette limite par une station de Terre.

1. *Considerations générales.*

1.1. La présent annexe décrit une méthode de calcul du brouillage pouvant être causé par des émetteurs de Terre à des récepteurs de radiodiffusion par satellite dans la bande de fréquences 11,7-12-2 GHz (11,7-12,5 GHz dans la Région 1).

1.2. La méthode à suivre comprend deux étaps:

a) Calcul de la valeur maximale admissible de la puissance surfacique brouilleuse à la limite de la zone de service de la station spatiale de radiodiffusion par satellite concernée;
b) Calcul de la valeur probable de la puissance surfacique produite, en un point quelconque de la limite de la zone de service, par l'émetteur de terre d'une autre administration.

1.3. Il faut examiner cas par cas le brouillage pouvant être causé par les émetteurs de Terre: on compare la puissance surfacique produite par chaque émetteur de Terre avec la valeur limite de la puissance surfacique en tout point de la limite de la zone de service d'une station du service de radiodiffusion par satellite d'une autre administration. Si, pour un émetteur donné, la valeur de la puissance surfacique est inférieure à la valeur admissible fixée pour um point quelconque de la limite de la zone de service, on considère que le brouillage causé par l'émetteur au service de radiodiffusion par satellite est inférieur à la valeur admissible et les administrations sont dispensées de coordination avant la mise en œuvre du service de Terre. Lorsqu'il en est autrement, il est nécessaire d'effectuer une coordination et des calculs plus précis, sur une base acceptée par des deux parties concernées.

1.4. Il faut souligner que si les calculs décrits dans la présente annexe révèlent un dépassement de la puissance surfacique maximale admissible, cela n'interdit pas nécessairement l'introduction du service de Terre, puisque les calculs sont obligatoirement fondés sur les hypothèses les plus défavorables concernant:

a) La nature du terrain sur le trajet de brouillage;
b) La discrimination exercée par les installations de réception de radiodiffusion par satellite à l'égard des émissions hors faisceau;
c) Les rapports de protection nécessaires pour le service de radiodiffusion par satellite;
d) Le type de réception dans le service de radiodiffusion par satellite (en l'occurrence la réception individuelle); aux angles de site considerés, ce type de réception pose davantage de problèmes que la réception communautaire;
e) La valeur de la puissance surfacique à protéger dans le service de radiodiffusion par satellite;
f) Les conditions de propagation entre la station de Terre et la zone de service du satellite de radiodiffusion.

2. *Limite de la puissance surfacique.*

2.1. *Considérations générales.*

La valeur admissible de la puissance surfacique à ne pas dépasser à la limite de la zone de service, pour protéger le service de radiodiffusion par satellite d'une administation, est donnée par la formule:

$$F = F_o - R + D + P \quad (1)$$

dans laquelle:

F — valeur maximale admissible de la puissance surfacique brouilleuse [en dB(W(m²)] dans la largeur de bande nécessaire des émission de radiodiffusion par satellite;
F_o — puissance surfacique utile [en dB(W/m²)] à la limite de la zone de service;
R — rapport de protection (en dB) signal utile/signal brouilleur;
D — discrimination angulaire (en dB) assurée par le diagramme de rayonnement de l'antenne du récepteur de radiodiffusion par satellite;
P — discrimination de polarisation (en dB) entre les signaux utile et brouilleur.

2.2. *Puissance surfacique utile (F_o).*

La valeur de F_o est égale à:

a) — 103 dB(W/m²) pour les zones de services dans les Régions 1 et 3;
b) — 105 dB(W/m²) pour les zones de service dans la Région 2.

2.3. *Rapport de protection (R).*

2.3.1. Dans le cas d'une contribution unique de brouillage, le rapport de protection contre tous les types d'émissions de Terre, sauf les émissions des systèmes de télévision multicanaux à modulation d'amplitude, est de 35 dB lorsque la différence entre les fréquences porteuses du signal utile et du signal brouilleur est égale ou inférieure à ± 10 MHz; il décroît linéairement de 35 dB à 0 dB lorsque la différence entre les fréquences porteuses passe de 10 MHz à 35 MHz; il est égal à 0 dB pour des différences de fréquence dépassant 35 MHz (voir la figure 1).

2.3.2. La différence entre les fréquences porteuses; doit être déterminée sur la base des assignations de fréquence figurant dans le Plan de radiodiffusion par satellite, ou, dans le cas des stations spatiales de radiodiffusion qui ne sont pas comprises dans un plan, sur la base des caractéristiques du système en service ou en projet. Pour des systèmes de télévision multicanaux à modulation d'amplitude qui produisent de grandes crêtes de puissance surfacique échelonnées sur une grande partie de la largeur de bande occuppée, le rapport de protection R est égal à 35 dB, quel que soit l'espacement des fréquences porteuses.

2.3.3. On ne prendra en considération um signal d'une station de Terre que si sa largeur de bande nécessaire recouvre en partie la largeur de bande nécessaire d'une assignation à une station du service de radiodiffusion par satellite.

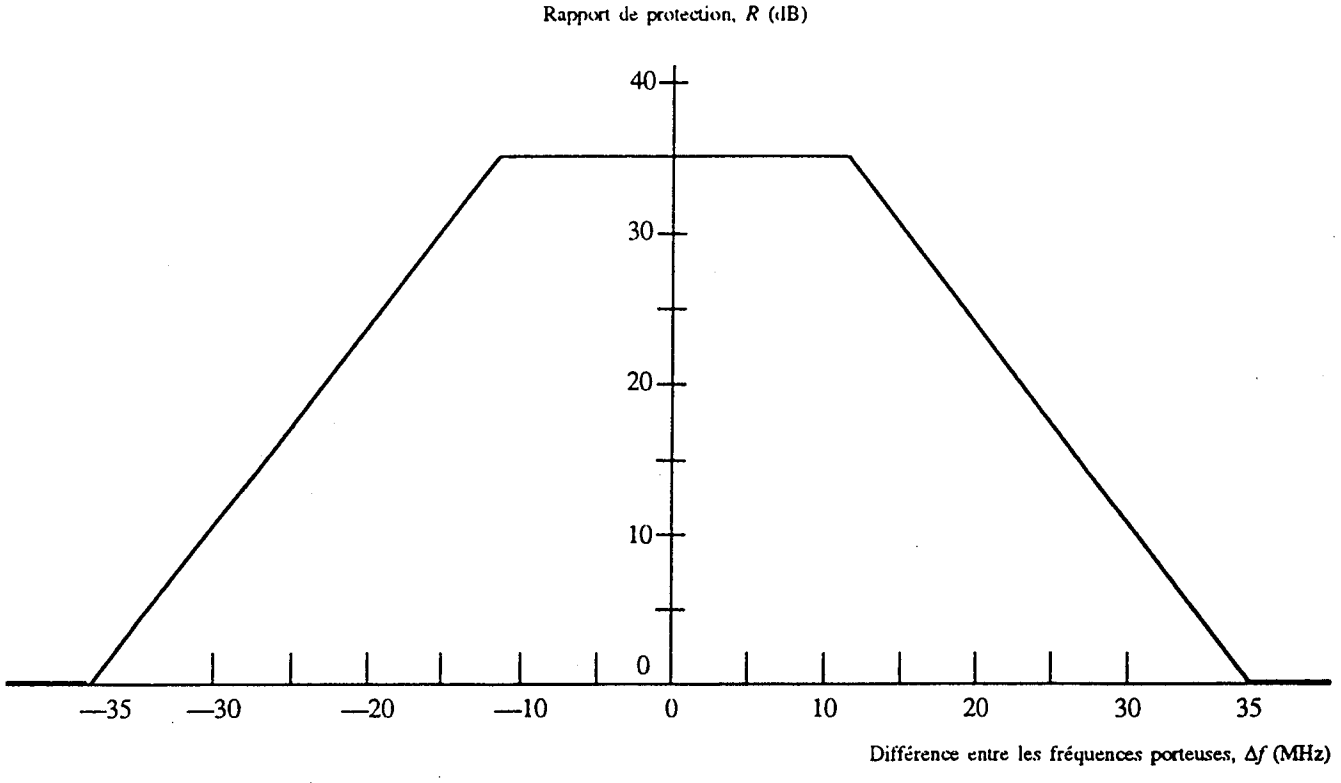


Figure 1 — Rapport de protection, R (dB), d'un signal de radiodiffusion vis-à-vis d'une seule source de brouillage provenant d'un service de Terre (sauf pour les systèmes de télévision multicanaux à modulation d'amplitude)

2.4. *Discrimination angulaire (D).*

2.4.1. *Zones de service des stations spatiales du service de radiodiffusion par satellite dasn les Régions 1 et 3.*

Lorsque, pour une zone de service considerée, l'angle se site (φ) choisi pour un système de radiodiffusion par satellite, en service ou en projet, est égal ou supérieur à 19°, on admet que, dans la fomule (1), $(D) = 33$ dB. Si φ est inferieur à 19° on calcule (D) à partir des formules (2a) ci-aprés.

Note. — Si plusieurs valeurs de φ sont spécifiées pour une zone de service donnée, on utulise la valeur appropriée à chaque portion de la limite de ladite zone de sercice.

$$\begin{aligned} D &= 0 \text{ pour } 0 \le \varphi \le 0{,}45° \\ D &= 3{,}7\ \varphi^2 \text{ pour } 0{,}5° < \varphi \le 1{,}41° \\ D &= 3 + 20 \log_{10} \varphi \text{ pour } 1{,}41° < \varphi \le 2{,}52° \\ D &= 1 + 25 \log_{10} \varphi \text{ pour } 2{,}52° < \varphi \le 19° \end{aligned} \qquad (2a)$$

Note. — Pour la détermination graphique de (D), voir la figure 2.

2.4.2. *Zones de service des stations spatiales du service de radiodiffusion par satellite dans la Région 2.*

Lorsque, pour une zone de service considérée, l'angle de site (φ) choisi pour un système de radiodiffusion par satellite, en service ou en projet, est égal ou supérieur à 27°, on admet que, dans la formule (1), $(D) = 38$ dB. Si φ est inférieur à 27°, on calcule (D) á partir des formules (2b) ci-après.

Note. — Si plusieurs valeurs de φ sont spécifiées pour une zone de service donnée, on utilise la valeur appropriée à chaque portion de la limite de ladite zone de service.

$$\begin{aligned} D &= 0 \text{ pour } 0 \le \varphi \le 0{,}45° \\ D &= 3{,}7\ \varphi \text{ pour } 0{,}45° < \varphi \le 1{,}27° \\ D &= 3{,}9 + 20 \log_{10} \varphi \text{ pour } 1{,}27° < \varphi \le 2{,}27° \\ D &= 2{,}1 + 25 \log_{10} \varphi \text{ pour } 2{,}27° < \varphi \le 27° \end{aligned} \qquad (2b)$$

Note. — Pour la détermination graphique de (D), voir la figure 2.

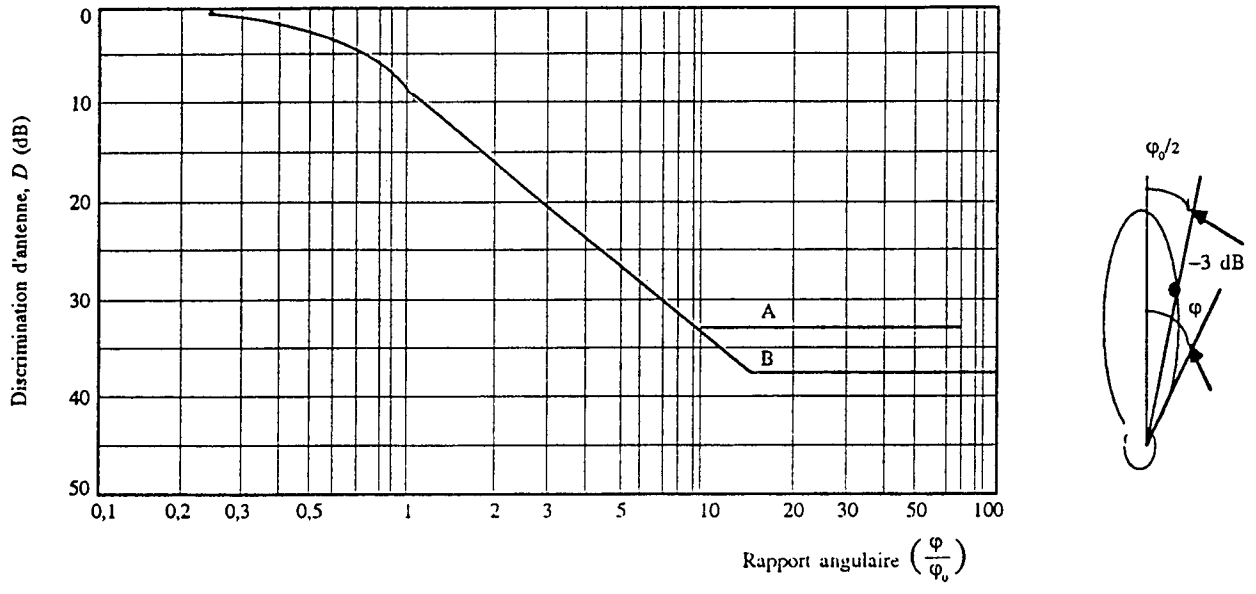


Figure 2 — Discrimination d'antenne, D (db), d'un récepteur de radiodiffusion par satellite en fonction de l'angle de site du satellite

Pour les zones de service dans les Régions 1 et 3, $\varphi_0 = 2°$; la courbe A s'applique.
Pour les zones de service dans la Région 2, $\varphi_0 = 1{,}8°$; la courbe B s'applique.

2.5. *Discrimination de polarisation (P).*

La valeur de P est égale à:

a) 3 dB, lorsque le service de Terre brouilleur utilise la polarisation rectiligne et le service de radiodiffusion par satellite la polarisation circulaire, ou vice-versa;

b) 0 dB, lorsque le service de Terre brouilleur et le service de radiodiffusion par satellite utilisent tous deux la même polarisation, circulaire ou rectiligne.

3. *Puissance surfacique produite par une station de Terre (F_p).*

La puissance surfacique F_p [en dB(W/m²)] produite par une station de Terre en un point quelconque de la limite de la zone de service est déterminée par la formule suivante:

$$F_p = E - A + 43 \qquad (3)$$

dans laquelle:

E — puissance isotrope rayonnée équivalente (en dBW) de la station dans la direction du point considéré de la limite de la zone de service;

A — affaiblissement de trajet total (en dB).

3.1. *Evaluation de l'affaiblissement de traject A pour une station de Terre située à plus de 100 km de la limite de la zone de services d'une station spatiale de radiodiffusion par satellite.*

Pour des trajets d'une longueur supérieure à 100 km, la valeur de A est la suivante:

$$A = 137{,}6 + 0{,}2324\, d_t + 0{,}0814\, d_m \qquad (4)$$

dans laquelle d_t et d_m représenten respectivement (en km) la longueur du trajet terrestre et la longueur du trajet maritime.

3.2. *Evaluation de l'affaiblissement de trajet A pour une station de Terre située à une distance égale ou inférieure à 100 km de la limite de la zone de service d'une station de radiodiffusion par satellite.*

Pour des trajets d'une longueur égale ou inférieure à 100 km, on calcule la valeur de *A* au moyen des formules (4) et (5); la valeur la plus faible est introduite dans la formule (3) pour calculer la puissance surfacique produite au point considéré de la limite de la zone de service:

$$A = 109{,}5 + 20 \log\, (d_t + d_m) \qquad (5)$$

La figure 3 donne la valeur de *A* en fonction de la longueur totale du trajet et des proportions de trajet maritime.

3.3. *Distance au-delà laquelle l'application de la méthode n'est plus nécessaire.*

Il n'est plus nécessaire d'appliquer la méthode et la coordination est inutile si la distance entre la station de Terre et la zone de service de la station spatiale de radiodiffusion par satellite et supérieure à:

a) 400 km dans le cas de trajets entièrement terrestres; ou

b) 1200 km dans le cas de trajets entièrement maritimes ou de trajets mixtes.

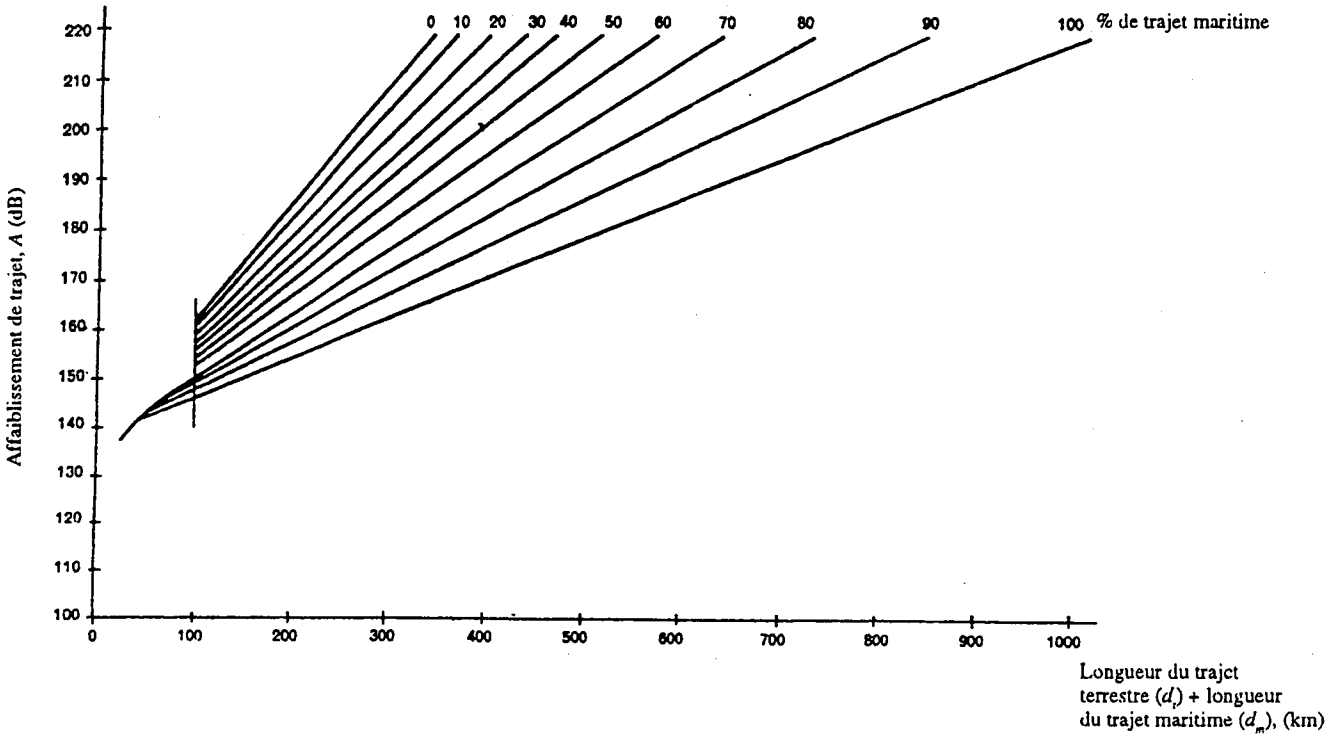


Figure 3 — Affaiblissement total de trajet, *A* (dB), en fonction de la longueur totale du trajet $(d_t + d_m)$ et des pourcentages de trajet maritime

ANNEXE 4

Nécessité de coordonner, par rapport au Plan, une station spatiale du service fixe par satellite ou une station spatiale du service de radiodiffusion par satellite de la Région 2 (article 7)

En relation avec le paragraphe 7.2.1, la coordination d'une station spatiale du service fixe par satellite ou du service de radiodiffusion par satellite de la Région 2 est requise lorsque, dans l'hypothèse de la propagation en espace libre, la valeur de la puissance surfacique produite sur le territoire relevant d'une administration de la Région 1 ou de la Région 3 dépasse la valeur définie par les expressions suivantes:

— 147 dB (W/m²/27 MHz) pour $0 \leq \theta < 0{,}44°$;
— $138 + 25 \log 0$ dB (W/m²/27 MHz) pour $0{,}44 \leq \theta < 19{,}1°$;
— 106 dB (W/m²/27 MHz) pour $19{,}1° \leq 0$;

θ = différence en degrés entre la longitude de la station spatiale brouilleuse du service de radiodiffusion par satellite ou du service fixe par satellite dans la Région 2 et la longitude de la station spatiale du service de radiodiffusion par satellite défavorablement influencée dans les Régions 1 et 3.

ANNEXE 5

Valeurs limites de la puissance surfacique à apliquer pour la protection des services de Terre dans les Régions 1 et 3 contre les brouillages produits par les stations spatiales du service de radiodiffusion par satellite de la Région 2, dans la bande 1,7-12,2 GHz (article 9)

Les valeurs limites de la puissance surfacique à appliquer dont les suivantes:

1) Pour tous les territoires des administrations des Régions 1 et 3 et pour tous les angles d'arrivée:
   — 125 dB (W/m²/4 kHz) pour des stations spatiales de radiodiffusion par satellite utilisant la polarisation circulaire;
   — 128 dB(W/m²/4 kHz) pour les stations spatiales de radiodiffusion par satellite utilisant la polarisation rectiligne; et

2) Pour les territoires des administrations de la Région 3 et ceux de la partie occidentale de la Région 1 situés à l'ouest de la longitude 30° Est:
   — 132 dB (W/m²/5 MHz) pour des angles d'arrivée compris entre 0° et 10° au-dessus de l'horizon;
   — $132 + 4{,}2 (\gamma - 10)$ dB (W/m² /5 MHz) pour des angles d'arrivée γ (en degrés) compris entre 10° et 15° au-dessus de l'horizon;
   — 111 dB (W/m²/5 MHz) pour des angles d'arrivée compris entre 15° et 90° au-dessus de l'horizon.

ANNEXE 6

Principes de planification dans la Région 2

Les principes suivantes ont été appliqués lors de l'élaboration des dispositions régissant la mise en œuvre des services de radiocommunication spatiale dans la bande 11,7-12,2 GHz dans la Région 2:

1. *Egalité des droits entre les services auxquels est attribuée la bande dans la Région 2.*

Aux termes de l'article 8 du Règlement des radiocommunications, la bande 11,7-12,2 GHz est attribuées au service de radiodiffusion par satellite, au service fixe par satellite et à des services de radiocommunication de Terre à titre primaire avec égalité des droits. Chaque administration de la Région 2 a le droit de décider par elle-même des services qu'elle mettra en œuvre sur son propre territoire.

2. *Egalité des droits entre des services de différentes Régions.*

Conformément aux dispositions du numéro **346** du Règlement des radiocommunications, dans totues les Régions le fonctionnement de services différents de même bande de fréquences est fondé sur le égalité des droits, sous réserve de ne causer aucun brouillage préjudiciable aux services des autres Régions.

3. *Reconnaissance des besoins nationaux.*

Toutes les administrations de la Région 2 prendront en considération les besoins nationaux qui ont été présentés ou qui le seront dans l'avenir.

4. *Droits d'accès équitables à la ressource orbite/spectre.*

Sou réserve des dispositions de la Convention du Réglement des radiocommunications et des résolutions en vigueur, il est reconnu que toutes les administrations ont droit d'accès à la ressource orbite/spectre pour fairé face à leurs propres besoins.

5. *Méthode de planification souple* (1).

Le plan pour la Région 3 qui sera adopté devra être assez souple pour permettre de tenir compte: de l'évolution future de la technique, de la détermination des besoins à venir, des modifications des besoins actuels ou des besoins formulés, des besoins des administrations non représentées à la Conférence (2), des données nouvelles relatives à la propagation et des diverses méthodes de conception des systèmes. Le plan ne pourra être modifié que par une conférence administrative des radiocommunications compétente.

6. *Utilisation efficace de l'orbite des satellites géostationnaires et du spectre.*

Le plan pour la Région 2 utilisera, dans la mesure où ce sera techniquement et économiquement possible, les techniques le plus récents afin d'employer avec le maximum d'efficacité l'orbite des satellites géostationnaires et le spectre de fréquences pour satisfaire aux besoins globaux des Régions ainsi qu'à ceux de chaque administration.

7. *Consultations entre administrations.*

Les administrations envisageant la mise en œuvre de systèmes dans la bande 11,7-12,2 GHz consulteront toutes les autres administrations affectées ou intéressées.

8. *Réception.*

Le plan pour la Région 2 sera établi sur la base de la réception individuelle: toutefois, chaque administration pourra adopter le système de réception qui conviendra le mieux à ses besoins: réception individuelle, réception communitaire ou les deux.

ANNEXE 7

Utilisation de la resource orbite/spectre

Etant donnée que, dans la Région 2, le partage des ressources de l'orbite/spectre entre le service de radiodiffusion par satellite et le service fixe par satellite sur la base de l'égalité des droits est difficile à réaliser et peut imposer certaines restrictions aux deux services, il importe de choisir les paramètres techniques et d'appliquer les techniques conduisant à une utilisation efficace de la ressource orbite/spectre de telle sorte que les deux services spatiaux en tirent le meilleur parti possible.

Les techiques énumérées ci-dessous font partie de celles qui permettent l'utilisation de la ressource orbite/spectre la plus efficace; elles doivent donc être appliquées avec le maximum d'efficacité dans la mesure où cela sera techniquement et économiquement possible, compte tenu de la capacité des systèmes à répondre aux besoins pour lesquells ils ont été conçus.

1. *Groupement.*

Des analyses très poussées ont montré que l'utilisation de l'orbite est améliorée lorsque les stations spatiales sont groupées selon la vulnerabilité au brouillage du système dont elles font partie et le brouillage que risque de causer ce système. Souvent, cela signifie que des stations spatiales à caractéristiques similares doivent être groupées dans la même partie de l'orbite.

2. *Croisement de polarisation.*

L'utilisation correcte du croisement de polarisation peut améliorer notablement l'utilisation de la ressource orbite/spectre en assurant une séparation supplémentaire entre des systèmes qui risquent de se brouiller.

3. *Géométrie des faisceaux croisés.*

Le principe de la géométrie des faisceaux croisés est le suivant: des stations spatiales adjacentes ne doivent pas desservir des zones de service adjacentes. On peut ainsi utiliser la discrimination des antennes de station spatiale et de station terrienne pour parvenir à la séparation maximale entre les systèmes.

4. *Zones de service appariées.*

On peut étendre à ce cas l'application du principe de la géométrie des faisceaux croisés. En effet, si les zones de service sont assez éloignées l'une de l'autre, la seule discrimination de l'antenne de la station spatiale peut suffire pour que les stations spatiales desservant ces zones occupent la même position sur l'orbite, ce qui permet pratiquement de doubler la capacité de l'orbite.

5. *Entrelacement des fréquences.*

Dans des systèmes différents, le brouillage mutuel entre les canaux atteint généralement sont maximum lorsque les deux fréquences porteuses coincident. Lorsque la disposition des canaux est telle que les fréquences sont entrelacées, ou, plus généralement, que l'on évite la coïncidence des fréquences porteuses, le brouillage mutuel peut fréquemment être réduit dans les notables proportions.

---

(1) Le paragraphe 5 n'implique pas la reconnaissance de systèmes exploités avant la mise en œuvre du plan.

(2) Conférence administrative mondiale des radiocommunications pour la radiodiffusion para satellite (Genève, 1977).

6. *Espacement minimal des stations spatiales.*

Il est évident que, pour parvenir à une utilisation maximale de l'orbite, il convient de placer les stations spatiales aussi près que possible l'une de l'autre, dans le mesure où les brouillages mutuels peuvent être maintenus à des niveaux acceptables.

7. *Discrimination de l'antenne de station spatiale.*

La discrimination dans les lobes latéraux de l'antenne de station spatiale détermine le degré de séparation existant entre les faisceaux desservant des zones de service qui ne se chevauchent pas et qui ne sont pas adjacentes. Pour parvenir à la séparation maximale, tout doit être fait pour améliorer la discrimination grâce aux progrès de la technique de conception et de construtions des antennes.

8. *Discrimination de l'antenne de station terrienne.*

La discrimination dans les lobes latéraux de l'antenne de station terrienne détermine le degrés de séparation obtenu par l'espacement des stations spatiales. Pour parvenir à une séparation maximale, tout doit être fait pour améliorer la discrimination, en tirant parti des techniques avancées de conception et de construction des antennes.

9. *Réduction au minimum des différences de p. i. r. e.*

Le brouillage causé par des stations spatiales relativement puissances (satellite de radiodiffusion ou certains types de satellites du service fixe) à des stations terriennes de réception est directement proportionnel à la différence entre leurs p. i. r. e. Le partage entre de telles stations spatiales est grandement facilité lorsque cette différence est maintenue à la plus faible valeur possible, compte tenu des besoins.

10. *Objectifs réalistes de qualité et de fiabilité.*

Les objectifs de qualité et de fiabilité ont une influence significative sur l'utilisation de la ressource orbite/spectre. Des objectifs inutilement élevés entraînent une diminution de la capacité de l'orbite; ils ne doivent donc pas être plus élevés qu'il n'est absolument nécessaire.

ANNEXE 8

Données techniques utilisées pour l'établissement du Plan et devant être utilisées pour l'application du Plan

1. *Définitions.*

1.1. *Zone de service.*

Zone de la surface de la Terre dans laquelle l'administration responsable du service est fondée à exiger que la protection convenue soit observée.

Note.— Selon la définition de la zone de service, il apparaît clairement, qu'á l'intérieur de cette zone, les conditions de protection convenues peuvent être exigées. Dans ladite zone, on doit trouver au moins: une puissance surfacique appropriée une protection contre les brouilleurs basée sur un rapport de protection convenu durant une fraction également convenue du temps.

1.2. *Zone de couverture.*

Zone délimité à la surface de la Terre par un contour en tout point duquel la puissance surfacique a une valeur constante convenue, laquelle, en l'absence de brouillage, permet d'obtenir la qualité de réception spécifiée.

Note 1. — Conformément aux dispositions du numéro 2674 du Règlement des radiocommunications, la zone de couverture doit être la plus petite possible, tout en englobant la zone de service.

Note 2. — La zone de couverture englobe normalement toute la zone de service. Elle résulte de l'intersection du faisceau (de section elliptique ou circularie) avec la surface de la Terre. Elle est définie par une valeur donnée de la puissance surfacique. Par exemple, dans le cas d'un pays de la Région 1 ou de la Région 3 dont le service est prévu pour une réception individuelle, ce serait la zone limitée par le contour correspondant à une puissance surfacique de — 103 dB (W/m²) pendant 99 % du moins le plus défavorable. En général, il existera une zone intérieure à la zone de couverture mais extérieure à la zone de service, dans laquelle la puissance surfacique sera supérieure à la valeur minimale spécifiée, mais où la protection contre les brouillages ne sera pas assuré.

1.3. *Empreinte d'un faisceau.*

Zone delimité par l'intersection du faisceau à mi-puissance de l'antenne d'émission du satellite avec la surface de la Terre.

Note. — L'empreinte du faisceau d'est autre que la zone de la surface de la Terre délimité par les points à — 3 dB du diagramme de rayonnement de l'antenne d'émission du satellite. Dans bien des cas, l'empreinte coincide presque avec la zone de couverture. Quand elle en diffère, cela s'explique par les différences permanentes de longueur des trajects entre le satellite et les différentes points de l'empreinte du faisceau, et aussi, le cas échéant, par les variations également permanentes des facteurs de propagation relatifs à cette zone. Cependant pour une zone de service dont la dimension maximale est vue du satellite sous un angle inférieure à 0,6° (valeur admisse comme étant a valeur minimale réalisable de l'ouverture à mi-puissance du faisceau), il peut y avoir une différence importante entre l'empreinte du faisceau et la zone de couverture.

1.4. *Position nominale sur l'orbite.*

Longitude d'une position sur l'orbite des satellites géostationnaires associée à une assignation de fréquence à une station spatiale d'un service de radiocommunication spatiale. Cette position est exprimée en degrés à partir du méridien de Greenwich.

2. *Facteurs de propagation radioélectrique.*

2.1. L'affaiblissement de propagation sur le traject espace vers Terre est égal à affaiblissement en espace libre augmenté de l'affaiblissement supplémentaire dépassé pendant a plus 1 % du mons le plus défavorable: ce dernier est indiqué par la figure 1 pour les cinq zones hydrométéorologiques définies dans la figure 2.

2.2. Lorsque l'on utilise les courbes de la figure 1, la différence entre l'affaiblissement par temps clair et l'affaiblissement pendant 99 % du mois le plus défavorable doit être limitée à 2 dB au maximum, grâce à un choix judicieux de l'angle de site.

2.3. Dans le planification du service de radiodiffusion par satellite, pour les émissions à polarisation circulaire, on doit utiliser le rapport suivant entre le niveau dela composante dépolarisée et celui de la composante copolaire:

Pour les zones hydrométéorologiques 1 et 2: — 27 dB;
Pour les zones hydrométéorologiques 3, 4 et 5: — 30 dB.

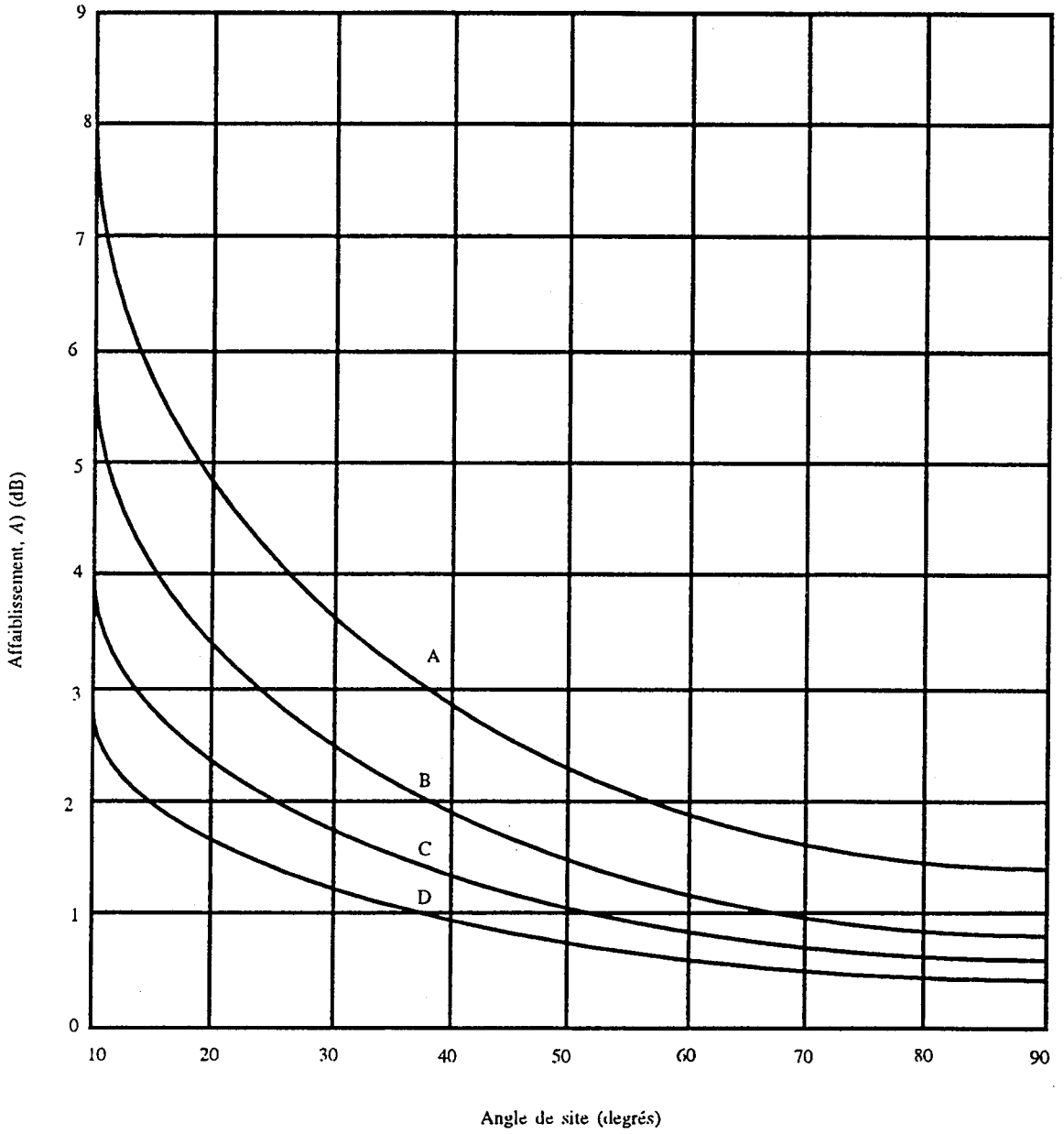


Figure 1 — Valeurs prévues de l'affaiblissement supplémentaire dépassé pendant au plus 1 % du moins le plus défavorable (0,25 % du temps) à 12 GHz dans les zones hydrométéorologiques mentionnées dans la figure 2

A — Zone hydrométéorologique 1
B — Zone hydrométéorologique 2
C — Zone hydrométéorologique 3 et 4
D — Zone hydrométéorologique 5

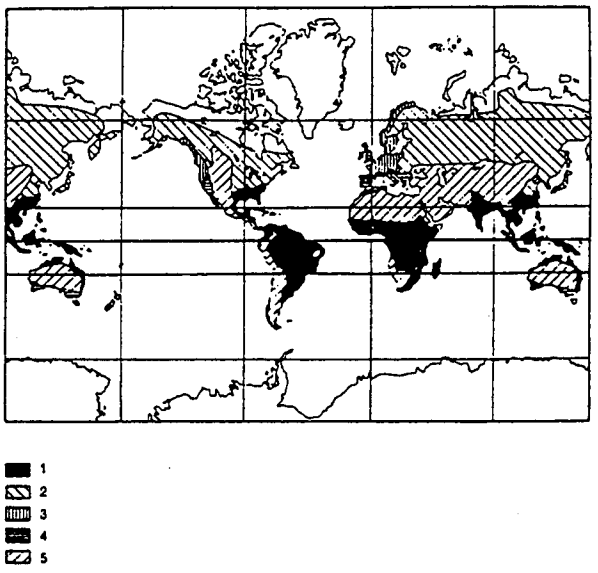


Figure 2 — Zones hydrométéorologiques

Il est à noter que l'on n'a pas fait beaucoup de mesures de l'affaiblissement dû aux précipitations dans les pays tropicaux, en particulier dans la région africaine.

3. *Caractéristiques techniques fondamentales.*

3.1. *Type de modulation.*

La planification du service de radiodiffusion par satellite est fondée sur l'utilisation d'un signal que se compose d'un signal vidéo associé à une voie son modulée en fréquence: l'ensemble module em fréquence une porteuse dans la bande des 12 GHz; la caractéristique de préaccentuation est confome à la fig. 3, laquelle provient de l'Avis 405 du CCIR.

Cela n'interdit pas l'utilisation de signaux modulantes de caractéristiques différentes (par example, une modulation constituée de voies son multiplexées en fréquence dans la bande du canal de télévision, la modulation numérique de signaux sonores et de télévision ou encore l'utilisation de caractéristiques différentes de préaccentuation), à condition que l'utilisation de ces autres caractéristiques ne cause pas un brouillage plus important que celui qu'apporte le système considéré dans la Plan.

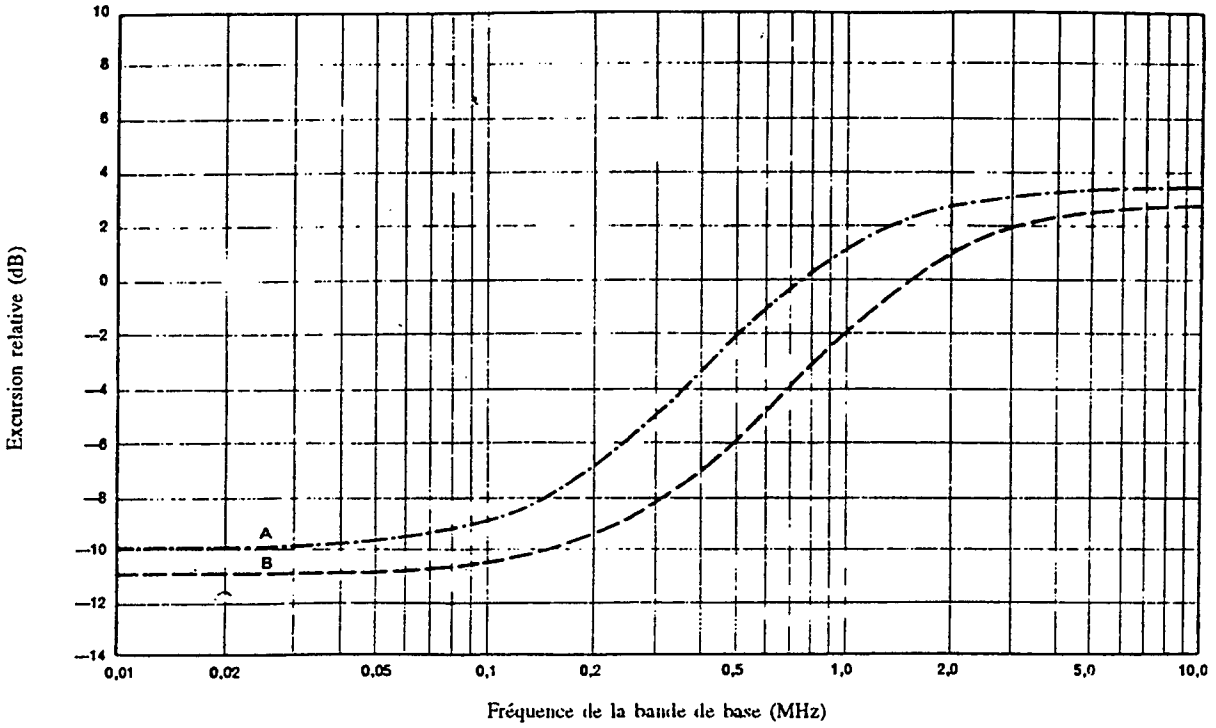


Figure 3 — Caractéristiques de préaccentuation pour les systèmes de télévision à 525 et 625 lignes.

Courbe A: système à 525 lignes.
Courbe B: système à 625 lignes.

3.2. *Polarisation.*

3.2.1. Pour la planification du service de radiodiffusion par satellite, la polarisation circulaire soit être utilisée dans les Régions 1, 2 et 3 (1).

3.2.2. La polarisation des émissions correpondant à des faisceaux différents, conçus à dessein pour desservir la même zone, devrait si possible être la même.

3.2.3. Les termes «direct» et «indirect» utilisés dans un Plan pour indiquer le sens de rotation des ondes polarisées circulairement correspondent à une polarisation dextrogyre (dans le sens des aiguilles d'une montre) ou lévogyre (dans le sens inverse des aiguilles d'une montre) selon les définitions suivantes:

Sens direct ou dextrogyre (sens des aiguilles d'une montre):

Onde (électramagnétique) polarisée elliptiquement, ou circulariement, dont, pour un observateur regardant dans le sens de la propagation, le vecteur champ électrique tourne en *fonction du temps,* dans un *plan fixe* quelconque normal à la direction de propagation, dans le sens *dextrorsum,* c'est-à-dire dans le sens des aiguilles d'une montre.

Note.— Dans le cas d'ondes planes polarisées circulariement dextrorsum, les extrémités des vecteurs attachés aux différents points d'une droite quelconque normale aux plans constituant les surfaces d'ondes forment, à un *instant donnée* quelconque, une hélice *sinistrorsum.*

Sens indirect ou lévogyre (sens inverse des aiguilles d'une montre):

Onde (électromagnétique) polarisée elliptiquement, ou circulairement, dont, pour un observateur regardant dans le sens de la propagation, le vecteur champ électrique tourne en *fonction du temps,* dans un *plan fixe* quelconque normal à la direction de propagation, dans le sens *sinistrorsum,* c'est-à-dire dans le sens contraire à celui des aiguilles d'une montre.

Note.— Dans le cas d'ondes planes polarisées circulairement, sinistrorsum, les extrémités des vecteurs attachés aux différents points d'ue montre quelconque normale aux plans constituant les surfaces d'ondes forment, à un *instant donnée* quelconque, une hélice *dextrorsum.*

3.3. *Raport porteuse/bruit.*

Pour la planification du service de radiodiffusion par satellite, le rapport porteuse/bruit est égal à 14 dB pendant 99 % du mois le plus défavorable.

On considère que la diminution de la qualité sur le trajet descendant due au bruit thermique sur le trajet montant équivaut à une dégradation du rapport porteuse/bruit ne dépassant pas 0,5 dB pendant 99 % du mois le plus défavorable.

3.4. *Rapport de protection entre deux signaux de télévision modulés en fréquence.*

Pour la planification dans les Régions 1 et 3 on a adopté les valeurs suivantes du rappport de protection pour le calcul des marges de protection équivalentes (2):

— 31 dB entre émissions d'un même canal;
— 15 dB entre émissions de canaux adjacents.

3.5. *Espacement entre canaux.*

3.5.1. *Espacement entre canaux du Plan.*

L'espacement entre les fréquences assignées de deux canaux adjacents est de 19,18 MHz. La Plan contient l'indication de la fréquence assignée à chaque canal.

---

(1) L'administration des États-Unis d'Amérique a exprimé son souci quant à l'adoption de la polarisation circulaire pour la Région 2, et a indiqué que l'adoption très probable de la polarisation rectiligne par le service fixe par satellite empêchera l'emploi du croisement de polarisation pour faciliter le partage entre les deux services et aura des répercussions sur l'utilisation de l'orbite et du spectre dans le Région.

L'administration de l'Iran a formulé des réserves quant à l'adoption de la polarisation circulaire pour la planification du service de radiodiffusion par satellite dans le Région 3; elle a précisé qu'elle avait l'intention de mettre en œuvre une polarisation rectiligne.

(2) La marge de protection équivalente, M, et donnée, en dB, par la formule:

$$M = -10 \log [10^{-M_1/10} + 10^{-M_2/10} - 10^{-M_3/10}]$$

où M_1 est la valeur, en dB, de la marge de protection pour le même canal. Elle est définie par l'expression suivante, ou les puissances sont évaluées à l'entrée du récepteur:

$$\frac{\text{puissance utile}}{\text{somme des puissances de brouillage dans le même canal}} \text{ (dB)} — \text{rapport de protection dans le même canal (dB)}$$

M_2 et M_3 sont les valeur, en dB, des marges de protection pour le canal adjacent inférieur et pour le canal adjacent supérieur.

La définition de la marge de protection dans la canal adjacent la même que celle du même canal, bien que l'on fasse intervenir d'une part le rapport de protection dans le canal adjacent et d'autre part la somme des brouillages dus aux émissions dans le canal adjacent.

3.5.2. *Groupement des canaux d'un même faisceau.*

La planification dans la Région 1 a été effectuée en s'efforçant de grouper tous les canaux d'um même faisceau d'antenne, dans une bande de fréquences de 400 MHz, afin de faciliter la construction des récepteurs.

3.5.3. *Espacement des fréquences assignées de canaux utilisés avec une même antenne.*

En raison de difficultés techniques dans le circuit de sortie de l'émetteur d'un satellite, l'espacement entre les fréquences assignées de deux canaux utilisés avec une même antenne doit être supérieur à 40 MHz.

3.6. *Facteur de qualité (G/T) d'une installation de réception de service de radiodiffusion par satellite.*

Pour la planification du service de radiodiffusion par satellite, on utilise une valeur du facteur de qualité *G/T*, de:

60 dB/K pour la réception individuelle;
14 dB/K pour la réception communautaire.

Ces valeurs sont calculées d'aprés la formule suivant qui inclut les erreurs de pointange, les effets de polarisation et le vieillissement des équipements:

$$G/T = \frac{\alpha \beta G_r}{\alpha T_a + (1 - \alpha) T_0 + (n - 1) T_0}$$

dans laquelle on a défini

α — total des pertes de couplage, exprimé en rapport de puissance;
β — total des pertes dues à l'erreur de pointage, aux effects de polarisation et au vieillissement, exprimé en rapport de puissance;
G_r — gain effectif de l'antenne de réception, exprimé en rapport de puissance et tenat compte du type d'illumination et du rendement;
T_a — température effective d'antenne;
T_o — température de référence = 290 K;
n — facteur de bruit global du récepteur, exprimé en rapport de puissance.

Voir aussi Rapport 473-1 (annexe 1) du CCIR.

3.7. *Antennes de rèception.*

3.7.1. *Diamètre minimal des antennes de réception.*

Pour la planification du service de radiodiffusion par satellite on consideré que le diamètre minimal des antennes de réception doit être tel que l'ouverture du faisceau à demi-puissance, φ_o, est:

a) Pour la réception individuelle: de 2° dans les Régions 1 et 3, de 1,8° dans la Région 2;
b) Pour la réception communautaire: de 1° dans toute les Régions.

3.7.2. *Diagrammes de référence des antennes de réception.*

Les diagrammes de références copolaire et contrapolaire des antennes de réception sont donnés dans les figures 4 et 5.

a) Le gain relatif de l'antenne, exprimé en dB, est donné par les courbes de la figure 4 dans le cas de:

La réception individuelle dans les Régions 1 et 3, pour laquelle il convient d'utiliser:

Pour la composante copolaire, la courbe A;
Pour la composante contrapolaire, la courbe B;

La réception communautaire, pour laquelle il convient d'utiliser:

Dans toutes les Régions, pour la composante copolaire, la courbe A', jusqu'à l'intersection avec la courbe C, puis, la courbe C;
Dans les Régions 1 et 3, pour la composante contrapolaire, la courbe B;

b) Pour la Région 2, le gain relatif de l'antenne, exprimé en dB, est donné par les courbes de la figure 5 dans le cas de:

La réception individuelle, pour laquelle il convient d'utiliser:

Pour la composante copolaire, la courbe A;
Pour la composante contrapolaire, la courbe B;

La réception communautaire, pour laquelle il convient d'utiliser, pour la composante contrapolaire, la courbe B (la composante copolaire étant donnée à la figure 4).

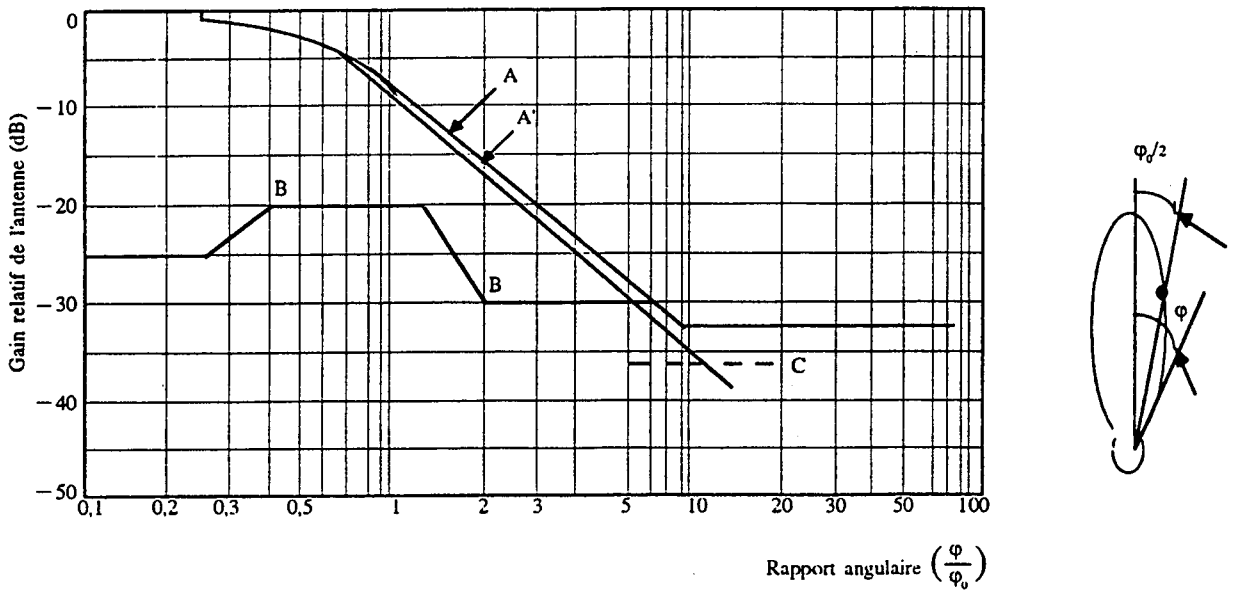


Figure 4. — Diagrammes de référence copolaire et contrapolaire de l'antenne de réception

Courbe A — Composante copolaire pour la réception individuelle sans suppression des lobes latéraux:

0 pour $0 \leq \varphi \leq 0{,}25\ \varphi_0$;

— $12 \left(\frac{\varphi}{\varphi_0}\right)^2$ pour $0{,}25\ \varphi_0 < \varphi \leq 0{,}707\ \varphi_0$;

— $\left[9{,}0 + 20 \log_{10} \left(\frac{\varphi}{\varphi_0}\right)\right]$ pour $0{,}707\ \varphi_0 < \varphi \leq 1{,}26\ \varphi_0$;

— $\left[8{,}5 + 20 \log_{10} \left(\frac{\varphi}{\varphi_0}\right)\right]$ pour $1{,}26\ \varphi_0 < \varphi \leq 9{,}55\ \varphi_0$;

— 33 pour $9{,}55\ \varphi_0 < \varphi$.

Courbe A — Composante copolaire pour la réception communautaire sans suppression des lobes latéraux:

0 pour $0 \leq \varphi \leq 0{,}25\ \varphi_0$;

— $12 \left(\frac{\varphi}{\varphi_0}\right)^2$ pour $0{,}25\ \varphi_0 < \varphi \leq 0{,}86\ \varphi_0$;

— $\left[10{,}5 + 25 \log_{10} \left(\frac{\varphi}{\varphi_0}\right)\right]$ pour $0{,}86\ \varphi_0 < \varphi$; jusqu'à l'intersection avec la courbe C (ensuite prendre la courbe C).

Courbe B — Composante contrapolaire pour les deux types de réception:

— 25 pour $0 \leq \varphi \leq 0{,}25\ \varphi_0$;

— $\left(30 + 40 \log_{10} \left|\frac{\varphi}{\varphi_0} - 1\right|\right)$ pour $0{,}25\ \varphi_0 < \varphi \leq 0{,}44\ \varphi_0$;

— 20 pour $0{,}44\ \varphi_0 < \varphi \leq 1{,}4\ \varphi_0$;

— $\left(30 + 25 \log_{10} \left|\frac{\varphi}{\varphi_0} - 1\right|\right)$ pour $1{,}4\ \varphi_0 < \varphi \leq 2\ \varphi_0$;

— 30 jusqu'à l'intersection avec la courbe de la composante copolaire (ensuite prendre la courbe de la composante copolaire).

Courbe C — Opposé algébrique du gain sur l'axe du faisceau principal.

Note. — Les valeurs de φ_0 sont indiqueés au paragraphe 3.7.1.

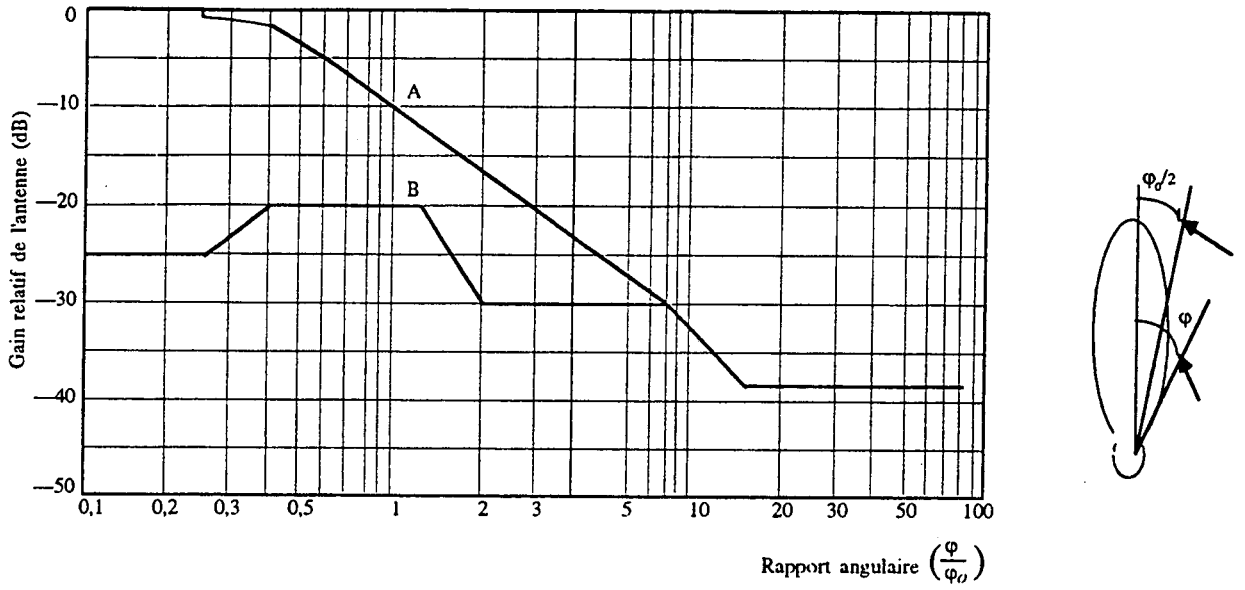


Figure 5 — Diagrammes de référence copolaire et contrapolaire de l'antenne pour réception individuelle dans la Région 2

Courbe A — Composante copolaire sans suppression des lobes latéraux:

0 pour $0 \le \varphi \le 0{,}25\ \varphi_0$;

— $12 \left(\frac{\varphi}{\varphi_0}\right)^2$ pour $0{,}25\ \varphi_o < \varphi \le 0{,}707\ \varphi_o$;

— $\left[9{,}0 + 20 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ pour $0{,}707\ \varphi_o < \varphi \le 1{,}26\ \varphi_o$;

— $\left[8{,}5 + 25 \log_{10} \left(\frac{\varphi}{\varphi_o}\right)\right]$ pour $1{,}26\ \varphi_o < \varphi \le 15{,}14\ \varphi_o$;

— 38 dB pour $\varphi > 15{,}14\ \varphi_o$.

Courbe B — Composante contrapolaire:

— 25 pour $0 \le \varphi \le 0{,}25\ \varphi_o$;

— $\left(30 - 40 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ pour $0{,}25\ \varphi_o < \varphi \le 0{,}44\ \varphi_o$;

— 20 pour $0{,}44\ \varphi_o < \varphi_o \le 1{,}4\ \varphi_o$;

— $\left(30 - 25 \log_{10} \left|\frac{\varphi}{\varphi_o} - 1\right|\right)$ pour $1{,}4\ \varphi_o < \varphi \le 2\ \varphi_o$;

— 30 jusqu'à l'intersection avec la courbe de la composante copolaire (ensuite prendre la courbe de la composante copolaire).

Note. — Les valeurs de φ_o sont indiquées en 3.7.1.

3.8. *Largeur de bande nécessaire:*

Les largeurs de bande nécessaires à prendre en considération sont:

Pour les systèmes à 625 lignes: 27 MHz;
Pour les systèmes à 525 lignes en Région 3: 27 MHz;
Pour le système M à 525 lignes de la Région 2: 18 et 23 MHz.

3.9. *Bandes de garde.*

3.9.1. On entendent par bande de garde la portion du spectre radioèlectrique comprise entre la limite de la bande attribuée et la limite de la bande nécessaire à l'émission dans le canal le plus proche.

3.9.2. Pour la planification du service de radiodiffusion par satellite, les bandes de garde nécessaires pour proteger les services assurés dans les bandes adjacents sont indiquées dans le tableau ci-dessous.

Régions	Bande de garde à la limite inférieure de la bande (11,7 GHz)	Bande de garde à la limite supérieure de la bande (12,2–12,5 GHz)
1	14 MHz	11 MHz
2	12 MHz	9 MHz
3	14 MHz	11 MHz

Ces bandes de garde ont été calculées sur la base d'une valeur de 67 dBW dans le cas des Régions 1 et 3 d'une valeur de 63 dBW dans le cas de Région 2, pour la p. i. r. e. maximale au centre du faisceau et pour un affaiblissement de filtre de 2 dB/MHz; ces valeurs se rapportent à la réception individuelle. Si l'on admet de plus faibles valeurs des p. i. r. e, les bandes de garde pourront être réduites de 0,5 MHz par décibel de diminution de ces p. i. r. e.

3.9.3. Il est probable que les progrés de la technique ou l'adoption de p. i. r. e plus faibles que les p. i. r. e. indiquées ci-dessous permettront de réduire les bandes de garde nécessaires. Aussi est-il recommande, à toute autre fin que la planification par la Conférence (1), de se conformer aux plus récents Avis du CCIR relatifs aux rayonnements non essentiels des satellites de radiodiffusion.

3.10. *Espacement sur l'orbite.*

Le Plan pour les Régions 1 et 3 a été établi en espaçant en règle générale de 6° les positions nominales sur l'orbite.

3.11. *Maintien de la position du satellite.*

Les stations spatiales du service de radiodiffusion par satellite doivent être maintenues en position avec une précision meilleure que ± 0,1°, tant dans la direction Nord-Sud que dans la direction Est-Ouest. (Ces tolérances conduisent à un écart maximal de ± 0,14° du satellite par rapport à sa position nominale).

3.12. *Angle de site des antennes de réception.*

Le Plan a été établi en considérant un angle de site d'au moins 20° pour réduire le plus possible la p. i. r. e. du satellite, prévenir les effets d'écran et diminuer les possiblités de brouillages dus aux services de Terre. Toutefois, dans les zones situées á des latitudes supérieures à 60° environ, l'angle de site est nécessairement inférieur à 20° (voir aussi paragraphe 2.2).

Dans les zones montagneuses où un angle de site de 20° peut être insuffisant, on a tenu compte autant que possible d'un angle de site minimal de 30° pour assurer un service de qualité acceptable. Un angle de site d'au moins 40° a été considéré pour des zones de services où se produisent de fortes précipitations (par exemple la zone hydrométéorologique 1).

Dans certaines zones sèches et nom montagneuses, un service de qualité acceptable pourrait être obtenu avec des angles de site inférieures à 20°.

Dans les zones à faibles angles de site, il peut être nécessaire de tenir compte d'un effet d'écran dû à des bâtiments très élevés.

En choisissant une position de satellite telle que l'angle de site soit maximal au sol, il a été tenu compte de la période d'éclipse correspondant á cette position.

3.13. *Antennes d'emission.*

3.13.1. *Section du faisceau de l'antenne d'émission.*

La planification a été fondée sur l'utilisation d'antennes d'émission à faisceau de section elliptique ou circulaire.

Si la section droite du faisceau émis est elliptique, l'ouverture φ_0 à prendre en considération est fonction de l'angle de rotation, q, entre le plan passant par le satellite et contenant le grand axe de la section droite du faisceau et le plan dans lequel l'ouverture de l'antenne est considérée.

On peut calculer la relation existant entre le gain maximal d'une antenne et l'ouverture à mis-puissance à partir de l'expression:

$$G_m = 27\,843/ab$$

ou

$$G_m\ (\text{dB}) = 44{,}44 - 10\ \log_{10}\ a - \log_{10} b$$

dans laquelle a et b sont respectivement les anglés (en degrés) sous lesquels sont vus du satellite le grand axe et le petit axe de la trace elliptique de la section droite du faisceau.

On admet que le rendement de l'antenne est de 55 %.

---

(1) Conference administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

3.13.2. *Ouverture minimale de l'antenne d'emission.*

Pour la planification on a admis que la valuer minimale actuellement réalisable de l'ouverture à demi-puissance est de 0,6°.

3.13.3. *Diagrammes de référence de l'antenne d'emission.*

Les diagrammes de référence copolaire et contrapolaire des antennes d'emission des stations spatiales utiliseés pour l'établissement du Plan sont reproduits à la figure 6.

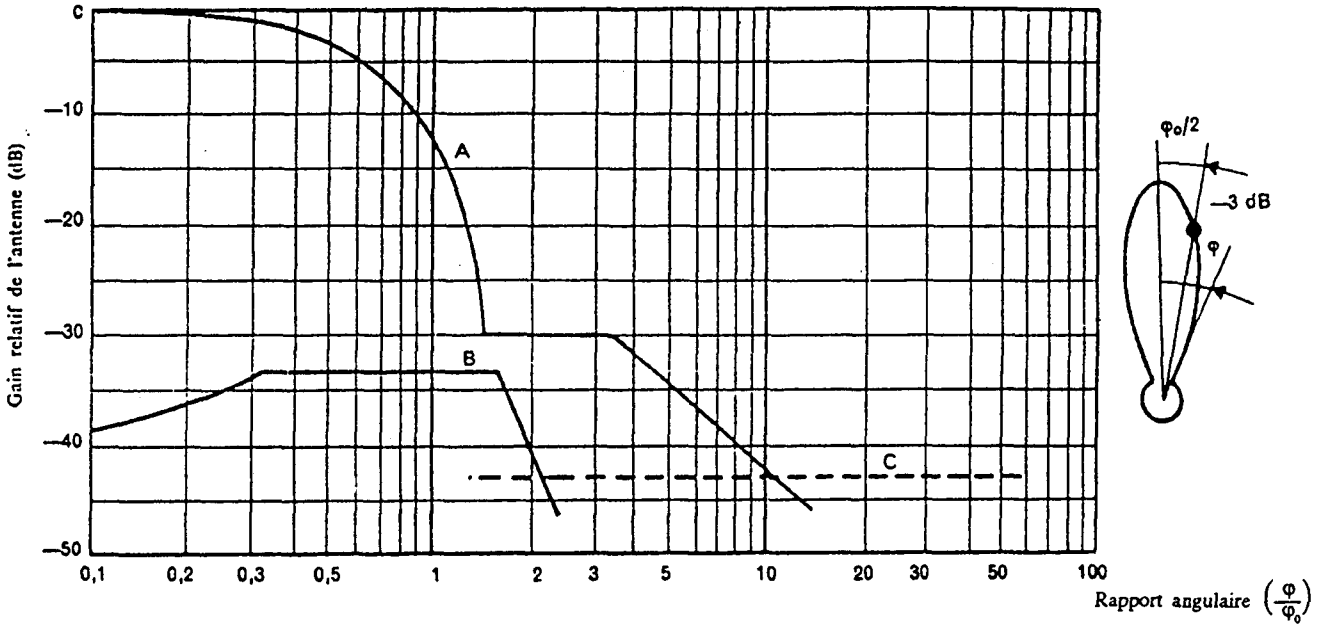


Figure 6 — Diagrammes de référence copolaire et contrapolaire de l'antenne d'emission du satellite

Courbe A — Composante copolaire:

— $12\left(\frac{\varphi}{\varphi_0}\right)^2$ pour $0 \leq \varphi \leq 1{,}58\ \varphi_0$;

— 30 pour $1{,}58\ \varphi_0 < \varphi \leq 3{,}16\ \varphi_0$;

— $\left[17{,}5 + 25\log_{10}\left(\frac{\varphi}{\varphi_0}\right)^2\right]$ pour $3{,}16\ \varphi_0 < \varphi$, après l'intersection avec la courbe C: comme la courbe C.

Courbe B — Composante contrapolaire:

— $\left(40 + 40\log_{10}\left|\frac{\varphi}{\varphi_0} - 1\right|\right)$ pour $0 \leq \varphi \leq 0{,}33\ \varphi_0$;

— 33 pour $0{,}33\ \varphi_0 < \varphi \leq 0{,}33\varphi_0$;

— $\left(40 + 40\log_{10}\left|\frac{\varphi}{\varphi_0} - 1\right|\right)$ pour $1{,}67\ \varphi_0 < \varphi_0$ après l'intersection avec la courbe C; comme la courbe C.

Courbe C — Opposé algébrique du gain sur l'axe du faisceau principal.

3.14. *Précision de pointage des antennes de satellite.*

3.14.1. L'écart du faisceau de l'antenne par rapport à sa direction de pointage nominale ne doit pas dépasser une valeur de 0,1° dans toutes les directions. En outre, la rotation angulaire d'un faisceau d'emission autour de son axe ne doit pas dépasser une valeur de ± 2°; il ln'est pas nécessaire d'indiquer cette limite pour les faisceaux à section circulaire utilisant la polarisation circulaire.

3.14.2. La zone couverte à la surface de la Terre par le faisceau du satellite subit d'autres déplacements dus aux facteures suivants:

Imperfections du maintien en position du satellite;

Effet plus prononcé des variations dues aus tolérances de pointage mentionnées ci-dessus, dans les zones de couvertures associées è de faibles angles de site;

Augmentation de l'importance de l'erreur sur l'axe de lacet au fur et à mesure que l'ellipse du faisceau devient plus allongée.

3.14.3. Il convient d'evaluer cas par cas l'effet de ces variations éventuelles, car leur influence globale sur la zone couverte dépende du changement de la géométrie du faisceau du satellite et il serait déraissonnable de spécifier pour toutes les situations une valeur unique du déplacement de la zone couverte.

3.14.4. Dans le cas d'une émission un polarisation rectiligne, l'erreur sur l'axe de lacet contribue de mainére significative à intensifier la composante émise en polarisation croisée, ce qui entraîne l'augmentation du brouillage avec les autres porteuses initialement en polarisation coirsée avec émission.

3.15. *Limitation de la puissance de sortie de l'émetteur du satellite.*

La puissance de sortie d'un station spatiale du service de radiodiffusion par satellite ne doit pas dépasser sa valeur nominale de plus de 0,25 dB pendant toute la durée d'utilisation du satellite.

3.16. *Puissance surfacique à la limite de la zone de couverture.*

La valuer de la puissance surfacique à la limite de la zone de couverture, pendant 99 % du mois le plus défavorable est de:

— 103 dB(W/m²) pour la réception individuelle dans les Régions 1 et 3;
— 105 dB(W/m²) pour la réception individuelle dans la Région 2;
— 111 dB(W/m²) pour la réception communautaire dans toutes les Régions.

3.17. *Différence entre la p. i. r. e. dirigée vers la limite de la zone de couverture et la p. i. r. e. sur l'axe du faisceau.*

Pour la planification, on considère que la valuer absolue de la différence entre la p. i. r. e. dirigée vers la limite de la zone de couverture et la p. i. r. e. sur l'axe du faisceau doit, de préférence, être de 3 dB.

Si l'empreinte du faisceau est supérieure à la zone de couverture, cette valeur devient inférieure à 3 dB.

3.18. *Utilisation de la dispersion de l'énergie .*

Pour la planification, on adopte une valuer de la dispersion d'énergie qui réduit de 22 dB la densité spectrale de puissance surfacique mesurée dans une bande de 4 kHz par rapport à cette densité mesurée dans toute la bande; cette réduction correspond à une excursion crête-à-crête de 600 kHz.

ANNEXE 9

Critères de partage entre services

1. *Caractéristiques de protection pour le partage entre services utilisant la bande des 12 GHz.*

1.1. La détermination des critères de partage entre les différents services utilisant la bande des 12 GHz doit être fondée sur les caractéristiques de protection spécifiées dans le tableau ci-dessous.

Service utile (*a*)	Signal utile (*a*)	Service brouilleur (*a*)	Signal brouilleur (*a*)	Caractéristiques de protection (*b*)	
				Valeur acceptable du brouillage par plusieurs niveaux (*c*)	Valeur pour une contribution unique de brouillage
SRS	TV/MF	SRS, SFS, SF, SR	TV/MF	*C/I* = 30 dB (*d*) (*g*)	*C/I* = 35 dB (*d*)
SFS	MRF/MF	SRS	TV/MF	*N* = 500 pW0p (*h*)	*N* = 300 pW0p
SFS	TV/MF	SRS, SFS	TV/MF	*C/I* = 32 dB (*e*)	*C/I* = 37 dB (*e*)
SFS	4 φ-MDP	SRS, SFS	TV/MF	*C/I* = 30 dB	*C/I* = 35 dB
SFS	MRF/MF	SFS	MRF/MF	*N* = 1000 pW0p	*N* = 400 pW0p
SF	MRF/MF	SRS	TV/MF	*N* = 1000 pW0p	—125 db (W/m²/4 kHz (*f*)
SR	TV/BLR	SRS	TV/MF	*C/I* = 50 dB	Sans object

(*a*) SRS = service de radiodiffusion par satellite; SFS = service fixe par satellite; SR = service de radiodiffusion; SF = service fixe; TV = télévision; MF = modulation de fréquence; MRF = multiplexage par répartition en fréquence; 4φ.MDP = modulation par déplacement de phase à quatre états; BLR = bande latérale résiduelle.

(*b*) Ces limites couvrent à la fois la contribution du trajet montant et la contribution du trajet descendant et la contribution du trajet descendant. Elles sont exprimées selon le cas:

En dB lorsqu'il s'agit du rapport porteuse/brouillage;
En pW0p lorsqu'il s'agit du bruit;
En dB(W/m²/4 kHz) lorsqu'il s'agit de la puissance surfacique dans une bande de 4 kHz.

(*c*) Les valeurs exprimées en dB sont celles des rapportes de protection pour l'ensemble des signaux brouilleurs. Les valeurs exprimées en pW0p sont celles du bruit observé dans la voir téléphonique la plus défavorisée résultant de l'ensemble des signaux brouilleurs.

(*d*) Pour les satellites de radiodiffusion situés aux limites de la Région 2 avec la Région 1 ou la Région 3, les rapports *C/I* doivent être augmentés de 1 dB.

(*e*) Voir l'Avis 483 du CCIR.

(*f*) Cette valeur peut être convenablement modifiée pour les régions tropicales, pour tenir compte de l'affaiblissement dû aux précipitations. La discrimination de polarisation peut être également prise en considération.

(*g*) *C/I* = rapporte de la puissance du signal utile à la puissance du signal brouilleur.

(*h*) *N* = puissance de bruit.

1.2. Les valeurs indiquées comme acceptables sont les valeurs nécessaires pour protéger le signal utile. Les valeurs indiquées pour une contribution unique de brouillage sont celles qu'il convient d'utiliser à titre indicatif pour fixer les critéres de partage. Il est nécessaire de calculer le brouillage total dû à l'ensemble des brouilleurs; en effet, en respectant pour chaque source les critères applicables à une contribution unique de brouillage, on ne garantit pas forcément que le brouillage total répondra aux caractéristiques de protection indiquées ci-dessus. Une contribution unique de brouillage est dèfine commer ètant l'ensemble des emissions d'une station qui entrent dans le récepteur du service utile dans le canal à protéger.

1.3. Le rapport porteuse/brouillage (*C/I*) est le rapport de la puissance du signal utile à la puissance du signal brouilleur, à l'entrée du récepteur, au sol, qui subit le brouillage. Pour le service fixe par satellite, la valeur indiquée doit être toujours dépassée, sauf pendant 20 % du mois le plus défavorable; pour le service de radiodiffusion et le service de radiodiffusion par satellite, le pourcentage correspondant est de 1 %.

1.4. Le symbole *N* désigne la puissance de bruit aprés démodulation en un point de niveau relatif 0 dBm0 de la tonalité de mesure dans une voie téléphonique quelconque d'un système téléphonique MRF/MF. La valeur indiquée ne doit pas être dépassé pendant plus de 20 % du mois le plus défavorable.

1.5. Les valeurs spécifiées pour le rapport de protection (c'est-à-dire le rapport de puissance porteuse/brouillage correspondant à une qualité d'image donnée) sont applicables, pour la planfication, aux signaux, de télévision, quelle que soit la norme utilisée.

1.6. Pour les systèmes du service de radiodiffusion par satellite dans lesquels le signal utile est un signal de télévision modulé en fréquence, les rapports de protection sont donnés pour des conditions de réference particulières dont les plus importantes sont:

a) Excursion de fréquence du signal utile (12 MHz crête-à-crête);
b) Qualité du service utile (niveau 4,5) (1);
c) Porteuse dans le même canal ou dans la même voie (pas de décalage des fréquences porteuses).

1.7. Si la conception du système est fondée sur des conditions autres que les conditions *a*) et *b*) ci-dessus, le rapport de protection du signal de télévision modulé en fréquence est donné par la formule:

$$R = 12{,}5 - 20 \log (D_v/12) - Q + 1{,}1\ Q^2 \text{ (dB)}$$

dans laquelle

D_v est l'excurtion de fréquence nominale crête-à-crête (MHz);
Q est le niveau de dégradation pour les brouillages seulement.

1.8. Lorsque les porteuses sont décalées en fréquence, la condition *c*) ne peut s'appliquer; les rapports de protection du canal adjacent doivent être ajustés en fonction du décalage de fréquence comme indiqué dans la figure 1. Par exemple, pour un décalege de 20 MHz, la valeur totale acceptable du rapport de protection contre les brouillages causès à un signal de télévision modulé en fréquence par un autre du même type est de 13 dB; la valeur correspondante pour une contribution unique de brouillage est de 18 dB.

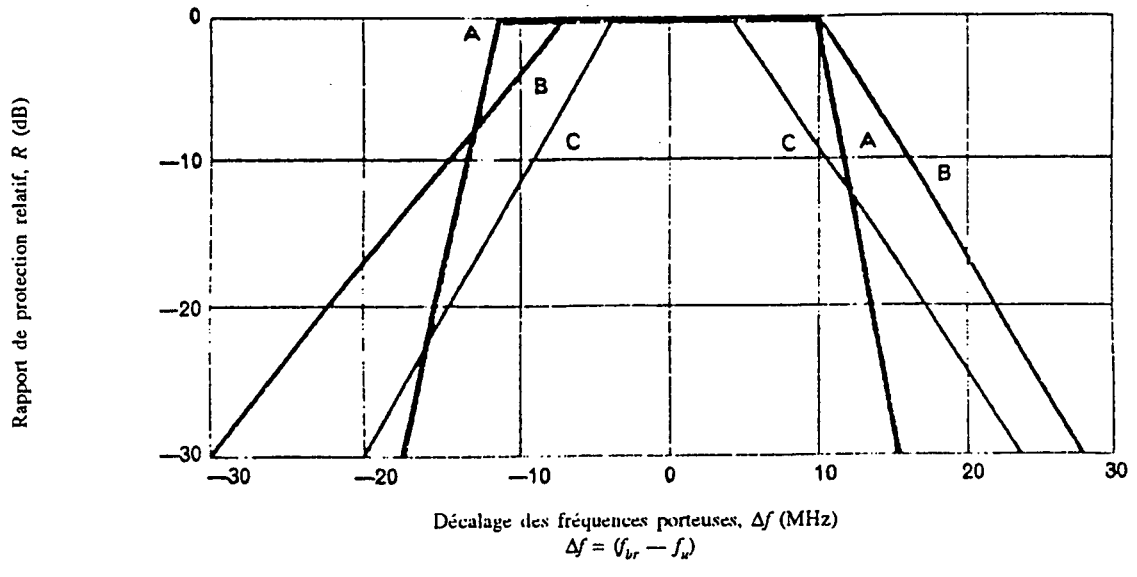


Figure 1 — Rapport de protection dans les conditions de reférence en fonction du décalage en fréquence

Courbe A — Pour un signal utile TV/BLR et un signal brouilleur TV/MF.
Courbe B — Pour un signal utile TV/MF et un signal brouilleur TV/MF.
Courbe C — Pour un signal utile TV/MF et un signal brouilleur TV/BLR.

(1) D'aprés l'échelle d'évaluation à 5 notes, définie dans l'Avis 500 du CCIR.

2. *Diamètre d'antenne de référence pour une station terrienne du service fixe par satellite, à utiliser pour le calcul des brouillages causés par les stations du service de radiodiffusion par satelitte.*

2.1. Pour une antenne de diamètre supérieur à 100 λ (2,5m), dans le service fixe par satellite, le gain des lobes latéraux est donné par la formule: 32 — 25 log θ, dans laquelle θ représent l'angle de visée (Avis 465 du CCIR). Il est de plus indépendant du diamètre de l'antenne.

2.2. Toutefois, en ce qui concerne les stations terriennes d'émission, le niveau de brouillage affectant le trajet montant des autres systèmes à satellites est inversement proportionnel au carré du diamètre de l'antenne. Le brouillage décroît donc lorsque le diamètre de l'antenne croit. Toutefois, dans le service fixe par satellite, la bande 11,7-11,2 GHz étant réservée aux émissions dans le sens espace vers Terre, cette question ne corcerne pas directement le service de radiodiffusion par satellite.

2.3. S'agissant des antennes dont le diamètre dépasse 100 λ, il n'y a donc pas lieu, semble-t-il, de fixer un diamétre minimal pour les antennes des stations terriennes de réception du service fixe par satellite dans la bande partagée 11,7-12,2 GHz. Pour le partage de cette bande lors de la planification, une antenne de 4,5 m avec un rendement de 60 % et un gain de 53 dB dans l'axe du faisceau peut être considerée comme usuelle. Toutefois, il convient de noter que les administrations de la Région 2 étudient la possibilité d'utiliser des antennes ayant des diamètres compris entre 3 m et 10 m.

3. *Utilisation de la dispersion de l'énergie dans le service de radiodiffusion par satellite.*

3.1. La dispersion artificielle de l'énergie contribue à faciliter le partage entre le service de radiodiffusion par satellite et les autres services auxquels la bande est également attribuée.

3.2. Cette dispersion de l'énergie s'obtient en ajoutant, dans la bande de base, un signal triangulaire au signal vidéo; il en résulte une bande de base composite qui sert à son tour à moduler en fréquence la porteuse sur le trajet montant. La fréquence du signal triangulaire est généralement synchronisée avec un sous-multiple de la fréquence de trame du signal de télévision; sa valeur est normalement comprise entre 12,5 Hz et 30 Hz.

3.3. Le tableau ci-après indique la rédution relative de la densité spectrale de puissance surfacique dans une bande de 4 kHz en fonction de l'excursion crête-à-crête due au signal de dispersion de l'energie. Les valeurs indiquées dans ce tableau cont été calculées au moyen de la formule:

$$\text{Réduction relative (en dB) dans une bande de 4 kHz} = 10 \log \frac{\Delta F_{cc} + \delta f_{eff}}{4}$$

ΔF_{cc} = excursion crête-à-crête due au signal de dispersion de l'energie (kHz);
δf_{eff} = excursion efficace due à la dispersion «naturelle» de l'énergie (kHz).

Dans l'établissement du tableau ci-après, on a admis pour δf_{eff} une valeur de 40 kHz, compte tenu de ce que la valeur donnée pour la dispersion «naturelle» dans le tableau 4 du project de Rapport 631 (Rév. 76) du CCIR est de 10 dB.

Réduction de la densité spectrale de puissance surfacique dans une bande de 4 kHz

Excursion crête-à-crête (kHz)	Réduction relative (dB)
0	10
100	15,44
200	17,78
300	19,29
400	20,41
500	21,30
600	22,04
700	22,67
800	23,22
900	23,71
1000	24,15

3.4. La valeur de la dispersion de l'energie dans le service de radiodiffusion par satellite a été déterminée de façon à réduire de 22 dB la densité spectrale de puissance surfacique mesurée dans une bande de 4 kHz par rapport à cette densité mesuré dans toute la bande; cette réduction correspond à une excursion crête-à-crête de 600 kHz.

ANNEXE 10

Restrictions aplicables aux positions sur l'orbite

En appliquant le procédure déscrite à l'article 4 pour apporter des modifications au Plan, les administrations doivent respecter les critères énoncés ci-aprés:

1) Aucun satellite de radiodiffusion desservant une zone de la Région 1 en utilisant une fréquence de la bande 11,7-12,2 GHz, ne doit occuper une position nominale sur l'orbite plus occidentale que 37° Ouest ou plus orientale que 146° Est;
2) Toute nouvelle position nominale sur l'orbite introduite dans le Plan dans la partie de l'arc d'orbite comprise entre 37° Ouest et 10° Est, et associée à une nouvelle assignation, ou résultant d'une modification apportée à une assigntion figurant dans le Plan, doit coïncider avec une position nominale sur l'orbitale indiquée dans le Plan à la date d'entrée en vigueur des Actes finals (1), ou se trouver au plus à 1° à l'est de ladite position sur l'orbite.

Dans le cas d'une modification apportée à une assignation figurant dans le Plan, l'utilisation d'une nouvelle position nominale sur l'orbite qui ne coinciderait avec aucune des positions nominales sur l'orbite indiquées dans le Plan à la date d'entrée en vigueur des Actes finals (1) s'accompagnera d'une réduction de p. i. r. e. de 8 dB par rapport à la valeur de la p. i. r. e. inscrite dans le Plan en regard de l'assignation avant la modification de celle-ci.

ANNEXE 11

Méthode de calcul de la puissance surfacique produite sur les territoires de la Région 2 par des stations spatiales du service de radiodiffusion des Régions 1 et 3

Méthode de calcul

1. On peut calcules la puissance surfacique produite par la station spatiale, dans des conditions de propagation en espace libre, en un point donné P situé à la surface de la Terre au moyen des données suivantes:

1.1. Positions nominale sur l'orbite;

1.2. P. i. r. e. (dbW);

1.3. Caractéristiques du faisceau d'antenne à demi-puissance (c'est-à-dire le grande axe et le petit axe ainsi que l'orientation de l'ellipse correspondante);

1.4. Coordonnées géographiques du point de visée (B):

1.5. Coordonnées géographiques du point P.

2. Les valeurs concernant les points 1.1 à 1.4 ci-dessus sont indiquées dans le Plan. Quant au point P, il peut être choisi d'apress l'objectif des calculs. Pour les calculs ci-aprés, les coordonnées géographiques du point P sont 35° Ouest et 8° Sud.

3. Pour obtenir la valuer de la puissance surfacique [(dB(W/m²)] produite au point P, on calcule:

La distance d(m), entre le satellite et le point P;

Le facteur d'étalement A pour la distance d.

$$A = 10 \log \frac{1}{4\pi d^2}$$

L'angle φ, vu depuis le satellite, entre les points B et P;

L'ouverture φ_o, du faisceau à demi-puissance dans la direction de P (dans le cas d'un faisceau circulaire, φ_o est indépendant de la direction);

Le gain d'antenne relatif δG (dB), pour les valeurs calculées de δ et δ_o en utilisant le diagramme de référence copolaire de l'antenne d'émission du satellite.

La puissance surfacique p_s produite au point P, est donnée par l'expression (2):

$$p_s\ [\mathrm{dB(W/m^2)}] = \text{p. i. r. e.} + \delta G + A$$

Résultats

Les puissances surfaciques produites au point de coordonnés 35° Ouest et 8° Sud par les stations de radiodiffusion des Régions 1 et 3, auxquelles ont été assignés dans le Plan les positions nominales sur l'orbite comprises entre 37° Ouest et 5° Est et les canaux 1 à 25, figurent dans le tableau suivant.

---

(1)Actes finals de la Conférence adminsitrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) entrés e vigeur le 1er janvier 1979.

(2) Dans cette expression, la p. i. r. e. se rapport au point de visée. Le gain d'antenne δG est pris par rapport au gain d'antenne dans la direction du point de visée, done δG est négatif.

Densité surfacique de puissance (DSP) produite dans la Région 2, au point: longitude = 35° Ouest, latitude = 8° Sud

Power flux density (PFD) produced in Region 2 at a point having: longitude = 35° W, latitude = 8° S

Densidad de flujo de potencia (DFP) producida en la Región 2 en el punto correspondiente alas siguientes coordenadas: longitud = 35° Oeste, latitud = 8.° Sur

Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 37,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 31,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 25,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 19,0		
N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IRFB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)
AND 341	4, 8, 12, 16 et 20	— 146,35	AZR 134	3, 7, 11, 15 et 19	— 140,72	ALG 251	2, 6, 10, 14 et 18	— 135,17	AUT 016	4, 8, 12, 16 et 20	— 143,67
CVA 085	23	— 141,92	CNR 130	23	— 140,93	ALG 252	4, 8, 12, 16 et 20	— 130,26	BEL 018	21 et 25	— 144,97
GMB 302	3, 7, 11, 15 et 19	— 137,17	CPV 301	4, 8, 12, 16 et 20	— 137,14	GHA 108	23	— 134,45	BEN 233	3, 7, 11, 15 et 19	— 140,20
GUI 192	1, 5, 9, 13 et 17	— 132,98	CTI 237	22	— 132,20	LBY 280	1, 5, 9, 13 et 17	— 138,64	D 087	2, 6, 10, 14 et 18	— 140,17
LIE 253	3, 7, 11, 15 et 19	— 146,00	E 129	23	— 137,48	LBY 321	3, 7, 11, 15 et 19	— 139,00	F 093	1, 5, 9, 13 et 17	— 138,67
MCO 116	21 et 25	— 145,75	G 027	4, 8, 12, 16 et 20	— 140,02	MRC 209	21 et 25	— 128,74	GNE 303	23	— 141,30
MLI 327	2, 6, 10, 14 et 18	— 132,79	GNP 304	2, 6, 10, 14 et 18	— 137,07	NGR 115	24	— 127,77	HOL 213	23	— 144,77
MLI 328	4, 8, 12, 16 et 20	— 131,06	HVO 107	21 et 25	— 131,90	TGO 226	2, 6, 10, 14 et 18	— 141,45	I 082	24	— 138,57
MTN 223	22	— 129,20	IRL 211	2, 6, 10, 14 et 18	— 144,38	TUN 150	22	— 141,14	LUX 114	3, 7, 11, 15 et 19	— 145,56
MTN 288	24	— 135,68	ISL 049	21 et 25	— 142,72				NIG 119	22	— 129,39
SEN 222	21 et 25	— 133,19	LBR 244	3, 7, 11 et 15	— 137,10				NMB 025	25	— 130,13
SMR 311	1, 5, 9, 13 et 17	— 145,92	POR 133	3, 7, 11, 15 et 19	— 142,35				SUI 140	22	— 143,10
			SRL 259	23	— 136,72				ZAI 322	4, 8, 12, 16 et 20	— 130,94
									ZAI 323	2, 6, 10, 14 et 18	— 130,05

Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 13,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 7,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 1,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal + 5,0		
N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IRFB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)
AGL 295	23	— 129,57	ALB 296	22	— 146,49	BOT 297	2, 6, 10, 14 et 18	— 134,49	CYP 086	21 et 25	— 147,47
CAF 258	24	— 130,81	EGY 026	4, 8, 12, 16 et 20	— 136,59	BUL 020	4, 8, 12, 16 et 20	— 144,97	DNK 089	12, 16 et 20	— 143,42
GME 300	1, 5, 9, 13 et 17	— 132,87	SDN 231	22	— 133,37	DDR 216	21 e 25	— 145,17	DNK 090	24	— 135,20
COG 235	22	— 134,83	SDN 230	23	— 136,84	HNG 106	22	— 145,07	FNL 103	2, 6, 10	— 138,17
GAB 260	3, 7, 11, 15 et 19	— 136,65	SDN 232	24	— 134,23	IFB 135	22	— 136,51	FNL 104	22	— 135,20
ISR 110	25	— 145,02	YUG 148	21 et 25	— 140,79	MOZ 307	4, 8, 12, 16 et 20	— 135,37	GRC 105	3, 7, 11, 15 et 20	— 140,87

Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 13,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 7,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal — 1,0			Position nominale sur l'orbite Nominal orbital position Posición orbital nominal + 5,0		
N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IFRB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)	N° IFRB IFRB No. N.° de la IRFB	Canaux N° Channel Nos. N.° de los canales	DSP PFD DFP dB (W/m²)
MLT 147	4, 8, 12, et 16	— 148,55	YUG 149	23	— 140,79	MWI 308	24	— 142,67	IFB 021	21 et 25	— 132,06
STP 241	4, 8, 12, 16 et 20	— 144,70				POL 132	1, 5, 9, 13 et 17	— 142,67	ISL 050	23	— 137,87
TCD 143	2, 6, 10, 14 et 18	— 132,89				ROU 136	2, 6, 10, 14 et 18	— 143,17	LSO 305	24	— 145,06
						SWZ 313	1, 5, 9, 13 et 17	— 147,30	NOR 120	14 et 18	— 139,42
						TCH 144	3, 7, 11, 15 et 19	— 143,27	S 138	4 et 8	— 138,94
						ZMB 314	3, 7, 11, 15 et 19	— 134,29	TUR 145	1, 5, 9, 13 et 17	— 138,47

NOC **AP15 Mar 2**

APPENDICE 31

Tableau des fréquences à utiliser das les bandes atribuées en exclusivité au service mobile maritime entre 4 MHz et 27,5 MHz

Dans le tableau, selon de cas, les fréquences à assigner dans une bande déterminée pour chacun des usages considérés:

Sont désignées par la fréquence la plus basse et par la fréquence la plus haute à assigner. Ces deux fréquences sont indiqueés en caractéres gras;

Sont régulièrement espacèes entre elles. Nombre des fréquences à assigner el la valeur de leur espacement, exprimé en kHz, sont précisés para une mention en italique.

Tableau des fréquences à utiliser dans les bandes attribuées

(kHz)

Bande (MHz)	Limite	Fréquences à assigner aux stations de navire pour la téléphonie, exploitation duplex (*a*)	Limite	Fréquences à assigner aux stations de navire et aux stations côtières pour la téléphonie, exploitation simplex (*a*)	Limite	Fréquences (non appariées) à assigner aux stations de navire pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds (*b*)	Limite	Fréquences à assigner aux stations de navire, systèmes de télégraphie à large bande, de fac-similé et systèmes spéciaux de transmission
4	4 063	4 064,4 - - - 4 141,9 *26 fréquences espacées de 3,1*	4 143,6	4 145 *1 fréquence*	4 146,6		4 146,6	4 148,6 - - - 4 160,6 *4 fréquences espacées de 4*
6	6 200	6 201,4 - - - 6 216,9 *6 fréquences espacées de 3,1*	6 218,6	6 220 et 6 223 *2 fréquences espacées de 3*	6 224,6		6 224,6	6 22,6 - - - 6 242,6 *5 fréquences espacées de 4*
8	8 195	8 196,4 - - - 8 289,4 *31 fréquences espacées de 3,1*	8 291,1	8 292,5 et 8 295,6 *2 fréquences espacées de 3,1*	8 297,3	8 297,6 - - - 8 299,6 *5 fréquences espacées de 0,5*	8 300	8 302 - - - 8 326 *7 fréquences espacées de 4*
12	12 330	12 331,4 - - - 12 427,5 *32 fréquences espacées de 3,1*	12 429,2	12 430,6 - - - 12 436,8 *3 fréquences espacées de 3,1*	12 439,5		12 439,5	12 441,5 - - - 12 477,5 *10 fréquences espacées de 4*
16	16 460	16 461,4 - - - 16 585,4 *41 fréquences espacées de 3,1*	16 587,1	16 588,5 - - - 16 594,7 *3 fréquences espacées de 3,1*	16 596,4		16 596,4	16 598,4 - - - 16 634,4 *10 fréquences espacées de 4*
22	22 000	22 001,4 - - - 22 122,3 *40 fréquences espacées de 3,1*	22 124	22 125,4 - - - 22 137,8 *5 fréquences espacées de 3,1*	22 139,5		22 139,5	22 142 - - - 22 158 *5 fréquences espacées de 4*

Note. — Pour les notes (*a*) à (*h*) voir page 4610-(1282).

en exclusivité au service mobile maritime entre 4 MHz et 23 MHz

Limite	Fréquences à assigner aux stations de navire pour la transmission de données océanographiques (*c*)	Limite	Fréquences à assigner aux stations de navire, systèmes télégraphie à large bande, de fac-similé et systèmes spéciaux de transmission	Limite	Fréquences (appariées) à assigner aux stations de navire pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données à des rapidités de modulation ne dépassant pas 100 bauds (*d*)	Limite	Fréquences (non appariées) à assigner aux stations de navire pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidités de modulation ne dépassant pas 100 bauds (*b*)	Limite
4 162,5	4 162,9 - - - 4 1651,6 *10 fréquences espacées de 0,3*	4 166	4 168 *1 fréquence*	4 170	4 170,5 - - - 4 177 *14 fréquences espacées de 0,5*	4 177,25	4 177,5 - - - 4 179,5 *5 fréquences espacées de 0,5*	4 179,75
6 244,5	6 244,9 - - - 6 247,6 *10 fréquences espacées de 0,3*	6 248	6 250 et 6 254 *2 fréquences espacées de 4*	6 256	6 256,5 - - - 6 267,5 *23 fréquences espacées de 0,5*	6 267,75	6 268 - - - 6 269,5 *4 fréquences espacées de 0,5*	6 269,75
8 328	8 328,4 - - - 8 331,1 *10 fréquences espacées de 0,3*	8 331,5	8 333,5 - - - 8 341,5 *3 fréquences espacées de 4*	8 343,5	8 344 - - - 8 357 *5 fréquences espacées de 0,5*	8 357,25	8 357,5 *1 fréquence*	8 357,75
12 479,5	12 479,9 - - - 12 482,6 *10 fréquences espacées de 0,3*	12 483	12 4850 et 12 489 *2 fréquences espacées de 4*	12 491	12 491,5 - - - 12 519,5 *57 fréquences espacées de 0,5*	12 519,75	12 520 - - - 12 526,5 *14 fréquences espacées de 0,5*	12 526,75
16 636,5	16 636,9 - - - 16 639,6 *10 fréquences espacées de 0,3*	16 640	16 642 - - - 16 658 *5 fréquences espacées de 4*	16 660	16 660,5 - - - 16 694,5 *69 fréquences espacées de 0,5*	16 694,75	16 695 - - - 16 705,5 *22 fréquences espacées de 0,5*	16 705,8
22 160,5	22 160,9 - - - 22 163,6 *10 fréquences espacées de 0,3*	22 164	22 166 - - - 22 190 *7 fréquences espacées de 4*	22 192	22 192,5 - - - 22 225,5 *67 fréquences espacées de 0,5*	22 225,75	22 226 e 22 226,5 *2 fréquences espacées de 0,5*	22 227

Bande (MHz)	Limite	Fréquences de travail à assigner aux stations de navire pour la télétraphie Morse de classe A1A ou A1B (*e*)	Limite	Fréquences d'appel à assigner aux stations de navire pour la télégraphie Morse de classe A1A ou A1B (*g*) (*h*)	Limite	Fréquences à assigner aux stations de navire pour l'appel sélectif numérique	Limite	Fréquences de travail à assigner aux stations de navire pour la télégraphie Morse de classe A1A ou A1B (*e*) (*f*)
4	4 179,75		4 179,75		4 187,2	4 187,6 *1 fréquence*	4 188	4 188,5 - - - 4 219 *62 fréquences espacées de 0,5*
6	6 269,75		6 269,75		6 280,8	6 281,4 *1 fréquence*	6 282	6 282,75 - - - 6 324,75 *57 fréquences espacées de 0,75*
8	8 357,75	8 358,5 - - - 8 359,5 *3 fréquences espacées de 0,5*	8 359,75		8 374,4	8 375,2 *1 fréquence*	8 376	8 377 - - - 8 435 *117 fréquences espacées de 0,5*
12	12 526,75	12 528 - - - 12 538,5 *22 fréquences espacées de 0,5*	12 539,6		12 561,6	12 562,3 et 12 562,8 *2 fréquences espacées de 0,5*	12 564	12 565,5 - - - 12 651 *172 fréquences espacées de 0,5*
16	16 705,8	16 707 - - - 16 719 *25 fréquences espacées de 0,5*	16 719,8		16 748,8	16 749,9 et 16 750,4 *2 fréquences espacées de 0,5*	16 752	16 754 - - - 16 858 *209 fréquences espacées de 0,5*
22	22 227		22 227		22 247	22 248 et 22 248,5 *2 fréquences espacées de 0,5*	22 250	22 250,5 - - - 22 309 *118 fréquences espacées de 0,5*

Note. — Pour les notes (*a*) à (*h*) voir page 4610-(1282).

Limite	Fréquences à assigner aux stations côtières pour la télégraphie Morse de classe A1A ou A1B, la télégraphie à large bande, le fac-similé, les systèmes spéciaux de transmission, la transmission de données et la télégraphie à impression directe	Limite	Fréquences (appariées) à assigner aux stations côtières pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données à des rapidités de modulation ne dépassant pas 100 bauds (*d*)	Limite	Fréquences à assigner aux stations côtières pour l'appel sélectif numérique	Limite	Fréquences à assigner aux stations côtières pour la téléphonie, exploitation duplex (*a*)	Limite
4 219,4		4 349,4	4 350 - - - 4 356,5 *14 fréquences espacées de 0,5*	4 356,75	4 357 *1 fréquence*	4 357,4	4 358,8 - - - 4 436,3 *26 fréquences espacées de 3,1*	4 438
6 325,4		6 493,9	6 494,5 - - - 6 505,5 *23 fréquences espacées de 0,5*	6 505,75	6 506 *1 fréquence*	6 506,4	6 507,8 - - - 6 523,3 *6 fréquences espacées de 3,1*	6 525
8 435,4		8 704,4	8 705 - - - 8 718 *27 fréquences espacées de 0,5*	8 718,25	8 718,5 *1 fréquence*	8 718,9	8 720,3 - - - 8 813,3 *31 fréquences espacées de 3,1*	8 815
12 652,3		13 070,8	13 071,5 - - - 13 099,5 *57 fréquences espacées de 0,5*	13 099,75	13 100 et 13 100,5 *2 fréquences espacées de 0,5*	13 100,8	13 102,2 - - - 13 198,3 *32 fréquences espacées de 3,1*	13 200
16 859,4		17 196,9	17 197,5 - - - 17 231,5 *69 fréquences espacées de 0,5*	17 231,75	17 232 et 17 232,5 *2 fréquences espacées de 0,5*	17 232,9	17 234,3 - - - 17 358,3 *41 fréquences espacées de 3,1*	17 360
22 310,5		22 561	22 561,5 - - - 22 594,5 *67 fréquences espacées de 0,5*	22 594,75	22 595 et 22 595,5 *2 fréquences espacées de 0,5*	22 596	22 597,4 - - - 22 718,3 *40 fréquences espacées de 3,1*	22 720

AP 31-7

Tableau des fréquences à assigner aux stations de navire dans la bande des 25 MHz

(kHz)

Limite	Fréquences d'appel à assigner aux stations de navire pour la télégraphie Morse de classe A1A ou A1B (*g*)	Limite	Fréquences (non appariées) à assignet aux stations de navire pour les systémes à bande étroite de télégraphie à impression directe et de transmission de données, à des rapidites de modulation ne depassant pas 100 bauds (*b*)	Limite	Fréquences de travail à assigner aux stations de navire pour la télégraphie Morse de classe A1A ou A1B (*e*)	Limite
25 070	—	25 076	25 076,3 ··· 25 089,8 *28 fréquences espacées de 0,5*	25 090,1	25 076,3 ··· 25 089,8 *35 fréquences espacées de 0,5*	25 110

(*a*) Voir l'apendice 16.
(*b*) Voir l'apendice 33.
(*c*) Ces bandes peuvent, de plus, être utilisées par les stations de bouée pout la transmition de données océanographiques et par les stations qui interrogent ces bouées, conformément aux disposition de la Resolution 314.
(*d*) Voir l'appendice 32.
(*e*) Dans les bandes de fréquences à utiliser pur les stations de navire pour la télégraphie Morse de classe A1A avec une rapidité de modulation ne dépassant pas 40 bauds, les administrations peuvent assigner des fréquences suplementaires intercalées entre les fréquences extrêmes á assigner. Toutes les fréquences ainsi assignées doivent être des multiples de 100 Hz. Les administrations doivent assurer une répartition uniforme de ces assignations dans les bandes et éviter, dans la mesure du possible, d'assigner les deux fréquences se trouvant à ± 100 Hz de chacune des fréquences en relation harmonique indiquées à la première ligne de chaque série dans l'appendice 35.
(*f*) Voir l'appendice 35.
(*g*) Voir l'appendice 34.
(*h*) Pour les conditions d'utilisation de fréquence 8364 kHz, voir le numéro 2988).

APPENDICE 32

NOC AP15A

Disposition des vois à utiliser pour les systèmes à bande étroit de télégraphie à impression directe et de transmission de données dans les bandes du service mobile maritime comprises entre 4000 kH3 et 23 000 kHz (fréquences appariées)

(Voir l'article 60 et la Résolution 300)

A chaque station côtière utilisant des fréquences appariées sont assignées une ou plusieurs paires de fréquences des séries, suivantes. Chaque paire comprend une fréquence d'émission et une fréquence de réception.

Table des fréquences des stations pour l'exploitation à deux fréquences

(kHz)

Série numéro	Bande des 4 MHz		Bande des 6 MHz		Bande des 8 MHz	
	Emission	Réception	Emission	Réception	Emission	Réception
1	4 350	4 170,5	6 494,5	6 256,5	8 705	8 344
2	4 350,5	4 171	6 495	6 257	8 705,5	8 344,5
3	4 351	4 171,5	6 495,5	6 275,5	8 706	8 345
4	4 351,5	4 172	6 496	6 258	8 706,5	8 345,5
5	4 352	4 172,5	6 496,5	6 258,5	8 707	8 346
6	4 352,5	4 173	6 497	6 259	8 707,5	8 346,5
7	4 353	4 173,5	6 497,5	6 259,5	8 708	8 347
8	4 353,5	4 174	6 498	6 260	8 708,5	8 347,5
9	4 354	4 174,5	6 498,5	6 260,5	8 709	8 348
10	4 354,5	4 175	6 499	6 261	8 709,5	8 348,5
11	4 355	4 175,5	6 499,5	6 261,5	8 710	8 349
12	4 355,5	4 176	6 500	6 262	8 710,5	8 349,5
13	4 356	4 176,5	6 500,5	6 262,5	8 711	8 350
14	4 356,5	4 177	6 501	6 263	8 711,5	8 350,5
15	–	–	6 501,5	6 263,5	8 712	8 351
16	–	–	6 502	6 264	8 712,5	8 351,5
17	–	–	6 502,5	6 264,5	8 713	8 352
18	–	–	6 503	6 265	8 713,5	8 352,5
19	–	–	6 503,5	6 265,5	8 714	8 353
20	–	–	6 504	6 266	8 714,5	8 353,5
21	–	–	6 504,5	6 266,5	8 715	8 354
22	–	–	6 505	6 267	8 715,5	8 354,5
23	–	–	6 505,5	6 267,5	8 716	8 355
24	–	–	–	–	8 716,5	8 355,5
25	–	–	–	–	8 717	8 356
26	–	–	–	–	8 717,5	8 356,5
27	–	–	–	–	8 718	8 357

Série numéro	Bande des 12 MHz		Bande des 16 MHz		Bande des 22 MHz	
	Emission	Réception	Emission	Réception	Emission	Réception
1	13 071,5	12 491,5	17 197,5	16 660,5	22 561,5	22 192,5
2	13 072	12 492	17 198	16 661	22 562	22 193
3	13 072,5	12 492,5	17 198,5	16 661,5	22 562,5	22 193,5
4	13 073	12 493	17 199	16 662	22 563	22 194
5	13 073,5	12 493,5	17 199,5	16 662,5	22 563,5	22 194,5
6	13 074	12 494	17 200	16 663	22 564	22 195
7	13 074,5	12 494,5	17 200,5	16 663,5	22 564,5	22 195,5
8	13 075	12 495	17 201	16 664	22 565	22 196
9	13 075,5	12 495,5	17 201,5	16 664,5	22 565,5	22 196,5
10	13 076	12 496	17 202	16 665	22 566	22 197
11	13 076,5	12 496,5	17 202,5	16 665,5	22 566,5	22 197,5
12	13 077	12 497	17 203	16 666	22 567	22 198
13	13 077,5	12 497,5	17 203,5	16 666,5	22 567,5	22 198,5
14	13 078	12 498	17 204	16 667	22 568	22 199
15	13 078,5	12 498,5	17 204,5	16 667,5	22 568,5	22 199,5
16	13 079	12 499	17 205	16 668	22 569	22 200
17	13 079,5	12 499,5	17 205,5	16 668,5	22 569,5	22 200,5
18	13 080	12 500	17 206	16 669	22 570	22 201
19	13 080,5	12 500,5	17 206,5	16 669,5	22 570,5	22 201,5
20	13 081	12 501	17 207	16 670	22 571	22 202
21	13 081,5	12 501,5	17 207,5	16 670,5	22 571,5	22 202,5
22	13 082	12 502	17 208	16 671	22 572	22 203
23	13 082,5	12 502,5	17 208,5	16 671,5	22 572,5	22 203,5
24	13 083	12 503	17 209	16 672	22 573	22 204
25	13 083,5	12 503,5	17 209,5	16 672,5	22 573,5	22 204,5
26	13 084	12 504	17 210	16 673	22 574	22 205
27	13 084,5	12 504,5	17 210,5	16 673,5	22 574,5	22 205,5
28	13 085	12 505	17 211	16 674	22 575	22 206
29	13 085,5	12 505,5	17 211,5	16 674,5	22 575,6	22 206,5
30	13 086	12 506	17 212	16 675	22 576	22 207
31	13 086,5	12 506,5	17 212,5	16 675,5	22 576,5	22 207,5
32	13 087	12 507	17 213	16 676	22 577	22 208
33	13 087,5	12 507,5	17 213,5	16 676,5	22 577,5	22 208,5
34	13 088	12 508	17 214	16 677	22 578	22 209
35	13 088,5	12 508,5	17 214,5	16 677,5	22 578,5	22 209,5
36	13 089	12 509	17 215	16 678	22 579	22 210
37	13 089,5	12 509,5	17 215,5	16 678,5	22 579,5	22 210,5
38	13 090	12 510	17 216	16 679	22 580	22 211
39	13 090,5	12 510,5	17 216,5	16 679,5	22 580,5	22 211,5
40	13 091	12 511	17 217	16 680	22 581	22 212
41	13 091,5	12 511,5	17 217,5	16 680,5	22 581,5	22 212,5
42	13 092	12 512	17 218	16 681	22 582	22 213
43	13 092,5	12 512,5	17 218,5	16 681,5	22 582,5	22 213,5
44	13 093	12 513	17 219	16 682	22 583	22 214
45	13 093,5	12 513,5	17 219,5	16 682,5	22 583,5	22 214,5
46	13 094	12 514	17 220	16 683	22 584	22 215
47	13 094,5	12 514,5	17 220,5	16 683,5	22 584,5	22 215,5
48	13 095	12 515	17 221	16 684	22 585	22 216
49	13 095,5	12 515,5	17 221,5	16 684,5	22 585,5	22 216,5
50	13 096	12 516	17 222	16 685	22 586	22 217
51	13 096,5	12 516,5	17 222,5	16 685,5	22 586,5	22 217,5
52	13 097	12 517	17 223	16 686	22 587	22 218
53	13 097,5	12 517,5	17 223,5	16 686,5	22 587,5	22 218,5
54	13 098	12 518	17 224	16 687	22 588	22 219
55	13 098,5	12 518,5	17 224,5	16 687,5	22 588,5	22 219,5
56	13 099	12 519	17 225	16 688	22 589	22 220
57	13 099,5	12 519,5	17 225,5	16 688,5	22 589,5	22 220,5
58	–	–	17 226	16 689	22 590	22 221
59	–	–	17 226,5	16 689,5	22 590,5	22 221,5
60	–	–	17 227	16 690	22 591	22 222

Série numéro	Bande des 12 MHz		Bande des 16 MHz		Bande des 22 MHz	
	Emission	Réception	Emission	Reception	Emission	Reception
61	–	–	17 227,5	16 690,5	22 591,5	22 222,5
62	–	–	17 228	16 691	22 592	22 223
63	–	–	17 228,5	16 691,5	22 592,5	22 223,5
64	–	–	17 229	16 692	22 593	22 224
65	–	–	17 229,5	16 692,5	22 593,5	22 224,5
66	–	–	17 230	16 693	22 594	22 225
67	–	–	17 230,5	16 693,5	22 594,5	22 225,5
68	–	–	17 231	16 694	–	–
69	–	–	17 231,5	16 694,5	–	–

NOC **AP15B** APPENDICE 33

Disposition des voies utiliser pour systèmes à bande étroite de télégraphie à impression direct et le transmission de données dans les bandes du service mobile maritime comprises entre 4000 kH_z et 27 500 kHz (fréquences non appariées)

(Voir l'article 60 et la Résolution **301**)

Une ou plusieurs fréquences sont assignées à chaque station de navire comme fréquences d'émission:

Table des fréquences d'émission des stations de navire

(kHz)

Série numéro	Bande de fréquences						
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25 MHz
1	4 177,5	6 268	8 297,6	12 520	16 695	22 226	25 076,3
2	4 178	6 268,5	8 298,1	12 520,5	16 695,5	22 226,5	25 076,8
3	4 178,5	6 269	8 298,6	12 521	16 696	–	25 077,3
4	4 179	6 269,5	8 299,1	12 521,5	16 696,5	–	25 077,8
5	4 179,5	–	8 299,6	12 522	16 697	–	25 078,3
6	–	–	8 357,5	12 522,5	16 697,5	–	25 078,8
7	–	–	–	12 523	16 698	–	25 079,3
8	–	–	–	12 523,5	16 698,5	–	25 079,8
9	–	–	–	12 524	16 699	–	25 080,3
10	–	–	–	12 524,5	16 699,5	–	25 080,8
11	–	–	–	12 525	16 700	–	25 081,3
12	–	–	–	12 525,5	16 700,5	–	25 081,8
13	–	–	–	12 526	16 701	–	25 082,3
14	–	–	–	12 526,5	16 701,5	–	25 082,8
15	–	–	–	–	16 702	–	25 083,3
16	–	–	–	–	16 702,5	–	25 083,8
17	–	–	–	–	16 703	–	25 084,3
18	–	–	–	–	16 703,5	–	25 084,8
19	–	–	–	–	16 704	–	25 085,3
20	–	–	–	–	16 704,5	–	25 085,8
21	–	–	–	–	16 705	–	25 086,3
22	–	–	–	–	16 705,5	–	25 086,8
23	–	–	–	–	–	–	25 087,3
24	–	–	–	–	–	–	25 087,8
25	–	–	–	–	–	–	25 088,3
26	–	–	–	–	–	–	25 088,8
27	–	–	–	–	–	–	25 089,3
28	–	–	–	–	–	–	25 089,8

APPENDICE 34

Table des fréquences d'appel à assigner aux stations de navire pour la télégraphie Morse de classe A1A, à des rapidités de modulation ne dépassant pas 40 bauds

(Voir l'article 60 et la Résolution n.° 312)

(kHz)

Groupe	Séries de voies	Bande des 4 MHz Largeur de voie 0,4 (a)	Bande des 6 MHz Largeur de voie 0,6 (a)	Bande des 8 MHz Largeur de voie 0,8 (a)	Bande des 12 MHz Largeur de voie 1,2 (a)	Bande des 16 MHz Largeur de voie 1,6 (a)	Séries de voies (22 MHz)	Bande des 22 MHz Largeur de voie 2,0 (b)	Bande des 25 MHz Largeur de voie 2,0 (b)
I	1	4 180 -4 180,4	6 270 -6 270,6	8 360 -8 360,8	12 540 -12 541,2	16 720 -16 721,6			
	2	4 180,4-4 180,8	6 270,6-6 271,2	8 360,8-8 361,6	12 541,2-12 542,4	16 721,6-16 723,2	1	22 227-22 229	Voie A 25 070-25 072 Groupes I et II
	3	4 180,8-4 181,2	6 271,2-6 271,8	8 361,6-8 362,4	12 542,4-12 543,6	16 723,2-16 724,8	2	22 229-22 231	
	4	4 181,2-4 181,6	6 271,8-6 272,4	8 362,4-8 363,2	12 543,6-12 544,8	16 724,8-16 726,4			
Voie commune	5	4 181,6-4 182	6 272,4-6 273	8 363,2-8 364	12 544,8-12 546	16 726,4-16 728	3	22 231-22 233	Voie commune C 25 072-25 074
Voie commune	6	4 182 -4 182,4	6 273 -6 273,6	8 364 -8 364,8	12 546 -12 547,2	16 728 -16 729,6	4	22 233-22 235	
II	7	4 182,4-4 182,8	6 273,6-6 274,2	8 364,8-8 365,6	12 547,2-12 548,4	16 729,6-16 731,2			
	8	4 182,8-4 183,2	6 274,2-6 274,8	8 365,6-8 366,4	12 548,4-12 549,6	16 731,2-16 732,8	5	22 235-22 237	Voie A 25 070-25 072 Groupes I et II
	9	4 183,2-4 183,6	6 274,8-6 275,4	8 366,4-8 367,2	12 549,6-12 550,8	16 732,8-16 734,4	6	22 237-22 239	
	10	4 183,6-4 184	6 275,4-6 276	8 367,2-8 368	12 550,8-12 552	16 734,4-16 736			
III	11	4 184 -4 184,4	6 276 -6 276,6	8 368 -8 368,8	12 552 -12 553,2	16 736 -16 737,6			
	12	4 184,4-4 184,8	6 276,6-6 277,2	8 368,8-8 369,6	12 553,2-12 554,4	16 737,6-16 739,2	7	22 239-22 241	
	13	4 184,8-4 185,2	6 277,2-6 277,8	8 369,6-8 370,4	12 554,4-12 555,6	16 739,2-16 740,8	8	22 241-22 243	
	14	4 185,2-4 185,6	6 277,8-6 278,4	8 370,4-8 371,2	12 555,6-12 556,8	16 740,8-16 742,4			Voie B 25 074-25 076 Groupes III et IV
IV	15	4 185,6-4 186	6 278,4-6 279	8 371,2-8 372	12 556,8-12 558	16 742,4-16 744			
	16	4 186 -4 186,4	6 279 -6 279,6	8 372 -8 372,8	12 558 -12 559,2	16 744 -16 745,6	9	22 243-22 245	
	17	4 186,4-4 186,8	6 279,6-6 280,2	8 372,8-8 373,6	12 559,2-12 560,4	16 745,6-16 747,2	10	22 245-22 247	
	18	4 186,8-4 187,2	6 280,2-6 280,8	8 373,6-8 374,4	12 560,4-12 561,6	16 747,2-16 748,8			

(a) Il convient que les administrations assignent la fréquence centrale de chaque voie du groupe approprié et ou de vois communes aux stations de navire que ne sont équipées que d'oscillateurs à commande par quartz et qui utilisent la relation harmonique pour l'appel en télégraphie Morse de classe A1A. Toutefois, elles peuvent subdiviser les voies du groupe approprié et les voies communes en fréquences d'appel déterminées, en commençant à 100 Hz de l'extrémité inférieure de la voie et en allant jusqu'à 100 Hz de son extrémité supérieure (voir l'exemple ci-dessous), et assigner ces fréquences à des navires équipés d'emetteurs à synthétiseurs de fréquence. Les administrations doivent éviter, dans la mesure du possible, d'assigner les deux fréquences se trouvant à ± 100 Hz de chacune des fréquences centrales en relation harmonique du present appendice.

Exemples de subdivision des voies (fréquences centrales en italique):

4/1/a	4 180,1	6/1/a	6 270,1	8/1/a	8 360,1	12/1/a	12 540,1	16/1/a	16 720,1
4/1/b	*4 180,2*	6/1/b	6 270,2	8/1/b	8 360,2	12/1/b	12 540,2	16/1/b	16 720,2
4/1/c	4 180,3	6/1/c	*6 270,3*	8/1/c	8 360,3	12/1/c	12 540,3	16/1/c	16 720,3
		6/1/d	6 270,4	8/1/d	*8 360,4*	12/1/d	12 540,4	16/1/d	16 720,4
		6/1/e	6 270,5	8/1/e	8 360,5	12 /1/e	12 540,5	16/1/e	16 720,5
				8/1/f	8 360,6	12/1/f	*12 540,6*	16/1/f	16 720,6
				8/1/g	8 360,7	12/1/g	12 540,7	16/1/g	16 720,7
						12/1/h	12 540,8	16/1/h	*16 720,8*
						12/1/i	12 540,9	16/1/i	16 720,9
						12/1/j	12 541,0	16/1/j	16 721,0
						12/1/k	12 541,1	16/1/k	16 721,1
								16/1/l	16 721,2
								16/1/m	16 721,3
								16/1/n	16 721,4
								16/1/o	16 721,5

(b) Dans de bandes des 22 MHz et 25 MHz les voies ne sont pas en relation harmonique avec celles des bandes des 4 MHz à 16 MHz. Toutefois, le principe de la subdivision des voies en fréquence d'appel déterminées, en commençant à 100 Hz de l'extrémité inférieure de la voie et en allant jusqu'à 100 Hz de son extrémite supérieure, s'applique.

NOC **AP15D**

APPENDICE 35

Tableau des fréquences de travail, en kHz, à assigner aux stations de navire pour la télégraphie Morse de classe A1A, à des rapidités de modulation ne dépassant pas 40 bauds

[Voir aussi le renvoi *e*) de l'appendice **31**]

Note. — La première ligne de chaque série, jusqu'à la série 53 y comprise, indique les fréquences en relation harmonique à assigner dans les bandes des 4, 6, 8, 12 et 16 MHz. Les autres fréquences ne sont pas necessairement en relation harmonique.

(kHz)

Série numéro	Bandes				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
1	4 188,5	6 282,75	8 377	12 565,5	16 754
a)	–	–	–	12 566	16 754,5
b)	–	–	8 377,5	–	16 755
c)	–	–	–	12 566,5	16 755,5
2	4 189	6 283,5	8 378	12 567	16 756
a)	–	–	–	12 567,5	16 756,5
b)	–	–	8 378,5	–	16 757
c)	–	–	–	12 568	16 757,5
3	4 189,5	6 284,25	8 379	12 568,5	16 758
a)	–	–	–	12 569	16 758,5
b)	–	–	8 379,5	–	16 759
c)	–	–	–	12 569,5	16 759,5
4	4 190	6 285	8 380	12 570	16 760
a)	–	–	–	12 570,5	16 760,5
b)	–	–	8 380,5	–	16 761
c)	–	–	–	12 571	16 761,5
5	4 190,5	6 285,75	8 381	12 571,5	16 762
a)	–	–	–	12 572	16 762,5
b)	–	–	8 381,5	–	16 763
c)	–	–	–	12 572,5	16 763,5
6	4 191	6 286,5	8 382	12 573	16 764
a)	–	–	–	12 573,5	16 764,5
b)	–	–	8 382,5	–	16 765
c)	–	–	–	12 574	16 765,5
7	4 191,5	6 287,25	8 383	12 574,5	16 766
a)	–	–	–	12 575	16 766,5
b)	–	–	8 383,5	–	16 767
c)	–	–	–	12 575,5	16 767,5
8	4 192	6 288	8 384	12 576	16 768
a)	–	–	–	12 576,5	16 768,5
b)	–	–	8 384,5	–	16 769
c)	–	–	–	12 577	16 769,5
9	4 192,5	6 288,75	8 385	12 577,5	16 770
a)	–	–	–	12 578	16 770,5
b)	–	–	8 385,5	–	16 771
c)	–	–	–	12 578,5	16 771,5
10	4 193	6 289,5	8 386	12 579	16 772
a)	–	–	–	12 579,5	16 772,5
b)	–	–	8 386,5	–	16 773
c)	–	–	–	12 580	16 773,5

Série numéro	Bandes				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
11	4 193,5	6 290,25	8 387	12 580,5	16 774
a)	–	–	–	12 581	16 774,5
b)	–	–	8 387,5	–	16 775
c)	–	–	–	12 581,5	16 775,5
12	4 194	6 291	8 388	12 582	16 776
a)	–	–	–	12 582,5	16 776,5
b)	–	–	8 388,5	–	16 777
c)	–	–	–	12 583	16 757,5
13	4 194,5	6 291,75	8 389	12 583,5	16 778
a)	–	–	–	12 584	16 778,5
b)	–	–	8 389,5	–	16 779
c)	–	–	–	12 584,5	16 779,5
14	4 195	6 292,5	8 390	12 585	16 780
a)	–	–	–	12 585,5	16 780,5
b)	–	–	8 390,5	–	16 781
c)	–	–	–	12 586	16 781,5
15	4 195,5	6 293,25	8 391	12 586,5	16 782
a)	–	–	–	12 587	16 782,5
b)	–	–	8 391,5	–	16 783
c)	–	–	–	12 587,5	16 783,5
16	4 196	6 294	8 392	12 588	16 784
a)	–	–	–	12 588,5	16 784,5
b)	–	–	8 392,5	–	16 785
c)	–	–	–	12 589	16 785,5
17	4 196,5	6 294,75	8 393	12 589,5	16 786
a)	–	–	–	12 590	16 786,5
b)	–	–	8 393,5	–	16 787
c)	–	–	–	12 590,5	16 787,5
18	4 197	6 295,5	8 394	12 591	16 788
a)	–	–	–	12 591,5	16 788,5
b)	–	–	8 394,5	–	16 789
c)	–	–	–	12 592	16 789,5
19	4 197,5	6 296,25	8 395	12 592,5	16 790
a)	–	–	–	12 593	16 790,5
b)	–	–	8 395,5	–	16 791
c)	–	–	–	12 593,5	16 791,5
20	4 198	6 297	8 396	12 594	16 792
a)	–	–	–	12 594,5	16 792,5
b)	–	–	8 396,5	–	16 793
c)	–	–	–	12 595	16 793,5
21	4 198,5	6 297,75	8 397	12 595,5	16 794
a)	–	–	–	12 596	16 794,5
b)	–	–	8 397,5	–	16 795
c)	–	–	–	12 596,5	16 795,5
22	4 199	6 298,5	8 398	12 597	16 796
a)	–	–	–	12 597,5	16 796,5
b)	–	–	8 398,5	–	16 797
c)	–	–	–	12 598	16 797,5

Série numéro	Bandes				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
23	4 199,5	6 299,25	8 399	12 598,5	16 798
a)	–	–	–	12 599	16 798,5
b)	–	–	8 399,5	–	16 799
c)	–	–	–	12 599,5	16 799,5
24	4 200	6 300	8 400	12 600	16 800
a)	–	–	–	12 600,5	16 800,5
b)	–	–	8 400,5	–	16 801
c)	–	–	–	12 601	16 801,5
25	4 200,5	6 300,75	8 401	12 601,5	16 802
a)	–	–	–	12 602	16 802,5
b)	–	–	8 401,5	–	16 803
c)	–	–	–	12 602,5	16 803,5
26	4 201	6 301,5	8 402	12 603	16 804
a)	–	–	–	12 603,5	16 804,5
b)	–	–	8 402,5	–	16 805
c)	–	–	–	12 604	16 805,5
27	4 201,5	6 302,25	8 403	12 604,5	16 806
a)	–	–	–	12 605	16 806,5
b)	–	–	8 403,5	–	16 807
c)	–	–	–	12 605,5	16 807,5
28	4 202	6 303	8 404	12 606	16 808
a)	–	–	–	12 606,5	16 808,5
b)	–	–	8 404,5	–	16 809
c)	–	–	–	12 607	16 809,5
29	4 202,5	6 303,75	8 405	12 607,5	16 810
a)	–	–	–	12 608	16 810,5
b)	–	–	8 405,5	–	16 811
c)	–	–	–	12 608,5	16 811,5
30	4 203	6 304,5	8 406	12 609	16 812
a)	–	–	–	12 609,5	16 812,5
b)	–	–	8 406,5	–	16 813
c)	–	–	–	12 610	16 813,5
31	4 203,5	6 305,25	8 407	12 610,5	16 814
a)	–	–	–	12 611	16 814,5
b)	–	–	8 407,5	–	16 815
c)	–	–	–	12 611,5	16 815,5
32	4 204	6 306	8 408	12 612	16 816
a)	–	–	–	12 612,5	16 816,5
b)	–	–	8 408,5	–	16 817
c)	–	–	–	12 613	16 817,5
33	4 204,5	6 306,75	8 409	12 613,5	16 818
a)	–	–	–	12 614	16 818,5
b)	–	–	8 409,5	–	16 819
c)	–	–	–	12 614,5	16 819,5
34	4 205	6 307,5	8 410	12 615	16 820
a)	–	–	–	12 615,5	16 820,5
b)	–	–	8 410,5	–	16 821
c)	–	–	–	12 616	16 821,5

Série numéro	Bandes				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
35	4 205,5	6 308,25	8 411	12 616,5	16 822
a)	–	–	–	12 617	16 822,5
b)	–	–	8 411,5	–	16 823
c)	–	–	–	12 617,5	16 823,5
36	4 206	6 309	8 412	12 618	16 824
a)	–	–	–	12 618,5	16 824,5
b)	–	–	8 412,5	–	16 825
c)	–	–	–	12 619	16 825,5
37	4 206,5	6 309,75	8 413	12 619,5	16 826
a)	–	–	–	12 620	16 826,5
b)	–	–	8 413,5	–	16 827
c)	–	–	–	12 620,5	16 827,5
38	4 207	6 310,5	8 414	12 621	16 828
a)	–	–	–	12 621,5	16 828,5
b)	–	–	8 414,5	–	16 829
c)	–	–	–	12 622	16 829,5
39	4 207,5	6 311,25	8 415	12 622,5	16 830
a)	–	–	–	12 623	16 830,5
b)	–	–	8 415,5	–	16 831
c)	–	–	–	12 623,5	16 831,5
40	4 208	6 312	8 416	12 624	16 832
a)	–	–	–	12 624,5	16 832,5
b)	–	–	8 416,5	–	16 833
c)	–	–	–	12 625	16 833,5
41	4 208,5	6 312,75	8 417	12 625,5	16 834
a)	–	–	–	12 626	16 834,5
b)	–	–	8 417,5	–	16 835
c)	–	–	–	12 626,5	16 835,5
42	4 209	6 313,5	8 418	12 627	16 836
a)	–	–	–	12 627,5	16 836,5
b)	–	–	8 418,5	–	16 837
c)	–	–	–	12 628	16 837,5
43	4 209,5	6 314,25	8 419	12 628,5	16 838
a)	–	–	–	12 629	16 838,5
b)	–	–	8 419,5	–	16 839
c)	–	–	–	12 629,5	16 839,5
44	4 210	6 315	8 420	12 630	16 840
a)	–	–	–	12 630,5	16 840,5
b)	–	–	8 420,5	–	16 841
c)	–	–	–	12 631	16 841,5
45	4 210,5	6 315,75	8 421	12 631,5	16 842
a)	–	–	–	12 632	16 842,5
b)	–	–	8 421,5	–	16 843
c)	–	–	–	12 632,5	16 843,5
46	4 211	6 316,5	8 422	12 633	16 844
a)	–	–	–	12 633,5	16 844,5
b)	–	–	8 422,5	–	16 845
c)	–	–	–	12 634	16 845,5

Série numéro	Bandes				
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
47	4 211,5	6 317,25	8 423	12 634,5	16 846
a).....	–	–	–	12 635	16 846,5
b).....	–	–	8 423,5	–	16 847
c).....	–	–	–	12 635,5	16 847,5
48	4 212	6 318	8 424	12 636	16 848
a).....	–	–	–	12 636,5	16 848,5
b).....	–	–	8 424,5	–	16 849
c).....	–	–	–	12 637	16 849,5
49	4 212,5	6 318,75	8 425	12 637,5	16 850
a).....	–	–	–	12 638	16 850,5
b).....	–	–	8 425,5	–	16 851
c).....	–	–	–	12 638,5	16 851,5
50	4 213	6 319,5	8 426	12 639	16 852
a).....	–	–	–	12 639,5	16 852,5
b).....	–	–	8 426,5	–	16 853
c).....	–	–	–	12 640	16 853,5
51	4 213,5	6 320,25	8 427	12 640,5	16 854
a).....	–	–	–	12 641	16 854,5
b).....	–	–	8 427,5	–	16 855
c).....	–	–	–	12 641,5	16 855,5
52	4 214	6 321	8 428	12 642	16 856
a).....	–	–	–	12 642,5	16 856,5
b).....	–	–	8 428,5	–	16 857
c).....	–	–	–	12 643	16 857,5
53	4 214,5	6 321,75	8 429	12 643,5	(*) *16 858*
a).....	–	–	–	12 644	–
b).....	–	–	8 429,5	–	–
c).....	–	–	–	12 644,5	–
54	4 215	6 322,5	8 430	12 645	–
a).....	–	–	–	12 645,5	–
b).....	–	–	8 430,5	–	–
c).....	–	–	–	12 646	–
55	4 215,5	6 323,25	8 431	12 646,5	–
a).....	–	–	–	12 647	–
b).....	–	–	8 431,5	–	–
c).....	–	–	–	12 647,5	–
56	4 216	6 324	8 432	12 648	–
a).....	–	–	–	12 648,5	–
b).....	–	–	8 432,5	–	–
c).....	–	–	–	12 649	–
57	4 216,5	(*) *6 324,75*	8 433	12 649,5	–
a).....	–	–	–	12 650	–
b).....	–	–	8 433,5	–	–
c).....	–	–	–	12 650,5	–
58	4 217	–	8 434	(*) *12 651*	–
a).....	–	–	–	–	–
b).....	–	–	8 434,5	–	–
59	4 217,5	–	(*) *8 435*	–	–
60	4 218	–	–	–	–
61	4 218,5	–	–	–	–
62	(*) *4 219*	–	–	–	–

(*) Cete fréquence est la plus elevée à assigner dans la bande.

NOC **AP20** APPENDICE 36

Appareils automatique distinés à la réception des signax d'alarme radiotélegraphique et radiotélephonique

(voir la section II de l'article 41)

1. Les appareils automatiques destinés à la réception du signal d'alarme radiotélégraphique doivent satisfaire aux conditions suivantes:

a) L'appareil doit fonctionner sous l'action du signal d'alarme transmis par radiotélégraphie en émissions des classes A2B et H2B au moins (voir le numéro **4216**);

b) L'appareil doit enregistrer le signal d'alarme malgré les brouillages (à condition que ces brouillages ne soient pas continus) provoqués par les parasites atmosphériques et par des signaux puissants autres que le signal d'alarme, de préférence sans qu'aucun réglage manuel soit nécessaire pendant les périodes durant lesquelles la veile est assurée à l'aide de cet appareil;

c) L'appareil ne doit pas être mis en action par des parasites atmosphériques ou par des signaux puissants autres que le signal d'alarme;

d) L'appareil doit posséder un minimum de sensibilité tel que, si les parasites atmosphériques sont négligeables, il soit à même de fonctionner sous l'action du signal d'alarme transmis par l'émetteur de secours d'une station de navire, à toute distance de cette station jusqu'à concurrence de la portée normale fixée pour ledit émetteur par la Convention internationale pour la sauvegarde de la vie humaine em mer, et de préférence à des distance plus grandes.

e) L'appareil doit avertir de tout dérangement susceptible d'empêcher son fonctionnement normal pendant les périodes de veille.

2. Les appareils automatiques destinés à la réception du signal d'alarme radiotéléphonique doivent répondre aux conditions suivantes:

a) L'appareil doit fonctionner sous l'action du signal l'alarme malgré les brouillages intermittents provoqués par les parasites atmosphériques et par des signaux puissants autres que le signal d'alarme, de préférence sans qu'aucun réglace manuel soit nécessaires pendant les périodes durant lesquelles la veille est assurée à l'aide de cet appareil;

b) L'appareil ne doit pas être mis en action par des parasites atmosphériques ou par des signaux puissants autres que les signal d'alarme;

c) L'appareil doit pouvoir fonctionner au-delà de la distance à laquelle la transmission de la parole est satisfaisante; il doit, pour autant que c'est possible en pratique, comporter un dispositif signalant les dérangements susceptibles d'empêcher son fonctionnement normal pendant les périodes de veille.

NOC **AP20A** APPENDICE 37

Caractéristiques techniques des radiobalises de localisation des sinistres fonctionnant sur la fréquence porteuse 2182 kHz

(Voir la section I de l'article 41)

Les radiobalises de localisation des sinistres doivent satisfaire aux conditions suivantes:

a) La puissance rayonnée par les radiobalises à faible puissance (Type L) doit avoir la valeur nécessaire pour produire au niveau de la mer à une distance de 30 milles marins un champ dont l'intensité est égale ou inférieure à 10 microvolts par mètre, l'intensité de champ initiale étant d'au moins 2,5 microvolts par mètre;

b) La puissance rayonnée par les radiobalises à grande puissance (Type H) doit avoir la valeur nécessaire pour produire au niveau de la mer à une distance de 30 milles marins un champ dont l'intensité est supérieure à 10 microvolts par mètre;

c) Après une période de 48 heures de fonctionnement continu, la puissance rayonnée ne doit pas être inférieure à 20 % de sa valeur initiale;

d) Les radiobalises doivent pouvoir faire des émissions de la classe A2A (ou A2B) ou H2A (ou H2B) avec un taux de modulation compris entre 30 % et 90 %;

e) Les tolérances des fréquences acoustiques des émissions des radiobalises de localisation des sinistres (voir les numéros **3256** à **3258**) sont:

± 20 Hz pour la fréquence 1300 Hz;
± 35 Hz pour la fréquence 2200 Hz.

f) Le matériel doit être conçu de façon à être conforme aux Avis pertinents du CCIR.

NOC **AP20B** APPENDICE 38

Appareils à bande étroite de télégraphie à impression directe

(Voir les articles 59, 60, 63 et 64)

Les appareils à bande étroite de télégraphie à impression directe utilisés and le service mobile maritime doivent satisfaire aux conditions suivantes:

a) Les appareils doivent pouvoir fonctionner avec les signaux de l'alphabet télégraphique international N° 2 avec une rapidié de modulation de 50 baudes et fournier à leur sortie des signaux de même type susceptibles d'être ensuite transmis sur le réseau télégraphique public;

b) La rapidité de modulation sur le trajet radioélectrique ne doit pas dépasser 100 bauds;

c) Les émissions doivent être de la classe F1B, de déplacement de fréquence étant de 170 Hz (1);

d) La tolérance de fréquence du signal émis doit être de ± 40 Hz pour les stations de navire et de ± 15 Hz pour les sations côtières (2) (3) (4);

e) La fréquence émise supérieure doit correspondre à «traival» (départ) et la fréquence émisse inférieure à «respos» (arrêt), conformément à l'Avis pertinent du CCIR;

f) Lorsqu'un système de correction d'erreurs esat utilisé, il convient que l'appareil soit muni d'un dispositif simple pour court circuiter ce système, afin de permettre l'émission et la réception, sur le trajet radiélectrique, de signaux non corrigés conformes aux dispositions de l'alinéa *a*) ci-dessus;

g) Dans le service mobile maritime, lorsque la télégraphie à impression directe fait appel à un système de détection et de correction des erreurs, on doit employer un système ARQ à 7 moments ou un système également à 7 moments, sans circuit de retour et avec réception en diversité de temps, utilisant le même code. Il convient que les autres caractéristiques de l'appareil de détection et de correction des erreurs soient conformes aux Avis pertinents du CCIR;

h) Si une stations est pourvue d'un système d'appel sélectif confome aux dispositions de l'appendice **39** et d'un système à impression directe conforme aux dispositions du présent appendice, et qu'elle utilise un signal d'appel à deux blocs, on lur assigne pour les deux systèmes le même numéro d'identification ou d'appel sélectif en se conformant aux dispositions des numéros **2088** et **2143** à **2146**;

i) Si une station est pourvue d'un système à impression directe conforme aux dispositions du présent appendice et qu'elle utilise un système d'appel à deux blocs, et si un numéro ne lui a pas déjà été assigné conformément aux dispositions des numéros **2088** et **2143** à **2146**, il convient de lui assigner en tel numéro pour son système à impression directe;

f) La conversion de l'identification numérique aux combinaisons de 28 bits (4 caractères) s'effectue selon les Avis pertinents du CCIR.

NOC **AP20C** APPENDICE 39

Système d'appel sèlectif à utiliser dans le service mobile maritime international

(Voir les articles 25, 62, 63 et l'appendice 9)

Dans les cas il est nécessaire de satisfaire à des besoins immédiats en matière d'appel sélectif, le système utilisé doit présenter les caractéristiques suivantes:

1.1. Le signal d'appel sélectif doit comporter cinq chiffres représentant le numéro d'appel sélectif assigné à un navire pour l'appel sélectif.

---

(1) Lorsque l'on effectue la manipulation par déplacement de fréquence en injectant des signaux à fréquence acoustique à l'entrée d'un emetteur a bande laterale unique, il convient de veiller soigneusement à supprimer de maniére suffisante la porteuse résiduelle de l'émission à bande latérale unique. En outre, un choix judicieux de la fréquence acoustique centrale permettra de minimaliser la possibilite pour la porteuse résiduelle de causer des brouillages dans les voies voisines. Pour cette raision, certaines administrations ont choisi 1700 Hz comme fréquence centrale.

(2) Aux fins de l'exploitation, il convient que le matériel de réception associé soit compatible avec la stabilité de fréquence des emetteurs.

(3) Ces tolérances sont applicables aux appareils installés après le 1er janvier 1976 et à la totalite des appareils du 1er janvier 1985. Concernant les appareils installés avant le 2 janvier 1976, la tolérance est de 100 Hz pour les émetteurs de station de navire (avec une dérive maximale de 40 Hz pour de courtes périoles, de l'ordre de 15 minutes), et de 40 Hz pour les émetteurs de station côtière.

(4) Il sera peut être opportun de fixer des limites de tolérance plus strictes, en fonction de la méthode d'exploitation du service et du matériel utilisé.

1.2. Le signal à fréquence acoustique appliqué à l'entrée de l'émetteur de la station côtière doit être constitué d'une suite d'impulsions à fréquence acoustique conforme aux dispositions suivantes:

1.2.1. Les fréquences acoustiques qui servent à représenter les chiffres du numéro d'appel sélectif assigné à un navire doivent être prises dans la série suivante:

Chiffre	1	2	3	4	5	6	7	8	9	0	Répétion de chiffres
Fréquence acoustique (Hz).....	1 124	1 197	1 275	1 358	1 446	1 540	1 640	1 747	1 860	1 891	2 110

Par exemple la série d'impulsions à fréquence acoustique correspondant au numéro d'appel sélectif 12 133 serait 1124-1197-1124-1275-2110 Hz, et la série correspondant au numéro 22 222 serait 1197-2110-1197-2110--1197 Hz.

1.2.2. Si les numéros d'appel sélectif représentés à l'aide de deux fréquences seulement — choisies parmi celles indiquées au paragraphe 1.2.1 — sont réservés à l'appel de groupes prédéterminés de navires, on peut disposer de 100 combinaisons différentes à attribuer selon les besoins des administrations.

1.2.3. Les signaux produits par les générateurs de fréquences acoustiques doivent être essentiellement sinusoïdaux, avec une distorsion harmonique totale ne dépassant pas 2 %.

1.2.4. Les impulsions à fréquence acoustique doivent être transmises l'une après l'autre.

1.2.5. La différence entre les amplitudes maximales de deux impulsions quelconques ne doit pas dépasser 1 dB.

1.2.6. La durée de chaque impulsion à fréquence acoustique, mesurée entre les points à 50 % de l'amplitude maximale, doit être de 100 ms ± 10 ms.

1.2.7. L'intervalle de temps entre deux impulsions consécutives, mesuré entre les points à 50 % de l'amplitude maximale, doit être 3 ms ± 2 ms.

1.2.8. Le temps d'établissement et le temps d'extinction de chaque impulsion, mesurés entre les points à 10 % et à 90 % de l'amplitude maximale, doivent être de 1,5 ms ± 1 ms.

1.2.9. La tolérance des fréquences acoustiques indiquées au paragraphe 1.2.1. doit être de ± 4 Hz.

1.2.10. Le signal d'appel sélectif (numéro d'appel sélectif assigné à la station de navire) doit être émis deux fois, avec un intervalle de 900 ms ± 100 ms entre la fin du premier signal et le commencement du second (figure 1).

1.2.11. L'intervalle entre les appels d'une station côtière à des navires différents doit être au minimum d'une seconde (figure 1).

2. Les informations supplémentaires qui suivent le signal d'appel sélectif doivent être transmises de la façon suivante:

2.1. Quatre chiffres pour identifier la station côtière appelante.

2.2. Deux zéros suivis de deux chiffres pour indiquer la voie de transmission sur ondes métriques sur laquelle la réponse devrait être donnée (voir l'appendice **18**).

2.3. Les caractéristiques des signaux doivent être conformes aux dispostions des paragraphes 1.2.1 et 1.2.3 à 1.2.9 inclus.

2.4. La composition du signal doit être conformes au diagramme ci-annexé (figure 2), la tolérance sur l'intervalle de 350 ms étant de ± 30 ms.

3. Un signal spécial «appel à tous les navires», destiné à actionner les sélecteures de réception installés à bord de tous des navires, quel que soit leur numéro d'appel sélectif, doit comporter l'émission continue de la suite des onze fréquences acoustiques indiquées au paragraphe 1.2.2. Les caractéristiques des impulsions à fréquence acoustique doivent satisfaire aux dispositions des paragraphes 1.2.3., 1.2.4 et 1.2.9. La durée de chacune de ces impulsions, mesurée entre les points à 50 % de l'amplitude maximale, doit être de 17 ms ± 1 ms; l'intervalle de temps entre deux impulsions consécutives mesuré entre les points à 50 % de l'amplitude maximale, ne doit pas dépasser 1 m. Il convient une la durée totale du signal «appel á tous les navires» soit au minimum de cinq secondes.

4. Les sélecteurs de réception installés á bord des navires devraient avoir une bonne fiabilité de fonctionnement dans touts les conditions permettant d'obtenir des communications de qualité satisfaisante.

5. Le sélecteur de réception doit être conçu pour recevoir des signaux dénnis au paragraphe 1. Toutefois, compte tenu du fait que les stations côtières sont susceptibles d'émettre des signaux supplémentaires (par exemple, pour l'identification de la stations côtière), il importe que la durée de retour au repos du décodeur soit de 250 ms ± 40 ms.

6. Ce sélecteur devrait être conçu, réalisé et entretenu de manière telle qu'il puisse fonctionner en présence de bruits atmosphériques et d'autres signaux broulleurs y compris les signaux d'appel sélectif autres que celui pour lequel le décodeur a été réglé.

7. Le sélecteur de réception doit comporter un dispositif fournissant une indication acoustique ou visuelle de la réception d'un appel et, si cela est exigé, un dispositif complémentaire permettant de déterminer l'indentité de la station d'où émane l'appel ou la voie de transmission sur ondes métriques à utiliser pour la réponse, selon les besoins des administrations.

8. Ce dispositif indicateur doit entrer en fonctionnement lors de la réception correcte du signal d'appel, que l'enregistrement correct ait eu lieu lors de l'emission du permier signal d'appel par la station côtière, ou lors de sa répétition, ou dans les deux cas.

9. Le dispositif indicateur doit rester en position de fonctionnement jusqu'à ce qu'il ait été remis manuellement en position de repos.

10. Le sélecteur de réception devrait être aussi simple que possible; il devrait pouvoir fonctionner de façon sûre pendant de longues périodes avec un minimum d'enîretien et il pourrait utilement comporter des moyens permettant d'en faire l'essai sans apport extérieur.

FIGURE 1

Composition des signaux d'appel sélectif, sans informations supplémentaires

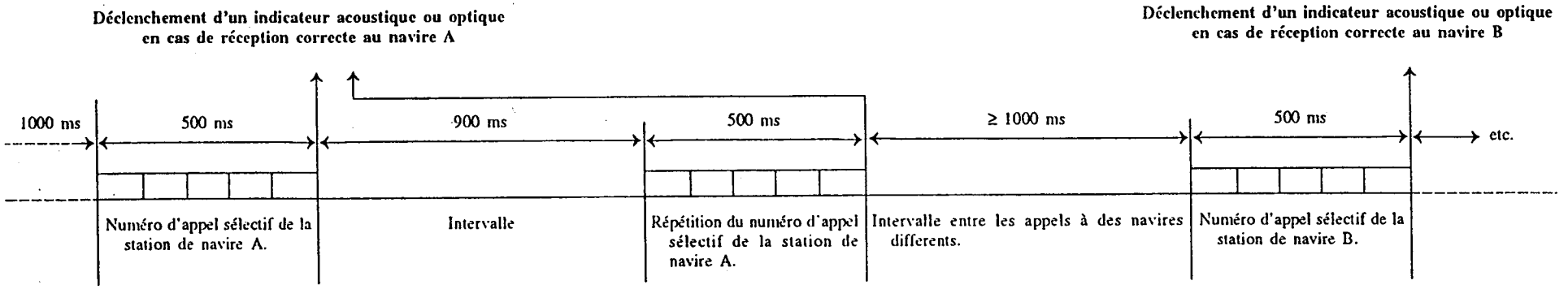
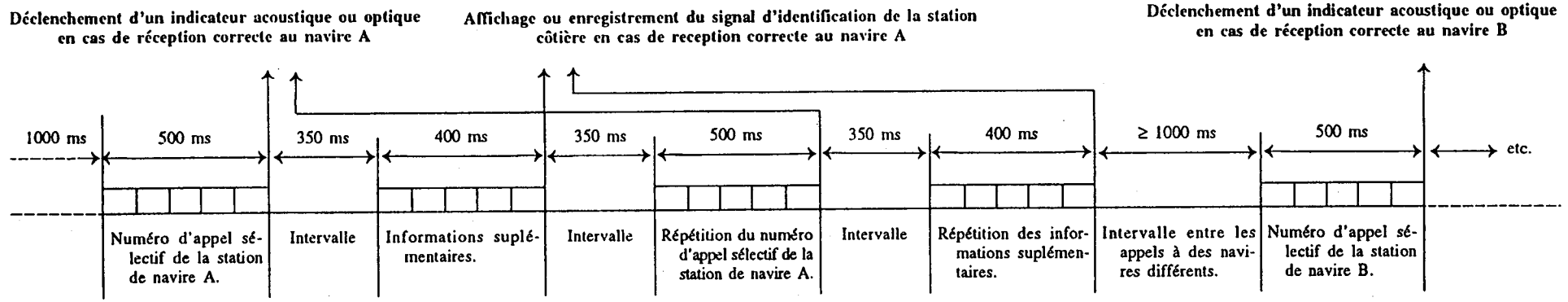


FIGURE 2

Composition des signaux d'appel sélectif, avec informations supplémentaires



NOC AP20D

APPENDICE 40

Systèmes à compressures et extensures couplés

(Voir la section IV de l'article 60 et l'appendice 17)

Lorsque le service mobile maritime radiotéléphonique international fait appel à des systèmes à compressures et extensures couplés:

a) Les caractéristiques du matérial à compresseurs et extenseurs couplés doivent être conformes aux dispositions des Avis pertinents du CCIR;

b) Pour obtenir le résultat optimal, les caractéristiques des appareils a bande latérale unique utilisés avec des systèmes à compresseurs et extenseurs couplés doivent être conformes aux dispositions de l'appendice 17 et il convient, en outre qu'elles satisfassent aux conditions suivantes:

1) La stabilité de fréquence à court terme (de l'ordre de 15 minutes) des émetteurs de station côtière est de ± 2 Hz;
2) La stabilité de fréquence à court terme (de l'ordre de 15 minutes) des émetteurs de navire est de ± 5 Hz;
3) Pour que la stabilité du gain total soit suffisante pendant la durée d'une communication, il faut que les récepteurs de station côtière soient munis de dispositifs permettant de maintenir l'erreur de fréquence d'une extrémité à l'autre à une valeur comprise entre ± 2 Hz et que les récepteurs de stations de navire soient munis de dispositifs permettant de maintenir cette erreur à une valeur comprise entre ± 5 Hz;
4) La variation maximale admissible de l'amplitude de l'émetteur dans la gamme des fréquences acoustiques 350-2700 Hz, à l'émission, est de 6 dB; le retard différentiel ne doit pas dépas ser 3 millisecondes. A cet égard, le récepteur doit avoir au moins les mêmes normes de fonctionnement;
5) Lorsqu'on n'utilise pas la porteuse pilote d'une émission de la classe R3E pour produire un signal continu destiné à la stabilisation de fréquence et à la commande de gain du récepteur, dans le cas d'une émission de la classe J3E par exemple, la procédure initiale d'accord doit comporter, pendant une brève période, l'émission d'une fréquence acoustique de référence appropriée (par exemple 1999 Hz ± 1 Hz) à un niveau de l'ordre de — 10 dBm0 ± 0,5 dB;
6) Au cas ou l'on désire utiliser des inverseurs ou d'autres types de dispositifs de secret, il faut tenir compte du fait que la fréquence acoustique supérieure de la voie téléphonique est 2380 Hz.

NOC AP23

APPENDICE 41

Procédure pour l'obtention des relèvements radiogoniométreques et des positions

(Voir l'article 35)

SECTION I

Instructions générales

§ 1. Les stations du service mobile aéronautique utilisent les procédures particulières qui peuvent être en vigueur en application d'accords conclus plar les administrations. Cependant, elles suivront les dispositions de cet appendice s'il leur est nécessaire de prendre part à des opérations de radiogoniométrie avec des stations du service mobile maritime.

§ 2. Avant d'appeler une ou plusieurs stations radiogoniométriques pour demander son relèvement ou sa position, la station mobile doit rechercher dans la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux:

a) Les indicatifs d'appel des stations à appeler pour obtenir les relèvements ou la position qu'elle désire;
b) La fréquence sur laquelle les stations radiogoniométriques veillent, et la ou les fréquences sur lesquelles elles prennent les relèvements;
c) Les stations radiogoniométrique qui, grâce à des liaisons par circuits spéciaux, peuvent fonctionner en groupe avec la station radiogonimétrique à appeler.

§ 3. La procédure qui doit suivre la station mobile dépend de diverses circonstances. D'une façon générale, la station mobile doit tenir compte de ce qui suit:

a) Si les stations radiogoniométriques ne veillent par sur la même fréquence (que ce soit la fréquence sur laquelle elles opèrent le relèvement ou toute autre frequence), les relèvement doivent être demandés séparément à chaque station ou groupe de stations utilisant une fréquence déterminée;

b) Si toutes les stations radiogoniométriques intéressées veillent surl la même fréquence, et si elles sont en mesure de prendre des relèvements sur une fréquence commune (qui peut être différente de la fréquence de veille), la station mobile doit les appeler ensemble au même moment, afin que toutes ces stations prennent simultanément les relèvements sur une même émission;

c) Si plusieurs stations radiogoniométriques sont groupées à l'aide de circuits spéciaux, une seule d'entre elles, dite «station radiogoniométrique de contrôle», doit être appelée, même si toutes sont munies d'appareilsémetteurs. Dans ce cas, la station mobile doit cependant, si c'est nécessaire, mentionnner dans l'appel, au moyen de leurs indicatifs d'appel, les stations radiogoniométriques dont elle désire obtenir des relèvements.

§ 4. La Nomenclaure des stations de radiorepérage et des staions effectuant des services spéciaux contient les indications relatives:

a) Au type de signal et à la classe d'émission à employer pour obtenir les relèvements;

b) À la durée des émissions que doit faire la station mobile;

c) À l'heure qu'utilise la station radiogoniométrique considérée, si cette heure est différent de celle du Temps universel coordonné (UTC).

SECTION II

Règles de procédure

§ 5. Les règles de procédure suivantes, applicables suivantes, applicables à la radiotélégraphie et à la radiotéléphonie, sont basées sur l'emploi de la radiotélégraphie. Em radiotéléphonie, des phrases appropriées peuvent remplacer les abréviations réglementaires.

Obtention d'un relèvement

§ 6. (1) La station mobile appelle la sations radiogoniométrique ou station radiogoniométrique de contrôle sur la fréquence de veille indiquée par la Nomenclature des stations de radiorepérage et des stations effectuant des services spéciaux. Suivant le type d'informantion qu'elle désire, la station appelante transmet l'abréviation réglementaire appropriée, suivie, si la station radiogoniométrique est une stations mobile, de l'abréviation réglementaire QTH? Elle indique, si c'est nécessaire, la fréquence sur laquelle elle va émettre pour faire prendre son relèvement, puis elle attend des instructions.

(2) Au moyen de l'abréviation réglementaire appropriée, la station radiogoniométrique invite la station appelante à faire l'émission nécessaire pour le relèvement. Si c'est nécessaire, elle indique la fréquence à utiliser à cet effet et le nombre de fois que l'émission doit être répétée.

(3) Après avoir le cas échéant, réglé, sa nouvelle fréquence d'emission, la station appelante transmet deux traits d'environ dix secondes chacun suivis de son indicatif d'appel. Elle répète ces signaux autant de fois que la station radiogoniométrique le lui a demandé.

(4) La station radiogoniométrique détermine la direction et, sin possible, le sens du relévement et sa classe (voir le paragraphe 7).

(5) Si la station radiogoniométrique n'est pas satisfaite de l'opération, elle demande à la station appelant de répéter l'émission décrite à l'alinéa (3).

(6) La station radiogoniométrique transmet les renseignements à la stations appelant dans l'ordre suivant:

a) L'abréviation réglementaire appropriée;

b) Trois chiffres indiquant en degrés le relèvement vrai par rapport à la station radiogoniométrique;

c) La classe du relèvement;

d) L'heure de l'observation;

e) Si la station radiogoniométrique est mobile, sa propre position en latitude en longitude, précédée de l'abréviation réglementaire QTH.

(7) Dès que la sation appelante a reçu le résultat de l'observation, et si elle estime nécessaire d'en obtenir confirmation, elle répète le message. La sation radiogoniométrique confirme alors l'exactitude de la répétition ou, le cas échéant, rectifie en répétant le message. Quand la station radiogoniométrique a acquis la certitude que la station mobile a correctement reçu le message, elle transmet le signal «fin de travail». La station appelante répète alors ce signal pour indiquer que l'opération est terminée.

(8) A moins d'indications contraires, la station appelante considère que le sens du relèvement a été déterminé. Si la station radiogoniométrique n'a pas déterminé ce sens, elle en fait mention dans la transmission de l'information, ou bien elle indique les deux directions opposées qu'elle relevées.

Classification des relèvements

§ 7. En vue d'apprécier la précision et de déterminer la classe correspondante d'un relèvement:

a) Il convient, en général et notamment dans le service radiogoniométrique mobile maintenu sur les fréquences inférieurs à 3000 kHz, que l'opérateur utilise les caractéristiques types des relèvements indiquées au tableau ci-après;

b) Les opérateurs d'une station radiogoniométrique peuvent, lorsque la nature de l'équipement et le temps le permettent, tenir compte de la probabilité de l'erreur du relèvement. Un relèvement est considéré comme appartenant à une classe donnée, s'il ya a une probabilité de moins de $^1/_{20}$ que l'erreur de relèvement dépasse les valeurs numériques spécifiées pour cette classe au tableau ci-après. Il convient que cette probabilité soit évaluée au moyen de l'analyse des cinq composantes de la variance totale du relèvement (instrument, emplacement, propagation, échantillonnage des relèvements et condition d'observation).

Obtention d'une position déterminée par deux ou plusieurs stations radiogoniométriques organisées en groupe

§ 8. (1) Si la station appelante désire être informée de sa position par un groupe de stations radiogonimétriques, elle appelle la station de contrôle comme il est indiqué à l'alinéa (1) du § 6 ci-dessus, et demande sa position au moyen de l'abréviation réglementaire appropriée.

(2) La stations de contrôle répond à l'appel et, lorsque les stations radiogonimétriques sont prêtes, elle invite, au moyen de l'abréviation réglementaire appropriée, la station appelante à émettre. Lorsque la position a été déterminée, la station de contrôle transmet à la sations appelante:

a) L'abréviation réglementaire appropriée;
b) La position en latitude et longitude ou, s'il y a lieu, par rapport à un point géographique connu;
c) La classe de la position, définie à l'alinéa suivant;
d) L'heure de l'observation.

(3) Selon son appréciation de la précision de ses observations, la station de contrôle classe la position dans l'un des quatre classes suivantes:

Classe A — positions que l'opérateur peut raisonnablement considérer comme précises à moins de 5 milles nautiques près;
Classe B — positions que l'opérateur peut raisonnablement considérer comme précises à moins de 20 milles nautiques près;
Classe C — positions que l'opérateur peut raisonnablement considérer comme précises à moins de 50 milles nautiques près;
Classe D — positions que l'opérateur ne peut pas considérer comme précises à moins de 50 milles nautiques près.

(4) Cependant, pour les fréquences supérieures à 3000 kHz, dans le cas où les limites de distances fixées à l'alinéa précédent ne coviendraient pas, la station de contrôle peut classer la position selon les Avis du CCIR.

Obtention des relèvements simultanés de deux ou plusieurs stations radiogoniométriques organisées en groupe

§ 9. Sur une demande de relèvements, la station de contrôle d'un groupe de stations radiogoniométriques procède comme il est indiqué au § 8. Elle transmet ensuite les relèvements pris par chaque station du groupe, en faisant précéder chaque relèvement de l'indicatif d'appel de la station qui l'a pris.

TABLEAU

Classification des relèvements

Classe	Erreur absolue du relèvement (degrés)	Carectéristiques des relèvements					
		Force des signaux	Indication du relèvement	Evanouissement	Brouillage	Oscillation du relèvement (degrés)	Durée d'observation
A	± 2	Très bonne ou bone	Nette (zéro bien défini).	Négligeable	Négligeable	Moins de 3	Suffisante.
B	± 5	Assez bonne	Floue	Léger	Léger	Plus de 3 moins de 5.	Brève.
C	± 10	Faible	Très floue	Intense	Élevé	Plus de 5 moins de 10.	Très brève.
D	Plus de ± 10	À peine perceptible	Mal définie	Très intense	Très élevé	Plus de 10	Insuffisante.

APPENDICE 42

MOD AP C

Tableau d'atribution des séries internationales d'indicatifes d'appel (a)

(Voir article 25)

Séries d'indicatifs	Attribuées à
AAA-ALZ	États-Unis d'Amérique.
AMA-AOZ	Espagne.
APA-ASZ	Pakistan (République Islamique du).
ATA-AWZ	Inde (République de l').
AXA-AXZ	Australie.
AYA-AZZ	Argentine (République).
A2A-A2Z	Botswana (République de).
A3A-A3Z	Tonga (Royaume des).
A4A-A4Z	Oman (Sultanat d').
A5A-A5Z	Bhoutan (Royaume du).
A6A-A6Z	Emirats Arabes Unis.
A7A-A7Z	Qatar (État du).
A8A-A8Z	Libéria (République du).
A9A-A9Z	Bahrein (État de).
BAA-BZZ	Chine (République Populaire de).
CAA-CEZ	Chili.
CFA-CKZ	Canada.
CLA-CMZ	Cuba.
CNA-CNZ	Maroc (Royaume du).
COA-COZ	Cuba.
CPA-CPZ	Bolivie (République de).
CQA-CUZ	Portugal.
CVA-CXZ	Uruguay (République Orientale de l').
CYA-CZZ	Canada.
C2A-C2Z	Nauru (République de).
C3A-C3Z	Andorre (Principauté d').
C4A-C4Z	Chypre (République de).
C5A-C5Z	Gambie (République de).
C6A-C6Z	Bahamas (Commonwealth des).
(*) C7A-C7Z	Organisation météorologique mondiale.
C8A-C9Z	Mozambique (République Populaire du).
DAA-DRZ	Allemagne (République fédérale d').
DSA-DTZ	République de Corée.
DUA-DZZ	Philippines (République des).
D2A-D3Z	Angola (République Populaire d').
D4A-D4Z	Cap-Vert (République du).
D5A-D5Z	Libéria (République du).
D6A-D6Z	Comores (République Fédérale et Islamique des).
D7A-D9Z	République de Corée.
EAA-EHZ	Espagne.
EIA-EJZ	Irlande.
EKA-EKZ	Union des Républiques Socialistes Soviétiques.
ELA-ELZ	Libéria (République du).
EMA-EOZ	Union des Républiques Socialistes Soviétiques.
EPA-EQZ	Iran (République Islamique d').
ERA-ESZ	Union des Républiques Socialistes Soviétiques.
ETA-ETZ	Ethiopie.
EUA-EWZ	Biélorussie (République Socialiste Soviétique de).
EXA-EZZ	Union des Républiques Socialistes Soviétiques.
FAA-FZZ	France.
GAA-GZZ	Royaume Uni de Grande-Bretagne et d'Irlande du Nord.
HAA-HAZ	Hongroise (République Populaire).
HBA-HBZ	Suisse (Confédération).
HCA-HDZ	Equateur.
HEA-HEZ	Suisse (Confédération).
HFA-HFZ	Pologne (République Populaire de).
HGA-HGZ	Hongroise (République Populaire).
HHA-HHZ	Haïti (République d').
HAIA-RIZ	Dominicaine (République).
HJA-HKZ	Colombie (République de).
HLA-HLZ	République de Coreé.
HMA-HMZ	République Populaire Démocratique de Corée.
HNA-HNZ	Iraq (République d').
HOA-HPZ	Panama (République de).
HQA-HRZ	Honduras (République de).
HSA-HSZ	Thailande.
HTA-HTZ	Nicaragua.
HUA-HUZ	El Salvador (République de).
HVA-HVZ	Cite du Vatican (État de la).
HWA-HYZ	France.
HZA-HZZ	Arabie Saoudite (Royaume de l')
H2A-H2Z	Chypre (République de).
H3A-H3Z	Panama (République de).
H4A-H4Z	Salomon (Îles).
H6A-H7Z	Nicaragua.
H8A-H9Z	Panama (République de).
IAA-IZZ	Italie.
JAA-JSZ	Japon.
JTA-JVZ	Mongolie (République Populaire de).
JWA-JXZ	Norvège.
JYA-JYZ	Jordanie (Royaume Hachémite de).
JZA-JZZ	Indonésie (République d').
J2A-J2Z	Djibouti (République de).
J3A-J3Z	Grenade.
J4A-J4Z	Grèce.
J5A-J5Z	Guinée-Bissau (République de).
J6A-J6Z	Sainte Lucie.
J7A-J7Z	Dominique.
KAA-KZZ	États-Unis d'Amérique.
LAA-LNZ	Norvège.
LOA-LWZ	Argentine (République).
LXA-LXZ	Luxembourg.
LYA-LYZ	Union des Républiques Socialistes Soviétiques.
LZA-LZZ	Bulgarie (République Populaire de).
L2A-L9Z	Argentine (République).
MAA-MZZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
NAA-NZZ	États-Unis d'Amérique.
OAA-OCZ	Pérou.
ODA-ODZ	Liban.
OEA-OEZ	Autriche.
OFA-OJZ	Finlande.
OKA-OMZ	Tchécoslovaque (Républque Socialiste).
ONA-OTZ	Belgique.
OUA-OZZ	Danemark.
PAA-PIZ	Paye Bas (Royaume des).
PJA-PJZ	Antilles néerlandaises.
PKA-POZ	Indonésie (République d').
PPA-PYZ	Brésil (République Féderative du).
PZA-PZZ	Suriname (République du).
P2A-P2Z	Papua-Nouvelle-Guinée.
P3A-P3Z	Chypre (République de).
P4A-P4Z	Antilles néerlandaises.
P5A-P9Z	République Populaire Démocrátique de Corée.
QAA-QZZ	(Abréviations réglementaires.)
RAA-RZZ	Union des Républiques Socialistes Soviétiques.
SAA-SMZ	Suède.
SNA-SRZ	Pologne (République Populaire de).
SSA-SSM	Egypte (République Arabe d').
SSN-STZ	Soudan (République Démocratique du).
SUA-SUZ	Egypte (Répúblique Arabe d').
SVA-SZZ	Grèce.
S2A-S3Z	Bangladesh (République Populaire du).
S6A-S6Z	Singapour (République de).
S7A-S7Z	Seychelles (République des).
S9A-S9Z	São Tomé-et-Príncipe (République Démocratique de).
TAA-TCZ	Turquie.
TDA-TDZ	Guatemala (République du).
TEA-TEZ	Costa Rica.
TFA-TFZ	Islande.
TGA-TGZ	Guatemala (République du)
THA-THZ	France.
TIA-TIZ	Costa Rica.
TJA-TJZ	Cameroun (République Unie du).
TKA-TKZ	France.
TLA-TLZ	Centrafricaine (République).
TMA-TMZ	France.
TNA-TMZ	Congo (République Populaire du).
TOA-TQZ	France.

Séries d'indicatifs	Attribuées à
TRA-TRZ	Gabonaise (République).
TSA-TSZ	Tunisie.
TTA-TTZ	Tchad (République du).
TUA-TUZ	Côte d'Ivoire (République de).
TVA-TXZ	France.
TYA-TYZ	Bénin (République Populaire du).
TZA-TZZ	Mali (République du).
T2A-T2Z	Tuvalu.
T3Z-T3Z	Kiribati (République).
T4A-T4Z	Cuba.
T5A-T5Z	Somalie (République Démocratique).
T6A-T6Z	Afghanistan (République Démocratique d').
UAA-UQZ	Union des Républiques Socialistes Soviétiques.
UUA-UTZ	République Socialiste Soviétique d'Ukraine.
UUA-UZZ	Union des Républiques Socialistes Soviétiques.
VAA-VGZ	Canada.
VHA-VNZ	Australie.
VOA-VOZ	Canada.
VPA-VSZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
VTA-VWZ	Inde (République de l').
VXA-VYZ	Canada.
VZA-VZZ	Australie.
WAA-WZZ	États-Unis d'Amérique.
XAA-XIZ	Mexique.
XJA-XOZ	Canada.
XPA-XPZ	Danemark.
XQA-XRZ	Chili.
XSA-XSZ	Chine (République Populaire de).
XTA-XTZ	Haute-Volta (République de).
XUA-XUZ	Kampuchea Démocratique.
XVA-XVZ	Viet Nam (République Socialiste du).
XWA-XWZ	Lao (Republique Démocratique Populaire).
XXA-XXZ	Portugal.
XYA-XZZ	Birmanie (République Socialiste de l'Union de).
YAA-YAZ	Afghanistan (République Démocratique d').
YBA-YHZ	Indonésie (République d').
YIA-YIZ	Iraq (République d').
YJA-YJZ	Nouvelles-Hébrides.
YKA-YKZ	République Arabe Syrienne.
YLA-YLZ	Union des Républiques Socialistes Soviétiques.
YMA-YMZ	Turquie.
YNA-YNZ	Nicaragua.
YOA-YRZ	Roumanie (République Socialiste de).
YSA-YSZ	El Salvador (République de).
YTA-YUZ	Yougoslavie (République Socialiste Fédérative de).
YVA-YYZ	Venezuela (République de).
YZA-YZZ	Yugoslavie (République Socialiste Fédérative de).
Y2A-Y9Z	République Démocratique Allemande.
ZAA-ZAZ	Albanie (République Populaire Socialiste d').
ZBA-ZJZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
ZKA-ZMZ	Nouvelle-Zélande.
ZNA-ZOZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
ZPA-ZPZ	Paraguay (République du).
ZQA-ZQZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
ZRA-ZUZ	Sudafricaine (République).
ZVA-ZZZ	Brésil (République Fédérative du).
2AA-2ZZ	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
3AA-3AZ	Monaco.
3BA-3BZ	Maurice.
3CA-3CZ	Guinée Équatoriale (République de).
3DA-3DM	Swaziland (Royaume du).
3DN-3DZ	Fidji.
3EA-3FZ	Panama (République de).
3GA-3GZ	Chili.
3HA-3UZ	Chine (République Populaire de).
3VA-3VZ	Tunisie.
3WA-3WZ	Viet Nam (République Socialiste du).
3XA-3XZ	Guinée (République Populaire Révolutionnaire de).
3YA-3YZ	Norvège.
3ZA-3ZZ	Pologne (République Populaire de).
4AA-4CZ	Mexique.
4DA-4IZ	Philippines (République des).
4JA-4LZ	Union des Républiques Socialistes Soviétiques.
4MA-4MZ	Venezuela (République de).
4NA-4OZ	Yougoslavie (République Socialiste Fédérative de).
4PA-4SZ	Sri-Lanka (République Socialiste Démocratique de).
4TA-4TZ	Pérou.
(*) 4UA-4UZ	Organization des Nations Unies.
4VA-4VZ	Haïti (République d').
4WA-4WZ	Yémen (République Arabe du).
4XA-4XZ	Israël (État d').
(*) 4YA-4YZ	Organisation de l'Aviation Civile internationale.
4ZA-4ZZ	Israël (État d').
5AA-5AZ	Libye (Jamahiriva Arabe Libyenne, Populaire Socialiste).
5BA-5BZ	Chypre (République de).
5CA-5GZ	Maroc (Royaume du).
5HA-5IZ	Tanzanie (République Unie de).
5JA-5KZ	Colombie (République de).
5LA-5MZ	Libéria (République du).
5NA-5OZ	Nigeria (République Fédérale de).
5PA-5QZ	Danemark.
5RA-5SZ	Madagascar (République Démocratique de).
5TA-5TZ	Mauritanie (République Islamique du).
5UA-5UZ	Niger (République du).
5VA-5VZ	Togolaise (République).
5WA-5WZ	Samoa occidental.
5XA-5XZ	Ouganda (République de l').
5YA-5ZZ	Kenya (République du).
6AA-6BZ	Egypte (République Arabe d').
6CA-6CZ	République Arabe Syrienne.
6DA-6JZ	Mexique.
6KA-6NZ	République de Corée.
6OA-6OZ	Somalie (République Démocratique).
6PA-6SZ	Pakistan (République Islamique du).
6TA-6UZ	Soudan (République Démocratique du).
6VA-6WZ	Sénégal (République du).
6XA-6XZ	Madagascar (République Démocrátique de).
6YA-6YZ	Jamaïque.
6ZA-6ZZ	Libéria (République du).
7AA-7IZ	Indonésie (République d').
7JA-7NZ	Japon.
7OA-7OZ	Yémen (Republique Démocratique Populaire du).
7PA-7PZ	Lesotho (Rayaume de).
7QA-7QZ	Malawi (République de).
7RA-7RZ	Algérie (République Algérienne Démocratique et Populaire).
7SA-7SZ	Suède.
7TA-7YZ	Algérie (République Algérienne Démocratique et Populaire).
7ZA-7ZZ	Arabie Saoudite (Royaume de l').
8AA-8IZ	Indonésie (Répúblique d').
8JA-8NZ	Japon.
8OA-8OZ	Botswana (République de).
8PA-8PZ	Barbade.
8QA-8QZ	Maldives (République des).
8RA-8RZ	Guyane.
8SA-8SZ	Suède.
8TA-8YZ	Inde (République de l').
8ZA-8ZZ	Arábie Saoudite (Royaume de l').
9AA-9AZ	Saint-Marin (République de).
9BA-9DZ	Iran (République Islamique d').
9EA-9FZ	Ethiopie.
9GA-9GZ	Ghana.
9HA-9HZ	Malte (République de).
9IA-9IZ	Zambie (République de).
9KA-9KZ	Koweit (État de).
9LA-9LZ	Sierra Leone.
9MA-9MZ	Malaisie.
9NA-9NZ	Népal.
9OA-9TZ	Zaire (République du).
9UA-9UZ	Burundi (République du).
9VA-9VZ	Singapour (République de).
9WA-9WZ	Malaisie.
9XA-9XZ	Rwandaise (République).
9YA-9ZZ	Trinité e Tobago.

(*) Les séries d'indicatifs d'appel précédées d'un astérisque sont attribuées à des organisations internacionales.

APPENDICE 43

Identités dans le service mobile maritime

1. *Considérations générales.*

1.1. Dans le service mobile maritime, les identités se composent d'une série de neuf chiffre transmis sur le trajet radioélectrique pour identifier d'une manière unique les stations de navire, les stations terriennes de navire, les stations côtières, les stations terriennes côtières et les appels de groupe.

1.2. Les identités des stations de navire doivent être conformes aux Avis pertinents du CCIR et du CCITT.

1.3. Ces identités sont composées de telle sorte que l'identité ou une partie de l'identité permette aux abonnés des services téléphonique ou télex reliés au réseau général des télécommunications d'appeler des navires en exploitation automatique dans le sens côtière-navire.

1.4. Il y a trois catégories d'identités dans le service mobile maritime:

i) Identités des stations de navire;
ii) Identités des appels de groupes;
iii) Identités des stations côtières.

1.5. La nationalité ou le pavillon d'une station est indiqué par un groupe de trois chiffres, les chiffres d'identification de nationalité (NID).

2. *Chiffres d'identification de nationalité (NID).*

Le tableau I donne les chiffres d'identification de nationalité attribués à chaque pays. Conformément au numéro **2087** dur Règlement des radiocommunications, le Secrétaire général est autorisé à attribuer des chiffres d'identification de nationalité aux pays qui ne figurent pas dans le tableau (1).

3. *Identité de la station de navire.*

L'identité de la station de navire se compose de 9 chiffres, comme il et indiqué ci-après:

N I D X X X X X X
1 2 3 4 5 6 7 8 9

où

N I D
1 2 3

représentent les chiffres d'identification de nationalité. Chaque X représente un chiffre compris entre 0 et 9.

4. *Identité de l'appel de groupe.*

L'identité de l'appel de groupe utilisée pour appeler simultanément plusieurs navires est formée comme suit:

0 N I D X X X X
1 2 3 4 5 6 7 8 9

le premier caractère étant un zéro et chaque X représentant un chiffre compris entre 0 et 9.

Le NID ne représente que le pays qui a assigné l'identité d'appel de groupe et n'empêche donc pas d'appeler des groupes composés de navires de différentes nationalités.

5. *Identité de station côtière.*

L'identité de la station côtière est composée comme suit:

0 0 N I D X X X X
1 2 3 4 5 6 7 8 9

les deux premiers caractères étant des zéros et chaques X représentant un chiffre compris entre 0 et 9.

Le NID représente le pays où est située la station côtière ou la station terrienne côtière.

TABLEAU I

Chiffres d'identification de nationalité (1)

Pays	**Chifres**

(1) Les détails relatifs à l'attribution des chiffres d'identification de nationalité (NID) devront être mis au point par le Secrétaire général, en coopération étroite avec le CCIR et le CCITT, conformément à la Résolution **313** et aux dispositons du présent appendice. En attendant que ces renseignements puissent être fournis à la prochaine conférence compétente pour décision, des attributions provisoires pourront être effectuées par le Secrétaire général. Ces attributions feront en conséquence l'objet d'un examen ou d'une révision par le conférence mentionnée ci-dessus.

ADD AP CB

APPENDICE 44

Numéros d'appel sélectif des stations de navire et numéros d'identification des stations côtières

PARTIE I

Tableau des tranches de numéros d'appel sélectif des stations de navire et des numéros d'appel sélectif pour groupes de stations de navire qui ont été fournis aux administrations

Tranches (*) de numéros d'appel sélectif des stations de navire et numéros d'appel sélectif pour groupes de stations de navire	Fournis à
00 000 (*)	Argentine (République).
00 001–00 499	Argentine (République).
00 900–00 999	Arabie Saoudite (Royaume de l').
01 010 (*)	Australie.
01 100–01 199	Australie.
01 800–01 899	Singapour (République de).
01 900–01 999	Seychelles (République des).
02 020 (*)	Argentine (République).
03 200–03 299	Canada.
04 040 (*)	Canada.
05 200–05 399	Chypre (République de).
05 900–05 999	Bulgarie (République Populaire de).
06 300–07 069	Danemark.
07 070 (*)	Danemark.
07 071–07 999	Danemark.
08 080 (*)	Danemark.
08 400–08 499	Espagne.
10 400–11 110	États-Unis d'Amérique.
11 111 (*)	États-Unis d'Amérique.
11 112–11 399	États-Unis d'Amérique.
14 000–14 140	Finlande.
14 141 (*)	Finlande.
14 142–14 199	Finlande.
14 700–15 150	France.
15 151 (*)	France.
15 152–16 099	France.
16 161 (*)	France.
16 700–17 170	Grèce.
17 171 (*)	Grèce.
17 172–17 699	Grèce.
18 181 (*)	Chine (République Populaire de).
19 000–19 099	Chili.
19 191 (*)	Chine (République Populaire de).
19 400–19 499	Ghana.
19 700–20 199	Chine (République Populaire de).
20 202 (*)	Chine (République Populaire de).
20 300–20 799	Italie.
21 212 (*)	Italie.
22 222 (*)	Italie.
22 300–22 399	Iraq (République d').
22 400–22 599	Koweït (État de).
22 700–22 899	Iraq (République d').
23 500–23 999	Inde (République de l').
24 300–25 199	Libéria (République du).
26 000–26 261	Suède.
26 262 (*)	Suède.
26 263–26 999	Suède.
31 900–31 999	Malte (République de).
32 000–32 099	Cuba.
32 400–33 332	Norvège.
33 333 (*)	Norvège.
33 334–34 342	Norvège.
34 343 (*)	Norvège.
34 344–34 499	Norvège.
36 000–36 099	Irlande.
36 200–36 299	Luxembourg.
36 400–37 372	Pays-Bas (Royaume des).
37 373 (*)	Pays-Bas (Royaume des).
37 374–38 382	Pays-Bas (Royaume des).
38 383 (*)	Pays-Bas (Royaume des).
38 384–38 399	Pays-Bas (Royaume des).
38 400–39 392	Allemagne (République fédérale d').
39 393 (*)	Allemagne (République fédérale d').
39 394–40 403	Allemagne (République fédérale d').
40 404 (*)	Allemagne (République fédérale d').
40 405–41 413	Allemagne (République fédérale d').
41 414 (*)	Allemagne (République fédérale d').
41 415–41 499	Allemagne (République fédérale d').
41 900–42 199	Panama (République de).
42 424 (*)	Panama (République de).
43 000–43 433	Pologne (République Populaire de).
43 434 (*)	Pologne (République Populaire de).
43 435–43 499	Pologne (République Populaire de).
43 500–44 099	Suède.
44 444 (*)	Panama (République de).
45 500–46 463	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
46 464 (*)	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
46 465–46 899	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
47 474 (*)	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
50 400–50 499	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
50 500–50 504	Israël (État d').
50 505 (*)	Israël (État d').
50 506–50 699	Israël (État d').
51 100–51 499	Suisse (Confédération).
52 600–53 534	Union des Républiques Socialistes Soviétiques.
53 535 (*)	Union des Républiques Socialistes Soviétiques.
53 536–54 544	Union des Républiques Socialistes Soviétiques.
54 546–55 554	Union des Républiques Socialistes Soviétiques.
55 556–56 099	Union des Républiques Socialistes Soviétiques.
56 200–56 299	Malaisie.
56 800–57 099	Yougoslavie (République Socialiste Fédérative de).
57 800–57 899	Venezuela (République de).
58 100–58 199	Algérie (République Algérienne Démocratique et Populaire)
58 200–58 299	Autriche.
59 400–59 499	Libye (Jamahiriya Arabe Libyenne Populaire Socialiste).
59 700–59 899	Nouvelle-Zélande.
59 900–59 999	Monaco.
60 100–60 599	République Démocratique Allemande.
61 000–61 099	Antilles néerlandaises.
61 100–61 199	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
61 500–61 599	Bahamas (Commonwealth des).
62 000–62 099	Jordanie (Royaume Hachémite de).
63 000–63 099	Qatar (État du).
63 200–63 299	Bahreïn (État de).
63 400–63 499	Emirats Arabes Unis.
64 600–64 645	Sudafricaine (République).
64 646 (*)	Sudafricaine (République).
64 647–64 799	Sudafricaine (République).
65 700–65 799	Turquie.
66 000–66 665	Union des Républiques Socialistes Soviétiques.
66 667–67 675	Union des Républiques Socialistes Soviétiques.
67 677–68 685	Union des Républiques Socialistes Soviétiques.
68 686 (*)	Union des Républiques Socialistes Soviétiques.
68 687–69 695	Union des Républiques Socialistes Soviétiques.
69 697–70 706	Union des Républiques Socialistes Soviétiques.
70 707 (*)	Union des Républiques Socialistes Soviétiques.

Tranches (*) de numéros d'appel sélectif des stations de navire et numéros d'appel sélectif pour groupes de stations de navire	Fournis à	Tranches (*) de numéros d'appel sélectif des stations de navire et numéros d'appel sélectif pour groupes de stations de navire	Fournis à
70 708–71 716	Union des Républiques Socialistes Soviétiques.	78 787 (*)	Mexique.
71 717 (*)	Union des Républiques Socialistes Soviétiques.	78 788–78 799	Mexique.
71 718–72 499	Union des Républiques Socialistes Soviétiques.	79 000–79 099	Oman (Sultanat d').
72 500–72 726	Belgique.	79 200–79 399	République Arabe Syrienne.
72 727 (*)	Belgique.	82 828 (*)	Malte (République de).
72 728–73 736	Belgique.	83 838 (*)	Malte (République de).
73 737 (*)	Belgique.	84 848 (*)	Pays-Bas (Royaume des).
73 738–73 999	Belgique.	86 868 (*)	Italie.
74 700–74 746	Sierra Leone.	87 878 (*)	Italie.
74 747 (*)	Sierra Leone.	88 888 (*)	Italie.
74 748–74 799	Sierra Leone.	89 898 (*)	Italie.
75 500–75 756	Islande.	90 909 (*)	Italie.
75 758–75 999	Islande.	91 919 (*)	Italie.
77 500–77 699	Yémen (République Démocratique Populaire de).	92 929 (*)	Italie.
77 700–77 776	Mexique.	93 939 (*)	Italie.
77 777 (*)	Mexique.	94 949 (*)	Israël (État d').
77 778–77 799	Mexique.	95 959 (*)	Israël (État d').
78 000–78 199	Egypte (République Arabe d').	96 969 (*)	Israël (État d').
78 700–78 786	Mexique.	97 979 (*)	République Démocratique Allemande.
		98 989 (*)	République Démocratique Allemande.

(*) Les numéros composés sont du même chiffre répété cinq fois, soit de deux chiffres différents répétés alternativement, sont réservés à l'appel de groupes prédéterminés de stations de navire. Ces numéros ne doivent pas être considérés comme faisant partie des tranches de numéros d'appel sélectif des stations de navire fournis aux administrations.

PARTIE II

Tableau des tranches de numéros d'identifications des stations côtières qui ont être fournis auxs administrations

Tranches de numéros d'identification	Fournis à	Tranches de numéros d'identification	Fournis à
0 100–0 119	Argentine (République).	2 830–2 849	Allemagne (République fédérale d').
0 270–0 279	Algérie (République Algérienne Démocratique et Populaire).	2 930–2 949	Pologne (République Populaire de).
0 330–0 339	Australie.	2 950–2 959	Suède.
0 480–0 489	Belgique.	3 200–3 259	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
0 580–0 589	Canada.	3 450–3 459	Israël (État d').
0 810–0 819	Bulgarie (République Populaire de).	3 500–3 509	Suisse (Confédération).
0 830–0 899	Danemark.	3 620–3 769	Union des Républiques Socialistes Soviétiques.
0 990–1 089	Espagne.	3 800–3 809	Malaisie.
1 090–1 190	États-Unis d'Amérique.	3 850–3 859	Yougoslavie (République Socialiste Fédérative de).
1 590–1 609	Finlande.	3 910–3 919	Venezuela (République de).
1 630–1669	France.	4 330–4 349	Sudafricaine (République).
1 780–1 789	Grèce.	4 360–4 369	Turquie.
1 860–1 889	Chili.	4 400–4 599	Union des Républiques Socialistes Soviétiques.
1 920–1 929	Ghana.	4 600–4 619	République Démocratique Allemande.
1 980–1 989	Irlande.	4 620–4 629	Singapour (République de).
2 010–2 019	Chine (République Populaire de).	4 630–4 639	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.
2 070–2 109	Italie.	4 640–4 649	Sierra Leone.
2 130–2 149	Iraq (République d').	4 650–4 659	Bahreïn (État de).
2 180–2 189	Koweït (État de).	4 660–4 669	Seychelles (République des).
2 280–2 289	Libye (Jamahiriya Arabe Libyenne Populaire Socialiste).	4 690–4 699	Qatar (État du).
2 300–2 339	Inde (République de l').	4 710–4 719	Emirats Arabes Unis.
2 480–2 489	Malte (République de).	4 810–4 819	Yémen (République Démocratique Populaire du).
2 500–2 509	Monaco.	4 820–4 829	Egypte (République Arabe d').
2 510–2 519	Cuba.	4 830–4 839	Arabie Saoudite (Royaume de l').
2 550–2 599	Norvège.	4 900–4 939	Mexique.
2 740–2 749	Islande.	4 980–4 999	République Arabe Syrienne.
2 770–2 779	Pays-Bas (Royaume des).	5 010–5 019	Oman (Sultanat d').

PROTOCOLE FINAL

Au moment de signer les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), les délégués soussignés prennent note des déclarations suivantes, formulées par des délégations signataires:

Nº 1

Pour la République de Honduras

La République de Honduras, par l'intermédiaire de sa délégation à la Conférence administrative mondiale des radiocommunications (Génève, 1979), désire formuler les réserves suivantes:

a) Son Gouvernement se réserve le droit de prendre les mesures qu'il estimera nécessaires pour protéger ses intérêts si d'autres Membres de l'Union ne se conforment pas aux dispositions du Règlement des radiocommunications, de ses Annexes et des Protocoles qui y sont attachés;

b) De même, elle déclare que son Gouvernement se réserve le droit de formuler toute réserve jusqu'à la date de ratitification des Actes finals de la présente Conférence administrative mondiale des radiocommunications (Génève, 1979).

Nº 2

Pour la République du Guatemala

La délégation de la République du Guatemala:

a) Réserve à son Gouvernement le droit d'accepter et de ratifier en totalité ou en partie les Actes finals de la présente Conférence ainsi que leur application dans le cadre territorial reconnu par la Constitution de la République;

b) N'accepte pas les réserves exprimées par d'autres pays si celles-ci vont à l'encontre des intérêts nationaux, selon l'appréciation définitive que le Gouvernement de la République du Guatemala formulera au moment d'accepter et de ratifier les Actes finals de la Conférence.

Nº 3

Pour la République du Tchad

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République du Tchad déclare, en ce qui concerne la protection de ses intérêts en matière de télècommunications, que la souveraineté de son État ne pourra en aucune manière être effectée par des dispositions adoptées par la présente Conférence ou les réserves formulées par d'autres États Membres de l'Union.

En conséquence, elle réserve le droit à son Gouvernement de prendre les mesures qu'il jugera nécessaires pour protéger ses services de télécommunications.

Nº 4

Pour la République Algérienne Démocratique et Populaire, le Royaume de l'Arabie Saoudite, l'État de Bhareïn, la République Popular du Bangladesh, les Emirats Arabes Unis, la République Islamique d'Iraq, le Royaume Hachémite de Jordanie, l'État de Koweït, le Liban, la Libye (Jmahiriya Arabe Libyenne Populaire Socialiste), le Royaume du Maroc, le Sultanat d'Oman, la République Islamique du Pakistan, l'État du Qatar, la République Arabe Syrienne, la République Démocratique Somalie, la République Démocratique du Saudan, la Tunisie et la Répulique Démocratic Populaire du Yémen.

Les délégations des pays susmentionnées déclarent que la signature et l'approbation ultérieure éventuelle par leurs Gouvernements repectifs des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) n'impliquent en aucune manière la reconnaissance d'Israël.

Nº 5

Pour la Bélgique

L'administration Belge a l'intention de mettre rapidement en service um réseau de stations de radiodiffusion dans la bande 100-104 MHz.

Elle insiste vivement auprès des administrations concernées pour que celles-ci envisagent dès maintenant les mesures rendant possible cette mise en service.

Nº 6

Pour la République Populaire du Bénin

La délégation de la République Populaire du Bénin réserve à son Gouvernement le droit de prendre toutes les mesures nécessaires pour protéger ses intérêts si des réserves formulées par d'autres délégations compromettaient le bon fonctionnement de ses services de télécommunication.

Nº 7

Pour le Chili

Se référant aux décisions prises par la Conférence administrative mondiale des radiocommunications (Génève, 1979), au sujet des assignations de fréquence qui figureront dans le Fichier de référence international des fréquences, tenant compte également des dispositions de l'article quatre, numéro deux, du Traité l'Antarctique signé à Washington le premier décembre 1959, et réitérant les termes du número VIII du Protocole final à la Convention internationale des télécommunications signée à Malaga-Torremolinos, 1973, la délégation du Chili déclare que, sur le territoire antarctique chilien, territoire sur lequel il exerce la souveraineté, son Gouvernement se réserve le droit d'assigner et de reconnaître les fréquences qu'il estimera nécessaires pour les services de radiocommunication, présents et futurs, qui fonctionneront dans les limites dudit territoire.

Nº 8

Pour Cuba

La délégation de Cuba, représentant son Gouvernement et au nom de celui-ci, déclare qu'elle ne reconnaît aucune valeur juridique ni morale à la signature des Actes finals par les représentants du régime de Pol Pot à la Conférence administrative mondiale des radiocommunications (Génève, 1979), sur la base des considérations suivantes:

Le régime génocide de Pol Pot ne représente pas les interêts légitimes du peuple du Kampuchea et n'exerce aucune autorité sur ce pays;

L'inscription du régime de Pol Pot à la présente Conférence est purement formelle; elle répond à des intérêts exclusivement politiques, comme en témoigne l'absence de participation aux travaux et débats de la Conférence. Du fait qu'il est dépourvu d'autorité sur le territoire de ce pays et qu'il n'y exerce aucune juridiction, ce régime ne peut réglementer le fonctionnement des télécommunications.

La délégation de Cuba considère que, en l'absence des représentants légitimes du peuple de Kampuchea, le Conseil Populaire Révolutionnaire, les Actes finals de la Conférence ne doivent porter aucune signature d'une représentation du Kampuchea.

Nº 9

Pour Cuba

En signant et en acceptant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) au nom du Gouvernement de la République de Cuba, la délégation de Cuba déclare que cela ne signifie en aucune manière qu'elle reconnaît la notification, l'inscription et l'utilisation de fréquences par le Gouvernement nord-américain, dans la partie du territoire cubain de la Province de Guantanamo qui est occupée illégalement et contre la volonté du peuple cubain.

L'utilisation de fréquences radioélectriques par le Gouvernement des États-Unis sur le territoire qu'il usurpe à Guantanamo. Cuba, constitue un obstacle aux services de télécommunications de Cuba et à l'exercice de la souveraineté de notre pays sur le spectre des fréquences radioélectriques, qui représente une ressource limitée.

Le Gouvernement de Cuba se réserve le droit de prendre toutes les mesures nécessaires pour la sauvegarde de ses intérêts légitimes.

Nº 10

Pour la République Islamique d'Iran

Cette Conférence n'a pas été en mesure de répondre de façon satisfaisante aux besoins du service de radiodiffusion à ondes décamétrique, dans les attributions de bandes de fréquences révisées, notamment dasn les bandes des 6 et 7 MHz. Si la Conference projetée de radiodiffusion à ondes décamétriques n'est pas habilitée, de par son ordre du jour, à disposer de certaines parties du spectre attribuées au service fixe, elle sera dans l'impossibilité de planifier l'utilisation de toutes les bandes de fréquences de manière á permettre aux pays d'assurer leurs services de radiodiffusion en cas de variations des conditions de propagation dans toute l'etendue du cycle d'activité solaire. En l'absence d'un

plan adéqual, l'Administration de la République Islamique d'Iran se réserve le droit de prendre les mesures nécessaires pour utiliser les portions des bandes 5850-5950 kHz et 7300-7400 kHz également pour les services de radiodiffusion, selon les besoins de cette Administration.

Nº 11

Pour la République Démocratique d'Afghanistan

La délégation de la République Démocratique d'Afghanistan réserve pour son Gouvernement le droit de continuer à utiliser les services fixe et mobile dans les bandes attribuées en exclusivité au service mobile maritime au-dessous de 10 MHz. Ces bandes seront utilisées pour les besoins intérieurs de l'Afghanistan et de manière à ne pas causer de brouillages préjudiciables au service mobile maritime.

Nº 12

Pour la République Islamique de Mauritanie

La délégation de la République Islamique de Mauritanie déclare que la signature des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) ainsi que la ratification éventuelle ultérieure desdits Actes finals par son Gouvernement n'impliquent en aucune manière la reconnaissance de l'État d'Israël.

Nº 13

Pour la République Islamique du Pakistan

Consideránt:

a) Que l'établissement d'un plan de radiodiffusion à ondes décamétriques est la condition indispensable du respect de la égalité e de l'ordre dans cette partie du spectre;
b) Que tous les efforts faits jusqu'ici pour élaborer un tel plan échoué en raison des attributions inadéquates au service de radiodiffusion dans la gamme des ondes décamétriques, notamment dans les bandes de fréquences le plus basses;
c) Qu'aucun élargissement des bandes de radiodiffusion des 6 MHz et 7 MHz, particulièrement importantes, n'a été approuvé par la présente Conférence;
d) Que le renvoi 531 concernant la partie élargie des bandes attribuées au service de radiodiffusion est trop rigide et ne laisse aucune marge de manœuvre à la prochaine Conférence administrative mondiale des radiocommunications;
e) Que la période de transfert des assignations déplacées en raison de l'élargissement des bandes attribuées au service de radiodiffusion est trop longue;
f) Que les émissions de radiodiffusion d'un petit nombre de pays dans des bandes 6 MHz et 7 MHz débordent déjà sur les bandes adjacentes attribuées aux services fixes, avec une puissance totale de 12,5 megawatts;
g) Que pour des raisons d'équité, ces émissions de radiodiffusion hors bande se multiplieront si la Conférence administrative mondiale des radiocommunications proposée ne parvient pas, faute d'attributions satisfaisantes, à établir un plan acceptable de radiodiffusion à ondes décamétriques;
h) Qu'il ne ser plus possible avant très longtemps de corriger ces erreurs d'attribution;

la délegation du Gouvernement du Pakistan á la présente Conférence administrative mondiale des radiocommunications de l'Union internationale des télécommunications ne peut accepter ni les attributions figurant dans le tableau d'attribution pour les bandes 5830-5950 kHz et 7300-7500 kHz, ni le renvoi 531 et ses conséquences. Cela étant, elle réserve à son Gouvernement le droit de prendre toutes les mesures qu'il estime appropriées pour protéger ses intérêts.

Ladite délégation garantir toutefois la coopération et la participation pleine et entière de son Administration à la préparation du plan de radiodiffusion à ondes décamétriques, conformément à la décision de la présente Conférence. Elle garantit également que les réserves ci-dessus deviendront caduques dès qu'un plan de radiodiffusion à ondes décamétriques acceptable aura été élaboré et mis en application.

La délégation de la République Islamique du Pakistan réserve en outre à son Gouvernement le droit d'accepter ou non les conséquences que pourrait entrainer le non-respect par tout autre Membre de l'Union des dispositions des Actes finals de la Conférence et du Règlement des radiocommunications. En pareil cas, le Pakistan se reserve le droit de prendre toutes les mesures nécessaires pour proteger ses intérêts.

Nº 14

Pour la Grèce et la République Socialiste Fédérative de Yougoslavie

Dans la bande 415-495 kHz, la présent Conférence a adopté, pour la Région 1, des attributions différentes decelles des Régions 2 et 3. Les deux services auxquels cette bande est attribuée, à savoir le service de radionavigation aeronautique et le service mobile maritime, sont tous deux services extrêmement importants du point de vue de la

sécurité. Les délégations des pays mentionnés ci-dessus estiment donc que cette decision suscitera de graves problèmes en ce qui concerne la sauvegarde de la vie humaine.

Pour éviter toute répercussion de cette décision, les délégations des pays mentionnés ci-dessous ont proposé, à toutes les etapes des déliberations de la présente Conférence, des solutions visant à garantir la protection absolue de ces services et en particulier du service de radionavigation aéronautique. Ces solutions n'ayant pas été retenues par la présente Conférence, les délégations en question déclarent que leurs administrations ne peuvent assumer la responsabilité des conséquences éventuelles d l'utilisation de cette bande telle qu'elle a été décidée, en raison du caractère international des deux services.

De plus, les délégations mentionnées ci-dessus déclarent qu'elles réservent à leurs administrations le droit de modifier les assignations de fréquence de leurs stations côtières dans la bande 415-435 kHz jusqu'à la date d'entrée en vigueur d'une version révisée du Plan de Copenhague qui spécifiera des fréquences de remplacement dans la bande 435-495 kHz, quelle que soit la date arrêtée.

Nº 15

Pour la République Orientale de l'Uruguay

La délégation de la République Orientale de l'Uruguay déclare que devant la réduction de la largeur des bandes de fréquences attribuées au service fixe entre 4 MHz et 27,5 MHz, et étant donné qu'il n'a pas été prévu de procédure de réassignation des fréquences qui permettrait de garantir de façon certaine la continuité de fonctionnement des stations radioélectriques de l'Uruguay lorsque le service de radiodiffusion et le service mobile maritime utiliseront les parties de bandes qui ont été retirées au service fixe, son Gouvernement se réserve le droit d'adopter les mesures qu'il jugerait nécessaires pour continuer d'utiliser sous une forme adéquate les fréquences du service fixe qui sont inscrites au nom de l'Uruguay dans le Fichier de référence international des fréquences — fréquences qui revêtent une importantce vitale pour le pays — jusqu'à ce que soient fournies de nouvelles fréquences de remplacement permettant le bon fonctionnement des services de radiocommunication de l'Uruguay.

La délégation de la République Orientale de l'Uruguay doute que, dans les bandes du service fixe ainsi réduites, et particulièrement dans certaines zones ou sous-régions dans lesquellles les spectre est déjà encombré, il soit possible de réassigner les voies à transférer, malgré la réduction des valeurs des paramètres techniques applicables à ses circuits.

La délègation de la République Orientale de l'Uruguay réserve, en outre, à son Gouvernement le droit d'adopter les mesures qu'il jugerait nécessaires pour protèger ses intérêts au cas où les fréquences de remplacement attribuées à une autre administration compromettraient son système de radiocommunication.

Nº 16

Pour le Japon

Les brouillages causés par certaines stations de radiodiffusion de la Région 1 fonctionnant dans la bande des ondes kilométriques compromettent la bonne marche des stations de radiophare aéronautiques au Japon. Ces brouillages augmenteront considérablement lorsque de nouveaux émetteurs de radiodiffusion à ondes kilométriques seront mis en service ou lorsque des modifications seront apportées aux caractéristiques des assignations existantes à des stations de radiodiffusion à ondes kilométriques.

Comme le mentionnent explicitement les considérants de la Résolution Nº 7 de la Conférence administrative régionale de radiodiffusion à ondes kilométriques et hectométriques (Génève, 1975) et le paragraphe 4.4.4.1 du rapport de la Reúnion spéciale préparatoire du CCIR (Génève, 1978), l'utilisastion de la bande des ondes kilométriques par les stations de radiodiffusion de la Région 1 peut défavorablement influer sur les stations d'autres services de radiocommunication auxquelles cette bande est attribuée dand d'autres régions, en particulier les stations du service de radionavigation aéronautique utilisées pour la sauvegarde de la vie humaine.

Cependant, la présente Conférence n'a pas résolu le problème susmentionné en ce qui concerne l'utilisation de la bande des ondes kilométriques. De plus, elle a adopté une Résolution relative à la modification des fréquences porteuses des stations de radiodiffusion á ondes kilométriques dans la Région 1, sans prendre dûment en considération les possibilités de brouillage supplémentaires qui peuvent en résulter pour les stations de radiophare aéronautiques de la Région 3.

Par conséquent, la délégation du Japon réserve à son Gouvernement le droit de prendre les mesures nécessaires, y compris un réaménagement de ses assignations de fréquences dans la bande comprise entre 130 kHz et 526,5 kHz, sans tenir compte des attributions faites dans le Règlement des radiocommunications, au cas où des stations de radiodiffusion de la Région 1 porteraient gravement atteinte au bon fonctionnement des stations de radiophare aéronautiques du Japon dans la bande de fréquences comprise entre 190 kHz et 285 kHz.

Nº 17

Pour la République Fédérale de Nigeria

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Fédérale de Nigeria réserve à son Gouvernement le droit de prendre toutes les dispo-

sitions qu'il jugera nécessaires pour sauvegarder ses intérêts au cas où les réserves ou les interprétations erronées des Actes finals formulées par d'autres pays organisations constitueraient une menace pour les services de télécommunication de la République Fédérale de Nigeria ou leur porteraient préjudice.

La délégation de la République Fédérale de Nigeria ne peut accepter en particulier la décision prise par cette Conférence concernant les liaisons de connexion du service de radiodiffusion par satellite dans la bande 14,0-14,8 GHz, pour les raisons suivantes:

a) La Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite de 1977 a établi un plan pour les liaisons descendantes dans la bande 11,7-12,5 GHz sur une largeur de bande de 800 MHz;

b) La largeur de bande qui a été attribuée en exclusivité aux liaisons de connexion du service de radiodiffusion par satellite dans nottre bande de fréquences préférée (14,5-15,3 GHz) n'est que de 300 MHz dans la bande 14,5-14,8 GHz acceptée par la Conférence. Cette largeur de bande ne ser pas suffisante étant donné le grand nombre d'administrations que l'on compte par position orbitale.

N° 18

Pour la République du Zaire

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République du Zaire réserve à son Gouvernement le droit de prendre toutes les mesures qu'il estime nécessaires afin d'assurer la protection de ses services de radiocommunications au cas où certains Membres de l'Union n'observaient pas les dispositions du Règlement de radiocommunication ou, si les réserves formulées par les délégations d'autres pays compromettaient le bon fonctionnement des services de radiocommunication Zairois.

N° 19

Pour le Canada

a) Satellites du service mobile fonctionnant dans la bande des ondes décimétriques:

Le Canada convient que les systèmes mobiles à satellites qu'il mettra au point conformément au numéro 641 du Règlement des radiocommunications doivent être coordonnés et notifiés relativement aux articles 11, 13 et 14. Mais, une fois ces satellites mis en service, le Canada considère qu'ils fonctionneront dans le cadre d'une attribution à titre primaire pendant toute leur durée de vie utile.

b) Radiodiffusion à ondes décamétriques:

Le Canada considère que la présente Conférence n'a pas apporté de solution au grave encombrement des bandes attribuées au service de radiodiffusion à ondes décamétriques au-dessous de 9 MHz. La Conférence a rejeté á une très faible majorité une proposition du Canada visant à ajouter dans le monde entier une bande de 100 kHz, entre 7300 kHz et 7400 kHz, aux fréquences attribuées à ce service, alors que cette adjonction aurait permis de résoudre le problème. C'est pourquoi, en signant les présents Actes finals, le Canada se réserve le droit de répondre à certains de ses besoins de radiodiffusion en recourant à la bande 7300-7400 kHz. Dans le mesure du possible, le Canada respectera bien entendu les droits des administrations dont les services seront exploités conformément aux Actes finals de la présente Conférence.

N° 20

Pour la République Populaire de Chine

Au moment de signer les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Populaire de Chine déclare ce qui suit au nom du Gouvernement chinois:

La délégation de la Chine prend note de la décision prise par la présente Conférence au sujet de la convocation d'une Conférence administrative mondiale des radiocommunications chargée d'établir un plan pour les bandes d'ondes décamétriques attribuées au service de radiodiffusion et estime qu'il s'agit d'une mesure efficace qui permettra de résoudre le problème de l'encombrement dans les bandes attribuées à la radiodiffusion en ondes décamétriques et celui des émissions hors bande. Toutefois, pour des raisons de nature historique l'Administration de la Chine se réserve le droit de continuer à employer les fréquences qu'elle utilise actuellement pour la radiodiffusion dans la bande 5060-27 500 kHz jusqu'à l'établissement et à la mise en œuvre du plan de radiodiffusion à ondes décamétriques proposé.

Nº 21

Pour le Chili

La délégation du Chilie à la Conférence administrative mondiale des radiocommunications (Génève, 1979), déclare, au sujet des obligations découlant du Règlement des radiocommunications révisé, et plus particulièrement en ce qui concerne le transfert des attributions actuelles du service fixe au profit d'autres services dans la bande des ondes décamétriques qu'elle fera tous les efforts nécessaires pour appliquer la nouvelle réglementation.

Néanmois, elle réserve à son Gouvernement le droit de prendre toutes les mesures qu'il estimera nécessaires pour maintenir en service, à l'intérieur du territoire national, les liaisons du service fixe qui, pour des raisons de faisabilité technique, économique ou autre, ne pourraient être transférées dans les délais fixés par la présente Conférence.

Nº 22

Pour la République de l'Inde

Au moment de signer les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la República de l'Inde n'accept pas les répercussions quelles qu'elles soient, des réserves que pourrait formuler toute autre administration concernant les dispositions des Actes finals. La délégation de la République de l'Inde réserve á son Gouvernement le droit de prendre toutes les mesures qu'il pourrait juger nécessaires pour protéger ses intérêts au cas où une administration n'observerait pas les dispositions du Règlement des radiocommunications telles qu'elles ont été révisées par la présente Conférence.

Nº 23

Pour le Mexique

La délégation du Mexique, en signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), exprime l'intention de son Administration de se conformer aux dispositions du Règlement des radiocommunications, telles qu'adoptées par ladite Conférence; toutefois, elle déclare que son Gouvernement se réserve le droit de prendre les mesures qu'il estimera nécessaires pour protéger ses intérêts, au cas où um Membre de l'Union ne respecterait pas les dispositions dudit Règlement.

De même, da délégation du Mexique déclare que son Administration fera tous ses efforts pour que le transfert des stations des services fixe et mobile terrestres actuellement enregistrées conformèment au Tableau d'attribution des bandes de fréquences en vigueur, se fasse dans les délais adoptés, afin que leur utilisation soit conforme au nouveau Tableau. Néanmoins, si à la suite des décisions prises par la présente Conférence pour réduire les bandes attribuées à ces services ou pour limiter leur opération dans les bandes d'ondes décamétriques au profit d'autres services, lesdites stations ne peuvent continuer à fonctionner efficacement dans les bandes qui leur ont été assignées ou dans les bandes de remplacement éventuelles, le Gouvernement du Mexique se réserve le droit d'adopter les mesures qu'il jugera appropriées pour assurer le fonctionnement satisfaisant de ces stations.

Nº 24

Pour la République de Côte d'Ivoire

La délégation de la République de Côte d'Ivoire réserve pour son Gouvernement le droit de prendre toutes les dispositions qu'il jugera nécessaires pour assurer la protection et le bon fonctionnement de ses services de télécommunications en cas de non observation par les autres Membres de l'Union des dispositions contenues dans le Règlement des radiocommunications (Génève, 1979).

Nº 25

Pour la République Islamique d'Iran

En ce qui concerne les attributions dans la bande 150-285 kHz inscrites au Tableau d'attribution des bandes de fréquences et approuvées par la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de l'Iran déclare:

a) Que les stations de radiodiffusion à ondes kilométriques de grande puissance de la Région 1 causent déjà des brouillages préjudiciables à la radionavigation aéronautique;

b) Que des modifications des caractéristiques de puissance ou des fréquences des émetteurs de radiodiffusion à ondes kilométriques ou bien l'entrée en service de nouvelles assignations dans la bande des ondes kilométriques (150-285 kHz), augmenteront ces brouillages et rendront par conséquent l'utilisation actuelle de la radionavigation aéronautique beaucoup plus difficile en Iran;

c) Que, en conséquence, l'Administration de la République Islamique d'Iran réserve pour son pays le droit de prendre les mesures nécessaires pour assurer la protection du service de radionavigation aéronautique;

d) Qu'elle réserve également son droit d'utiliser aussi la section 160-190 kHz de la bande 150-285 kHz pour le service de radiodiffusion à ondes kilométriques selon les besoins de l'Iran.

Nº 26

Pour la République de Venezuela

En signant les Acts finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) la délégation de Venezuela exprime l'intention de son administration de se conformer aux dispositions du Règlement des radiocommunications révisé. Néanmoins, elle déclare que son Gouvernement se réserve le droit d'adopter les mesures qu'il estimera nécessaires pour protéger ses intérêts, plus particuliérement en ce qui concerne les services fixe et mobile au-dessous de 9975 kHz, ainsi que dans le cas où un Membre de l'Union n'observerait pas les dispositions du Règlement des radiocommunications (Génève, 1979) ou si les réserves formulées par d'autres pays portaient préjudice à ses services de télécommunications actuels ou en projet.

Nº 27

Pour l'État de la Cité du Vatican, l'Italie, le Portugal et la Turquie

De l'avis des Administrations précitées, la présente Conférence n'a pas adopté de dispositions appropriées pour répondre aux besoins du service de radiodiffusion à ondes décamétriques, en particulier dans les bandes des 6 MHz et 7 MHz. De ce fait, la Conférence prévue dans la Resolution 508 ne pourra pas établir un plan pour toutes les bandes de fréquences attribuées à la radiodiffusion à ondes décamétriques et ces pays ne pourront donc pas assurer une exploitation continue de leur service de radiodiffusion à ondes décamétriques dans des conditions de propagation variant d'un bout à l'autre du cycle solaire.

En conséquence, les Administrations précitées se réservent le droit de prendre les mesures nécessaires pour répondre aux besoins de leur service de radiodiffusion à ondes décamétriques.

Nº 28

Pour la France, la Principauté de Liechtenstein et la Conférence Suisse

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), les délégations des pays susmentionnés déclarent réserver leurs droits de prendre toute mesure jugée nécessaire pour protéger leurs intérêts, si des réserves déposées ou d'autres mesures prises devaient avoir pour conséquences de porter atteinte au bon fonctionnement de leurs services de radiocommunications ou si certains Membres devaient manquer de se conformer aux dispositions en vigueur du Règlement des radiocommunications en particulier au cas où ils établiraient ou exploiteraient, ou encore laisseraient établir ou exploirer, sur leur territoire, sans coordination préalable, des stations du service de radiodiffusion ne respectant pas les dispositions du Nº 2666 du Règlement des radiocommunications.

Nº 29

Pour la République Fédérative du Brésil

La présent Conférence a adopté la Résolution 4, relative à la durée de validité des assignations de fréquence aux stations spatiales utilisant l'orbite des satellites géostationnaires. A ce propos, la délégation de la République Fédérative du Brésil souhaite formuler les observations suivantes:

a) Il est inutile d'adopter, à la présente Conférence, la procédure expérimentale décrite dans la Résolution en question, compte tenu des dispositions réglementaires existantes de l'article 13;
b) La période fixée pour l'application de la procédure expérimentale, qui va du 1er juillet 1980 à la prochaine Conférence mondiale des radiocommunications spatiales, ne correspond pas à la période, bien plus longue, qui serait nécessaire à la pleine application de cette procédure de manière à obtenir des résultats significatifs permettant d'en mesurer l'utilité;
c) Les procédures adoptées aux termes de la Résolution en question peuvent facilement donner à penser qu'un pays ou groupe de pays donné a un droit de priorité permanent et peut s'approprier des assignations de fréquence et des positions orbitales, ce qui va à l'encontre des principes exposés dans l'article 33 de la Convention internationale des télécommunications de l'UIT (Malaga-Torremolinos, 1973) et dans les Résolutions 2 et 3 adoptées par la présente Conférence.

Par conséquent, en signant les Actes finals de la présente Conférence, la délégation de la République Fédérative du Brésil réserve les droits de son Gouvernement en ce qui concerne l'application de la Résolution 4 par un pays ou groupe de pays donné, chaque fois cette application est considérée comme contraire aux dispositions des articles 11 et 13 adoptés par la présente Conférence administrative mondiale des radiocommunications (Génève, 1979).

Nº 30

Pour l'État d'Israël

La délégation d'Israël déclare que la signature qu'elle apposera sur l'Accord et l'éventuelle approbation de cet Accord par son Administration ne prendront effet et n'entraîneront pour Israël d'obligation qu'à l'égard des administrations qui appliquent les dispositions de la Convention dans leurs relations avec l'État d'Israël.

Israël se considére inclus également, à tous égards, dans les renvois 621 (174-223 MHz) et 866 (15,7-17,3 GHz) — en dépit des objections infondées d'un très petit nombre de délégations.

Tout en appuyant le principe d'une planification des bandes d'ondes décamétriques pour le service de radiodiffusion, conformément à la Résolution 508 de la présente Conférence, la délégation d'Israël note:

a) Que les bandes d'ondes décamétriques attribuées par la présente Conférence au service de radiodiffusion ne sont pas suffisantes pour assurer une base appropriée à une telle planification;

b) Que la présente Conférence n'a pris aucune disposition contre le «brouillage intentionnel» — alors qu'il est notoire que certain Membres de l'Union causent délibérément des brouillages préjudiciables aux services de radiodiffusion;

c) Que cette pratique du brouillage intentionnel rend inutilisable plus de 50 % du spectre des fréquences attribué au service de radiodiffusuion, qu'elle est absolument incompatible avec la notion même de planification et qu'elle constitue une violation flagrante de la lettre et de l'esprit de la Convention de l'UIT et du Règlement des radiocommunications.

Dans ces conditions, Israël se réserve le droit de prendre toute mesure nécessaire pour assurer le bon fonctionnement et une protection adéquate de ses services de radiodiffusion. Ce faisant, Israël s'efforcera néanmoins, dans la mesure du possible, de respecter les droits des administrations dont les services sont exploités conformément à la Convention et aux Actes finals de la présente Conférence.

Nº 31

Pour la Turquie

En signant les Actes finals de la présent Conférence au nom de son Gouvernement, la délégation de la Turquie à la Conférence administrative mondiale des radiocommunications (Génève, 1979), déclare officiellement que le Gouvernement de la Turquie n'accepte aucune obrigation découlant de l'attribution additionnelle (renvoi 694) de la bande de fréquences 645-862 MHz au service de radionavigation aéronautique à titre permis, afin d'assurer la protection du service de radionavigation aéronautique contre les stations de radiodiffusion existentes ou en projet qui fonctionnent conformément au Tableau d'attribution des bandes de fréquences dans la zone située à l'est de 40° Est.

Nº 32

Pour la République fédérale d'Allemagne, la Belgique, le Danemark, les États-Unis d'Amérique, a Grèce, l'Islande, l'Italie, le Luxembourg, la Norvège, le Royaume des Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord et la Turquie

Les Administrations des pays susmentionnés se réservent le droit d'exploiter des systèmes, dans le service mobile par satellite, dans la bande de fréquences 235-399,9 MHz aux termes des dispositions du renvoi du Tableau d'attribution des bandes de fréquences pertinent, sous la seule réserve de la procédure de coordination prévue à l'article 14. La disposition supplémentaire de ce renvoi impose une condition d'absence de brouillage qui pourrait conduire à demander d'interrompre l'exploitation d'un système à satellites ayant déjà fait l'objet d'une coordination si une administration, tout en ayant approuvé le système à satellites en question, venait à mettre en œuvre ou simplement à envisager la mise en œuvre d'un système susceptible de subir des brouillages préjudiciables. Les Administrations susmentionnées n'acceptent pas cette condition.

Nº 33

Pour l'Autriche, le Danemark, l'Espagne, la Finlande, la Principauté de Liechtenstein, la Norvège, le Portugal, la Suède et la Confédération Suisse

En signant les Actes finals de la Conférence, les délégations de l'Autriche, du Danemark, de l'Espagne, de la Finlande, de la France, du Liechtenstein, de la Norvège, du Portugal, de la Suède et de la Suisse, tiennent à faire la déclaration suivante:

La Conférence administrative mondiale des radiocommunications (Génève, 1979), a refusé d'insérer dans le Règlement des radiocommunications une disposition qui aurait permis d'attribuer au service mobile

aéronautique de certains pays de la Région 1 et de la Région 2 la bande de fréquences 862-960 MHz. La disposition proposée limitait clairement l'exploitation de ce service à un petit nombre de voies à l'intérieur de cette bande dans le cadre d'un système radiotéléphonique public et sous rèserve d'accords obtenus conformément à la procédure prévue dans l'article 14.

La disposition proposée était destinée à favoriser l'intégration éventuelle de certaines stations d'aéronefs dans un réseau radiotéléphonique public intégré au sol, et à protéger em même temps les autres services fonctionnant conformément au Tableau d'attribution des bandes de fréquences.

De nombreux pays ont besoin, d'urgence, de service mobiles téléphoniques publics; la croissance de ces besoins devrait encore s'accélérer avec l'amélioration des réseaux téléphoniques publics traditionnels.

Les délégations susmentionnées, notant avec beaucoup de préoccupations que la reconnaissance internationale a été refusée à cette attribution, réservent à leurs Administrations le droit d'utiliser un nombre limité de fréquences à l'intérieur de la bande 862-960 MHz pour communiquer avec les aéronefs dans le cadre d'un réseau du service mobile téléphonique public conformément aux conditions décrites.

Des mesures seront prises pour garantir que les services mentionnées ci-dessus ne causeront pas de brouillage préjudiciable aux services fonctionnant conformément au Tableau d'attribution des bandes de fréquences dans les autres pays.

Nº 34

Pour la République Socialiste Soviétique de Biélorussie, la République Socialiste Soviétique d'Ukraine e t l'Union des Républiques Socialistes Soviétiques

Dans le Tableau d'attribution des bandes de fréquences révisé par la Conférence administrative mondiale des radiocommunications (Génève, 1979), des attributions additionnelles ont été faites au service de radiodiffusion dans la bande des ondes décamétriques, aux dépens des attributions au service fixe.

Etant donné qu'en URSS les stations du service fixe fonctionnent depuis longtemps dans ces bandes de fréquences, les délégations de l'Union des Républiques Socialistes Soviétiques, de la République Socialiste Soviétique d'Ukraine et de la République Socialiste Soviétique de Biélorussie sont autorisées à déclarer qu'en URSS les bandes d'ondes décamétriques attribuées additionnellement en exclusivité au service de radiodiffusion seront aussi utilisées par le service fixe.

Nº 35

Pour la République fédérale d'Allemagne

En signant les Actes finals de la Conférence, la délégation de la République fédérale d'Allemagne déclare que l'attribution révisée du spectre des bandes d'ondes décamétriques au service fixe, au service de radiodiffusion et au service maritime ne répond pas aux besoins de ces services en République Fédérale d'Allemagne, tels qu'ils ont été formulés dans les documents pertinents présentés à la Conférence administrative mondiale des radiocommunications (Génève, 1979).

La solution des problèmes existants est conditionée par un transfert satisfaisant de ces services, et par l'élaboration d'un plan de radiodiffusion à ondes décamétriques, accepté à l'échelon international, permettant, dans les bandes attribuées au service de radiodiffusion, l'inclusion nécessaire de toutes les émissions hors bandes, et répondant aux besoins du service de radiodiffusion à ondes décamétriques de la République fédérale d'Allemagne.

En conséquence, la République fédérale d'Allemagne se réserve le droit, en ce qui concerne le spectre des bandes d'ondes décamétriques de prendre les mesures nécessaires pour faire aux besoins minima de ses services respectifs.

Nº 36

Pour le Royaume de l'Arabie Saoudite, la République de Chypre, l'Espagne, les États-Unis d'Amérique, la Grèce, le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, la Repúblique Socialiste Démocratique de Sri Lanka et la République de Zambie

Considérant que cette Conférence n'a pas été en mesure de répondre de façon satisfaisante aux besoins du service de radiodiffusion à ondes décamétriques, dans les attributions de bandes de fréquences révisées, notamment dans les bandes des 6 MHz et 7 MHz. Si la Conférence projetée de radiodiffusion à ondes décamétriques n'est pas habilitée, de par son ordre du jour, à disposer de certaines parties du spectre attribuées au service fixe, elle sera dans l'impossiblité de planifier l'utilisation de toutes les bandes de fréquences de manière à permettre aux pays d'assurer leurs services de radiodiffusion en cas de variations des conditions de propagation dans toute l'étendue du cycle d'activité solaire. En l'absence d'un plan adéquat, les Administrations susmentionnées se réservent le droit de prendre les mesures nécessaires pour répondre aux besoins de leurs services de radiodiffusion à ondes décamétriques.

Nº 37

Pour la République de Corée

La délégation de la République de Corée, au nom de son Gouvernement, réserve à celui-ci le droit de prendre telle décision qu'il pourra juger nécessaire pour sauvegarder ses intérêts si d'autres Membres manquent d'observer les dispositions du Règlement des radiocommunications (Génève, 1979), ou de ses Annexes, ou si les réserves formulées par d'autres pays compromettent le bon fonctionnement de ses services de télécommunication.

Nº 38

Pour les États-Unis d'Amérique

La délégation des Etats-Unis d'Amérique déclare officiellement que, en signant les présents Actes finals au nom des États-Unis d'Amérique, elle n'accepte pas certaines décisions prises par la présente Conférence au sujet du Tableau d'attribution des bandes de fréquences et des renvois associés à ce Tableau. En conséquence:

1) Étant donné que la présente Conférence n'a pas prévu d'attributions suffisantes pour le service de radiodiffusion à ondes décamétriques, particulièrement à 6 MHz et 7 MHz, les États-Unis d'Amérique font des réserves sur cette question, comme indiqué dans la déclaration Nº 36, présentée conjointement avec les délégations de l'Arabie Saoudite, de Chypre, de l'Espagne, de la Grèce, du Royaume-Uni de Sri Lanka et de la Zambie;
2) Les États-Unis d'Amérique se réservent le droit d'exploiter des stations du service mobile par satellite dans la gamme de fréquences de 235 MHz à 399,9 MHz, comme indiqué dans la déclaration Nº 32, présentée conjointement avec les délégations de la République fédérale d'Allemagne, de la Belgique, du Danemark, de la Grèce, de l'Islande, de l'Italie, du Luxembourg, de la Norvège, des Pays-Bas, du Portugal, du Royaume-Uni et de la Turquie;
3) Dans l'exploitation des stations du service de localisation, à primaire, dans les bandes 430-440 MHz, 5650-5850 MHz, 8500-8750 Hz, 8850-9000 MHz, 9200-9300 MHz, 9500-9800 MHz, 10 000-10 500 MHz, 13,4-14 GHz, 15,7-17,3 GHz et 33,4-36 GHz, les États-Unis d'Amérique ne peuvent garantir la protection d'autres services, ni la coordination avec d'autres services;
4) Les États-Unis d'Amérique se réservent le droit d'exploiter des stations du service fixe, du service mobile et du service radiolocalisation, à titre primaire, dans les bandes spécifiées dans les renvois relatifs aux bandes de fréquences 470-806 MHz et 890-960 MHz, sans la condition spécifiée dans ces renvois, selon lesquels cette exploitation est sujette à un accord aux termes de l'article 14. Les États-Unis coordenneront l'utilisation de ces services avec les administrations des pays voisins qui sont influencées;
5) Étant donné que la Conférence n'a pas fait d'attributions suffisantes pour le service mobile maritime à ondes décamétriques, en particulier au-dessous de 12 MHz, les États-Unis d'Amérique déclarent leur intention de satisfaire les besoins du service mobile maritime dans les différentes bandes d'ondes décamétriques inférieures à 10 MHz qui ont été attribuées au service mobile à titre primaire.

Nº 39

Pour les États-Unis d'Amérique

L'Administration des États-Unis d'Amérique attire l'attention sur le fait que certaines de ses émissions de radiodiffusion dans les bandes d'ondes décamétriques attribuées au service de radiodiffusion subissent, de la part d'administrations signataires des présents Actes finals, des brouillages préjudiciables intentionnels, brouillages qui sont incompatibles avec l'utilisation rationelle et équitable de ces bandes; elle declare que tant que ces brouillages existeront, elle se réserve le droit de prendre, à leur propos, les mesures nécessaires et appropriées pour protéger les intérêts de ses services de radiodiffusion. Ce faisant, elle entend cependant respecter, dans la mesure du possible, les droits des administrations dont les services sont exploités conformément aux présents Actes finals.

Nº 40

Pour la République de Colombie, la République Populaire du Congo, l'Equateur, la République Gabonaise, la République du Kenya, la République de l'Ouganda, la République Démocratique Somalie et la République du Zaire

Les délégations des pays susmentionnés ratifient, dans toutes ses parties, la réserve Nº 51 formulée lors de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (1977) et elles réitérent par conséquent le contenu de cette réserve pour ce qui a trait à la Conférence administrative mondiale des radiocommunications (Génève, 1979).

De même, les délégations précitées tiennent à affirmer que la Conférence administrative mondiale des radiocommunications (Génève, 1979) n'a pas compétence pour traiter ou décider de questions à caractére territorial, ni d'aspects se rapportant à la souveraineté des États.

D'autre part, les délégations précitées déclarent une fois de plus que la position des pays équatoriaux en ce qui concerne les questions se rapportant aux segments de l'orbite des satellites géostationnaires situés au-dessous de leurs territoires respectifs tend à apporter un bénéfice authentique aux peuples de leurs pays respectifs, à la communauté internationale et, en particulier, aux pays en développement; en même temps, ces délégations expriment leur opposition à la poursuite de l'application du principe «premier venu, premier servi», qui profite uniquement à un petit nombre de pays, bénéficiaire exclusifs de cette ressource naturelle limitée, au détriment des autres membres de la communauté internationale, et, en particulier, des pays en développement.

Enfin, les délégations des pays susmentionnés déclarent officiellement qu'elles n'acceptent pas, et par conséquent qu'elles ne s'estiment pas liées, après la signature des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) et en aucune circonstance, par les résolutions, recommandations, accords et décisions de cette Conférence, relatifs au positionnement des satellites géostationnaires sur le segments de l'orbite qui correspondent aux territoires sur lesquels s'exercent les droits souverains de ces pays.

N° 41

Pour la République de Colombie

La délégation de la Colombie à la Conférence administrative mondiale des radiocommunications (Génève, 1979), se réserve le droit, au nom de son Gouvernement, de prendre, quand elle le jugera nécessaire, les mesures appropriées à propos des obrigations qui découlent du Règlement des radiocommunications tel que révisé par la présente Conférence, et en particulier au sujet du transfert des assignations de fréquences aux stations du service fixe dans les parties des bandes d'ondes décamétriques qui ont été attribuées à d'autres services.

De même, la délégation de la Colombie se réserve le droit de continuer à utiliser, à l'intérieur du territoire national, les liaisons du service fixe qui fonctionnent conformément ai Règlement en vigueur et qui, pour des raisons de faisabilité technique, économique ou autres, ne peuvent être transférées dans les délais prévus à la présent Conférence.

N° 42

Pour la République d'Indonésie

La délégation de la République d'Indonésie à la Conférence administrative mondiale des radiocommunications (Génève, 1979):

a) Réserve à son Gouvernement le droit de prendre toute décision et toute mesure conservatoire visant à sauvegarder ses intérêts pour le cas où les Actes finals élaborés par la présente Conférence se trouveraient en contravention avec la Constitution, les lois et les droits de la République d'Indonésie, tels qu'ils existent actuellement ou qu'ils pourraient découler des principes formulés le 3 décembre 1976 dans la Déclaration de Bogota par les pays équatoriaux, ainsi que de tout autre principe du droit international. Ce faisant, le Gouvernement de la République d'Indonésie tiendra compte des intérêts légitimes des autres pays afin de promouvoir la coopération internationale en ce qui concerne les utilisations pacifiques de l'espace pour le bien de l'ensemble de l'humanité;

b) Réserve également le droit de son Gouvernement de prendre toute décision et toute mesure conservatoire visant à sauvegarder ses intérêts pour le cas où des Membres de l'Union manqueraient d'observer les dispositions des Actes finals de la Conférence ou pour celui où des réserves formulées par d'autres Membres viendraient à compromettre ses droits au titre des Actes finals.

N° 43

Pour l'Autriche

En signant les Actes finals de la Conférence, la délégation de l'Autriche désire faire la déclaration suivante:

L'Autrich n'approuve pas les attributions des bandes d'ondes décamétriques 5850-5950 kHz et 7300-7400 kHz aux services fixe et mobile, étant donné qu'il n'existe aucune attribution additionnelle au service de radiodiffusion dans les bandes des 6 MHz et des 7 MHz.

En conséquence, l'Administration autrichienne estime que la Conférence de radiodiffusion à ondes décamétriques proposée ne sera pas en mesure de planifier toutes les bandes de fréquences de manière à permettre aux pays d'assurer un fonctionnement régulier de leurs services de radiodiffusion, eu égard aux conditions de propagation variables au cours du cycle solaire.

De ce fait, la délégation autrichienne réserve à son Administration le droit de prendre les mesures nécessaires afin de sauvegarder les intérêts de ses services de radiodiffusion à ondes décamétriques. Ce faisant, l'Administration autrichienne tiendra compte, dans la mesure du possible, des intérêts des services d'autres pays.

Nº 44

Pour la République Populaire d'Angola

La délégation de la République Populaire d'Angola réserve à son Gouvernement le droit de prendre toutes mesures qu'il estime nécessaires pour protéger les intérêts de ses télécommunications si certains Membres n'observent pas les dispositions du Règlement des radiocommunications ou si des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses services de télécommunications.

Nº 45

Pour la République Argentine

A) La délégation de la République Argentine déclare que son Gouvernement se réserve le droit d'adopter les mesures qu'il jugera pertinentes pour assurer le bon fonctionnement de ses services de télécommunications si ses intérêts étaient compromis par les décisions de la présente Conférence, notamment en ce qui concerne l'application de la procédure de libération de parties de la bande attribuée au service fixe dans les ondes décamétriques entre 4000 kHz et 27 500 kHz et du transfert des stations dudit service des parties de la bande en question à d'autres bandes de fréquences.

De même, la délégation de l'Argentine déclare que si les réserves formulées par d'autres pays portent préjudice à ses services de télécommunications, la République Argentine se réserve le droit de prendre les dispositions nécessaires pour protéger ses services.

B) La délégation de la République Argentine déclare que son Gouvernement ne reconnaît pas les assignations de fréquence qui peuvent être faites directement ou indirectement pour tous les services, dans toute partie du spectre radioélectrique, en ce qui concerne les îles Malouines. L'île de la Géorgie du Sud, les îles Sandwich du Sud et l'Antarctique argentin entre 25° et 74° de longitude à l'ouest de Greenwich, au sud de 60° de latitude Sud du Pôle Sud, si ces assignations sont faites au nom d'un ou de plusieurs autres États alors que la République Argentine exerce les droits de souveraineté sur ces territoires. De toute manière, la République Argentine se réserve le droit d'utiliser à son compte les fréquences radioélectriques assignées dans les conditions précitées.

C) Au nom de son Gouvernement, la délégation de la République Argentine déclare que l'occupation illicite des Îles Malouines, des îles de la Géorgie du Sud et Sandwich du Sud par le Royaume-Uni a été reconnue par l'Organisation des Nations Unies qui dans ses Résolutions 2065 (XX), 3160 (XXVIII) et 31/49, a demandé instamment que les négociations entre les deux Gouvernements soient activées afin de mettre un terme à une situation de type colonial.

Nº 46

Pour la République Démocratique Populaire du Yémen

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Démocratique Populaire du Yémen, tout en réaffirmant son soutien à la coopération internationale dans le domaine des télécomunnications, réserve à son Gouvernement le droit de prendre toutes mesures qu'il estimera nécessaires pour protéger ses iontérêts si un pays manque, de quelque manière que ce soit, d'observer les dispositions des Actes finals de la Conférence susmentionnée ou si des réserves formulées par d'autres pays compromettent ses services de télécommunications.

Nº 47

Pour la République d'Iraq et la République Arabe Syrienne

Les Administrations des pays susmentionnés confirment que, conformément à la Résolution 1, l'IFRB ne devrait accepter aucune notification d'assignation de fréquences à des stations situées dans un territoire occupé, lorsque ces notifications sont présentées par l'Administration du pays occupant.

Nº 48

Pour l'Irlande et le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord

Etant donné qu'il n'a pas été possible, à la présente Conférence, d'obtenir l'inclusion de l'Irlande dans le renvoi 621, les délégations susmentionnées déclarent que leurs Administrations appliqueront le Règlement des radiocommunications comme si l'Irlande avait été mentionnée dans ledit renvoi.

Nº 49

Pour la République Unie de Tanzanie

Le Gouvernement de la République Unie de Tanzanie se réserve le droit de prendre toute décision qu'il jugera nécessaire pour protéger ses intérêts, si des Membres manquent, de quelque manière que ce soit, d'observer les disposi-

tions du Règlement des radiocommunications (Conférence administrative mondiale des radiocommunications, (Génève, 1979) ou si des réserves formulées par d'autres pays compromettent le bon fonctionnement de ses services de radiocommunication.

N° 50

Pour la République Populaire du Mozambique

La délégation de la République Populaire du Mozambique réserve le droit de son Gouvernement de prendre toutes les mesures nécessaires pour protéger ses intérêts si un pays manque d'observer les dispositions du Règlement des radiocommunications elaboré par la Conférence administrative mondiale des radiocommunications (Génève, 1979), ou si les réserves formulées par un pays quelconque tendent à compromettre le bon fonctionnement de ses services de télécommunications.

N° 51

Pour la República de Zambie

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République de Zambie réserve à son Gouvernement le droit de prendre toutes mesures qu'il jugera nécessaires pour protéger ses intérêts en matière de télécommunications si un Membre quelconque de l'UIT n'observe pas, de quelque manière que ce soit, les dispositions du Règlement des radiocommunications.

N° 52

Pour la République du Niger

A la lumière des réserves déjà déposées, la délégation du Niger à la Conférence administrative mondiale des radiocommunications (Génève, 1979) réserve le droit de son Gouvernement de prendre toutes mesures utiles protéger ses intérêts en matière de radiocommunications du fait de non respect des dispositions des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) et du Règlement des radiocommunications issu de ladite Conférence.

N° 53

Pour la République Populaire du Congo

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation Congolaise prend note avec appréhension des réserves formulées par l'autres délégations en ce qui concerne l'utilisation et l'application du Règlement des radiocommunications.

En conséquence, la délégation de la République Populaire du Congo réserve à son Gouvernement le droit de prendre des mesures nécessaires pour la sauvegarde de ses intérêts dans le cas où les pays signataires des Actes finals n'observeraient pas les dispositions du Règlement des radiocommunications ou, si les réserves formulées par les délégations d'autres pays compromettaient le bon fonctionnement de ses services de radiocommunications.

N° 54

Pour la République Populaire Révolutionnaire de Guinée

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Populaire et Révolutionnaire de Guinée a noté avec appréhension des réserves faites par certains membres, notamment en ce qui concerne les attribuitions au Tableau d'attribution des bandes de fréquences et le respect des dispositions du Règlement des radiocommunications.

En conséquence, elle réserve à son Gouvernement le droit de prendre toutes les mesures qu'il jugera utiles pour sauvegarder ses intérêts en matière de télécommunications.

N° 55

Pour la République Socialiste Democratique de Sri Lanka

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Socialiste Démocratique de Sri Lanka a noté que plusieurs administrations ont émis des réserves concernant diverses dispositions des Actes finals de la Conférence chargée de remanier le Règlement des radiocommunications.

La délégation de la République Socialiste Démocratique de Sri Lanka réserve donc à son Gouvernement, le droit de prendre toutes mesures qu'il jugera nécessaires pour protéger ses intérêts, au cas où les réserves en question porteraient gravement préjudice aux services de télécommunications de la République Socialiste Democrátique de Sri Lanka.

N° 56

Pour la República Centrafricaine

La délégation de la République Centrafricaine a noté avec appréhension certaines des réserves déjà déposées et portant sur l'application des dispositions du Règlement des radiocommunications et notamment du Tableau d'attribution des bandes de fréquences. En conséquence, elle réserve à son Gouvernement de droit de prendre toutes les mesures qu'il jugera nécessaires pour protéger ses services des télécommunications et d'approuver le nouveau Règlement des radiocommunications.

N° 57

Pour le Ghana

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation du Ghana apris note de diverses réserves formulées par d'autres pays et est très préoccupée par les attributions le fréquence et les nouveaux renvois.

La délégation du Ghana réserve à son Gouvernement le droit du protéger ses intérêts en matière de télécomunications et n'accepte aucune des conséquences des réserves, formulées par d'autres Gouvernements, qui pourraient entraîner un accroissement de sa participation aux dépenses de l'Union.

N° 58

Pour la République Socialiste de Roumanie

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Socialiste de Roumanie a noté avec inquiétude les réserves formulées par d'autres pays en ce qui concerne notamment les attributions inscrites dans le Tableau d'attribution des bandes de fréquences ainsi que l'application du Règlement des radiocommunications.

La délégation de la République Socialiste de Roumanie réserve donc à son Gouvernement le droit de prendre toutes mesures qu'il jugera nécessaires pour protéger ses intérêts, au cas où les réserves susmentionnées porteraient préjudiciable à ses services de télécommunications.

N° 59

Pour la République du Libéria

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République du Libéria prend note avec préocupation des réserves formulées par d'autres pays, en ce qui concerne aussi bien les attributions inscrites dans le Tableau d'attribution des bandes de fréquences que l'application du Règlement des radiocommunications.

La délegation de la République du Libéria réserve donc à son Gouvernement le droit de prendre telles mesures qu'il jugera nécessaires pour protéger ses intérêts, au cas où ces réserves porteraient préjudice à ses services de télécommunications.

N° 60

Pour la Thaïlande

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la Thaïlande fait la déclaration suivante au nom de son Gouvernement:

a) Elle observe que de nombreux pays se réserve le droit d'utiliser les portions de bandes 5850-5950 kHz et 7300-7400 kHz pour des services de radiodiffusion;

b) Elle n'accept pas les réserves formulées par d'autres pays en ce qui concerne l'utilisation des portions de bandes 5850-5950 kHz et 7300-7400 kHz pour des services de radiodiffusion et réserve à son Gouvernement le droit de prendre toute mesure ferme qu'elle pourra juger nécessaire afin de protéger ses services de télécommunications;

c) Elle réserve à son Gouvernement le droit d'exploiter des stations du service mobile, sauf mobile aéronautique, à titre primaire dans la bande 435-438 MHz et prendra les mesures nécessaires pour as-

surer que les services fonctionnant conformément au Tableau d'attribution des bandes de fréquences dans l'autres pays ne subissent aucun brouillage préjudiciable du fait de service mentionné.

N° 61

Pour la République Unie du Cameroun

Au moment de signer les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République Unie du Cameroun a noté avec une grande préoccupation les réserves faites par d'autres pays portant sur des attributions faites dans le Tableau d'attribution des bandes de fréquences et portant aussi sur l'application du Réglement des radiocommunications.

La délégation de la République Unie du Cameroun réserve, en conséquence, le droit à son Gouvernement, de prendre toutes les mesures jugées nécessaires pour sauvegarder ses intérêts au cas où les réserves susmentionnées porteraient préjudice à ses services des télécommunications.

N° 62

Pour Maurice

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de Maurice prend note avec préoccupation des réserves formulées par d'autres délégations, en particulier en ce qui concerne aussi bien, les attributions inscrites dans le Tableau d'attribution des bandes de fréquence que l'aplication du Règlement des radiocommunications.

En conséquence, la délégation de Maurice réserve à son Gouvernement le droit de prendre toute mesure qu'il jugera nécessaire pour protéger les intérêts de son service de radiodiffusion et des autres services de télécommunication, au cas où ces réserves compromettraient de quelque manière que ce soit, le bon fonctionnement de ces services.

N° 63

Pour la République de Singapour

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), et après avoir pris note des réserves déposées par d'autres délégations, en particulier en ce qui concerne le Tableau d'attribution des bandes de fréquences, la délégation de la République de Singapour réserve à son Gouvernement le droit de prendre toute mesure qu'il jugera nécessaire pour protéger ses intérêts, si un Membre manque, de quelque manière que ce soit, d'observer les dispositions du Règlement des radiocommunications établi par ladite Conférence, où si les réserves susmentionnées compromettent le bon fonctionnement de ses services de télécommunications.

N° 64

Pour la République des Philippines

La délégation de la Rèpublique des Phillipines, après avoir apris notes des réserves formulées par certaines délégations en particulier en ce qui concerne l'utilisation du sprectre des fréquences, réserve à son Gouvernement le droit de prendre, le cas échéant, toute mesure qui pourrait être nécessaire pour protéger ses intérêts si des Membres manquent d'observer les dispositions des Actes finals de la présente Conférence de leurs annexes ou du protocole y attaché, où si les réserves formulées par d'autres pays peuvent avoir des conséquences préjudiciables aux intérêts des Philippines.

N° 65

Pour le Costa Rica

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation du Costa Rica déclare que son Administration s'efforcera de respecter les dispositions du Règlement des radiocommunications adopté au cours de la presente Conférence; néanmoins, compte tenu des réserves formulées par certains pays, elle réserve à son Gouvernement le droit:

a) D'adopter les mesures nécessaires pour protéger les services de radiocommunications du Costa Rica, au cas où la non-observation du Règlement, de ses annexes et protocoles associés par d'autres pays Membres de l'Union porterait préjudice au fonctionnement de ces services;

b) De ne pas accepter les réserves formulées par les différents pays qui ne protègent pas les services fixe et mobile, étant donné que, surtout dans les bandes d'ondes décimétriques, lesdits services ont une importance capitale pour le Costa Rica et qu'ils doivent être protégés contre tous les types de brouillages.

Nº 66

Pour l'Equateur

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de l'Equateur déclare que son Administration s'efforcera de respecter toutes les dispositions du Règlement qui a été adopté à la présent Conférence; néanmois, compte tenu des réserves formulées par d'autres paysm elle réserve à son Gouvernement le droit:

a) D'addopter les mesures qu'elle jugera nécessaires pour protéger les services de télécommunications de l'Equateur, au cas où la non-observation du Règlement et de ses annexes par d'autres pays Membres de l'Union porterait préjudice au fonctionnement de ces services;
b) De ne pas accepter les réserves formulées par d'autres pays, si elles contreviennent aux intérêts nationaux de l'Equateur;
c) De continuer á utiliser certaines des assignations actuelles des services fixe et mobile à ondes décamétriques si, pour des raisons techniques, économiques ou autres, il n'est pas possible d'en effectuer le transfert dans les délais prévus à la présente Conférence.

Nº 67

Pour la République de Haute-Volta

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République de Haute-Volta a noté avec appréhension les réserves formulées par certains pays au sujet de certaines dispositions du Règlement des radiocommunications.

En conséquence, elle réserve á son Gouvernement le droit de prendre les mesures qu'il jugera nécessaires pour sauvegarder ses intérêts dans le cas où ces-ci viendraient à être compromis.

Nº 68

Pour le Royaume Hachémite de Jordanie, le Liban et la République Arabe Syrienne

Les délégations précitées à la Conférence administrative mondiale des radiocommunications (Génève, 1979), se déclarent solennellement liées par les dispositions adoptées par la présente Conférence, conformément aux dispositions de la Convention internationale des télécomunications.

En conséquence, elles rejettent toutes déclarations ou mesures qui ne soit pas conformes aux décisions prises par ladite Conférence.

En particulier, elles déclarent que la déclaration figurant dans la réserve Nº 30 à propos des renvois relatifs aux bandes 174-223 MHz et 15,7-17,3 GHz est inacceptable, car elle est contraire aux décisions prises par la Conférence, laquelle pleinement reconnu le bien fondé des objections d'ordre technique formulées par la délégation du Royaume Hachémite de Jordanie contre l'inclusion d'Israël dans les renvois en question.

Nº 69

Pour la République du Kenya

En raison des réserves déposées par certains pays cherchant à exploiter certains services en violation des dispositions du Règlement des radiocommunications établi par la Conférence administrative mondiale des radiocommunications (Génève, 1979), la délégation de la République du Kenya réserve á son Gouvernement le droit de prendre les mesures qu'il pourra juger nécessaires pour protéger ses services de télécommunication si d'autres Membres manquent d'observer les dispositions du Règlement des radiocommunications, tel qu'il a été révisé par la présente Conférence, en particulier du fait des réserves Nºs 13, 32, 33, 36, 38 et 43 contenues dans le Protocole final.

Nº 70

Pour la République Islamique d'Iran

La délégation de la République Islamique d'Iran déclare que son Administration n'accepte aucune conséquence des réserves formulées par toute autre administration ou groupe d'administrations á propos des dispositions des Actes

finals. La délègation de la République Islamique d'Iran réserve pour son pays le droit qu'a son Gouvernement de prendre toutes mesures qu'il pourra juger nécessaires pour protéger ses intérêts si une autre administration, notamment en conséquence de l'une des réserves N.os 11, 32, 34 ou 38 du Protocole final, passait outre aux dispositions du Règlement des radiocommunications révisé par la présente Conférence ou les enfreindrait et plus particulièrement si de tels actes portaient préjudice aux besoins ou aux intérêts de la République Islamique d'Iran.

Nº 71

Pour la République du Mali

Après avoir note des réserves déposées par d'autres délégations notamment celles portant sur le Tableau d'attribution des bandes de fréquences, la délégation de la République du Mali réserve à son Gouvernement le droit de prendre toutes les mesures qu'il estimerait nécessaires pour sauvegarder ses intérêts si ces réserves ou le non respect des dispositions du Règlement des radiocommunications tendaient à compremettre le bon fonctionnement de ses services de radiocommunications.

Nº 72

Pour les États-Unis d'Amérique

En référence à la reserve Nº 9 du Gouvernement de la République de Cuba, le Gouvernement des États-Unis d'Amérique note que la presence des États-Unis à Guantanamo est conforme à un traité en vigueur; les États-Unis se réservant le droit de répondre comme par le passe à leurs besoins de radiocommunications à Guantanamo.

Nº 73

Pour la Belgique, la France, le Luxemburg, le Royaume des Pays-Bas et la Confédération Suisse

Les délégations des pays susmentionnés prenant note des réserves exprimées par plusieurs délégations au sujet des attributions insuffisantes faites au service de radiodiffusion dans la partie inférieure de la bande des ondes décamétriques et des mesures que leurs Administrations respectives se proposent de prendre par voie de conséquence, déclarent que leurs Administrations se réservent le droit de prendre toute mesure nécessaire tant pour le fonctionnement satisfaisant des services auxquels cette portion du spectre est attribuée que pour leur permettre un usage équitable de la bande décamétrique poour leur service de radiodiffusion.

Nº 74

Pour la République Algérienne Démocratique et Populaire, le Royaume de l'Arabie Saoudite, l'État de Bhareïn, les Emirats Arabes Unis, la République d'Iraq, le Royaume Hachémite de Jordanie, l'État de Koweït, le Liban, la Lybie (Jamahiriya Arabe Libyenne Populaire Socialiste), le Royaume du Maroc, le Sultanat d'Oman, l'État du Qatar, la République Arabe Syrienne, la République Démocratique Somalie, la République Démocratique du Sudan et la République Démocratique Populaire du Yémen.

Après avoir pris note des réserves déjà déposées, les délégations des pays précités réservent les droits de leurs Gouvernements de prendre telles mesures qu'ils jugeront nécessaires pour protéger leurs intérêts, si un ou plusieurs Membres de l'Union manquent d'observer le dispositions des Actes finals de la Conférence mondiale des radiocommunications (Génève, 1979), ou si les réserves formulées par ces Membres portaient préjudice à leurs services de télécommunications.

Nº 75

Pour la République fédérale d'Allemagne, l'Australie, l'Autriche, la Belgique, le Canada, le Danemark, les États-Unis d'Amérique, la Finlande, la France, la Grèce, l'Irlande, l'Italie, le Japon, la Principauté de Liechtenstein, le Luxemburg, la Norvège, la Nouvelle-Zélande, Papua-Nouvelle-Guinée, le Royaume des Pays-Bas, le Portugal, le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, la Suède et la Confédération Suisse.

Les délégations précitées, se référant aux réserves formulées par la République de Colombie, la République Populaire du Congo, l'Equateur, la République Gabonaise, la République du Kenya, la République de l'Ouganda, la République Démocratique Somalie et la République du Zaïre dans la Déclaration Nº 40 et celle de la République d'Indonésie dans la Déclaration Nº 42, estiment que dans la mesure où ces deux déclarations se réfèrent à la Déclaration de Bogota du 3 décembre 1976 par les pays équatoriaux et à leurs revendications sur l'exercice de droits de souveraineté sur des sections de l'orbite des satellites géostationnaires, lesdites revendications ne peuvent pas être reconnues par la présente Conférence et que les décisions adoptées par elle au sujet de l'assignation et de l'utilisation des fréquences et de positions orbitales sur l'orbite des satellites géostationnaires sont pleinement conformes à la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) qui lie la présent Conférence.

Les délégations susmentionnées souhaitent également déclarer que la Résolution 3, en ce référent aux «questions techniques pertinentes relatives à la situation géographique particulière de certains pays», n'implique pas la reconnaissance de revendications concernant tout droit préférentiel à l'orbite des satellites géostationnaires.

Nº 76

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord

Se référent à la déclaration faite par la République de l'Argentine dans le numéro 45 du Protocole final, le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord ne doute pas de la souveraineté du Royaume-Uni sur les îles Falkland et leurs dépendances et sur le Territoire antarctique britannique. A cet égard, il convient d'appeler l'attention sur l'article IV du Traité de l'Antarctique auxquels sont partie le Royaume-Uni et l'Argentine, qui bloque les prétentions territoriales dans l'Antarctique.

Le Gouvernement Royaume-Uni n'accepte donc pas la déclaration de la République d'Argentine qui conteste la souveraineté du Royaume-Uni sur les territoires ci-dessus mentionnés. En outre, le Royaume-Uni a le droit d'avoir des fréquences assignées à ses services de radiocommunications fonctionnant à partir desdits territoires et considérerait toute utilisation par la République Argentine de fréquences causant des brouillages préjudiciables auxdites assignations comme une violation de la Convention et du Règlement des radiocommunications. Le Royaume-Uni n'accepte pas l'assertion contenue au dernier paragraphe de la déclaration de l'Argentine et selon laquelle «l'occupation illicite des îles Falkland, des îles de la Géorgie du Sud et aux îles Sandwich du Sud par le Royaume-Uni a été reconnue par l'Organisation des Nations Unies». Les Résolutions des Nations Unies ont simplesment demandé le règlement du différend par négociation entre les deux Gouvernements.

Nº 77

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord

Se référant à la déclaration faite par la République du Guatemala dans le numéro 2 du Protocole final, le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord n'a aucun doute en ce qui concerne la souveraineté du Royaume-Uni sur Belize et tient à réserver officiellement ses droits à ce sujet.

Nº 78

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord

La délégation du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord n'accepte pas le numéro 7 du Protocole final, du Chili, dans la mesure où celui-ci conteste la souveraineté du Gouvernement de sa Majesté, au Royaume-Uni, sur le territoire antarctique britannique. La délégation note la référence à l'article IV du Traité de l'Antarctique qui bloque les prétentions territoriales dans l'Antarctique.

Nº 79

Pour la République de Colombie, la République Populaire du Congo, l'Equateur, la République Gabonaise, la République du Kenya, la République de l'Ouganda, la République Démocratique Somalie et la République du Zaïre

Les délégations des pays susmentionnés font observer que le point *e*) et la deuxième partie du paragraphe 3.2 du dispositif de la Résolution 3 approuvée par la Conférence administrative mondiale des radiocommunications (Génève, 1979), se réfèrent aussi à la situation géographique particulière des pays équatoriaux, en ce qui concerne l'orbite des satellites géostationnaires, ainsi qu'il ressort du déroulement des débats qui ont eu lieu au sein du Groupe de travail ad hoc et de la Commission qui ont traité de ce sujet.

Cela étant entendu, les délégations susmentionnées ont accepté les termes de la Résolution précitée, qui traite de l'utilisation de l'orbite des satellites géostationnaires, compte tenu — et il ne saurait en être autrement — des circonstances pertinents découlant de la situation géographique particulière des pays dont le territoire est traversé par l'équateur terrestre.

En conséquence, quelle que soit la planification ou la réglementation tendant à rationaliser l'utilisation de l'orbite des satellites géostationnaires par l'accès équitable de tous les pays à cette orbite, il faudra tenir compte des considérations que les pays équatoriaux ont formulées à cet égard.

Nº 80

Pour Papua-Nouvelle-Guinée

En signant les Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), le délégation de Papua-Nouvelle-Guinée réserve à son Gouvernement le droit de prendre troutes mesures qu'il jugera nécessaires pour sauvegarder les intérêts de ses services de radiocommunication si d'autres pays manquent d'observer les dispositions

adoptées par la Conférence et causent, de ce fait, des brouillages préjudiciables aux systèmes de radiocommunication relevant du Gouvernement de Papua-Nouvelle-Guinée.

N° 81

Pour le Japon

En ce qui concerne les réserves formulées par la délégation chilienne et par la délégation argentine su sujet des assignations de fréquences dans l'Antarctique, la délégation du Japon réaffirme la positions du Gouvernement japonais au sujet de l'article 4 du Traité de l'Antarctique.

N° 82

Pour la République Démocratique Somalie

La délégation de la République Démocratique Somalie à la Conférence administrative mondiale des radiocommunications (Génève, 1979) déclare que son Gouvernement n'acceptera jamais des mesures ou des situations quelconques qui, résultant de réserves déjà déposées par d'autes administrations, pourraient compromettre eles intérêts des services de télécommunication de la Somaile.

N° 83

Pour Cuba

Si, à la suite des réserves formulées dans les numéros 36 et 38 du Protocole final de la Conférence administrative mondiale des radiocommunications (Génève, 1979), en ce qui concerne l'utilisation du service de radiodiffusion dans les bandes attribuées à d'autres services que le service précité, au voisinage de 6 MHz et de 7 MHz, ces nouvelles bandes ne peuvent être utilisées de manière appropriée par les services auxquels elles sont attribuées, l'Administration de la République de Cuba, se réserve le droit de les utiliser de la façon qui répond le mieux à ses intérêts.

(Suivent les signatures.)

RÉSOLUTIONS

Note du Secrétaire général

En application des décisions prises par la Conférence, les Résolutions ont été classées et numérotées dans les catégories et selon le système de numérotation indiqués ci-dessous. En outre, dans l'application de ce processus de classification, il est apparu que cetaines Résolutions faisant partie d'un groupe donné étaient en rapport direct avec des Résolutions figurant dans d'autres groupes; il a été tenu compte de ce fait, afin de faciliter la consultation des textes.

	Numéros
Resolutions d'application générale	1–99
Principes, procédures générales et coopération	1–20
Se réfèrent également: N^os 35, 36 et 37.	
Procédures spécifiques	30–39
Se réfèrent également: N^os 1, 6, 7, 8, 9, 100, 101, 102, 200, 201, 202, 502, 503, 504, 506, 507, 700 et 701.	
Questions techniques	60–69
Service fixe/service fixe par satellite	100–199
Se réfèrente également: N^os 8, 9, 31, 32, 33, 34, 502, 503, 504, 506, 507, 700 et 701.	
Service mobile/service mobile par satellite	200–299
Se réfèrent également: N^os 38, 305 et 315.	
Service mobile maritime/service mobile maritime par satellite	300–399
Se réfèrent également: N^os 200 et 201.	
Service mobile aéronautique/service mobile aéronautique par satellite	400–499
Service de radiodiffusion/service de radiodiffusion par satellite	500–599
Se réfèrent également: N^os 31, 32, 33, 34, 100, 101, 102, 700 et 701.	
Autres services	600–699
Relatives a plus d'un service	700–799
Se réfèrent également: N^os 31, 32, 33, 34, 100, 101, 102, 502, 503, 504, 506 et 507.	

Voir également, à ce propos, l'Index analytique établi par le Sécretariat général.

CA

RÉSOLUTION Nº 1

Relative à la notification des assignations de fréquence (1)

La fréquence administrative mondiale des radiocommunications (Génève, 1979),

se référant

Au Préambule de la Convention (2);
À l'article 31 de la Convention (2) (Arrangements particuliers);
À l'article 7 du Règlement des radiocommunications (Accords particuliers);
À l'article 12 du Règlement des radiocommunications (Notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence aux stations de radiocommunications de Terre);
À l'article 13 du Règlement des radiocommunications (Notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence aux stations de radioastronomie et aux stations de radiocommunication spatiale à l'exception des stations du service de radiodiffusion par satellite);
À l'article 17 du Règlement des radiocommunications (Procédure relative aux bandes attribuées en exclusivité au service de radiodiffusion emtre 5950 kHz et 26 100 kHz);

décide

que, sauf indication contraire spécifiquement stipulée dans des arrangements particulieres communiqués à l'union par les administrations, toute notification d'une assignation de fréquence à une station doit être faite par l'administration du pays sur le territoire duquel la station est située.

AY

RÉSOLUTION Nº 2

Relative à l'utilisation équitable par tous les pays, avec égalité de droits, de l'orbite des satellites géostationnaires et des bandes de fréquences attribuées aux services de radiocommunication spatiale (3)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considéran

que tous les pays ont les mêmes droits d'utiliser les fréquences radioélectriques attribuées aux différents services de radiocommunication spatiale ainsi que, pour ces services, l'orbite des satellites géostationnaires;

tenant compte du fait

que le spectre des fréquences radioélectriques et l'orbite des satellites géostationnaires constituent des ressources naturelles limitées et qu'il convient de les utiliser de la manière la plus efficace et économique possible;

consciente du fait

que l'utilisation, par les différents pays ou groupes de pays, des bandes de fréquences attribuées ainsi que d'emplacement fixes sur l'orbite des satellites géostationnaires peut commencer à des dates différentes, selon les besoins de ces pays et selon les moyens techniques dont ils pourront disposer;

décide

1. Que l'enregistrement à l'IFRB des assignations de fréquence pour les services de radiocommunication spatiale et l'utilisation de ces assignations ne sauraient conférer une priorité permanente à tel ou tel pays ou groupe d epays et faire obstacle à la création de systèmes spatiaux par d'autres pays;
2. Qu'en conséquence, il convient qu'un pays ou groupe de pays au nom duquel des assignations de fréquence ont été enregistrées par l'IFRB pour ses services de radiocommunication spatiale prenne toutes les mesures pratiquemnt possibles pour laisser à d'autres pays ou groupes de pays qui le désirent la possibilité d'utiliser de nouveaux systèmes spatiaux;
3. Qu'il convient que les administrations et les organismes permanents de l'Union tiennent compte des dispositions contenues dans les paragraphes 1 et 2 de la présente Résolution.

---

(1) Remplace de la Résolution Nº 5 de la Conférence administrative des radioconmunications (Génève, 1959).
(2) Convention internationale des télécommunications (Malaga-Torremolinos, 1973).
(3) Remplace de la Résolution Nº Spa2-1 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

BP RÉSOLUTION Nº 3

Relative à l'utilisation de l'orbite des satellites géostationaires et à la planification des services spatiaux utilisant cette orbite

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'orbite des satellites géostationnaires et le spectre des fréquences radioélectriques sont des ressources naturelles limitées et qu'ils sont utilisés par les services spatiaux;
b) Qu'il est nécessaire d'assurer l'accès équitable à ces ressources et leur utilisation efficace et économique par tous les pays, comme le prévoient l'article 33 de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) et la Résolution 2;
c) Que différents pays ou groupes de paus peuvent utiliser les fréquences radioélectriques et l'orbite des satellites géostationnaires à des époques différentes, leon leurs besoins et les ressources dont ils disposent;
d) Que, dans le monde entier, les besoins d'assignations de position orbitale et de fréquence pour les services spautiaux sont de plus nombreux;
e) Qu'il conviendrait, en ce qui concerne l'utilisation de l'orbite des satellites géostationnaires par des services spatiaux, de prêter attention aux questions techniques pertinents relatives à la situation géographique particuliére de certains pays;

décide

1. Qu'une conférence administrative mondiale des radiocommunications spatiales sera convoquée en 1984 au plus tard afin de garantir concrétement à tous les pays un accès équitable à l'orbite des satellites géostationnaires et aux bandes de fréquences attribuées aux services spatiaux;
2. Que cette conférence se tiendra en deux sessions;
3. Que la première session devra:
3.1. Décider de services spatiaux et des bandes de fréquences pour lesquels il convient d'établir des plans;
3.2. Définir les principes, les paramètres techniques et les critères applicables à la planification notamment en ce qui concerne les assignations d'orbite et des fréquence pour les services spatiaux ainsi que les bandes de fréquences visées au paragraphe 3.1, en tenant compte des questions techniques pertinentes relatives à la situation géographique particuliére de certains pays; fournir en outre des principes directeurs concernant les procédures réglementaires associées;
3.3. Élaborer les principes directeurs en matière de procédures réglementaires applicables aux services et aux bandes de fréquences qui ne sont pas visées au paragraphe 3.2;
3.4. Examiner d'autres qui permettraient d'attreindre l'objectif ennocé au point 1 du dispositif;
4. Que la seconde session aura lieu au plus tôt douze mois et au plus tard dix-huit mois après la première session afin de mettre en œuvre les décisions prises lors de la premiére session;

invite

1. *Le CCIR* à effectuer des études préparatoires et à fournir à la première session de la conférence des renseignements techniques concernant les principes, les critères et les paramètres techniques, y compris ceux dont on a besoin pour la planification des services spatiaux;
2. *L'IFRB* à préparer un rapport sur la mise en application des procédures des articles 11 et 13, comprenant des renseignements sur les difficultés éventuellement signalées à l'IFRB par les administrations qui cherchent à obtenir l'accès à des positions orbitales et des fréquences appropriées et à distribuer ce rapport aux administrations au moins un an avant la première session de la conférence;
3. *L'IFRB* à se charger de la préparation technique de la conférence, conformément aux dispositions du Règlement des radiocommunications;
4. *Les admninistrations* à examiner tous les aspects de la question, afin de soumettre des propositions à la conférence et à coopérer activement aux travaux susmentionnée du CCIR et de l'IFRB;
5. *Le Conseil d'administration* à prendre toutes les mesures nécessaires en vue de la convocation de la conférence conformément à la présente Résolution.

BY RÉSOLUTION Nº 4

Relative à la durée de validité des assignations de fréquence aux stations spatiales utilisant l'orbite des satellites géostationnaires

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire d'utiliser de façon rationnelle et efficace le spectre des fréquences et l'orbite des satellites géostationnaires et qu'il convient de prendre en considération les dispositions de la Résolution **2** relative à

l'utilisation par tous les pays avec égalité de droits, des bandes de fréquences attribuées aux services de radiocommunication spatiale;

b) Que la limitation de la durée de validité des assignations de fréquence aux stations spatiales utilisant l'orbite des satellites géostationnaires relève d'une notion qui pourrait permettre de se rapprocher des objectifs susmentionnés;

c) Que l'amortissement des investissements considérables effectués pour le développement des radiocommunications spatiales, constitue une charge particulièrement lourde pour toutes les administrations et que ces investissements doivent être étalés sur une période prédéterminée;

d) Que l'on doit s'efforcer d'inciter les administrations qui en ont le possibilité à développer des techniques destinées à améliorer l'utilisation du spectre des fréquences et de l'orbite des satellites géostationnaires en vue d'accroître la masse des moyens de radiocommunication mis à la disposition de la communauté mondiale;

e) Qu'une conférence administrative mondiale des radiocommunications spatiales doit, vers 1984, traiter de l'utilisation de l'orbite des satellites géostationnaires et la planification des services spatiaux utilisant cette orbite;

f) Qu'il serait utile d'établir, à titre expérimental, une procédure permettant de tirer des enseignements de l'application de la nouvelle notion de notification de la durée de validité d'une assignation dans les radiocommunications spatiales, mais qu'il n'est pas souhaitable d'imposer aux administrations une durée fixée réglementairement et identique dans tous les cas, et qu'il faut au contraire laisser le soin aux administrations de proposer elles-mêmes en fonction de leurs besoins et de l'intérêt général cette durée de validité;

décide

1. Que, entre le 1er juillet 1980 et la conférence administrative mondiale des radiocommunications spatiales (voir le Résolution **3**), les assignations de fréquence à des stations de radiocommunication spatiale situées sur l'orbirte des satellites géostationnaires seront traitées comme suit:

1.1. Une assignation de fréquence à une station spatiale (1) instalée à bord d'un satellite géostationnaire est réputée être abandonnée définitivement au-delà de la durée de fonctionnement indiquée sur la fiche de notification, comptée à partir de la date de la mise en service de cette assignation. Cette période est limitée à celle pour laquelle le réseau à satellite a été conçu. Le Comité invite alors l'administration notificatrice à procéder à l'annulation de cette assignation. Si, dans un délai de trois mois suivant l'expiration de cette durée de fonctionnement, le Comité n'a pas reçu de réponse, il insère un symbole dans le collonne Observations du Fichier de référence indiquant que l'assignation n'est pas conforme à la présente Résolution;

1.2. Si une administration notificatrice, qui souhaite prolonger la durée de fonctionnement indiquée initialement sur la fiche de notification d'une assignation de fréquence à une station spatiale (1) existante, en informe le Comité plus de trois ans avant la fin de la durée en question et si toutes les autres caractéristiques fondamentales de cette assignation restent inchangées, le Comité modifie conformément à la demande la durée de fonctionnement initialement inscrite au Fichier de référence et publie cette information dans une section spéciale de la circulaire hebdomadaire;

1.3. Si trois ans au moins avant la fin de las durée de fonctionnement inscrite au Fichier de réference d'une assignation de fréquence à une station spatiale (1) existante, une administration entreprend la procédure de coordination prévue au numéro **1060** pour la mise en service d'une nouvelle station spatiale utilisant la même fréquence assignée et la même position orbitale mais avec des caractéristiques techniques différentes et si la Comité conclut après la notification que la nouvelle assignation est conforme aux dispositions du numéro **1503** et qu'elle n'accroit pas par rapport à l'assignation antérieure la probabilité de brouillage au détriment d'une assignation de fréquence figurant dans le Fichier de référence ou dans la procédure de coordination, la nouvelle assignation reçoit une conclusion favorable et est inscrite au Fichier de réference

1.4. Une administration notificatrice qui souhaite apporter une modification aux caractéristiques fondamentales d'une assignation de fréquence à une station spatiale (1) inscrite au Fichier de référence, doit, dans tous les cas autres que ceux prévus aux paragraphes 1.2. et 1.3., entreprendre la procédure correspondant à cette modification selon les dispositions des numéros **1547** a **1551**;

2. Que, pour l'application de dispositions du paragraphe 1.1 ci-dessus, les renseignements relatifs à la durée de validité des assignations de fréquence aux stations spatiales doivent être notifiés en plus des renseignements figurant dans les appendices **3** et **4** du Règlement des radiocommunications;

3. Que l'application de la présente Résolution ne préjugera en aucune manière des décisions de la conférence administrative des radiocommunications spatiales mentionnée dans la Résolution **3**;

invite

la conférence administrative mondiale des radiocommunications spatiales prévue par la Résolution **3** à prendre connaissance des premiers résultats découlant de la mise en application de la présente Résolution.

---

(1) L'expression «station spatiale» peut s'appliquer à plusieurs satellites, à condition qu'un seul satellite soit en fontionnement à un moment quelconque et que les stations installés à bord des satellites successifs aient des caractéristiques fondamentales identiques.

CG RÉSOLUTION Nº 5

Relative à la cooperation technique avec les pays en développement dans le domaine des études de propagation en régions tropicales

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

ayant noté

que l'assistance fournie par l'Union, de concert avec d'autres institutions spécialisée des Nation Unies telles que le PNUD, dans le domaine des télécomunications aux pays en développement, permet de bien augurer de l'avenir;

consciente

a) Du fait que les pays en développement, en particulier ceux situés en régions tropicales, ont besoin d'avoir une meilleure connaissance de la propagation des ondes radioélectriques sur leurs territoires, pour l'utilisation rationnelle et économique du spectre radioélectrique;
b) Du rôle important de la propagation dans les radiocommunications;
c) De l'importance des travaux des CCI dans l'évolution des télécommunications en général et des radiocommunications en particulier;

considérant

a) La nécessité pour les pays en développement de faire eux-mêmes des études de télécommunication en général et de propagation en particulier sur les territoires, ceci étant, pour eux, le meilleur moyen d'acquérir les techniques des télécommunications et de planifier leurs systèmes de façon rationnelle en tenant compte des conditions spéciales en régions tropicales;
b) Les faibles moyens dont disposent ces pays;

décide d'inviter le Secrétaire général

1. À offrir l'assistance de l'Union aux pays en développement situés en régions tropicales qui s'efforcent de faire des études sur leur propre territoire afin d'améliorer et de développer leurs radiocommunications;

2. D'aider ces pays à organiser, si nécessaire avec la collaboration des organisations internationalles et régionales telles que l'Union africaine des postes et télécommunications (UAPT), l'Union panafricaine des télécommunications (UAPT) et l'Union des radiodiffusions et télévisions nationales d'Afrique (URTNA) qui pourraient s'intéresser à la question, des campagnes nationales de mesures de propagation, y compris des collectes de données météorologiques appropriées, effectuées sur la base des Avis, Questions et Programmes d'études du CCIR en vue d'améliorer l'utilisation du spectre radioélectrique;

3. À rechercher des fonds et des ressources à cette fin auprès du PNUD ou d'autres sources de financement de manière à permettre à l'Union d'apporter aux pays concernés une assistance technique à la fois suffisante et efficace aux fins de la présente Résolution;

invite instamment les administrations

à présenter au CCIR les résultats de ces mesures de propagation afin qu'ils soient examinés dans le cadre des études de ce Comité;

invite le Conseil d'administration

à suivre les progrès des campagnes de mesure de propagation et les résultats obtenus et à prendre toute action qu'il jugerait nécessaire.

BW RÉSOLUTION Nº 6

Relative à la préparation d'un manuel destiné à expliquer et à illustrer les procédures du Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La complexité des procédures réglementaires spécifiées au chapitre IV du Règlement des radiocommunications;
b) La nécessité, pour beaucoup d'administrations, de disposer d'un manuel permettant à leur personnel de mieux comprendre ces procédure pour faciliter leur mise en œuvre;
c) Le recours possible à des diagrammes, des organigrammes et d'autres illustrations graphiques facilitant la compréhension de procédures complexes;

reconnaissant

1. Que, faute de temps, il est difficile à la Conférence administrative mondiale des radiocommunications (Génève, 1979), de mettre au point des éléments explicatifs et des diagrammes à inclure ou à joindre aux Actes finals;

2. Qu'un effort est nécessaire pour élaborer un manuel répondant de façon adéquat aux besoins mentionnés sous *b*);

3. Qu'il y aurait intérêt à ce que le format d'un tel manuel soit compatible avec celui du Règlement des radiocommunications;

décide

que l'IFRB doit, aussitôt que possible après la Conférence administrative mondiale des radiocommunications (Génève, 1979), élaborer un manuel comprenant des illustrations graphiques appropriées, y compris des organigrammes, destinnées à aider les personnel des administrations dans l'application des procédures réglementaires prévues au chapitre IV du Règlement des radiocommunications;

charge le Secrétaire général

1. De publier le manuel élaboré par l'IFRB;

2. D'insérer de maniére appropriée dans les éditions publiées du Règlement des radiocommunications les organigrammes, quand ils seront disponibles, assortis d'une remarque précisant qu'ils sont destinés à faciliter la compréhension des procédures mais qu'ils ne font pas partie du Règlement des radiocommunications.

AD RÉSOLUTION Nº 7

Relative à la mise ne œuvre d'une gestion nationale des fréquences radioélectriques

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le Règlement des radiocommunications contient, entre autres dispositions, des procédures de coordination, de notification et d'enregistrement des fréquences déterminant les droits et obligations des pays Membres;

b) Que l'application de ces procédures nécessite un service de gestion de fréquences radioélectriques dans chaque pays Membre;

c) Que l'existence d'un tel service aide les pays Membres à sauvegarder leurs droits et à s'acquitter de leurs obligations conformément au Règlement des radiocommunications;

d) Que l'application du Règlement par l'internédiaire d'un tel service est dans l'intérêt de l'ensemble de la communauté internationale;

notant

qu'un tel service de gestion de fréquences radioélectriques nécessité un personnel dûment qualifié et en nombre suffissant;

notant en outre

que les administrations de nombreaux pays en développement ont besoin de créer ou de renforcer un tel service approprié à leur structure administrative, et de le charger de l'application du Règlement des radiocommunications sur le plan national et international;

recommande

aux administrations de ces pays de prendre les mesures à cet effet;

décide

1. Que des réunions seront organisées entre des représentants de l'IFRB et du CCIR et des participants concernés par les questions relatives à la gestion des fréquences dans les administrations des pays en développement et des pays développés;

2. Que l'objet de ces réunions est de mettre au point des modèles de structures appropriées aux administrations de pays en développement et de discuter les moyens de les mettre en œuvre et d'exploiter ces services de gestion des fréquences;

3. Que ces réunions devraient aussi identifier les besoins particuliers de pays en développement pour établir de tels services et les moyens requis pour satisfaire ces besoins;

recommande

aux pays en développement de prévoir, lors de la planification de l'utilisation des fonds reçus notamment des instances internationales, la participation aux réunions ainsi que la création et le développement de ces services;

invite le Conseil d'administration

à prendre les mesures nécessaires pour l'organisation de telles réunions;

charge le Secrétaire général

1. De diffuser la présente Résolution auprès de tous les Membres de l'Union en attirant leur attention sur son importance;

2. De diffuser les résultats de ces réunions, notamment auprès des pays en développement;

3. D'indiquer à ces pays les formes d'aide que l'UIT est en mesure de mettre à leur disposition pour l'implantation de la structure qu'ils désirent;

attire l'attention de la prochaine Conférence de plénipotentiaires sur

1. Les problèmes particuliers identifiés dans la présente Résolution;
2. Le besoin d'entreprendre, dans les meilleurs délais, une action efficace en vue de leur solution;
3. Le besoin de prendre toutes mesures pratiques pour dégager les ressources à cet effet.

CV RÉSOLUTION Nº 8

Relative à la mise en œuvre des modificactions d'attributions dans les bandes comprises entre 4000 kHz et 27 500 kHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'un certain nombre de bandes de fréquences comprises entre 4000 kHz et 27 500 kHz et qui étaient attribuées auparavant en exclusivité ou en partage au service fixe ont été réattribuées à d'autres services;

b) Que les assignations existantes aux stations des services fixe et mobile doivent être progressivement éliminées de ces bandes réattribuées pour faire place à d'autres services;

c) Que les assignations devant être déplacées, appelées «assignations à transférer», doivent être reclassées dans d'autres bandes de fréquences;

consciente

des difficultés que rencontreront les administrations et l'IRFB pendant le passage des anciennes attributions à celles de la présente Conférence;

décide

1. Que la procédure de transition de l'annexe A à la présente Rèsolution est utilisée en vue d'assurer le passage ordonné et équitable des anciennes attributions à celles qui sont faites par la présente Conférence;

2. Que les dispositions du numéro **1242** et les dispositions associées de l'article 12 relatives à l'examen et à l'inscription dans le Fichier de référence des assignations dans les bandes comprises entre 4000 kHz et 27 500 kHz attribuées en exclusivité ou en partage au service fixe sont suspendues du 1er janvier 1982 au 30 juin 1984;

3. Que la procédure intérimaire de l'annexe B à la présente Résolution est utilisée afin de tenir compte de toute assignation de fréquence nouvelle et urgente, dans les bandes concernées, au cours de la période de suspension des dispositions de l'article 12 visée au point 2 du dispositif;

4. Que la procédure de révision de l'annexe C à la présente Résolution est utilisée afin de examiner, à l'issue la période de transition, toute nouvelle assignation de caractère urgent notifiée pendant la période de suspension des dispositions de l'article 12 visée au point 2 du dispositif;

5. Qu'une procédure particulière de transfert, décrite dans la Resolution **404,** s'applique aux stations du service fixe aéronautique fonctionnant dans la bande 21 954-22 000 kHz [bande que la présente Conférence a attribuée en exclusivité au service mobile aéronautique (R)] et sera terminé le 1er fevrier 1983;

invite les administrations

1. Dans la recherche du réaménagement de leurs assignations du service mobile qui se trouvent dans les bandes comprises entre 4000 kHz et 27 500 kHz réattribuées à d'autres services à ne ménager aucun effort pour trouver des assignations de remplacement dans les bandes attribuées en exclusivité au service mobile concerne;

2. À faciliter la coopération en s'abstenant de soumettre des fiches de notification portant sur des assignantions dans les bandes concernées, pendant la période de suspension des dispositions de l'articlel 12 visée au point 2 du dispositif, sauf dans le cas d'assignation urgentes et nouvellles á traiter dans le cadre de la procédure intérimaire;

prie l'IFRB

pendant la période de suspension des dispositions de l'article 12 visée au point 2 du dispositif de n'examiner, aux termes de cet article, aucune fiche de notification dans les bandes concernées aute que celles nécessitant le supression d'assignations existantes.

ANNEXE A À LA RÉSOLUTION Nº 8

Procédure de transition relative au choix et á l'approbation des assignations de remplacement

PARTIE I

Phase préparatoire

SECTION I

Préparation et publication par l'IFRB d'un ensemble de propositions concernant les assignations de remplacement

1. Pour les besoins de cette Résolution, l'expression «assignation à transférer» se réfèrer à une assignation de fréquence à une station du service fixe dans les parties des bandes de fréquences antérieurement attribuées au service fixe et nouvellement atribuées à d'autres services, et pout laquelle une assignation de remplacement doit être trouvée confornément à la présente Résolution.

2. Le Comité, dès que possible après la fin de l'application de la procédure décrite en annexe à la Résolution **9**, établit un ensemble de propositions en vue du remplacement de toutes les assignations à tranférer inscrites dans la section provisoire du Fichier de référence dans les bandes comprises entre 4000 kHz et 27 500 kHz que la Conférence administrative mondiale des radiocommunications (Génève, 1979) a tranférées du service fixe à d'autres services.

3. Les assignations à transférer sont traitées dans l'ordre des dates revisées inscrites dans la colonne 2d, comme indiqué dans la Résolution **9**. En outre, toutes les assignations á transférer qui portent la même date révisée sont traitées dans l'ordre suivant:

1) Assignations pour utilisation nationale;
2) Assignations pour utilisations internationale.

Lors de l'application de cette disposition, les assignations à transférer sont traitées par lots sans accorder de priorité aux assignations d'une administration quelconque.

4. Les assignations à transférer de classe de fonctionnement C ne sont traitées que lorsqu'il a été trouvé des solutions pour toutes les assignations transférées des classes de fonctionnement A ou B.

5. Les assignations à transférer de classe de fonctionnement C sont réparties autant que possible uniformément dans les bandes qui sont encore attribuées au service fixe.

6. Le Comité, lorsqu'il applique les dispositions de la présente section, et afin de protéger les assignations inscrites, n'utilise que le Fichier de référence réaménagé conformément à la procédure décrite en annexe à la Résolution **9**.

7. Le 1er juillet 1983 le Comité envoie à chaque administration un document énumérant toutes les assignations concernant cette administration, en indiquant celles qui sont inscrites dans la section provisoire du Fichier de référence et celles qui sont proposées en remplacement.

SECTION II

Examen et approbation des assignations proposées

8. Au reçu du document mentionné au paragraphe 7, chaque administration en accuse réception et examine les assignations de remplacement proposées pour s'assurer qu'elles sont acceptables; elle informe, dès que possible, le Comité:

De son accord; ou
Des assignations qu'elle estime inacceptables.

Dans ce dernier cas, l'administration donne ses raisons au Comité le plus rapidement possible.

9. Le Comité examine les réponses reçues au titre du paragraphe 8 et s'efforce de donner satisfaction aux administrations intéressées, en ce qui concerne les assignations proposées jugées inacceptables, en procédant de préférence à de légères modifications. Pour cela, il procéde de la manière suivante:

Il rassemble toutes les réponses reçues au titre du paragraphe 8 dans un délai de six mois à partir du 1er juillet 1983, puis il les traite ensemble et sans accorder de priorité à la réponse d'une administration quelconque; puis

Il rassemble toutes les réponses reçues au titre du paragraphe 8 entre six et neuf mois à partir du 1er juillet 1983, puis il traite la seconde série comme indiqué ci-dessus pour la première série.

SECTION III

Mesure à prendre par le Comité

11. Lorsque la procédure prescrite dans les sections I et II de la présente annexe a pris fin, le Comité inscrit dans le Fichier de référence toutes les assignations de remplacement acceptées par les administrations, avec une annotation indiquant:

Qu'elles auront le même statut que les assignations qui n'ont pas été transférées, conformément aux dispositions de la Résolution **9**;

Leur caractère provisoire conformément aux dispositions du numéro **1311**.

12. Pour toutes les assignations mentionnées au paragraphe 11, le Comité inscrit la date appropriée dans la colonne 2d du Fichier de référence, conformément au paragraphe 6.3 de l'annexe à la Résolution **9**.

13. Le Comité publie ensuite, sous la forme de suppléments récapitulatifs à la Liste internationale des fréquences, toutes les assignations de remplacement faites conformément à la procédure prescrite dans la partie I de la présente annexe.

14. Après publication des suppléments prescrits au paragraphe 13, le Comité informe par télégramme toutes les administrations dont les assignations à transférer de classe de fonctionnement A encore en suspens n'ont pu être transférées.

SECTION IV

Entrée en vigueur de l'article 12

15. A partir du 1er juillet 1984, les dispositons de l'article 12 s'appliqueront aux bandes de fréquences attribuées au service fixe entre 4000 kHz et 27 500 kHz.

16. Après cette date, une administration qui a été informée par le Comité en application du paragraphe 14 que certaines de ses assignations à transférer n'ont pas été remplacées au titre de la procédure de transition, pourra choisir de nouvelles assignations, compte tenu des assignations inscrites dans le Fichier de référence en application du paragraphe 11, et présentera au Comité de nouvelles notifications conformément à l'article 12.

PARTIE II

Phase de transfert

SECTION V

Mesure à prendre par les administrations

17. Après avoir reçu et accepté les assignations de remplacement de ses assignations inscrites et transférées par décision de la Conférence administrative mondiale des radiocommunications (Génève, 1979), une administration effectue le passage de l'ancienne à la nouvelle assignation au plus tard:

Le 1er juillet 1989 pour les bandes de fréquences supérieures à 10 MHz;
Le 1er juillet 1994 pour les bandes de fréquences inférieures à 10 MHz.

18. Après avoir effectué le passage de l'ancienne assignation à l'assignation, de remplacement, une administration en informe promptement le Comité; ce dernier biffe le symbole spécial placé en regard de l'assignation de remplacement conformément au numéro **1311** (voir le paragraphe 11 ci-dessus), dans le Fichier de référence, ce qui indique que le transfert a été effectué, et inscrit la date du changement dans la colonne 2c. La date qui figurait initialement dans la colonne 2c en regard de l'assignation transférée est inscrite dans la colonne Observations.

19.1. Si, après avoir effectué le passage à une assignation de remplacement de classe de fonctionnement A, une administration subit un brouillage préjudiciable ou reçoit une plainte en brouillage préjudiciable concernant une autre assignation de classe de fonctionnement A, cette administration:

a) S'efforce de régler le problème avec toute autre administration concernée;
b) Et, en cas d'échec, peut choisir et soumettre au Comité une assignation de remplacement (1).

19.2. Si, après avoir effectué le passage à une assignation de remplacement de classe de fonctionnement B, une administration subit un brouillage préjudiciable à cette de fonctionnement, cette administration peut choisir et présenter au Comité une autre assignation de remplacement (1).

20. Après avis favorable du Comité concernant l'assignation de remplacement choisie en application du numéro 19.1, *b*), ou 19.2, cette administration est autorisée à demander l'inscription dans la colonne 2d du Fichier de référence, en regard de cette assignation, de la date commune du 1er janvier 1982 pour la classe de fonctionnement A et du 2 janvier 1982 pour la classe de fonctionnement B.

SECTION VI

Signification des dates inscrites dans le Fichier de référence

21. La signification des dates concernant les assignations transférées est mentionné dans l'annexe à la Résolution **9** et dans l'article 12.

---

(1) Le Comité aidera l'administration qui en fait la demande à mettre en œuvre la procédure décrite au paragraphe, 19.1, *b*), ou 19.2.

ANNEXE B À LA RÉSOLUTION Nº 8

Procédure intérimaire concernant les fiches de notification d'assignation de fréquence dans les bandes attribuées en exclusivité ou en partage au service fixe, entre 4000 kHz et 27 500 kHz

1. Durant la période comprise entre 1er janvier 1982 et le 30 juin 1984, une administration, qui a besoin d'une assignation d'une urgence telle qu'elle ne peut attendre la fin de la période de transition, peut notifier une nouvelle assignation dans les bandes attribuées en exclusivité ou en partage au service fixe entre 4000 kHz et 27 500 kHz. Les fiches de notification ainsi présentées doivent contenir les renseignements énumérés dans la section pertinente de l'appendice 1.

2. Une administration qui soumet une fiche de notification conformément au paragraphe 1 ci-dessus est réputée accepter que son assignation:

a) Soit de nature intérimaire;
b) Soit soumise à la procédure de révision décrite dans l'annexe C à la présente Résolution et doive, le cas échéant, être modifiée, compte tenu des résultats de cette révision;
c) Ne cause de brouillage préjudiciable à aucune assignation inscrite dans le Fichier de référence et ayant droit à une protection.

3. Au reçu d'une fiche de notification complète et conforme au paragraphe 1, le Comité l'examine relativement au numèro **1240** et retourne à l'administration notificatrice toute fiche de notification qui ne serait pas conforme à cette disposition, en donnant les motifs de ce renvoi.

4. Les fiches de ntofication conformes au numéro **1240** sont inscrites dans une section spéciale de la circulaire hebdomadaire avec une annotation indiquant qu'elles sont à la fois sujettes à la procédure intérimaire et à la procédure de révision décrites respectivement dans la présente annexe et dans l'annexe C à la présente Résolution. Les assignations notifiées en application du numéro **1218** sont, de plus, annotées en conséquence.

5. Le Comité établit et tient à jour une Liste spéciale de toutes les fiches de notification traitées au titre du paragraphe 4.

ANNEXE C À LA RÉSOLUTION Nº 8

Procédure de révision concernant des assignations de fréquence à des stations du service fixe dans les bandes comprises entre 4000 kHz et 27 500 kHz

1. Dès le 1er juillet 1984, le Comité examinera conformément aux dispositions appropriées de l'article 12 toutes les assignations intérimaires de la Liste spéciale établie conformément à l'annexe B à la présente Résolution en vue de leur inscription dans le Fichier de référence.

2. Pour les besoins de cet examen, les assignations intérimaires seront traitées sans qu'aucune priorité ne soit accordée à une administration quelconque, les assignations notifiées aux termes du numèro **1218** étant cependant traitées en premier lieu.

3. Toutes les assignations intérimaires doivent être exaiminées par le Comité eu égard à la probabilité de brouillage préjudiciable ayant pour origine les assignations inscrites dans le Fichier de référence à titre provisoire en application des dispositions de l'annexe A de la présente Résolution, et au égard à la probabilité de brouillage préjudiciable causé à ces dernières assignations. Selon les conclusions formulées par le Comité à la suite de cet examen, les mesures suivantes sont prises.

4. *Conclusion favorable relativement au paragraphe 3 ci-dessus.*

4.1. Les assignations intérimaires notifiées aux termes du numéro **1218** sont inscrites dans le Fichier de référence, la date 1er juillet 1984 étant inscrites dans la colonne 2d.

4.2 Les autres assignations intérimaires doivent être examinées conformément au numéro **1242** par rapport aux assignations de fréquence inscrites dans le Fichier de référence à la date du début de la procédure intérimaire décrite dans l'annexe B à la présente Résolution. Selon les conclusions du Comité, les dispositions pertinentes de l'article 12 sont appliquées. Si de telles assignations doivent être inscrites, la date 1er juillet 1984 doit être portée dans la colonne 2d.

5. *Conclusion défavorable relativement au paragraphe 3 ci-dessus.*

Compte tenu de la classe de fonctionnement de l'assignation et du contenu du Fichier de référence mis au net, le Comité propose des assignations de remplacement appropriées et les inscrit provisoirement en portant la date 1er juillet 1984 dans la colonne 2d.

6. Lorsque cet examen est terminé, le Comité établit et publie sous forme d'annexe á sa circulaire hebdomadaire une Liste temporaire des assignations inscrites et des assignations de remplacement proposées. Il envoie un exemplaire de cette Liste, ainsi qu'un extrait par pays, à chacune des administrations qui a des assignations intérimaires dans la Liste spéciale mentionnée au paragraphe 1 de la présente annexe.

7. Au reçu de la Liste mentionnée au paragraphe 6, les administrations étudient les assignations proposées en remplacement de leurs assignations intérimaires et, dans un délai de cinq mois à compter de la date de publication de la Liste temporaire, font savoir au Comité si les assignations proposées sont acceptables. Si les assignations proposées ne sont pas acceptables, les administrations doivent en indiquer les motifs.

8. En acceptant les assignations proposées, les administrations doivent en indiquer la date ultime de mise en service. Cette date ne doit pas dépasser un délai d'un an à compter de la publication de la Liste temporaire.

9. En examinant les réponses faites en applications du paragraphe 7, le Comité s'efforce, si nécessaire par de légers ajustements de donner satisfaction aux administrations intéressées en ce qui concerne les assignations proposées et jugées inacceptables et leur propose des fréquences de remplacement. Simultanément, le Comité remplace l'inscription provisoire pertinente par la nouvelle fréquence proposée.

10. Si, à la date du 1er juillet 1985, les inscriptions provisoires faites en vertu des paragraphes 5 ou 9 n'ont pas été acceptées par les administrations intéressées, le Comité les remplace par les assignations intérimaires correspondantes avec une annotation appropriée. A compter de cette date, ni la Liste spéciale ni la Liste temporaire ne sont plus prises en considération.

11. Les administration, qui ont des assignations intérimaires pour lesquelles il n'a pas été possible de trouver d'assignations de remplacement acceptables, sont libres de choisir de nouvelle assignations de remplacement et envoient de nouvelles fiches de notification conformément aux dispositions de l'article 12. Le Comité aide l'administration qui en fait la demande à mettre en oeuvre la procédure décrite dans le présent paragraphe.

CT

RÉSOLUTION Nº 9

Relative à la révision de certaines parties du Fichier de référence international des fréquences dans les bandes de fréquences attribuées au service fixe comprises entre 3000 kHz et 27 500 kHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considèrant

a) Qu'il est nécessaire d'eméliorer la précision et la fiabilité du Fichier de référnce international des fréquences, notamment dans les bandes attribuées en exclusivité ou en partage au service fixe comprises entre 3000 kHz et 27 500 kHz;

b) Que des initiatives antérieures de l'IFRB ont prouvé qu'il est possible, grace à la coopération des administrations, d'améliorer sensiblement la précision et la fiabilité du Fichier de référence;

reconnaissant

a) Que, pour résoudre le problème, il faut l'élaborer à l'échelle mondiale dans un esprit de coopération active;

b) Qu'il est nécessaire de définir, pour réviser certaines parties du Fichier de référence, une procédure prévoyant la coopération de toutes les administrations et de l'IFRB;

reconnaissant en outre

a) Qu'une part importante des assignations concernant le service fixe est destinée à des utilisations autres que l'exploitation régulière;

b) Que l'identification de la classe de fonctionnement de ces assignations dans de Fichier de référence faciliterait la gestion internationale des bandes de fréquences attribuées au service fixe dans cette partie du spectre et devrait constituer une caractéristique type du Fichier de référence;

c) Que la détermination des horaires réguliers de fonctionnement faciliterait également la gestion de ce service;

d) Que cette manière d'identifier la classe de fonctionnement et l'horaire régulier de fonctionnement de ces assignations devrait être appliquée à toute procédure destinée á la révision;

e) Qu'une fois appliquées, ces mesures constitueraient une base solide pour l'adoption des arrangements de transition nécessaires au remplacement des assignations aux stations du service fixe à transférer par suite de décisions de la Conférence administrative mondiale des radiocommunications (Génève, 1979);

décide

d'adopter la procédure décrite en annexe à la présente Résolution aux fins de la révision des parties du Fichier de référence relatives aux bandes attribuées au service fixe entre 3000 kHz et 27 500 kHz;

décide, d'autre part,

que la présente Résolution entrera en vigueur le 1er janvier 1980;

invites les administrations et l'IFRB

à collaborer sans réserve et dans les plus brefs délais à l'applications de cette procédure.

ANNEXE À LA RÉSOLUTION Nº 9

Procédure applicable à la révision des inscriptiones dans le Fichier de référence dans les bandes attribuées au service fixe entre 3000 kHz et 27 500 kHz

1. Le Comité extrait du Fichier de référence et communique, à chaque administration, dès que possible aprés le 1ª janvier 1980, une Liste nationale (1) individuelle de toutes des assignations (2) qui sont inscrites dans le Fichier de référence au nom de cette administration ou pour lesquelles des fiches de notification ont été reçues avant cette date, dans les bandes attribuées en exclusivité ou en partage au servive fixe entre 3000 kHz et 27 500 kHz. En même temps, le Comité attire l'attention de cette administrration sur les assignations pour lesquelles un autre moyen de télecomunication apparaît disponible.

2. Au reçu de la Liste mentionnée au paragraphe 1 ci-dessus, chaque administration en accuse réception au Comité par télegramme. Une administration qui n'a pas reçu sa Liste nationale au 1ª avril 1980 en informe promptement le Comité, qui envoie sans délai à cette administration un autre exemplaire. Le Comité doit s'assurer que chacune des administrations a bien reçu la Liste nationale relative à ses propres assignations.

3. Après avoir accusé réception de sa Liste nationale, chaque administration examine celle-ci et:

a) Supprime toute inscription qui ne serait plus nécessaire;

b) Classe les inscriptions restantes du service fixe à l'aide des symboles suivants:

Symbole A — assigantion destinée à être utilisée pour exploitation régulière qui n'est pas assurée par un autre moyen satisfaisant de télécommunication;

Symbole B — assignation destinée à être utilisée comme assigntion de réserve pour un autre moyen de télecommunication;

Symbole C — assignation pour une utilisation occasionnele en réserve n'exigeant pas de protection internationalement reconnue contre les brouillages préjudiciables;

c) Indique les heures normales (UTC) de fonctionnement de l'assignation ou les indique en serviec de jour (HJ), service de nuit (HN) ou service de transition (HT).

4. Après avoir apliqué les dispositions visées aux paragraphes 2 et 3 ci-dessus, chaque administration renvoie sa Liste nationale annotée au Comité, dès que possible et au plus trad le 31 mars 1981.

5. Le Comité envoie à chaque administration un accusé de réception de sa Liste nationale annotée; en cas de difficulté spéciale ou à la demande des administrations, le Comité leur fournit l'assitance et les conseils que justifient, le cas échéant, les circonstances.

6. Le 1ª octobre 1981, le Comité publiera un section provisoire du Fichier de référence se rapportant uniquement aux assignations dans les bandes attribuées au service fixe entre 3000 kHz et 27 500 kHz. Cette section comportera toutes les assignations figurant dans les Listes nationales telles qu'annotées par les administrations, et les assignations figurant dans les Listes nationales qui n'auront pas été renvoyées au Comité, à l'exception des assignations ayant fait l'objet d'une conclusion défavorable relativement au numéro **1240**, sans référence au numéro **342**. Les assignations inscrites dans cette section provisoire seront annotées de la maniére indiquée ci-après:

6.1. Toutes les assignations porteront un symbole indiquant une référence à la présente Résolution.

6.2. Les dates inscrites dans les colonnes 2a, 2b ou 2d ou le symbole inscrit dans la colonnne 2d et les conclusions figurant dans la partie appropriée de la colonne 13 seront modifiées comme indiqué dans le tableau annexé.

6.3. Les assignations de fréquence aux stations du service fixe dans les parties de bandes réattribuées à d'autres services porteront un symbole indiquant qu'il s'agit d'assignations pour lesquelles on trouvera des assignations de remplacement conformément à la Résolution **8**, en maintenant la date et le statut indiqués dans le tableau annexé.

7. Avant d'appliquer les paragraphes I.2 et II.2 du tabeau annexé aux assignations des pays ayant un petit nombre d'assignations, le Comité consul l'administration dont l'assignation a motivé une conclusion défavorable pour s'assurer qu'aucun brouillage efectif ne s'est produit depuis l'inscription de l'assignation. Si l'administration répond qu'aucun brouillage ne s'est produit, le Comité inscrira le symbole correspondant à la classe de fonctionnement A de l'assigantion et modifiera la conclusation défavorable. Dans tout autre cas il appliquera les dispositions du numéro **1218** pour trouver une autre fréquence et remplacera la fréquence en consultant l'administration intéressée.

8. Dès que possible, après le 1ª janvier 1982, le Comité devra:

8.1. Publier un supplément à la section provisoire du Fichier de référence contenant les assignations pour lesquelles des fiches de notification auront été reçues entre le 1ª janvier 1980 et le 31 décember 1981 et inscrites dans le Fichier de référence

8.2. Envoyer aux administrations un exemplaire de leur Liste nationale.

8.3. Incorporer dans le Fichier de référence la section provoire mentionnée au paragraphe 6, y compris les assigantions mentionnées au paragraphe 8.1 ci-dessus en remplacement des inscriptions correspondantes dans les bandes de fréquences en question.

9. Après avoir accompli ces tâches, le Comité publiera un rapport indiquant les résultats obtenus grâce à cette procédure.

---

(1) Le Comité détermine par une enquête préalable le nombre d'exemplaires de la Liste nationale à adreser à chaque administration. La Liste nationale est présentée de la même manière que la Liste internationale des fréquences mais le mode d'envoi de la Liste peut varier selon les circonstances, en fonction des demandes des administrations et sous réserve de l'accord du Comité.

(2) Pour les besoins de la présent procédure les assignations à des stations du service fixe aéronautique sont considérées comme des stations du service fixe dans la ou les bandes concernées.

TABLEAU

	Colonne 13a	Colonne 13b	Colonne 13c
1. Bandes de fréquences inférieures à 3900 kHz (Région 1), 3950 kHz (Région 3) et 4000 kHz (Région 2)			
1.1. Listes renvoyées au Comité:			
Classe de fonctionnement A des assignations	Supprimer tous les symboles indiquant les conclusions relativement au numéro **1241**.	Remplacer la date en 2a ou 2b par 1-1-82 en 2a.	RES 9 SUP RR 515
Classes de fonctionnement B ou C des assignations	Idem	Remplacer la date en 2a ou 2b par 1-1-82 en 2a.	RES 9 SUP RR 515
Inscriptions selon le numéro **342** du Règlement des radiocommunications.	NOC	Remplacer la date par 5-1-82 en 2b.	RES 9
1.2. Listes non renvoyées au Comité:			
Assignations inscrites avec une date en 2a	NOC	Remplacer la date par 3-1-82 en 2a.	RES 9
Assignations inscrites ave une date en 2b	NOC	Remplacer la date par 4-1-82 en 2b.	RES 9
Inscriptions selon le numéro **342** du Règlement des radiocommunications.	NOC	Remplacer la date par 5-1-82 en 2b.	RES 9
2. Bandes de fréquences supérieures à 3900 kHz (Région 1), 3950 kHz (Région 3) et 4000 kHz (Région 2)			
1.1. Listes renvoyées au Comité:			
Classe de fonctionnement A des assignations	Supprimer tous les symboles indiquant les conclusions relativement au numéro **1242**.	Remplacer la date ou le symbole en 2d par 1-1-82.	RES 9 SUP RR 515
Classes de fonctionnement B ou C des assignations	Idem	Remplacer la date ou le symbole en 2d par 2-1-82.	RES 9 SUP RR 515
Inscriptions selon le numéro **342** du Règlement des radiocommunications.	NOC	Remplacer la date ou le symbole en 2d par 5-1-82.	RES 9
1.2. Listes non renvoyées au Comité:			
Conclusion favorable relativement au numéro **1240** ...	NOC	Remplacer la date ou le symbole en 2d par 3-1-82.	RES 9
Inscriptions selon le numéro **342** du Règlement des radiocommunications.	NOC	Remplacer la date ou le symbole en 2d par 5-1-82.	RES 9

AF

RÉSOLUTION Nº 10

Relative à utilisation de liaisons radiotélegraphies et radiotéléphoniques par les organisations de la Croix-Rouege, du Croissant-Rouge et du Lion-et-Soleil-Rouge

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'œuvre universelle de secours des organisations de la Croix-Rouge, du Croissant-Rouge et du Lion-et--Soleil-Rouge prend une importance croissante et qu'elle est souvent indispensable;

b) Que, dans ces circonstances, il arrive fréquemment que les moyens normaux de communications soient surchargés, endommagés, complètement interrompus ou indisponibles;

c) Qu'il est nécessaire de faciliter par tous les moyens possibles l'intervention efficace de ces organisations, nationales et internationales;

d) Que des moyens de liaisson rapides et autonomes sont essentiels dans les interventions de ces organisations;

e) Qu'il est nécessaire que les organisations nationales de la Croix-Rouge, du Croissant-Rouge et du Lion-et--Soleil-Rouge engagées dans une action de secours international puissent communiquer entre elles et avec le Comité international de la Croix-Rouge et la Ligue des Sociétés de la Croix-Rouge;

décide de prier instamment les administrations

1. De prendre en considération les besoins éventuels des organisations de la Croix-Rouge, du Croissant-Rouge et du Lion-et-Soleil-Rouge en moyens de radiocommunication si les moyens normaux de communication sont interrompus ou indisponibles;

2. D'assigner à ces organisations le nombre minimum de fréquences de travail nécessaires en conformité avec le Tableau d'attribution des bandes de fréquences; pour les circuits entre 3 Mhz et 30 MHz, on choisira dans la mseure du possible des fréquences adjacentes aux bandes du service d'amateur;

3. De prendre toutes les mesures partiquement possibles pour protéger ces liaisons contre les brouillages préjudiciables.

CY

RÉSOLUTION Nº 11

Relative à utilisation des radiocoommunications pour la sécurité des anvires et des aéronefs des États non parties à un confllit armé (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le droit international reconnaît aux États non parties à un conflit armé, applés ci-après États neutres, le droit d'exercer en sécurité des activités commerciales normales sans risque de dommages de la parte d'États parties à um conflit armé;
b) Qu'au voisinage du lieu d'un conflit armé, les navires et aéronefs d'un État neutre courent un risque considérable;
c) Que, pour la sauvegarde de la vie humaine, il est souhaitable, dans ces circonstances, de pouvoir identifier ces navires et aéronefs et d'un déterminer la position;
d) Que les radiocommunications offrent un moyen rapide d'identifier et de localiser les navires et aéronefs avant qu'ils entrent dans une zone de conflit armé et pendant qu'ils traversent cette zone;

tenant compte

a) Que la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) a adopté une recommandation relative aux transports sanitaires et à la sécurité des navires et aéronefs des États non parties à un conflit armé; et
b) Que la Conférence administrative mondiale des radiocommunications (Génève, 1979) a traité à fond la question des transports sanitaires dans le cadre du Règlement des radiocommunications en ajoutant une nouvelle section II à l'article 40, mais qu'elle n'a pas pris de dispositions pour la sécurité des navires et aéronefs des États neutres;

décide d'inviter les administrations

1. À garder présentes à l'esprit les conditions à remplies pour identifier et localiser les navires et aéronefs des États neutres et pour communiquer avec eux, et notamment la possibilité d'utiliser les radars secondaires aéronautiques de surveillance et les répondeurs radar maritimes;

2. À étudier s'il est nécessaire d'établir une procédure accepatle et, dans l'affirmative, à la définir afin de contribuer à assurer la sécurité des navires et aéronefs des États neutres en période de conflit armé, en se référant à l'annexe à la présente Résolution qui décrit une procédure possible;

invite le Conseil d'administration

à prendre en considération l'inscription de cette question à l'ordre du jour de la prochaine conférence administrative mondiale des radiocommunication compétente:

charge le secrétaire général

de communiquer le contenu de la présente Résolution à l'OMCI et à l'OACI afin qu'elles prennent les mesures appropriées.

ANNEXE À LA RÉSOLUTION Nº 11

Procédure possible pour l'identification et la localisation des navires et aéronefs des États neutres

Aux fins d'annonce et d'identification de navires et d'aéronefs des États non parties à un conflit armé, mentionnés ci-après comme transportes neutres une transmission complète des signaux d'urgence décrits aux numéros **3196** et **3197** sera suivie par l'adjonction du seul groupe «NNN» en radiotélégraphie et par l'adjonction du mot unique «NEUTRAL» prononcé comme en français, en radiotéléphonie.

Les fréquences énumérés au numéro **3201** peuvent être utilisées par les transports neutres aux fins d'auto-identification et d'établissement des communications. Dès que possible, la communication doit être transférée sur une fréquence de travail appropriée.

L'utilisation du signal comme décrit dans le premier paragraphe indique que le message qui suit concerne un transport neutre. Le message doit contenir les données suivantes:

a) L'indicatif d'appel ou tout autre moyen reconnu d'identification du véhicule de transport neutre;

---

(1) Remplace la Recommandation Nº Mar2-17 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1977).

b) La position du véhicule de transport neutre;
c) Le nombre et le type de véhicules de transport neutre;
d) L'itinéraire prévu;
e) La durée estimée du déplacement et les heures de départ et d'arrivée prévues, selon le cas;
f) Toute autre information, telle qu'altitude de vol, fréquences radioélectriques de veille, lengues utilisées, modes et codes des systèmes de radars secondaires de surveillance.

Les dispositons de la section I de l'article 40 s'appliquent, s'il y a lieu, à l'utilisation des signaux d'urgence par des transports neutres.

L'identification et la localisation des navires neutres peuvent être effectuées au moyen des répondeurs radar maritimes normalisés.

L'identification et la localisation des aéronefs neutres peuvent être effectuées au moyen du système de radar secondaire de surveillance (SSR), tel qu'il est spécifié à l'annexe 10 de la Convention de Chicago du 7 décembre 1944, relative à l'Aviation civile internationale, mise à jour periodiquement. Le mode et de code SSR à réserver à l'usage exclusif des aéronefs neutres doivent être définis par els Parties aux conflit ou l'une des parties au conflit, agissant d'un commum accord ou isolément, conformément à des procédures recommandées par l'Organization de l'aviation civile internationale.

L'utilisation des radiocommunications pour annoncer et identifier les transports neutres est facultative; cependant, si elles sont employées, les dispositions du Règlement des radiocommunications et, en particulier, celles des articles 37 et 38 s'appliquent.

DC

RÉSOLUTION Nº 12

Relative aux nouvelles règles de formation des indicatifs d'appel

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Que de nombreaux pays, en particulier les pays en développement, ont un besoin urgent de nouveaux indicatifs d'appel;
b) Que le Règlement des radiocommunications (Génève, 1979), contient à l'article 25 de nouvelies règles de formation des indicatifs d'appel;
c) Que, selon l'article 69 du Règlement, ces règles entreront en viguer le 1er janvier 1981;

prie instamment des administrations concernées

d'utuliser les nouvelles règles de formation des indicatifs d'appel contenues dans l'article 25 du Règlement dès que nécessaire et même avant la date fixée pour leur entrée en viguer;

charge le Secrétaire général

de publier les renseignements reçus de ces administrations sur l'utilisation des nouvelles règles de formation des indicatifs d'appel.

DE

RÉSOLUTION Nº 13

Relative à la formation des indicatifs d'appel et à l'attribution de nouvelles séries internationales (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La recommandation de la Conférence internationale des radiocommunications (Atlantic City, 1947) relative à la formation des indicatifs d'appel;
b) La demande croissante d'indicatifs d'appel due tant à l'augmentation du nombre des Membres de l'Union qu'à celle des besoins des pays déjà Membres;
c) Les renseignements fournis par le Secrétaire général en ce que concerne les attributions de séries d'indicatifs d'appel depius 1947 et les possibles du système de formation des indicatifs d'appel actuellement utilisé;

estimant

qu'il convient, autant que possible, d'éviter de modifier les indicatifs d'appel actuellement en usage;

---

(1) Remplace la Résolution Nº 8 de la Conférence administrative des radiocommunications (Génève, 1959).

notant

a) Que les anciennes séries d'indicatifs d'appel formées, soit de trois lettres, soit d'un chiffre et de deux lettres, étant épuisées, il a été recouru à de nouvelles séries composées d'une lettre, d'un chiffre et d'une lettre, ce chiffre ne pouvant en aucun cas être 0 ou 1;

b) Que la méthode mentionnée à l'alinéa *notant a*) ne s'applique pas aux séries commeçant par les lettres suivantes: B, F, G, I, K, M, N, R, U, W;

c) Qu'il a été soumis à la présente Conférence une proposition visant à former de nouvelles séries d'indicatifs d'appel en remplaçant le roisième caractère, qui est une lettre, par un chiffre;

d) Que cela entraînerait toutefois des modifications sucessives à la section III de l'article **25**;

décide

1. Que le secrétaire général continuera à inviter instamment les administrations:

1.1. À utiliser au maximum les possibilitités des séries qui leur sont actuellement attribuées afin d'éviter, autant que possible, de nouvelles demandes;

1.2. À réexaminer les indicatifs d'appel assignés jusqu'à présent un vue de libérer éventuellement certaines séries et de les remettre à la disposition de l'Union;

2. Que le Secrétaire général fournira tous les conseils utiles aux administrations qui lui en feront la demande sur les moyens d'employer dans les meilleurs conditions d'économie, comme il est de règle, les séries qui leur sont attribuées;

3. Que si malgré tout, il apparît que toutes les possibilités du système actuel de formation des indicatifs d'appel doivent être épuisées avant la prochaine conférence administrative mondiale des radiocommunications compétente le secrétaire général:

3.1. Étudiera la possibilité de former de nouvelles séries d'indicatifs d'appel sur la base des propositions mentionnées au paragraphe *notant c*);

3.2. Difusera une lettre:

3.2.1. Expossant la situation;

3.2.2. Invitant instamment les administrations à lui faire parvenir des propositions sur les moyens de faire face à cette situation;

4. Que, à l'aide des renseignements ainsi rassemblés, le secrétaire général établira et présentera à la prochaine conférence administrative mondiale des radiocommunications compétente un rapporte comportant ses commentaires et suggestions.

DG

RÉSOLUTION Nº 14

Relative au transfert de technologie

La Conférence administrative mondiale des radiocommunications (Genéve, 1979),

considérant

a) Les termes de la Résoluiton relative au Dèveloppement et à la Coopération internationale (Nº 3362.S-VIII) adoptée par l'Assemblée générale des Nations Unies lors de sa Septiéme session extraordinaire, ainsi que les termes de la section III de cette Résolution qui met l'accent sur le rôle de la science et de la technologie au service du développement;

b) Les termes de la Resolution 32/160 de l'Assemblée générale qui proclame une Décennie des transports et des communications en Afrique durant la période 1978-1987 et qui envisage qu'une année de cette Décennie soit proclamée Année mondiale des communications;

c) Les décisions de l'Assemblée générale concernant la préparation d'une Startégie internationale pour le développement au cours de la Troisième Décennie des Nations Unies pour le Développement, pour les annés 1980 (Résolution 33/193);

notant

que, lors de la récente Conférence des Nations Unies relative à l'application de la science et de la technologie au développement (Vienne, août 1979), les gouvernements ont adopté une Déclaration relative à un Programme d'action, en vue d'accélérer l'application de la science et de la technologie pour le développement;

consciente

de l'importance que revêt l'application de la science et de la technologie dans le domaine des télecommunications, aux fins du développement des services et de la réalisation d'objectifs sociaux, économiques et culturels;

consciente également

de l'importance du rôle de l'UIT en tant qu'institution spécialisée des Nations Unies chargée d'entreprendre des actions pour la réalisation des objectifs énoncés dans la Convention internationale des télécommunications;

décide d'inviter instamment

1. Les gouvernements des pays Membres, notamment ceux des pays en développement, et leurs administrations à faire en sorte que soient élaborées des politiques de développement des télécommunications au niveau national, afin de renforcer leurs activités de coopération technique en vue de la réalisation d'un transfert efficace de la technologie des télécommunications, de toute nature en particlier dans le domaine des radiocommunications;

2. Les administrations à participer au maximum, dans la mesure pratiquement possible, aux Commissions d'études des Comités consultatifs internationaux de l'Union, forums importants pour le transfert de l'information sur le progrès et l'application des télécommunications à la tecnhologie;

décide de charger le secrétaire général

1. D'intensifier encore les activités de coopération technique visant à la planification, à l'établissement, à la maintenance et à l'exploitation des systèmes de télécommunication, ainsi qu'à la formation du personnel à ces fins, en veu d'accélérer le transfert et la bonne application de la techonologie en faveur du développement, compte tenu des besoins porpres à chaque pays;

2. De rechercher, sur le plain international, des ressources pour favoriser l'accélération de ces programmes d'action en matière de coopération technique, notamment des fonds qui pourraient être dégagés dans le cadre du Programme d'action de Vienne;

3. De porter la présente Résolution à la connaissance de tous les pays Membres de l'Union et des organes compétents des Nations Unies;

invite le conseil d'administration

à suivre les progrès accomplis dans la réalisation des objectifs énoncés par la présente Résolution et à faire rapport sur ces progrès, en tant que de besoin, à la prochaine Conférence de plénipotentiaires.

CZ

RÉSOLUTION Nº 15

Relative à la coopération internationale et à l'assistance technique dans le domaine des radiocommunications spatiales (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'un grand nombre de pays Membres de l'Union internationale des télécommunications ne sont pas en mesure de bénéficier dans l'immédiat des avantages fournis par la technique des satellites pour le développement de leurs services de télécommunication;

b) Que ces pays pourraient tirer de très grands avantages des programmes d'assistance technique exécutés sous les auspices de l'Union;

notant

a) Que les systèmes internationaux de télécommunications par satellite sont assujettis aux dispositions de la Convention et des Règlements de l'Union et que tous les pays, y compris notamment les pays en développement, peuvent de ce fait participer aux systèmes de télécommunications spatiales;

b) Qu'un certain nombre de problèmes devront être résolus afin que les pays en développement puissent participer effectivement aux systèmes internationaux de télécommunications spatiales et intégrer ces systèmes à leurs réseaux de télécommunications nationaux;

décide d'inviter el conseil d'administration

1. À attirer l'attention des administrations sur les moyens leur permettant de bénéficier d'une assistance techniques dans le domaine de la mise en œuvre des télécommunications spatiales;

2. À étudier la meilleure manière dont les pays Membres de l'Union pourraient formuler et présenter des demandes d'assistance afin de recevoir le maximum d'aide sous formes financière et autre;

3. À étudier la meilleure manière dont pourraient être utilisés les fonds rendus disponibles par l'Organisation des Nations Unies en application de sa Résolution Nº **1721,** afin d'accorder une assistance sous formes technique et autre aux administrations des pays Membres de l'Union, afin que celles-ci puissent utiliser effectivement les télécommunications spatiales;

4. À étudier le moyen par lequel les travaux des Comités consultatifs et autres organismes de l'Union pourraient être utilisés de la maniére la plus efficace pour fournir aux administrations des pays Membres de l'Union des renseignements et une assistance pour le développement des radiocommunications spatiales.

---

(1) Remplace la Résolution Nº Spa 4 de la Conférence administrative extraordinaire des radiocommunications (Génève, 1963).

CX

RÉSOLUTION Nº 16

Relative au rôle des télécommunications dans le développement rural intégré

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

rappelant

la Résolution 3362 (S-VIII) de la Septième session extraordinaire de l'Assemblée générale des Nations Unies qui a, entre autres choses, demandé aux États Membres d'encourager le développement rural intégré dans les pays en développement;

rappelant en outre

l'importance donnée au développement rural par diverses conférences intergouvernementales au cours de la deuxième Décennie des Nations Unies pour le développement, qui ont reconnu la nécessité d'intensifier les efforts de développement visant à satisfaire les aspirations des communautés rurales et à accélérar le développement de l'infrastructure dans les zones rurales;

Les Résolutions Nº 779 (Application de la stratégie internationale du développement pour la deuxième Décennie des Nations Unies pour le développement) et Nº 800 (Les télécommunications — un facteur important du développement économique et social — rôle joué par l'UIT dans ce domaine) du Conseil d'administration de l'Union et l'importance des télécommunications pour le développment social et économique, de même que les divers projets et études enterpris par l'Union pour atteindre ces objectifs;

convaincue

de l'importance des télécomunications en tant qu'élément essential de l'infrastructure des zones rurales;

reconnaisant

a) Que la plupart des pays en développement manquent encore de ressources appropriées dans le domaine des télécommunications;
b) Qu'actuellement de nombreuses régions rurales du monde ne bénéficient pas des avantages de la technique des télécommunications;
c) Que les populations de nombreux pays vivent isolées les unes des autres en raison d'obstacles géographiques tels qu'océans, montagnes, forêts et déserts;
d) Que les télécommunications modernes et, en particulier, les radiocommunications, y compris les techniques spatiales, peuvent contribuer à surmonter ces difficultés et à intégrer les communautés rurales au processus de développement;
e) Que de nombreux pays en développement ne sont pas en mesure d'établir entièrement, au moyen de leurs propres ressources, des réseaux modernes de télécommunication;

notant

les possibilités démontrées des techniques modernes des télécommunications, qui offrent le moyen d'apporter aux zones rurales les services d'enseignement, de santé et de protection sociale, facteurs importants pour le développement social;

notant en outre

qu'un réseau rural adéquat de télécommunications peut largement contribuer à stimuler le développement des activités agricoles et celui d'autres secteurs importants pour le progrès économique et social;

en appelle instamment aux gouvernements des pays Membres

afin qu'ils intensifient leurs efforts dans le domaine de la coopération technique en veu du développement accéléré des télécommunications au profit des communautés rurales, en tenant compte des ressources insuffisantes de divers pays en développement;

en appelle en outre instamment aux administrations

afin qu'elles participent activement aux études effectuées par les groupes autonomes spécialisés (GAS 3 et GAS 5) du CCITT/CCIR en ce qui concerne le développement des télécommunications rurales;

prie le secrétaire général

1. De continuer à accorder une attention particulière aux activités d'assistance technique de l'Union en vue de la planification détaillée, de l'exploitation et de la manitenance de l'infrastructure des télécommunications rurales et de l'application des tecnhiques appropriées;
2. De porte la présente Résolution à l'attention des organes compétents des Nations Unies; et

3. De continuer à coopérer avec les institutions spécialisées et les organisations du système des Nations Unies dans le domaine du développement rural intégré;

invite le conseil d'administration

à examiner la présente Résolution, à veiller à sa mise en application et à rendre compte des progrès réalisés à cet égard dans le Rapport annuel sur les activités de l'Union.

DF RÉSOLUTION N° 17

Relative à la detérmination de la structure des commissions que pourra établir une conférence administrative des radicommunications en fonction de son ordre du jour

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que certaines administrations, ne disposant pas d'un perssonel suffisant, éprouvent des difficultés à constituer les délégations qui les représenteront aux conférences administratives des radiocommunications, à raison d'un délégué au moins par commission formée;

b) Qu'il est aujourd'hui difficile aux administrations de prévoir le nombre et l'appellation des commissions qui seront constituées à chaque conférence avant la réunion de celle-ci, ainsi que les sujets qu'il conviendra d'attribuer à chacune;

c) Que l'expérience acquise lors de conférences précédentes pertinentes montre qu'il est souhaitable que le secrétaire général prépare suffisamment à l'avance un projet de structuration pour les conférences à venir;

reconnaissant

a) Que l'organisation des travaux d'une conférence administrative des radiocommunications ne peut être décidée que par cette conférence en fonction de son ordre du jour et des propositions et des autres documents qui lui sont soumis;

b) Que, cependant, l'organisation des conférences antérieures peut fournir une orientation utile pour celle d'une nouvelle conférence, et que les renseignements relatifs à l'organisation des travaux des conférences passées peuvent, par conséquent, faciliter aux administrations les préparatifs en vue des conférences futures;

décide

1. Qu'une fois l'ordre du jour d'une conférence administrative des radiocommunications fixé par le Conseil d'administrations, le secrétaire général envoie aux administrations, en même temps qu'un exemplaire de la résolution contenant cet ordre du jour, une invitation à faire part de leur opinion sur la structure que devrait avoir la conférence, compte tenu de l'ordre du jour;

2. Qu'après avoir reçu la réponse des administrations, le secrétaire général élabore pour la conférence, en consultation avec l'IFRB et le Directeur du CCIR et compte tenu de l'expérience acquise lors de conférences antérieures de caractère analogue un projet de structure indiquant, en même temps que les commissions suggérés, les articles, appendices, résolutions, recommandations et autres sujets contenus dans l'ordre du jour qui doivent être traités par chaque commission;

3. Que le secrétaire général informera de ce projet de document le Conseil d'administration et l'enverra comme document d'information à toutes les administrations.

CU RÉSOLUTION N° 30

Relative à la révision d'inscriptions du Fichier de référence international des fréquences, à la demande de conférences antérieures

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative extraordinaire des radiocommunications (Génève, 1951), a adopté une Liste internationale des fréquences dans laquelle figuraient des inscriptions non conformes au Tableau de répartition des bandes de fréquences d'Atlantic City (1947);

b) Que la Conférence administrative des radiocommunications (Génève, 1959), a indroduit les concepts de service primaire et de service secondaire, modifiant ainsi le Tableau de répartition des bandes de fréquences d'Atlantic City (1947), et privant certaines inscriptions de la Liste internationale des fréquences de leur caractère prioritaire;

c) Que la Conférence administrative des radiocommunications (Génève, 1959), dans l'établissement du Fichier de référence international des fréquences, a considéré et traité de façon spéciale le transfert de ces inscriptions du Fichier de référence des fréquences conformément aux dispositions de la Résoloution N° 4 (Génève, 1959);

d) Que, dans la période comprise entre le 1er janvier 1952 et le 31 mars 1953, des assignations ont été introduites dans cette Liste sans examen, avc un symbole dans la colonne 2d et que le Comité tient compte de ces assignations lors de l'examen de toute fiche de notification;

considérant en outre

e) Que les administrations avaient été instamment priées ded prendre les mesures requises;
f) Que la présente Conférence avait été invitée à réexaminer la situation;

décide

1. Que le Comité examine, du point de vue de leur conformité avec le nouveau Tableau d'attribution des bandes de fréquences, les assignations de fréquence auxquelles la Résolution Nº 4 de la Conférence des radiocommunications (Génève, 1959) était appliquée et corrige en conséquence ses conclusions à compter de la date d'entrée en vigueur des Actes finals de la présente Conférence. Lorsqu'une telle conclusion est modifiée en application de la présente Résolution, une remarque appropriée est inscrite dans la colonne Observations;

2. Que les assignations comportant un symbole dans la colonne 2d, qui ne sont pas couvertes par la Résolution 9 seront examinées en vue de remplacer ce symbole par la date du 1er avril 1953;

3. Que le Comité fera connaître aux administrations intéressées les mesures qu'il aura prises à propos de leurs assignations inscrites dans la Liste.

CI RÉSOLUTION N.º 31

Relative à l'application de certaines dispositions des Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) pour tenir compte des modifications apportées par la Conférence administrative mondiale des radiocommunications (Génève, 1979) au tableau d'attribution des bandes de fréquences pour la Région 2, dans la bande 11,7-12,7GHz.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971) a attribué, dans la Région 2, la bande de fréquences 11,7-12,2 GHz au service fixe par satellite, au service de radiodiffusion par satellite, au service fixe, au service mobile (sauf mobile aéronautique) et au service de radiodiffusion;
b) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) a établi des dispositions et un Plan associé pour le service de radiodiffusion par satellite dans la bande 11,7-12,5 GHz (Région 1) et dans la bande 11,7-12,2 GHz (Région 3);
c) Que cette Conférence a aussi défini des critères de partage interrégionaux sur la base des attributions de bandes de fréquences alors en vigueur;
d) Que les attributions de bandes de fréquences au service fixe par satellite et au service de radiodiffusion par satellite, dans la bande des 12 GHz dans la Région 2, ont été élargies et modifiées par la présent Conférence;
e) Que la présente Conférence a aussi décidé d'incorporer les dispositions et le Plan associé adoptés par la Conférence de 1977 dans le Règlement des radiocommunications en tant qu'appendice 30;

reconnaissant

a) Que ces modifications du Tableau d'attribution des bandes de fréquences n'entraînent, en principe, pas de nouveaux cas de partage interrégionaux autres que le cas visé au point *b)* ci-dessous;
b) Que les dispositions de l'appendice 30 peuvent être appliquées directement, comme indiqué ci-dessus, à tous les cas de partage autres que le partage entre le service fixe par satellite dans les Régions 1 et 3 et le service de radiodiffusion par satellite dans la Région 2, dans la bande de fréquences 12,2-12,7 GHz;
c) Que le cas unique visé au *reconnnaissant b)* ci-dessust fait l'objet de la Résolution **700**;

décide

1. Que les dispositions de l'article 4 et l'annexe 1 de l'appendice 30 relatives à la modification du Plan établi pour le service de radiodiffusion par satellite dans les Régions 1 et 3 s'appliquent aussi à la protection du service de radiodiffusion par satellite dans la bande 12,2-12,5 GHz, et du service fixe par satellite dans la bande 12,2-12,3 GHz, attribuées à ces services dans la Région 2;

2. Que les dispositions de l'article 6 et l'annexe 3 de l'appendice 30 relatives à la procédure de coordination et de notification des assignations de fréquence aux stations de Terre qui affectent des assignations de fréquences aux stations du service de radiodiffusion par satellite, s'appliquent aussi dans la bande 12,2-12,7 GHz, en ce qui concerne le service de radiodiffusion par satellite dans la Région 2;

3. Que les dispositions de l'article 7 et l'annexe 4 de l'appendice 30, ainsi que la Résolution **503**, relatives aux procédures préliminaires et à la coordination, notification et inscription des assignations de fréquence aux stations du service

fixe par satellite et du service de radiodiffusion par satellite dans la Région 2, s'appliquent aussi à la bande 12,2-12,3 GHz attribuée au service fixe par satellite et à la bande 12,2-12,5 GHz attribuée au service de radiodiffusion par satellite dans la Région 2;

4. Que les dispositions de l'article 9 et l'annexe 5 de l'appendice 30 qui spécifient les valeurs limites de la puissance surfacique entre 11,7 GHz et 12,2 GHz pour protéger les services de Terre dans les Régions 1 et 3 contre les émissions des stations spatiales du service de radiodiffusion par satellite dans la Région 2, s'appliquent aussi à la bande 12,2-12,5 GHz;

5.Que, jusqu'à ce que la conférence régionale de 1983 pour la Région 2 prenne des décisions finales concernant la bande 12,5-12,7 GHz:

a) L'article 9 et les valeurs limites indiquées dans l'annexe 5, alinéa 1), de l'appendice 30 s'appliqueront aux stations spatiales du service de radiodiffusion par satelllite fonctionnant dans la Région 2, et

b) Les valeurs limites de la puissance surfacique indiquée au numéro **2574** s'appliqueront aux stations spatiales du service fixe par satellite, fonctionnant dans la Région 2, en ce qui concerne les pays mentionnés aux numéros **848** et **850** et en Région 3;

demande au CCIR

1. D'étudier d'urgence la question de la protection adéquate des services de Terre dans chaque Région influencée, dans la bande 12,2-12,7 GHz, en vue d'assuer la planification efficace du service de radiodiffusion par satellite dans la Région 2 conformément aux points 4 et 5 du dispositif de la présente Résolution;

2. D'établir un rapport spécial sur la question en temps voulu pour pouvoir être examiné par les réunions préparatoires compétentes et fournir des directives pour les travaux de ladite conférence régionale.

AI RÉSOLUTION Nº 32

Relative à l'utilisation des assignations de fréquence aux stations de radiocommunication de Terre et de radiocommunication spatiale dans les bandes 11,7-12,2 GHz dans la Région 3 et 11,7-12,5 GHz dans la Région 1 (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977), a adopté la Résolution Nº Sat-2;

b) Que, selon les dispositions du numéro **838** du Règlement des radiocommunications, le service fixe, le service mobile et le service de radiodiffusion existants et futurs fonctionnant dans la bande 11,7-12,2 GHz dans la Région 3 et dans la bande 11,7-12,5 GHz dans la Région 1 ne doivent pas causer de brouillage préjudiciable aux stations de radiodiffusion par satellite fonctionnant conformément aux décisions de ladite Conférence;

c) Que les décisions de ladite Conférence comprennent un Plan pour les stations du service de radiodiffusion par satellite;

d) Que les procédures de coordination prévues dans la Résolution **33** ne devront être appliquées que jusqu'à la date d'entrée en vigueur des plans établis en exécution de la Résolution **507**;

décide

1. Que toutes les administrations qui utilisent ou envisagent d'utiliser des assignations de fréquences à des stations de Terre dans les bandes couvertes par les Plan détermineront, dès que possible, si ces assignations affectent ou non les assignations de fréquence conformes au Plan (avec, si nécessaire, l'assistance de l'IFRB);

2. Que les administrations pourront continuer à utiliser des assignations de fréquence non conformes au Plan de radiodiffusion par satellite, à condition qu'elles se mettent d'accord avec les administrations dont les stations de radiodiffusion par satellite sont affectées;

3. Que les administrations désirant conclure un accord communiqueront la teneur de cet accord à l'IFRB;

4. Qu'à la réception de ces renseignements, l'IFRB inscrira un symbole dans la colonne «Observations» du Fichier de référence, pour indiquer la durée spécifiée dans l'acoord, laquelle devra être également publiée dans une section spéciale de la circulaire hebdomadaire de l'IFRB;

5. Que la Résolution Nº Sat-2 est abrogée et remplacée par la présente Résolution;

invite l'IFRB

à apporter son assistance aux administrations pour leur permettre d'appliquer les dispositions de la présente Résolution.

---

(1) Remplace la Résolution N.º Sat-2 de la Conférence administrative des radiocommunications pour la radiodiffusion par spatiales (Génève, 1977).

BO

RÉSOLUTION Nº 33

Relative à la mise en service de stations spatiales du service de radiodiffusion par satellite avant la mise en vigueur vigueur d'accords et de plans associés pour le service de radiodiffusion par satelite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Résolution **507** en visage l'établissement de plans pour le service de radiodiffusion par satellite, mais que quelques administrations peuvent cependant ressentir el besoin de mettre en service des stations de ce service avant l'établissement de ces plans;

b) Qu'il convient que les administrations évitent, dans la mesure du possible, la prolifération de stations spatiales du service de radiodiffusion par satellite avant que de tels plans aient été établis;

c) Qu'une station spatiale du service de radiodiffusion par satellite est susceptible de causer des brouillages préjudiciables aux stations de Terre fonctionnant dans la même bande de fréquences, même si ces dernières stations sont situées en dehors de la zone de service de la stations spatiale;

d) Que les procédures spécifiées à l'article 11 du Règlement des radiocommunications ne contiennent pas de dispositions concernant la coordination entre stations spatiales du service de radiodiffusion par satellite et stations de Terre, ni entre stations spatiales du service de radiodiffusion par satellite et systèmes statiaux relevant d'autres administrations;

décide

1. Que, sauf lorsque des accords et des plans associés pour le service de radiodiffusion par satellite ont été établis et mis en vigueur, la procédure suivante sera appliquée:

SECTION A

Procédure de coordination entre stations spatiales du service de radiodiffusion par satellite et stations de Terre

2.1. Avant de notifier à l'IFRB ou de mettre en service une assignation de fréquence à une stations spatiale du service de radiodiffusion par satellite dans une bande de fréquences, lorsque cette bande de fréquences est attribuée, avec égalité de droits, au service de radiodiffusion par satellite et à un service de radiocommunications de Terre, soit dans la même Région ou sous-Région, soit dans des Régions ou sous-Régions différentes, une administration coordonne l'utilisation de cette assignation avec toute autre administration dont les services de radiocommunications de Terre sont susceptibles d'être affectés. A cet effet, elle communique au Comité toutes les caractéristiques techniques de cette station telles qu'elles sont énumérées dans les sections pertinentes de l'appendice 3 au Règlement des radiocommunications, qui sont nécessaires pour évaluer les risques de brouillage à un service de radiocommunication de Terre (1).

2.2. Le Comité publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise des administrations par télégramme-circulaire.

2.3. Toute administration qui estime que ses services de radiocommunication de Terre sont susceptibles d'être affectés présente ses observations à l'administration qui recherche la coordination et, dans tous les cas, au Comité. Ces observations doivent être envoyées dans un délai de quatre mois à compter de la date de la circulaire hebdomadaire pertinente de l'IFRB. Toute administration n'ayant pas fait connaître ses observations dans ce délai est réputée avoir considéré que ses services de radiocommunication de Terre ne sont pas susceptibles d'être affectés.

2.4. Toute administration qui a émis des observations sur la station en projet doit, soit communiquer son accord, avec une copie au Comité, soit, si cela n'est pas possible, envoyer à l'administration qui recherche la coordination toutes les données sur lesqueles ses observations sont fondées ainsi que toutes les suggestions qu'elle peut faire en vue d'une solution satisfaisante du probléme.

2.5. L'administration qui projette de mettre en service une station spatiale du service de radiodiffusion par satellite ainsi que toute autre administration estimant que ses services de radiocommunication de Terre sont susceptibles d'être affectés par la station en question peuvent demander l'aide du Comité à tout moment au cours de la procédure de coordination.

2.6. En cas de désaccord persistant entre l'administration qui recherche la coordination et l'administration auprès de laquelle la coordiantion a été recherchée, l'administration qui recherche la coordination diffère, excepté dans les cas où l'assistance du Comité a été demandée, l'envoi au Comité de sa fiche de notification concernant l'assignation en projet, de six mois à compter de la date de publication des renseignements dont il est question au paragraphe 2.2.

---

(1) Remplace la Résolution Nº Sat-3 de la Conférence administrative des radiocommunications pour la radiodiffusion par spatiales (Génève, 1977).

(2) Il convient que les méthodes de calcul et les critères de brouillage à utiliser pour évaluer de brouillage soient fondés sur les Avis pertinents du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'une autre façon. En cas de désaccord sur un Avis du CCIR ou en l'absence de tels Avis, les méthods et les critères font l'objet d'accords entre les administrations concernées. Ces accords doivent être réalisés sans porter préjudice aux autres administrations.

SECTION B

Procédure de cordination entre stations spatiales du service de radiodiffusion par satellite et systèmes spatiaux relevant d'autres administrations

3. Une administration qui a l'intention de mettre en service une station spatiale du service de radiodiffusion par satellite applique, aux fins de la coordination avec les systèmes spatiaux d'autres administrations, les dispositions suivantes de l'article 11 du Règlement des radiocommunications:

3.1. Numéros **1041** à **1058** inclus:

3.2.1. Numéros **1060** à **1065** (1).

3.2.2. Aucune coordination aux termes du paragraphe 3.2.1 n'est requise lorsqu'une administration se propose de modifier les caractéristiques d'une assignation existante d'une manière telle que la probabilité de brouillages préjudiciables causés à des stations du service de radiocommunication spatiale d'autres administrations ne s'en trouve pas accrue.

3.2.3. Numéros **1074** à **1105** inclus.

SECTION C

Notification, examen et inscription dans le Fichier de référence des assignations aux stations spatiales du service de radiodiffusion par satellite traitées dans la présente Résolution

4.1. Toute assignation de fréquence (2) à une station spatiale du service de radiodiffusion par satellite doit être notifiée au Comité. L'administration notificatrice applique à cet effet les disposition des numéros **1495** à **1497** du Règlement des radiocommunication.

4.2. Les notifications faites aux termes du paragraphe 4.1 sont traitées initialement conformément aux dispositions du numéro **1498**.

5.1. Le Comité examine chaque fiche de notification:

5.2. — *a*) Du point de vue de sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radicommunications, à l'exception de celles qui sont relatives aux procédures de coordination et à la probabilité de brouillages préjudiciables, qui font l'objet des alinéas 5.3, 5.4 et 5.5;

5.3. — *b*) Le cas échéant, du point de vue de sa conformité avec les dispositions du paragraphe 3.2.1 de la section A ci-dessus, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées;

5.4. — *c*) Le cas échéant, du point de vue de sa conformité avec les dispositions du paragraphe 3.2.1 de la section B ci-dessus, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées;

5.5. — *d*) Le cas échéant, du point de vue de la probabilité d'un brouillage préjudiciable au détriment du service assuré par une station d'un service de radiocommunications spatiales ou d'un service de radiocommunications de Terre pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions des numéros **1240** ou **1503**, selon le cas, du Règlement des radiocommunications si cette assignation de fréquence n'a pas, en fait, causé de brouillage préjudiciable au service assuré par une station ayant fait l'objet d'une assignation antérieurement inscrite dans le Fichier de référence et qui est elle-même conforme aux numéros **1240** ou **1503**, selon le cas.

6.1. Selon des conclusion auxquelles le Comité parvient à la suite de l'examen prévu aux paragraphes 5.2, 5.3, 5.4 et 5.5 la procédure se poursuit comme suit:

6.2. Lorsque le Comité formule une conclusion défavorable relativement au paragraphe 5.2, la fiche de notification est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire, en vue d'arriver à une solution satisfaisant du problème.

6.3. Lorsque le Comité formule une conclusion favorable relativement au paragraphe 5.2 ou lorsqu'il formule la même conclusion après que la fiche de notification a été présentée à nouveau, il examine la fiche relativement aux dispositions des paragraphes 5.3 et 5.4.

6.4. Lorsque le Comité conclut que les procédures de coordination dont il est question aux paragraphes 5.3 et 5.4 ont été appliquées avec succès en ce qui concerne touts les administrations dont les services peuvent être affectés, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d du Fichier de référence, avec une observation dans la colonne Observations indiquant que cette inscription ne préjuge en aucune façon les décisions à inclure dans les accords et plans associés dont il est question dans la Résolution **507**.

6.5. Lorsque le Comité conclut que les procédures de coordination dont il est question aux paragraphes 5.3 ou 5.4 n'ont, selon le cas, pas été appliquées sans succès, la fiche de notification est renvoyée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent ce renvoi et avec les suggestions que le Comité peut faire en vue d'arriver à une solution satisfaisante du problème.

---

(1) Il convient que les méthodes de calcul et les critères de brouillage à utiliser pour évaluer de brouillage soient fondes sur les Avis pertinentes du CCIR acceptés par les administrations concernées en application de la Résolution **703** ou d'une autre façon. En cas de désaccord sur un Avis du CCIR ou en l'absence de tels Avis, les méthodes et les critères font l'objet d'accords entre les administrations concernées. Ces accords doivent être réalises sans porter préjudice aux autres administrations.

(2) L'expression «assignation de fréquence», partout où elle figure dans la présente Résolution, doit être entendue comme se référant soit à une nouvelle assignation de fréquence. soit à une modification à une assignation déjà inscrite dans le Fichier de référence international des fréquences (denommé ci-après le «Fichier de référence»).

6.6. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en déclarant qu'elle n'a pas eu de succès en tentant d'effectuer la coordination, le Comité examine la fiche du point de vue du paragraphe 5.5.

6.7. Lorsque l'administration notificatrice présente à nouveau sa fiche de notification et si le Comité conclut que les procédures de coordination ont été appliquées avec succès en ci que concerne toutes les administrations dont les services peuvent être affectés, l'assignation est traitée comme il est indiqué au paragraphe 6.4.

6.8. Lorsque le Comité formule une conclusion favorable relativement au paragraphe 5.5, l'assignation est inscrite dans le Fichier de référence. Le symbole approprié représentant la conclusion du Comité indique que, le cas échéant, les procédures de coordination dont il est question aux pagraphes 2.1 ou 3.2.1 n'ont pas été couronnés de succès. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d du Fichier de référence, avec l'observation mentionnée au paragraphe 6.4.

6.9. Lorsque le Comité formule une conclusion défavorable relativement au paragraphe 5.5, la fiche de notification est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire en vue d'arriver à une solution satisfaisant du problème.

6.10. Si l'administration présent de nouveau sa fiche non modifiée et si elle insiste pour un nouvel examen de cette fiche, mais si la conclusion du Comité relativement au paragraphe 5.5 reste la même, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite que si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins quatro mois sans qu'aucune plainte en brouillage préjudiciable en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d du Fichier de référence avec l'observation mentionnée au paragraphe 6.4. Une observation appropriée est inscrite dans la colonne 13 pour indiquer que l'assignation n'est pas conforme aux dispositions des paragraphes 5.3, 5.4 ou 5.5 selon le cas. Dans le cas ou l'administration intéressée ne reçoit aucune plainte en brouillage préjudiciable concernant le fonctionnement de la station en question pendant une période d'une année après sa mise en service, le Comité réexamine sa conclusion.

6.11. Si l'utilisation d'une assignation de fréquence à une station spatiale qui a été inscrite dans le Fichier de référance conformément aux dispositions du paragraphe 6.10 de la présente Résolution ou du numéro **1544** cuase effectivement un brouillage préjudiciable à la réception d'une station spatiale du service de radiodiffusion pour laquelle une assignation de fréquence a été antérieurement inscrite dans le Fichier de référence à la suite d'une conclusion favorable relativement aux paragraphes 5.2, 5.3, 5.4 et 5.5 de la présente Résolution, selon le cas, la station brouilleuse doit faire cesser immediatement le brouillage préjudiciable lorsque'elle est avisée dudit brouillage.

6.12. Si l'utilisation d'une assignation de fréquence à une spatiale du service de radiodiffusion par satellite qui a été inscrite dans le Fichier de référence conformément aux dispositions du paragraphe 6.10 de la présente Résolution cause effectivement un brouillage préjudiciable à la réception d'une station de radiocommunication spatiale pour laquele une assignation de fréquence a été antérieurement inscrite dans le Fichier de référence à la suite d'une conclusion favorable relativement aux numéros **1503** à **1512**, selon le cas, la station brouilleuse soit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

6.13. Si l'utilisation d'une assignation de fréquence à une station spatiale du service de radiodiffusion par satellite qui a été inscrite dans le Fichier de référence conformément aux dispositions du paragraph 6.10 de la présent Résolution cause effectivement un brouillage préjudiciable à la réception d'une station de Terre pour laquelle une assignation de fréquence a été antérieurement inscrite au Fichier de référence à la suite d'une conclusion favorable relativement au numéro **1240,** la station brouilleuse doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

6.14. Si l'utilisation d'une assignation de fréquence non conforme aux dispositions des numéros **1240, 1352** ou **1503** cause effectivement un brouillage préjudiciable à la réception d'une station quelconque fonctionnant conformément aux dispositions du paragraphe 5.2 de la présente Résolution, la station utilisant l'assignation de fréquence non conforme aux dispositions des numéros précités doit faire cesser immédiatement le brouillage préjudiciable lorsqu'elle est avisée dudit brouillage.

CL

RÉSOLUTION N° 34

Relative à l'établissement de services de radiodiffusion par satellite dans la bande 12,5-12,75 GHz (Région 3) et au partage avec les services spatiaux et de Terre (Régions 1, 2 et 3)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

qu'elle a attribué la bande 12,5-12,75 GHz au service de radiodiffusion par satellite, aux fins de réception communautaire dans la Région 3;

reconnaissant

qu'aux termes de la Résolution **507,** le Conseil d'administration voudra peut-être habiliter une future conférence administrative des radiocommunications compétente à établir un plan pour le service de radiodiffusion par satellite dans la bande 12,5-12,75 GHz dans la Région 3;

décide

1. Que, jusqu'à ce qu'un plan soit établi pour le service de radiodiffusion par satellite dans la bande 12,5-12,75 GHz dans la Région 3, les dispositions de la Résolution **33** et l'article 11 continueront à s'appliquer à la coordination entre les stations du service de radiodiffusion par satellite dans la Région 3 et:

1) Les stations spatiales du service de radiodiffusion par satellite et du service fixe par satellite dans les Régions 1, 2 et 3;
2) Les stations de Terre dans les Régions 1, 2 et 3;

2. Qu'il convient que le CCIR étudie d'urgence les dispositions techniques qui pourront être appropriées au partage entre les stations du service de radiodiffusion par satellite dans la Région 3 et:

1) Les stations spatiales du service de radiodiffusion par satellite et du service fixe par satellite dans les Régions 1 et 2;
2) Les stations de Terre dans les Régions 1 et 2;

3. Que, en attendant que des dispositions techniques soient élaborées par lè CCIR et acceptées par les administrations concernées aux termes de la Résolution **703,** le partage entre les stations spatiales du service de radiodiffusion par satellite dans la Région 3 et les services de Terre dans le Régions 1, 2 et 3 será fondé sur les critères suivants:

1) La puissance surfacique produite à la surface de la Terre par les émissions d'une station spatiale du service de radiodiffusion par satellite dans la Région 3, quelles que soient les conditions et les méthodes de modulation, ne doir pas dépasser les limites indiquées à l'annexe 5 de l'appendice **30** en notant que le sous-paragraphe 2 ne s'appliquera qu'à la protection du service de radiodiffusion;
2) En plus du critère 1), les dispositions du numéro **2574** doivent s'appliquer aux pays mentionnées aux numéros **848** et **850;**
3) Les limites indiquées aux points 1) et 2) ci-dessus peuvent être dépassées sur le territoire d'un pays, à condition que l'administration de ce pays l'ait accepté.

AA RÉSOLUTION N° 35

Relative à la procedure à suivre pour mettre fin à un désaccord au sujet des Normes techniques ou des Règles de procédure du Comité international d'enregistrement des fréquences

La Conference administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, conformément aux dispositions du numéro **1001.1,** les Normes techniques et les Règles de procédure de l'IFRB sont communiquées à tous les Membres de l'Union et peuvent faire l'objet de commentaires des administrations;
b) Qu'une administration peut être en désaccord sur le fond de ces documents;
c) Qu'au cas où un désaccord ne pourrait être résolu, une procédure devrait permettre de surmonter les divergences;

reconnaissant

a) Qu'en ce qui concerne les Normes techniques, le CCIR pourrait constituer la meilleure source d'avis compétents;
b) Qu'en ce qui concerne les Règles de procédure, une conférence administrative mondiale des radiocommunications pourrait constituer la meilleure source d'interprétation du Règlement des radiocommunications;

décide

1. Qu'en cas de désaccord persistant sur le fond des Normes techniques de l'IFRB, le Comité avec l'accord de l'administration concernée pose la questions au CCIR aux fins d'études internationales et d'élaboration d'un Avis pertinent par l'Assemblée plénière du CCIR;

2. Que si le CCIR n'est pas en mesure un tel Avis ou s'il existe un désaccord sur le fond des Règles de procédure de l'IFRB, la question peut dans les deux cas être renvoyée au Conseil d'administration aux fins d'inscription à l'ordre du jour de la conférence administrative mondiale des radiocommunications suivante;

3. Qu'en attendant le règlement de la question, le Comité continue à appliquer la Norme technique ou la Règle de procédure en litige, mais qu'une fois la question résolue par un Avis du CCIR ou par une décision d'une conférence administrative mondiale des radiocommunications, le Comité prend sans délais les mesures qui s'imposent, y compris le réexamen de toutes les conclusions formulées en la matière.

AK RÉSOLUTION N° 36

Relative à l'établissement, par le Comité international d'enregistrement des fréquences, d'une documentation explicative au sujet de l'application de la nouvelle méthode de désignation des émissions dans les procédures de notification et à la révision du Fichier de référence international des fréquences qui en résulte.

La Conference administrative mondiale des radiocommunications (Génève, 1979),

ayant adopté

l'article 4 et l'appendice 6 contenant un nouveau système de désignation des émissions;

considerant

a) Que ces désignations revêtent une importance fondamentale pour les procédures de notification spécifiées dans le Règlement des radiocommunications;
b) Qu'il est essential que ce nouveau système ce désignation des émissions soit appliqué non seulement aux nouvelles assignations de fréquence mais également aux inscriptions existantes du Fichier de référence;
c) Que certaines nouvelles désignations sont plus détaillées que les anciennes;
d) Que l'IFRB n'a pas les moyens de remplacer automatiquement toutes les désignations anciennes par les nouvelles;

notant

a) Que certaines administrations pourront éprouver des difficultés à mettre en œuvre la nouvelle méthode de désignation des émissions lors de sa première application;
b) Que ces administrations auront besoin de renseignements explicatifs à ce sujet bien avant la date d'entrée en vigueur des Actes finals de la présente Conférence;

décide

1. Que l'IFRB établira une documentation explicative, comportant des exemples, au sujet de l'application de la nouvelle méthode de désignation, en vue de son utilisation dans les procédures de notification spécifiées dans le Règlement des radiocommunications et mettra cette documentation à la disposition des administrations le plus tôt possible et au plus tard le 1er octobre 1980;

2. Que l'IFRB procédera à la conversion des données inscrites dans le Fichier de référence en consultation avec les administrations et sur la base des renseignements qu'elles fourniront;

3. Qué si, dans un délai raisonnable, l'IFRB n'a pas reçu d'une administration les renseignements visés au paragraphe 2, il convertira les données inscrites dans le Fichier de référence aussi exactement que possible et ajoutera, dans la colonne Observations, une remarque mentionnant que la conversion a été effectuée conformément au présent alinéa;

4. Que, à dater de l'entrée en vigueur de la présente révision du Règlement des radiocommunications, on n'utilisera pour les procédures de coordination et de notification que les désignations des émissions figurant dans l'article 4. Néanmoins, si le Comité reçoit ultérieurement des renseignements ou des notifications contenant l'ancien type de désignation, il ne les tiendra pas pour incomplets pour cette seule raison. Si c'est pratiquement possible, le Comité modifiera la désignation et, si des précisions sont nécessaires, il consultera l'administration intéressée.

BX RÉSOLUTION N° 37

Relative à la mise en œuvre et au développement de l'utilisation des techniques informatiques pour faciliter la gestion du spectre radioélectrique par les administrations

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La Résolution **7** relative à mise au point de la gestion nationale du spectre radioélectrique;
b) La Résolution **6** relative à l'élaboration d'un manuel destiné à expliquer et à illustrer certaines dispositions du Règlement des radiocommunications;
c) La Recommandation **31** adressée au CCIR, relative à l'élaboration d'un manuel sur l'application des techniques informatiques à la gestion du spectre radioélectrique;

considérant en outre

d) La valeur potentielle des techniques informatiques pour le nombreux aspects de la gestion du spectre;
e) La nécessité d'une assistance complémentaire aux administrations, en particulier dans le pays en développement, pour leur permettre de mettre en œuvre et de développer les équipements informatiques ou d'exploiter d'une manière optimale leurs équipements informatiques existants en vue de la gestion du spectre radioélectrique;

décide que le secrétaire général

organisera rapidement un examen de ces problèmes pour faire en sorte que les mesures suivantes soient prises de la manière la plus efficace possible:

1. Organisation de cycles d'études régionaux consacrés, en particulier, à la formation dans ce domaine, compte tenu des besoins nationaux des administrations;

2. Utilisation de toutes les ressources pédagogiques dont dispose l'Union pour assurer une formation complémentaire dans ce domaine en fonction des besoins nationaux des administrations;

3. Établissement, dans le cadre des instances existantes de l'UIT, de dispositions appropriées destinées à aider les administrations à identifier les problèmes particuliers dans ce domaine et à y apporter des solutions en utilisant du mieux possible les techniques informatiques;

invite le conseil d'administration

à examiner les recommandations du Secrétaire général et à trouver les ressources nécessaires.

BR RÉSOLUTION Nº 38

Relative à la réassignation des fréquences aux stations des services fixe et mobile fonctionnant dans les bandes attribuées aux services de radiolocalisation et d'amateur dans la Région 1

(1625-1635 kHz, 1800-1810 kHz, 1810-1850 kHz et 2160-2170 kHz)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

que la présente Conférence a adopté des modifications à l'attribution des bandes de fréquences comprises entre 1606,5 kHz et 2850 kHz;

notant

a) Que la mise en œuvre du Tableau révisé d'attribution des bandes de fréquences présente des difficultés, en particulier pour les stations du service mobile maritime dans la Région 1, dans les bandes 1625-1635 kHz, 1800-1810 kHz et 2160-2170 kHz qui sont mises à la disposition des services de radiolocalisation et dans la bande 1810-1850 kHz qui est mise à la disposition du service d'amateur;

b) Que la présente Conférence a recommandé la convocation, en 1982 au plus tard, d'une conférence administrative des radiocommunicatios pour les services mobiles en général;

soulignant

la nécessité d'élaborer des plans d'assignation de fréquences pour la bande 1606,5-2850 kHz dans la Région 1, afin d'appliquer les dispositions des numéros **486** et **492** du Règlement des radiocommunications;

invite la conférence pour les services mobiles

mentionnée ci-dessus à donner la priorité à l'adoption d'un nouveau plan d'assignation de fréquences dans la bande 1606,5-2850 kHz pour le service mobile maritime dans la Région 1;

décide

1. Que dans la Région 1, exception faite des pays et des bandes de fréquences mentionnés (1) aux numéros **485**, **490**, **491**, **493** et **199**, à partir de la date d'entrée en vigueur du plan d'assignation de fréquences pour le service mobile maritime qui figurera dans les actes finals de la conférence compétente, il sera mis fin à toutes les opérations des stations des services fixe et mobile dans les bandes 1625-1635 kHz, 1800-1850 kHz et 2160-2170 kHz;

2. Que le plan d'assignation de fréquences mentionné ci-dessus indiquera les fréquences de remplacement pour les stations du service mobile maritime, ainsi que les dispositions relatives à leur mise en œuvre;

3. Que les administrations, au nom desquelles sont inscrites des assignations aux stations des services fixe, mobile terrestre ou mobile aéronautique (OR) dans les bandes concernées choisiront les assignations de remplacement appropriées et les notifieront à l'IFRB et que, lorsque la conclusion du Comité sera favorable relativement aux numéros **1240** et **1241**, l'assignation portera la même date et aura le même statut que celle qu'elle remplace en ce qui concerne les assignations des pays de la Région 1;

4. Que la protection assurée aux stations des services fixe et mobile conformément aux numéros **486** et **492** continuera à s'appliquer jusqu'à ce que des assignations de remplacement satisfaisantes aient été trouvées et mises en œuvre conformément aux dispositions de la présente Résolution;

5. Qu'à compter de la date de mise en œuvre du plan d'assignation de fréquence pour le service mobile maritime, contenu dans les actes finals de la conférence compétente, les assignations de fréquence qui n'auront pas été transférées conformement au point 3 du dispositif de la présente Résolution, ne continueront à fonctionner qu'au titre des dispositions du numéro **342.**

AJ RÉSOLUTION Nº 60

Relative aux renseignements sur la propagation des ondes radioélectriques utilisés pour déterminer la zone de coordination

(Voir l'appendice 28)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Nº **485**, bandes 1625-1635 kHz, 1800-1810 kHz et 2160-2170 kHz; Nº **490**, bande 1810-1830 kHz; Nº **491**, bande 1810-1830 kHz; Nº **493**, bande 1810-1850 kHz, et Nº **499**, bande 2160-2170 kHz.

considérant

a) Que l'appendice 28 au Règlement des radiocommunications décrit une méthode de détermination de la zone de coordination qui fait intervenir certaine documentation relative à la propagation des ondes radioélectriques;
b) Que les renseignements sur la propagation contenus dans cet appendice sont fondés, directement ou indirectement, sur des données de propagation figurant dans les textes du CCIR;
c) Que les études du CCIR sur la propagation se poursuivent, de sorte que leurs conclusions sont sujettes à modification et pourront dans l'avenir conduire à modifier les sections de l'appendice 28 dans lesquelles interviennent les renseignements sur la propagation;
d) Que, dans certains parties du monde, aucune mesure de la propagation des ondes radioélectriques n'a été effectuée;

reconnaissant

a) Qu'il faut généralement plusieurs années pour rassembler suffisamment de données afin de pouvoir en tirer des conclusions fiables au sujet de la propagation;
b) Que, pour des raisons administratives, il est souhaitable que les renseignements sur la propagation utilisés pour la détermination de la zone de coordination ne soient pas révisés trop fréquemment et, en tout état de cause, qu'ils ne le soient que si l'effet d'une telle révision sur les dimensions de la zone de coordination est suffisamment important;
c) Que la détermination de la zone de coordination effectuée selon l'appendice 28 ne nécessite pas une connaissance détaillée des caractéristiques de propagation sur des trajets individuels et qu'il est souhaitable que l'on continue à procéder de cette façon;

invite le CCIR

à poursuivre l'étude des données sur la propagation intéressant la détermination de la zone de coordination et à conserver aux textes correspondants une présentation qui permette leur insertion directe dans l'appendice 28 en remplacement des sections actuelles, 3, 4 et 6 ou de l'annexe III;

décide

1. Que toutes les Assemblées plénières du CCIR devront aboutir à une conclusion sur le point de savoir si, d'après les renseignements sur la propagation contenus dans les Avis les plus récents du CCIR, une révision des sections 3, 4, et 6 ou de l'annexe III de l'appendice 28 au Règlement des radiocommunications est justifiée;

2. Que, lorsqu'une Assemblée plénière du CCIR aura abouti à la conclusion qu'une révision des sections 3, 4 et 6 de l'annexe III de l'appendice 28 est justifiée, le Directeur du CCIR en informera le Secrétaire général de l'UIT et lui transmettra les modifications proposées à l'appendice 28.

demande

1. Que le Conseil d'administration inscrive alors à l'ordre du jour de la prochaine conférence administrative mondiale des radiocommunications un point extraordinaire portant sur l'examen de ladite conclusion du CCIR;

2. Que si la conférence administrative mondiale des radiocommunications précitée décide que les renseignements sur la propagation utilisés dans l'appendice 28 doivent être révisés, le Secrétaire général, en consultation avec l'IFRB, insère les amendements décidés par ladite conférence dans un document donnant le nouveau texte des sections 3, 4 et 6 ou de l'annexe III de l'appendice 28, publié sous une forme telle qu'on puisse directement le substituer à la version de l'appendice 28 alors en vigueur, et envoie ce document à toutes les administrations;

décide en outre

que, à compter d'une date que fixera ladite conférence, le texte révisé servira de base pour toutes les déterminations ultérieures de la zone de coordination au moyen de l'appendice 28.

BK RÉSOLUTION Nº 61

Relative à la division du monde en zones climatiques pour le calcul des caractéristiques de propagation

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la propagation des ondes radioélectriques, particulièrement fréquences supérieures à 1 GHz, est influencée de manière significative par le précipitation ainsi que par les tempêtes de sable et de poussière;
b) Que l'on ne dispose, pour certaines régions géographiques, ni de valeurs mesurées ni de statistiques à court terme concernant l'intensité des précipitations;
c) Qu'il existe très peu de données sur l'occurrence et sur les effets des tempêtes de sable et de poussière;

d) Que, pour l'évaluation des caractéristiques de propagation, le CCIR a divisé le monde en cinq zones hydrométéorologiques correspondant d'une manière générale aux caractéristiques des précipitations et que cette division n'est plus appropriée;

e) Que la division actuelle du monde en un nombre aussi réduit de zones hydrométéorologiques n'a vraisemblablement pas la précision voulue pour permettre une évaluation correcte de l'affaiblissement et de la diffusion par les précipitations dans certaines parties du monde;

f) Que les effets des tempêtes de sable et de poussière n'ont pas fait l'objet d'études et d'évaluations appropriées, quant à leur gravité ou quant à leurs variations dans le temps;

g) Que le CCIR affectue actuellement certains études sur les effets des précipitations et des tempêtes de sable et de poussière;

prie le CCIR

1. D'accélérer et de développer ses travaux sur les effets des précipitations et d'attacher plus d'importance à l'étude des tempêtes de sable et de poussière;

2. De donner de avis sur la nature des études nécessaires dans les régions géographiques pour lesquelles les données sont insuffisantes;

3. De porter une attention particulière, compte tenu des nouvelles données dont il pourra disposer, à la révision de la classification actuelle du monde en zones hydrométéorologiques;

invite instamment les administrations

1. À encourager et à entreprendre d'urgence dans leur pays des mesures des taux de précipitations et des variations dans l'espace et dans le temps de ces précipitations, notamment de leur structure cellulaire;

2. À encourager et à entreprendre, d'urgence également, des mesures de l'influence des tempêtes de sable et de poussière sur la propagation;

3. À communiquer les résultats de ces mesures au CCIR pour permettre à celui-ci de décrire de façon plus précise et plus détaillée les phénomènes qui entrent en jeu et d'établir une classification améliorée des tempêtes de sable et de poussière ainsi que des régions hydrométéorologiques pour application aux problèmes des radiocommunications.

AM

RÉSOLUTION Nº 62

Relative à l'utilisation expérimentale des ondes radioélectriques par les satellites de recherche ionosphérique (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la recherche sur l'ionosphère terrestre revêt une très grande importance pour l'étude des relations entre le Soleil et la Terre et également pour l'utilisation rationnelle des ondes radioélectriques se propageant par l'ionosphère;

b) Que l'on a effectué des recherches couronnées de succès avec des satellites tels qu'Alouette 1 et 2, ISIS 1 et 2 et ISS, munis d'appareils de sondage ionosphérique par le haut;

c) Que des satellites de recherche ionosphérique semblables à ceux cités ci-dessus, seront mis en œuvre pour poursuivre les recherches sur l'ionosphère et au-delà;

d) Que les appareils de sondage par le haut fonctionnent pour la plupart en régime d'impulsions avec balayage de fréquence;

e) Que les satellites dont il s'agit sont généralement utilisés par intermittence, pendant une fraction de la journée, selon les caractéristiques de l'orbite;

f) Que le système de sondage peut être télécommandé avec précision, à volonté, à partir de la station terrienne correspondante;

décide

que les administrations peuvent continuer à autoriser l'émission d'ondes radioélectriques à partir de satellites de recherche ionosphérique placés sur des orbites au-dessus de l'ionosphère dans les bandes d'ondes hectométriques et décamétriques, à condition que l'on dispose de moyens appropriés pour commander les émissions de ces satellites, comme le requiert le numéro **2612** du Règlement des radiocommunications afin d'empêcher que des brouillages préjudiciables soient causés à d'autres services.

---

(1) Remplace la Résolution Nº Spa2-4 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

AG

RÉSOLUTION Nº 63

Relative à la protection des services de radiocommunication contre les brouillages causés par le rayonnement des appareils industriels, scientifiques et médicaux (ISM)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les appareils ISM engendrent et utilisent localement de l'énergie radioélectrique et que l'on ne peut pas toujours éviter qu'une partie de cette énergie soit rayonnée à l'extérieur;
b) Qu'il existe un nombre croissant d'appareils ISM, qui fonctionnent sur diverses fréquences réparties dans tout le spectre;
c) Que, dans certains cas, une importante fraction de l'énergie peut être rayonnée par um appareil ISM en dehors de sa fréquence de travail;
d) Que certains services radioélectriques, notamment ceux qui utilisent de faibles niveaux de champ, risquent de subir des brouillages causés par le rayonnement d'appareils ISM et que ces risques sont inacceptables particulièrement lorsqu'il s'agit de services de radionavigation ou d'autres services de sécurité:
e) Que, pour limiter les risques de brouillage à des parties déterminées du spectre:
i) Les précédentes Conférences des radiocommunications (Atlantic City, 1947: Génève, 1959) ont désigné quelques bandes de fréquences à l'intérieur desquelles les services de radiocommunication doivent accepter les brouillages préjudiciables produits par les appareils ISM;
ii) La présente Conférence n'a accepté d'augmenter le nombre des bandes de fréquences utilisables par les appareils ISM qu'à la condition que soient définies les limites du rayonnement de ces appareils à l'intérieur des bandes nouvellement désignées pour une utilisation mondiale et à l'extérieur de l'ensemble des bandes utilisables par les appareils ISM;

décide

que, pour assurer une protection convenable aux services de radiocommunication, il est nécessaire de mener d'urgence des études en vue de définir les limites à imposer aux rayonnements des appareils ISM dans tout le spectre radioélectrique, et plus particulièrement dans les bandes nouvellement désignées.

invite le CCIR

1. À poursuivre, en collaboration avec le CISPR et la CEI, les études qu'il a entreprises au sujet du rayonnement des appareils ISM dans l'ensemble du spectre radioélectrique en vue d'assurer une protection convenable aux services de radiocommunication;

2. À spécifier aussi rapidement que possible dans des Avis les limites à imposer au rayonnement des appareils ISM à l'intérieur et a l'extérieur des bandes qui leur sont désignées dans le Règlement des radiocommunications.

La priorité devrait être donnée aux études permettant de parvenir à un Avis relatif aux bandes de fréquences nouvellement désignées par la présente Conférence pour les appareils ISM et qui sont les suivantes:

6765-6795 kHz;
433,05-434,79 MHz;
61-61,5 GHz;
122-123 GHz;
244-246 GHz;

invite la prochaine conférence administrative des radiocommunications compétente

à résoudre le problème des brouillages causés par les appareils ISM aux services de radiocommunication en tenant compte des Avis du CCIR.

CF

RÉSOLUTION Nº 64

Relative à l'étude par le CCIR de la protection des équipements radioélectriques contre la foudre

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il existe dans le monde des zones où, malgré l'installation de dispositifs de protection contre la foudre, les équipements sont constantemment endommagés et souvent de façon très grave, à la suite des décharges qui se produisent lors d'orages électriques ou de violents orages;
b) Qu'en raison des circonstances, des conditions climatiques, de la pollution de l'environnement par l'homme, etc., les études menées n'ont pas aboiti à des résultats probants;
c) Le manque de moyens matériels et d'expérience des techniciens confrontés à ce phénomène;

considérant en outre

le numéro **72** de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973);

invite le CCIR

1. À étudier ce phénomène en consultation avec le CCITT et à émettre un Avis sur ce sujet;
2. À inclure dans la mesure du possible dans l'étude de ce phénomène, afin de faciliter l'application des techniques de protection, des statistiques sur les décharges de foudre en fonction des zones climatiques dans lesquelles elles se manifestent, sur la fréquence de ces manifestations et les grandeurs caractéristiques de la foudre mesurées sous forme de tensions ou de courants induits, ainsi que les constantes de temps associées:

et invite les administrations

à soumettre au CCIR les données techniques et les résultats des études effectuées dans ce domaine.

AH RÉSOLUTION Nº 65

Relative à la diffusion d'informations actualisées sur les Avis du CCIR mentionnés dans le Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Que le Règlement des radiocommunications se réfère à des Avis déterminés du CCIR ainsi qu'à des «Avis pertinents du CCIR»;
b) Que la Résolution 703 prévoit des consultations quant à l'applicabilité des Avis du CCIR relatifs aux critères techniques de partage des bandes de fréquence entre services de radiocommunication spatiale et services de radiocommunications de Terre ou entre services de radiocommunication spatiale;
c) Que les Avis du CCIR peuvent être révisés par les Assemblées plénières du CCIR, ce qui entraine un changement des numéros de référence;

considérant

a) Que pour bien appliquer le Règlement des radiocommunications, les administrations doivent savoir quels Avis du CCIR doivent être pris en considération;
b) Que les renseignements sur la mise à jour de ces Avis sont de la plus haute importance;

invite le CCIR

1. À identifier et énumérer les dispositions du Règlement des radiocommunications contenant une référence à un Avis déterminé du CCIR ou à un «Avis pertinent du CCIR» en indiquant les numéros de référence et les titres de ces Avis;
2. À charger le Directeur du CCIR de fournir au Secrétaire général les renseignements nécessaires à la mise à jour de cette liste;

prie le Secrétaire général

de communiquer à toutes les administrations la liste de ces Avis ainsi que toute mise à jour ultérieure.

AE RÉSOLUTION Nº 66

Relative à la division du monde en Régions aux fins d'attribution des bandes de fréquences

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a)Que la division actuelle du monde en Régions 1, 2 et 3 aux fins de l'attribution des bandes de fréquences remonte à 1947 et que les bases techniques sur lesquelles elle repose n'étaient pas alors clairement définies;
b) Que depuis 1947, les techniques des radiocommunications ont fait des progrès considérables et qu'un grand nombre de pays nouveaux ont fait leur apparition;

consciente

que la division du monde en trois Régions, telle qu'elle existe, ne répond peut-être pas d'une manière appropriée et équitable aux besoins de tous les pays;

reconnaissant

qu'il n'est pas possible de mener à bien la révision nécessaire de la division existante du monde en Régions pendant la présente Conférence;

décide

que cette division doit être revue compte des progrès les plus importants survenus dans la technique des radiocommunications et de l'augmentation du nombre des Membres de l'Union qui sont à des stades différents de développement;

demande au CCIR

d'entreprendre une étude des bases techniques et opérationnelles d'une éventuelle révision de la division du monde aux fins de l'attribution des bandes de fréquences radioélectriques, fondée sur tous les facteurs pertinents tels que la propagation des ondes radioélectriques, les conditions climatiques, la configuration géographique naturelle du monde, le niveau de développement économique et technique, et qui permettra une utilisation plus efficace du spectre des fréquences par tous les pays Membres de l'Union;

prie instamment tous les Membres de l'Union

de participer activement à l'étude susmentionnée, en contribuant aux travaux envisagés;

demande en outre au CCIR

d'achever cette étude et d'en soumettre les résultats au plus tard à sa XVI[e] Assemblée plénière et, en tout cas, d'établir un rapport qui sera examiné par la prochaine Assemblée plénière;

invite le Conseil d'administration

à suivre le déroulement de cette étude et à donner des avis à la Conférence de plénipotentiaires afin que la question puisse être résolue comme il convient lors dLune future conférence administrative mondiale des radiocommunications de l'Union.

BJ RÉSOLUTION N° 67

Relative au perfectionnement de la conception et de l'utilisation des matériels radioélectriques

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le spectre des fréquences radioélectriques est une ressource naturelle limitée qui n'a d'intérêt que si elle est exploitée;
b) Que l'utilisation efficace du spectre peut être compromise par les caractéristiques des matériels d'émission et de réception:
c) Que les conditions de fonctionnement des systèmes radioélectriques peuvent aussi porter préjudice à l'utilisation efficace du spectre;
d) Que les progrès constants de l'électronique et des branches connexes permettent de produire des systèmes de radiocommunication qui utilisent plus rationnellement le spectre des fréquences;

décide

que les administrations devraient encourager le perfectionnement de la conception et de la construction des matériels radioélectriques, ainsi que du mode d'exploitation des systèmes, afin d'utiliser au mieux le spectre des fréquences radioélectriques.

CD RÉSOLUTION N° 68

Relative à la nouvellde définition de certains termes contenus dans l'Annexe 2 à la Convention internationale des télécommunications (Málaga-Torremolinos, 1973) et applicables au Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

ayant examiné et adopté

les termes et définitions contenus dans l'article 1 du Règlement des radiocommunications (Génève, 1979), qui comprend un certain nombre de termes déjà définis dans l'Annexe 2 à la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) intitulée «Définition de certains termes employés dans la Convention et dans les Règlements de l'Union internationale des télécommunications»;

estimant

que les définitions de certains termes, comme «brouillage nuisible» (dans le présent Règlement «brouillage préjudiciable»), «télégraphie» et «téléphonie», ainsi que des termes associés qui figurent également dans l'annexe 2 à la Convention et qui revêtent une certaine importance pour le Règlement des radiocommunications, devraient être revues afin de les rendre plus précises et plus conformes aux techniques actuelles;

reconnaissant toutefois

que, compte tenu de l'article 51 et notamment du numéro **167** de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973), seule une Conférence de Plénipotentiaires de l'Union internationale des télécommunications est habilitée à modifier les termes contenus dans l'Annexe 2 à ladite Convention ainsi que leurs définitions;

recommande

à la Conférence de plénipotentiaires de l'Union internationale des télécommunications (Nairobi, 1982) de réexaminer la définition, dans l'Annexe 2 à la Convention internationale des télécommunications, des termes «brouillage nuisible», «télégraphie» et «téléphonie» et des termes associés en tenant compte des termes et définitions adoptés pour l'usage du Règlement des radiocommunications par la Conférence administrative mondiale des radiocommunications (Génève, 1979), ainsi que des propositions éventuellement soumises par le CCIR et le CCITT en application de la Résolution N° 44 de la Conférence de plénipotentiaires (Malaga-Torremolinos, 1973);

charge le Secrétaire général

1. De porter cette question à l'attention de ladite Conférence de plénipotentaires;
2. D'indiquer par des notes, dans la version publiée au Règlement des radiocommunications, les définitions qui ne sont pas alignées sur l'Annexe 2 à la Convention, en soulignant le fait que les définitions correspondantes qui figurent dans cette annexe prévaudront sur celles qui figurent dans le Règlement des radiocommunications, dans la mesure où elles présentent des différences;
3. De modifier ou de supprimer ces notes pour tenir compte des décisions pertinentes de la Conference de plénipotentiaires.

BD RÉSOLUTION N° 100

Relative à la coordination, la notification et l'inscription, dans le Fichier de référence international des fréquences, des assignations à des stations du service fixe par satellite, à l'égard des stations du service de radiodiffusion par satellite dans la Région 2 (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

que le Règlement des radiocommunications ne contient aucune dispositions traitant de la coordination de la notification et de l'inscription dans le Fichier de référence international des fréquences des assignations de fréquence aux stations du service fixe par satellite dans la bande 12,1-12,3 GHz en ce qui concerne leur interaction avec les stations du service de radiodiffusion par satellite dans la Région 2;

décide

que les dispositions des articles 11 et 13 du Règlement des radiocommunications seront appliquées dans ces cas jusqu'à ce que cette question puisse être examinée par une conférence administrative des radiocommunications compétente.

BQ RÉSOLUTION N° 101

Relative à la conclusion d'accords et à l'établissement des plans associés pour des liaisons de connexion aux stations spatiales du service de radiodiffusion par satellite fonctionnant dans la bande des 12 GHz, conformément au Plan adopté par la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) pour les Régions 1 et 3.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il convient d'utiliser le plus efficacement possible l'orbite des satellites géostationnaires et les bandes de fréquences attribuées au service fixe par satellite;

---

(1) Remplace la Résolution N° Spa-6 de la Conférence administrative mondiale pour la radiocommunications pour la radiodiffusion par satellite (Génève, 1971).

b) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) a élaboré et adopté des dispositions et un Plan associé d'attribution de canaux et de positions orbitales dans les bandes fréquences 11,7-12,5 GHz pour la Région 1 et 11,7-12,2 GHz pour la Région 3, qui figurent dans l'appendice 30;

c) Que les liaisons de connexion aux satellites de radiodiffusion font partie du service fixe par satellite et que l'utilisation des bandes de fréquences sur ces liaisons est actuellement régie par les dispositions des articles 11 et 13 du Règlement des radiocommunications;

d) Que la présence de nombreux satellites de radiodiffusion fonctionnant dans des positions de l'orbite des satellites géostationnaires par les plans précités entraînera de grandes difficultés pour la coordination, avec les systèmes du service par satellite, de l'utilisation des bandes de fréquences sur les liaisons de connexion pour la transmission de programmes;

e) Que les critères de partage existant dans l'article 27 nont pas été établis spécifiquement pour les liaisons de connexion pour le service de radiodiffusion par satellite dans les bandes où l'utilisation du service fixe par satellite est réservée exclusivement aux liaisons de connexion pour le service de radiodiffusion par satellite;

notant

a) Que la présente Conférence a reconnu certaines bandes de fréquences comme disponibles pour les liaisons de connexion aux satellites de radiodiffusion (voir le Tableau des attributions de bandes de fréquences et les renvois associés, numéros **835**, **858**, **863** et **869**);

b) Que le choix de bandes de fréquences pour les liaisions de connexion aux satellites de radiodiffusion doit être laissé aux administrations concernées;

décide

1. Que les liaisons de connexion aux satellites de radiodiffusion fonctionnant dans les bandes 11,7-12,5 GHz dans la Région 1 et 11,7-12,2 GHz dans la Région 3 doivent être organisées et exploitées, dans les bandes 10,7-11,7 GHz, 14,5-14,8 GHz (uniquement pour les pays situés en dehors de l'Europe et pour Malte) et 17,3-18,1 GHz pour la Région 1 et 14,5-14,8 GHz et 17,3-18,1 GHz pour la Région 3, conformément aux accords et aux plans associés, adoptés par une conférence administrative des radiocommunications à laquelle pourront participer toutes les administrations intéressées ainsi que les administrations dont les services pourraient être affectés; toutefois, les administrations peuvent également utiliser les liaisons de connexion aux satellites de radiodiffusion dans la bande 14,0-14,5 GHz (uniquement pour les pays situés en dehors de l'Europe et pour Malte) ou dans d'autres bandes de fréquences attribuées au service fixe par satellite (Terre vers espace), sous réserve d'une coordination avec d'autres réseaux du service fixe par satéllite;

2. Que jusqu'à l'entrée en vigueur des accords et des plans associés précités, les administrations et l'IFRB doivent appliquer les procédures décrites dans les articles 11 et 13 et dans la Résolution **102** pour les liaisons de connexion aux satellites de radiodiffusion fontionnant dans les bandes mentionées au paragraphe 1 de la partie *décide* du dispositif.

3. Que, jusqu'à l'entrée en vigueur des actes finals de la conférence administrative des radiocommunications proposée, les critères spécifiés dans l'article 27 pour le partage entre les services de Terre et le service fixe par satellite seront aussi applicables aux liaisons de connexion du service de radiodiffusion par satellite dans les bandes susmentionnées;

invite le Conseil d'administration

à étudier la question de la convocation d'une conférence administrative des radiocommunications afin de fixer la date et le lieu réunion appropriés de cette conférence, ainsi que son ordre du jour;

invite le CCIR

1. À étudier les caractéristiques techniques les plus appropriées pour les liaisons de connexion aux satellites de radiodiffusion ainsi que les méthodes de planification pour l'attribution des canaux à ces liaisions dans les bandes attribuées par la Conférence administrative mondiale des radiocommunications (Génève, 1979) (voir la Recommandation **101**);

2. À étudier et à déterminer d'urgence les critères de partage appropriés à appliquer entre les services fixe et mobile et les liaisons de connexion aux satellites de radiodiffusion.

CS RÉSOLUTION N° 102

Relative à la coordination entre administrations des caractéristiques techniques des liaisons de connexion aux stations spatiales du service de radiodiffusion par satellite de la bande 11,7-12,5 GHz (Région 1) et 11,7-12,2 GHz (Région 3) pour la période comprise entre l'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) et l'entrée en vigueur des actes finals de la future conférence de planification des liaisons de connexion à de telles stations spatiales.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, avant la convocation d'une conférence de planification des liaisons de connexion, toute administration désirant utiliser une liaison de connexion à une station spatiale du service de radiodiffusion par satellite devrait pouvoir déterminer les caractéristiques techniques de cette liaison en accord avec toutes les administrations partageant la même position orbitale pour de telles stations prévues au Plan contenu dans les Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) (appendice 30), en tenant compte des Avis pertinents du CCIR;

b) Que toute administration désirant mettre en service une station spatiale du service de radiodiffusion par satellite conformément aux dispositions de l'appendice 30 et utiliser à cet effet une assignation de fréquence pour la liaison de connexion devra appliquer les procédures de publication anticipée et de coordination prévue dans l'article 11 pour cette liaison de connexion;

décide

1. Que l'IFRB, lorsqui'il procédera à la publication anticipée aux termes du numéro **1044** devra aussi indiquer les administrations au nom desquelles une assignation de fréquence est inscrite dans l'appendice 30 pour la même position orbitale;

2. Que l'accord ou les commentaires des administrations mentionnées au paragraphe 1 ci-dessus seront communiqués à l'administration qui recherche la coordination dans um dálai de quatre mois à compter de la date de la publication anticipée;

3. Qu'un accord de pré-coordination entre les administrations partageant la même position orbitale dans le Plan pourra être effectué, si nécessaire avec l'assistance du Comité, au cours d'une réunion à laquelle ces administrations seront invitées et pourront participer si elles le désirent;

4. Que le résultat de cet accord de pré-coordination sera publié en complément des procédures normales de coordination effectuées conformément aux dispositions de l'article 11 et que la conférence qui sera chargée de la planification des liaisons de connexion sera informée de tous les accords de pré-coordination effectués en application de la présent Résolution, sans préjuger d'aucune façon des décisions que prendra cette conférence.

BZ RÉSOLUTION N° 103

Relative à l'amélioration de l'assistance aux pays en développement en vue de faciliter l'accès de leur service fixe aux bandes des ondes décamétriques et d'assurer la protection de leurs assignations contre les brouillages préjudiciables

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

prenant note

d'autres résolutions adoptées par la présente Conférence concernant les besoins particuliers des pays en développement;

considérent

a) Que, dans de nombreux cas, les pays en développement ont besoin d'une assistance de nature hautement spécialisée, qui soivent être obtenue à bref délai, notamment en ce qui concerne le service fixe et l'utilisation de bandes de fréquences dans la gamme des ondes décamétriques;

b) Que les connaissances techniques et l'expérience qui présentent à cet égard le plus d'intérêt pour ces pays peuvent leur être fournies par le Comité international d'enregistrement des fréquences ou par son intermédiaire;

considérant en outre

c) Que les ressources de l'IFRB sont limitées;

décide

1. Que les dispositions des numéros **1218, 1260, 1275 à 1304, 1416** et **1963 à 1966** du Règlement des radiocommunications sont essentiellement destinées à être utilisées par les administrations des pays en développement;

2. Que les administrations des pays développés devraient recourir le moins possible à de telles dispositions;

3. Que les administrations des pays en développement devraient recourir le plus possible à de telles dispositions.

AN

RÉSOLUTION N° 200 (1)

Relative à l'utilisation des classes d'émission R3E et J3E aux fins de détresse et de sécurité sur la fréquence porteuse 2182 kHz (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Que le Règlement des radiocommunications prévoit l'utilisation, sur la fréquence porteuse 2182 kHz:

De la classe d'émission A3E ou H3E par les stations de navire, d'aéronef et d'engin de sauvetage;
De la classe d'émission H3E par les stations côtières;
Des classes d'émissions spécifiées dans l'appendice 37 par les radiobalises de localisation des sinistres;

b) Que ces dispositions ont pour object principal d'assurer la fiabilité des communications de détresse et de sécurité par l'emploi de techniques éprouvées;

prenent note également

a) Du Rapport final du Groupe d'experts (Génève, 1963);
b) Des études pertinents du CCIR concernant la technique de la bande latérale unique (voir la Question 26-1/8, les Avis 488, 543 et 544 et le Rapport 744 du CCIR);

reconnaissant

que l'emploi des classes d'émission R3E et J3E donnerait à l'exploitation sur la fréquence porteuse 2182 kHz les avantages inhérents à l'emploi de la technique de la bande latérale unique sont on bénéficie déjà sur d'autres fréquences;

reconnaissant toutefois

que le CCIR recommande que la classe d'émission R3E ne soit pas utilisée aux fins de détresse et de sécurité (voir l'Avis 543 du CCIR);

considérant

a) Qu'un grand nombre d'appareils utilisant les classes d'émission A3E et H3E seront encore en usage pour la détresse et la sécurité le 1er janvier 1982;
b) Que le matériel à bande latérale unique doit être conçu pour fonctionner avec des tolérances de fréquence plus strictes et selon des normes techniques plus élévées que le matériel à double bande latérale;
c) Que le matériel conçu pour la sécurité, en particulier le matériel des engins de sauvetage, doit:

Avoir un fonctionnement sûr dans des conditions extérieures variables et après de longues périodes de stockage;
Être en toute circonstance d'un emploi facile par une personne inexpérimentée;
Être d'un prix relativement modique;

d) Que les besoins de radiogoniométrie et de ralliement doivent être satisfaits;
e) Que la nécessité d'émettre et de recevoir les signaux d'alarme radiotéléphonique à deux fréquences, notamment les signaux des radiobalises de localisation des sinistres, doit aussi être satisfaite ou qu'il doit être tenu compte à cet égard des tolérances de fréquence indiquées à l'appendice 37 et des Avis pertinents du CCIR;

décide

1. Que l'emploi des classes d'émission R3E et J3E pour la détresse et la sécurité doit continuer à être étudié;
2. Qu'il convient que cette étude soit achevée en temps voulu pour que la prochaine conférence administrative mondiale des radiocommunications compétente puisse prendre une décision sur la date de passage définitif aux classes d'émission R3E et J3E sur la fréquence porteuse 2182 kHz;

demande au CCIR

de continuer à étudier cette question comme un sujet urgent et d'émettre si possible des Avis assez tôt avant la conférence précitée;

---

(1) Note du secrétariat général: voir aussi la Résolution 305.
(2) Remplace la Résolution N° Mar2-20 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

demande au Secrétaire général

de communiquer la présente Résolution à l'Organisation intergouvernementale consultive de la navigation maritime;

invite l'Organisation intergouvernementale consultative de la navigation maritime

à inclure l'éxamen de ce sujet dans le cadre de l'étude actuellement entreprise sur le système de détresse et de sécurité maritime.

AB

RÉSOLUTION N° 201

Relative aux dispositions d'exploitation à la taxation et à la comptabilité de la correspondance publique dans les services mobiles

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le CCITT, conformément aux décisions de la Conférence administrative mondiale des radiocommunications maritime (Génève, 1974) a préparé deux Avis relatifs à l'exploitation dans le service mobile maritime et à la taxation, la comptabilité et le remboursement dans le service mobile maritime;

b) Que la présente Conférence a accepté, dans leur ensemble et dans la plupart des points de détail, les conclusions du rapport sur les études effectuées par le CCITT, conformément aux résolutions pertinentes de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974), qui sont dès lors abrogées;

c) Qu'en conséquence, le Règlement additionnel des radiocommunications ainsi que certaines dispositions du Règlement des radiocommunications relatives à l'exploitation, à la taxation et à la comptabilité de la correspondance publique dans les services mobiles ont été remplacés par des dispositions rendant applicables d'une façon générale les Avis du CCITT;

d) Qu'un certain nombre des dispositions qui ont été remplacées se rapportaient à des services mobiles autres que le service mobile maritime et le service mobile maritime par satellite;

e) Que les dispositions contenues dans le deux Avis susmentionnés du CCITT relatif à la correspondance publique ne s'appliquent actuellement qu'au service mobile maritime et au service mobile maritime par satellite;

f) Qu'en outre, dans toute révision des Avis pertinents du CCITT, il y a lieu de prendre pleinement en considération les intérêts maritimes, en laissant aux administrations un temps suffisant pour leur permettre de mener les consultations relatives à ces intérêts;

reconnaissant

a) Qu'il n'y a pas actuellement de dispositions particulières prévues pour la correspondance publique internationale dans les services mobiles autres que le service mobile maritime et le service mobile maritime par satellite;

b) Que la correspondance publique internationale pourrait cependent s'étendre dans l'avenir à des services mobiles autre que le service mobile maritime et le service mobile maritime par satellite;

invite le CCITT

à entreprendre, en cas de besoin, l'étude des dispositions relatives aux dispositions d'exploitation, de taxation et de comptabilité concernant la correspondance publique dans les services mobiles autres que le service mobile maritime et le service mobile maritime par satellite, en visant à harmoniser le plus possible toutes les dispositions concernant les services mobiles en question;

invite en outre le CCITT

en poursuivant ses travaux relatifs au service mobile maritime et au service mobile maritime par satellite, à prendre particulièrement en considération les intérêts maritimes;

décidé

que, dans l'éventualité où un service de correspondance publique internationale serait ouvert dans un service mobile autre que le service mobile maritime et le service mobile maritime par satellite, ce nouveau service devrait se conformer autant que pratiquement possible aux dispositions actuelles d'exploitation, de taxation et de comptabilité prévues par le Règlement des radiocommunications, le Règlement téléphonique et le Règlement télégraphique ainsi que par le Avis pertinents du CCITT, jusqu'à ce que les révisions nécessaires puissant être effectuées.

DH

RÉSOLUTION N° 202

Relative à la convocation d'une conférence administrative mondiale des radiocommunications pour les services mobiles

La Conférence administrative mondiale des radiocommunicatons (Génève, 1979),

notant

la Résolution N° **814** du Conseil d'administration;

considérant

a) Que l'ordre du jour de la présente Conférence prévoit une révision partielle du Règlement des radiocommunications et que la révision complète nécessaiterait la convocation d'une conférence appropriée pour réviser la teneur des articles restants, en particulier ceux qui concernant les services mobiles;
b) Que, compte tenu des décisions qu'elle a prises et de la nécessité d'harmoniser certaines dispositions applicables aux services mobiles aéronautiques, maritime et terrestre, et en particulier d'améliorer les dispositions relatives à la détresse et à la sécurité, et qu'en raison des progrès techniques et de l'introduction de nouveaux systèmes, il est nécessaire de réviser un certain nombre de dispositions concernant les services mobiles;
c) Qu'il faut tenir compte des nouvelles demandes auxquelles doivent faire face les services mobiles;
d) Que la présente Conférence a formulé diverses recommendations envisageant la convocation d'une conférence qui traiterait des dispositions applicables aux services mobiles;
e) Que, lorsque des modifications aux bandes de fréquences attribuées aux services mobiles ont été introduites par la présente Conférence il peut être nécessaire d'apporter des modifications aux plans des voies et autres subdivisions de ces bandes de fréquences pour les services intéressés;

notant, en outre

que les Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) prévoient un Plan d'allotissement pour ce service, que ce Plan est à l'heure actuelle en cours d'application, et qu'il ne devrait pas être modifié dans un proche avenir;

décide d'inviter le Conseil d'administration

à prendre les dispositions nécessaires en vue de la convocation d'une conférence administrative mondiale des radiocommunications pour les services mobiles, afin de réviser les dispositions du Règlement des radiocommunications qui concernent plus particulièrement ces services;

invite

1. Le CCIR à préparer les bases techniques et d'exploitation pour la conférence;
2. L'IFRB à prêter son aide technique pour la préparation et l'organisation de la conférence.

AZ

RÉSOLUTION N° 300

Relative à l'utilisation et á la notification des fréquences appariées réservées aus systèmes à bande étroite de télégraphie à impression directe et de transmission de données fonctionnant dans les bandes d'ondes décamétriques attribuées au service mobile maritime (1).

(Voir l'appendice 32)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que certaines parties des bandes d'ondes décamétriques atrribuées au service mobile maritime ont été réservées aux systèmes à bande étroite de télégraphie à impression directe et de transmission de données, à la condition qu'ils utilisent exclusivement des fréquences appariées;
b) Que, dans chaque bande, le nombre des fréquences appariées est limité;
c) Qu'une future conférence ayant compétence à cet effet pourrait attribuer aux systèmes à bande étroite de télégraphie à impression directe des bandes plus larges que les bandes actuelles;

(1) Remplace la Résolution N° Mar2-7 de la Conférence adnuinistrative mondiale des radiocommunications maritimes (Génève, 1974).

d) Que, pour cette raison, la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) n'a pas estimé opportun, lors de sa réunion, d'établir un plan, mais que ce plan pourrait devenir nécessaire ultérieurement par suite de l'encombrement des voies;

e) Que, cependant, des mesures intérimaires doivent être prises par les administrations et par l'IFRB pour assurer la mise en service ordonnée de ces nouvelles fréquences appariées;

décide

1. Que les fréquences appariées des bandes d'ondes décamétriques réservées aux systèmes à bande étroite de télégraphie à impression directe entre stations côtières et stations de navire seront utilisées par ces stations, notifiées et inscrites dans le Fichier de référence international des fréquences selon des modalités suivantes:

1.1. Les assignations de paires de fréquences pour l'émission et la réception seront faites uniquement aux stations côtières. Les stations de navire de toute nationalité utiliseront de plein droit pour leurs émissions les fréquences de réception des stations côtières avec lesquelles elles échangeront du trafic;

1.2. Afin d'obtenir une utilisation efficace des fréquences, chaque administration choisira les paires de fréquences à assigner aux stations côtières selon ses besoins avec l'aide de l'IFRB;

1.3. Les assignations ainsi choisies et mises en service seront notifiées à l'IRFB sur des fiches dont le modèle figure dans l'appendice 1 au Règlement des radiocommunications, et les administrations fourniront les caractèristiques fondamentales énumérées aux stations A ou B, selon les cas, dudit appendice. Se ces assignations sont conformes au Tableau d'attribution des bandes de fréquences et aux dispositions connexes du Règlement des radiocommunications ainsi qu'à la présente Résolution, le Comité, à titre d'information, les publiera dans la partie 1A de sa circulaire hebdomadaire et les inscrira dans le Fichier de référence. Il n'inscrira aucune date dans la colonne 2 du Fichier de référence et ne formulera aucune conclusion découlant d'un examen technique de compatibilité avec une assignation existante. Toutefois, la date à laquelle le Comité aura reçu la fiche de notification sera indiquée dans la partie 1A de la circulaire hebdomadaire et dans la colonne Observations du Fichier de référence. Une référence à la présente Résolution sera aussi inscrite dans la colonne Observations;

1.4. Toute fiche de notification qui ne serait pas conforme aux dispositions précitées du Règlement des radiocommunications ou à la présente Résolution sera retournée par l'IFRB à l'administration notificatrice accompagnée de toute suggestion que le Comité pourrait présenter à cet égard.

1.5. Si des difficultés surgissent entre les pays utilisant une même voie, la question sera résolue par arrangement mutuel entre les administrations intéressées;

2. Qu'une future conférence ayant compétence à cet effet sera invitée à examiner les difficultés qu'aurait pu soulever l'application de la présente Résolution et à prendre, si nécessaire, une décision sur le statut à donner aux assignations susmentionées ou sur les conditions d'établissement d'un plan pour les bandes et les systèmes en question. Les inscriptions faites dans le Fichier de référence en application de la présente Résolution ne préjugeront en aucune façon les décisions qui pourraient être prises par la conférence susmentionnée;

3. Que la présente Résolution s'applique aux assignations de fréquence appariées aux systèmes à bande étroite de télégraphie à impression directe comme indiqué au paragraphe 1.1 ci-dessus, nonobstant toutes autres dispositions contraires du Règlement des radiocommunications et des résolutions existantes des conférences administratives des radiocommunications.

BA RÉSOLUTION Nº 301

Relative à la notification des fréquences non appariées utilisées par les stations de navire pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données (1)

(Voir l'appendice 33)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que certaines parties des bandes d'ondes décamétriques attribuées au service mobile maritime sont réservées aux systèmes à bande étroite de télégraphie à impression directe et de transmission de données qui utilisent des fréquences non appariées;

b) Que la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) n'a pas été en mesure de décider jusqu'à quel point il faut réglementer l'utilisation rationnelle des fréquences pour la transmission par les stations de navire de signaux de télégraphie à impression directe émis sur des fréquences non appariées, ni de décider sur quelle bande il conviendrait de fonder cette réglementation;

c) Qu'il convient que des questions soient examinées par une future conférence compétente en la matière;

(1) Remplace la Résolution Nº Mar2-8 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

d) Que les dispositions actuelles du Règlement des radiocommunications ne donnent pas aux administrations les directives voulues pour la période comprise entre la date d'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) et la date d'entrée en vigueur de ceux de la conférence visée au paragraphe *c*) ci-dessus;

décide

1. Que, pendant la période dont il esta question à l'alinéa *d*) ci-dessus, toute administration qui exploitera ou mettra en fonctionnement, à l'intention des navires, un système à bande étroite de télégraphie à impression directe ou de transmission de données utilisant des fréquences non appariées, devra notifier à l'IFRB, aux fins d'inscription dans le Fichier de référence international des fréquences, les fréquences sur lesquelles devront émettre les navires qui participeront à ce service;

2. Que les fiches de nitification relatives aux fréquences utilisées à la réception par les stations côtières ne feront pas l'objet d'un examen technique de la part l'IFRB et que les assignations notifiées seront inscrites dans le Fichier de référence uniquement à titre d'information, sans date dans la colonne 2, mais avec dans la colonne Observations, une observation pertinente contenant simplement une référence à la présente Résolution;

3. Que ces inscriptions dans le Fichier de référence ne préjugeront en aucune façon les décisions que pourra prendre la conférence visée au paragraphe *c*) ci-dessus.

AX RÉSOLUTION Nº 302

Relative au traitement par l'IFRB des fiches de notification d'assignation de fréquence aux stations océanographiques (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'elle a adopté la Resolution **314** relative à l'établissement d'une système mondial coordonné de rassemblement des données concernant l'océanographie;

b) Que l'IFRB a besoin d'instructions concernant la notification des assignations de fréquence aux stations océanographiques et leur inscription dans le Fichier de référence international des fréquences;

décide

de donner pour instructions à l'IFRB de n'accepter aux fins d'inscription dans de Fichier de référence international des fréquences que les fiches de notification présentées par des administration aux termes des numéros **1214** à **1217** et **1219** du Règlement des radiocommunications, qui concernent des stations océanographiques d'émission et de réception qui sont situées à terre et qui sont conformes aux dispositions de la Résolution **314**. L'IFRB traitera ces fiches de ntofication selon les dispositions du numéro 1245 du Règlement des radiocommunications. Les inscriptions pertinentes dans le Fichier de référence ne préjugeront en aucune façon les décisions que prendra la prochaine conférence administrative des radiocommunications compétente en ce qui concerne le service mobile maritime.

AV RÉSOLUTION Nº 303

Relative aux fréquences navire-navire dans les bandes comprises entre 1605 kHz et 3600 kHz dans la Région 1 (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le Fichier de référence international des fréquences comprend parmi ses inscriptions initiales les fréquences qui ont été assignées par la Conférence administrative extraordinaire des radiocommunications (Génève, 1951), à des pays déterminés pour des communications entre navires dans les bandes comprises entre 1605 kHz et 3600 kHz dans la Région 1;

b) Qu'il convient de prendre des dispositions pour la notification et l'inscription dans le Fichier de référence de l'utilisation de ces fréquences pour des communications entre navires par les administrations d'autres pays de la Région 1;

---

(1) Remplace la Résolution Nº Mar19 de la Conférence administrative mondiale des radiocommunications (Génève, 1967).

(2) Remplace la Résolution Nº 15 de la Conférence administrative des radiocommunications (Génève, 1959).

décide

1. Qu'il convient que l'utilisation des fréquences dont il est question au paragraphe *a*) par d'autres administrations soit coordonnée par les administrations intéressées et notifiée par la suite au Comité international d'enregistrement des fréquences;

2. Que lorsqu'il recevra semblable notification, le Comité inscrira ce nouvelles assignations dans le Fichier de référence international des fréquences sans date dans la colonne 2a ni dans la colonne 2b, mais avec une observation pertinente dans la colonne Observations, suivie de la date de réception par le Comité de la fiche de notification;

invite les administrations

à réexaminer les zones d'utilisation des assignations de fréquence intéressés, telles qu'elles sont inscrites dans le Fichier de référence, en vue d'améliorer les possibilités de partage;

prie l'IFRB

de présenter, s'il y a lieu, aux administrations intéressés les propositions qu'il peut être en mesure de formuler en vue d'atteindre le but dont il est question au paragraphe qui précède.

AS RÉSOLUTION Nº 304

Relative à la mise en œuvre de la nouvelle disposition des voies utilisées pour la télégraphie Morse de classe A1A dans les bandes attribuées au service mobile maritime entre 4000 kHz et 27 500 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que dans sa Recommandation Nº Mar7, la Conférence administrative mondiale des radiocommunications (Génève, 1967) a recommandé aux administration d'étudier les questions concernant, l'utilisation future de la relation harmonique dans les appareils radioélectriques de navire;

b) Que la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) a pris des mesures pour que les stations de navire puissent utiliser, pour la télégraphie Morse de classe A1A, des fréquences d'appel et des fréquences de travail qui ne sont pas en relation harmonique;

c) Qu'il est souhaitable de mettre en œuvre, dès que possible, la nouvelle disposition des voies;

reconnaissant

a) Qu'il est nécessaire de prévoir un délai d'amortissement pour les appareils radioélectriques dont le fonctionnement dépend de la relation harmonique des fréquences de travail;

b) Que l'évolution et les progrès de la technique, en particulier celle des synthétiseurs de fréquence, ont permis de disposer d'appareils radioélectriques plus stables et plus fiables;

décide

1. Que les stations de navire dont le fonctionnement dépend de fréquences d'appel et de fréquences de travail en relation harmonique assignée avant le 1er janvier 1976, peuvent continuer à utiliser celles de ces assignations qui se trouvent à l'intérieur des bandes indiquées dans l'appendice 31 pour l'appel et le travail des navires en télégraphie Morse de classe A1A;

2. Qu'il convient que, dès que possible, les navires utilisent des appareils pouvant fonctionner conformément à la nouvelle disposition des voies figurant dans l'appendice 35 en ce qui concerne les fréquences nécessaires à l'execution de leur service;

3. Que les appareils installés après le 1er janvier 1976 doivent pouvoir fonctionner conformément à la nouvelle disposition des voies figurant dans l'appendice 35 en ce qui concerne les fréquences nécessaires à l'execution de leur service.

AO RÉSOLUTION Nº 305 (2)

Relative à l'utilisation des classes d'émission R3E e J3E sur les fréquences porteuses 4125 kHz et 6215,5 kHz utilisées en plus de la fréquence porteuse 2182 kHz aux fins de détresse et de sécurité (3)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Remplace la Résolution Nº Mar2-4 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Note du Secrétariat général: voir aussi la Résolution 200.
(3) Remplace la Résolution Nº Mar2-21 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

notant

a) Que le Règlement des radiocommunications autorise jusqu'au 1er janvier 1984 l'utilisation d'émissions de la classe H3E par les stations côtières, les stations de navire et les stations d'aéronef émettant sur les fréquences porteuses 4125 kHz et 6215,5 kHz (voir les numéros **2982** et **2986**);
b) Que ces dispositions ont pour objet principal d'assurer la fiabilité des communications de détresse et de sécurité par l'emploi de techniques éprouvées;

prenant note également

a) Du Rapport final du Groupe d'experts (Génève, 1963);
b) Des études pertinentes du CCIR concernant la téchnique de la bande latérale unique (voir la question 26–1/8 et les Avis 488, 543 et 544 et le Rapport 744 du CCIR);

reconnaisant

que l'emploi des classes d'émission R3E et J3E donnerait à l'exploitation sur les fréquences porteuses 4125 kHz et 6215,5 kHz les avantages inhérents à l'emploi de la technique de la bande latérale unique dont on bénéficie déjà sur d'autres fréquences;

reconnaissant toutefois

que le CCIR recommande que la classe d'émission R3E ne soit pas utilisée aux fins de détresse et de sécurité (voir l'Avis 543 du CCIR);

considérant

a) Qu'un grand nombre d'appareils utilisant la classe d'émission H3E sont encore en usage pour la détresse et la sécurité;
b) Que le matériel utilisant les classes d'émission R3E et J3E doit être conçu pour fonctionner avec des tolérances de fréquence plus strictes et selon des normes techniques plus élevées que le matériel utilisant la classe d'émission H3E avec détection d'envelopee dans le récepteur;
c) Que le matériel conçu pour la sécurité devrait, en toutes circonstances, avoir un fonctionnement sur dans des conditions extérieures variables et être d'un emploi facile par une personne inexpérimentée;

décide

qu'il n'est pas nécessaire de poursuivre l'étude relative à l'emploi des classes d'émission R3E et J3E pour la détresse et la sécurité sur les fréquences porteuses 4125 kHz et 6215,5 kHz (voir les Avis 543 et 544 du CCIR);

demande au Secrétaire général

de communiquer la présente Résolution à l'Organisation intergouvernementale consultative de la navigation maritime;

invite

1. L'Organisation intergouvernamental consultative de la navigation maritime à inclure l'examen de ce sujet dans le cadre de l'étude actuellement entreprise sur le système de détresse et de sécurité maritime;
2. La prochaine conférence administrative mondiale des radiocommunications compétente à poursuivre l'examen de ce sujet.

AW RÉSOLUTION Nº 306

Relative à l'emploi de la technique de la bande latérale unique dans les bandes du service mobile maritime radiotéléphonique comprise entre 1605 kHz et 4000 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La Recommandation Nº 28 de la Conférence administrative des radiocommunications (Génève, 1959);
b) Que la Conférence administrative mondiale des radiocommunications (Génève, 1967) a décidé d'imposer l'utilisation de la technique de la bande latérale unique, sauf dans certaines circonstances;
c) Qu'il est souhaitable de remplacer dès que possible les émissions à double latérale par des émissions à bande latérale unique dans les bandes atribuées au service mobile maritime entre 1605 kHz et 4000 kHz;

(1) Remplace la Résolution Nº Mar5 de la Conférence administrative mondiale des radiocommunications (Génève, 1967).

décide

que, sauf disposition contraire contenue dans les Actes finals de la présente Conférence, les stations radiotéléphoniques du service mobile maritime qui fonctionnent dans les bandes comprises entre 1605 kHz et 4000 kHz devront être conformes aux conditions suivantes:

1. Aucune nouvelle installation d'appareils à double bande latérale ne doit être autorisée dans les stations de navire, à l'exception des cas prévus aux numéros **2973**, **4127** et **4130** du Règlement des radiocommunications;

2. Jusqu'au 1er janvier 1982 les stations côtières et les stations de navire équipées d'appareils à bande latérale unique devront également être équipées de façon à pouvoir faire des émissions de la classe H3E compatibles avec l'emploi de récepteurs à double bande latérale. L'obligation de pouvoir faire des émissions de la classe H3E sur la fréquence porteuse 2182 kHz subsistera au-delà du 1er janvier 1982;

3. Après le 1er janvier 1982, seules les émissions des classes R3E et J3E seront autorisées; cependant, les émissions suivantes seront, de plus, autorisées:

Les émissions des classes A3E et H3E pour les stations de navire, d'aéronef ou d'engin de sauvetage émettant sur la fréquence porteuse 2182 kHz;

Les émission de la classe H3E pour les stations côtières émettant sur la fréquence porteuse 2182 kHz;

Dans les Régions 1 et 3 au Groenland, à titre exceptionnel, les émissions de la classe H3E pour les stations côtières qui diffusent des messages de sécurité sur la fréquence porteuse 2170,5 kHz;

Les émissions des classes H2B, R2B et J2B pour les stations côtières aux fins d'appel sélectif sur la fréquence porteuse 2170,5 kHz;

Les émissions des classes spécificées à l'appendice 37 au Règlement des radiocommunications pour les radiobalises de localisation des sinistres (voir également le numéro **3265** du Règlement des radiocommunications);

4. À partir du 1er janvier 1982, les stations de navire et celles des stations d'aéronef qui sont tenues de mettre en œuvre la technique de la bande latérale unique sur les fréquences de travail du service mobile maritime utiliseront uniquement des émissions de la classe H3E sur la fréquence porteuse 2182 kHz.

AQ

RÉSOLUTION Nº 307

Relative au passage à la technique de la bande latérale unique des stations radiotéléphoniques du service mobile maritime dans les bandes comprises entre 1605 kHz et 4000 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les stations radiotéléphoniques à double bande latérale du service mobile maritime qui fonctionnent dans les bandes comprises entre 1605 kHz et 4000 kHz utilisent une largeur de bande de l'ordre de 6 kHz;

b) Que ces stations auront à utiliser à l'avenir la technique de la bande latérale unique;

c) Que des mesure doivent être prévues pour éviter autant que possible, pendant la période de passage à la technique de la bande latérale unique, des brouillages nuisibles entre les stations qui utilisent la technique de la double bande latérale et les stations qui utilisent la technique de la bande latérale unique;

décide

1. Que le passage à la technique de la bande latérale unique des stations visées au considérant *a*) ci-dessus s'effectuera aux dispositions ci-après:

1.1. La fréquence porteuse de la voie à bande latérale unique située dans la partie supérieur de l'ancienne voie à double bande latérale, sera la même que la fréquence porteuse de cette voie;

1.2. La fréquence porteuse de la voie à bande latérale unique située dans la partie inférieure de l'ancienne voie à double bande latérale, sera inférieure de 3 kHz à la fréquence porteuse de cette voie lorsque cette dernière fréquence est supérieure de 6 kHz au moins à la fréquence porteuse de la voie radiotéléphonique à double bande latérale adjacente;

1.3. Dans la Région 1, la fréquence porteuse de la voie à bande latérale unique située dans la partie inférieure de l'ancienne voie à double bande latérale pour les communications entre navires sera inférieure de 2,5 kHz à la fréquence porteuse de cette voie lorsque cette dernière fréquence est séparée de 5 kHz de la fréquence de la voie radiotéléphonique à double bande latérale immédiatement inférieure;

2. Que les émissions de la classe H3E ne devront pas être utilisées dans les voies à bande latérale unique situées dans la partie inférieure des anciennes voies à double bande latérale.

---

(1) Remplace la Résolution Nº Mar4 de la Conférence administrative mondiale des radiocommunications (Génève, 1967).

BB

RÉSOLUTION Nº 308

Relative à l'espacement des fréquences attribuées au service mobile maritime dans la bande 156-174 MHz (1)

(Voir l'appendice 18 et l'article 6)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les fréquences des bandes d'ondes métriques comprises entre 156-174 MHz sont de plus en plus utilisées dans le service mobile maritime;
b) Qu'il existe un besoin accru de voies à ondes métriques à l'usage des opérations portuaires;
c) Qu'il existe un besoin accru de voies à ondes métriques pour la correspondance publique dans le service mobile maritime;
d) Qu'il existe un besoin de voies à ondes métriques pour le service du mouvement des navires;
e) Qu'il est nécessaire de prévoir des voies à ondes métriques pour des utilisations autres que la radiotéléphonie, par exemple le fac-similé et la télégraphie à impression directe à bande étroite;
f) Que les operations de lutte contre la pollution, de recherches et de sauvetage, ainsi que l'exploitation des navires et des brise-glaces nécessitent des voies à ondes métriques pour les communications entre les hélicoptères ou aéronefs légers et les navires;

notant

quel, à la suite de la révision du Règlement des radiocommunications (Génève, 1959) para la Conférence administrative mondiale des radiocommunications (Génève, 1967) et par la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974):

a) L'espacement des voies attribuées au service mobile maritime radiotéléphonique à ondes métriques est en cours de réduction de 50 kHz à 25 kHz;
b) Des voies supplémentaires, numérotées de 60 à 88, ont été obtenues en intercalant des voies espacées de 25 kHz entre les voies espacées de 50 kHz de l'appendice 18 au Règlement des radiocommunications (Génève, 1959);
c) Il convient d'attribuer les voies espacées de 25 kHz sur une base internationale;
d) Le passage d'un espacement de 50 kHz à un espacement de 25 kHz devait se dérouler comme suit:

1) Date à laquelle on a pu comencer à modifier les émetteurs pour qu'ils fonctionnent avec une excursion maximale de ± 5 kHz et à modifier les récepteurs pour augmenter, le cas échéant, leur gain basse fréquence — 1er janvier 1972;
2) Date à laquelle les modifications visées au paragraphe *d*) 1 ont dû être terminées pour tous les appareils existants — 1er janvier 1973;
3) Date jusqu'à laquelle il convenait que les stations côtières conservassent la possibilité de recevoir des émissions avec excursion maximale de ± 15 kHz, et à partir de laquelle il convenait de modifier le plus tôt possible les récepteurs de ces stations afin qu'ils répondissent aux conditions de sélectivité requises por des voies espacées de kHz — 1er janvier 1973;
4) Date à partie de laquelle tous les nouveaux appareils ont dû fonctionner avec un espacement de 25 kHz entre voies — 1er janvier 1973;
5) Date à partie de laquelle les stations ne pourront utiliser que des appareils satisfaisant à l'espacement de 25 kHz entre voies et à partie de laquelle les voies intercalaires pourront être utilisées sans aucune réserve — 1er janvier 1983.

décide

1. Que les administrations peuvent, dans les zones où cela est nécessaire, autoriser l'emploi des voies 60 à 88, à l'exception des voies 75 et 76 qui ont été désignées comme bandes de garde de la voie 16;

2. Que les caractéristiques techniques des appareils destinés à fonctionner dans les voies espacées de 25 kHz dans le service mobile maritime à ondes métriques doivent être conformes aux dispositions de l'appendice 19;

3. Que, pour le 1er janvier 1983, tous les appareils devront satisfaire à l'espacement de 25 kHz entre voies et que, à partie de cette date, toutes les voies intercalaires pourront être utilisées sans aucune réserve.

---

(1) Remplace la Résolution Nº Mar2-14 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

AT

RÉSOLUTION Nº 309

Relative à l'utilisation non autorisée des fréquences des bandes attribuées au service mobile maritime (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que les observations de contrôle des émissions relatives à l'utilisation des fréquences de la bande 2170-2194 kHz et des bandes attribuées en exclusivité au service mobile maritime entre 4063 kHz et 25 110 kHz montrent qu'un certain nombre des fréquences de ces bandes continuent à être utilisées par des stations de services autres que le service mobile maritime, notamment par des stations de radiodiffusion de grande puissance dont certaines sont exploitées en contravention aux dispositions du numéro **2665** du Règlement des radiocommunications;

b) Que ses stations causent ainsi des brouilages préjudiciables aux communications échangées dans ce service et qu'un très grand nombre d'émissions dont les sources n'ont pas pu être indentifiées avec certitude ont été observées dans les bandes en question;

c) Que les radiocommunications constituent le seul moyen de communications dont dispose le service mobile maritime;

considérant en particulier

d) Qu'il est essentiel que les voies servant à l'acheminement du trafic de détresse et de sécurité soient exemples de brouilleges préjudiciables, en raison de la nécessité absolue de sauvergarder la vie humaine et les biens;

décide de prier instamment les administrations

1. De faire en sorte que des stations appartenant à des services autres que le service mobile maritime s'abstiennent d'utiliser les fréquences situées dans les voies de détresse et de sécurité dans les bandes de grade de ces voies et dans les bandes attribuées en exclusivité au service mobile maritime, sauf dans les conditions expressément stipulées aux numéros **342**, **518**, **519**, **522** ou **956** à **958** du Règlement des radiocommunications;

2. De continuer à tout mettre en œuvre pour identifier et localiser la source de toute émission non autorisée susceptible de mettre en danger des vies humaines et des biens et de communiquer à l'IFRB les renseignements obtenus;

3. De participer aux programmes de contrôle des émissions que l'IFRB pourra organiser en exécution des dispositions de la presente Résolution;

4. De demander à leurs gourvernements respectifs de promulguer toute législation qu'ils jugeron nécessaire pour interdire aux stations situées au large de leurs côtes de contrevenir aux dispositions du numéro **2665** du Règlement des radiocommunications;

de charger l'IFRB

1. De continuer d'organiser à intervalles réguliers des programmes de contrôle des émissions dans les voies de détresse et de sécurité, dans les bandes de garde de ces voies et dans les bandes attribuées exclusivité au service mobile maritime entre 4063 kHz et 26 175 kHz, en vue d'identifier les stations d'autres services fontionnant dans ces bandes;

2. De prendre les dispositions nécessaires en vue de l'élimination des émissions des stations d'autres services fonctionnant dans ces bandes, émissions qui causent des brouillages préjudiciables au service mobile maritime ou qui sont susceptibles de lui en causer;

3. De rechercher, selon les besoins, la collaboration des administrations d'une part pour identifier les sources de ces émissions en employant tous les moyens disponibles, d'autre part pour obtenir la cessation de ces émissions.

CN

RÉSOLUTION Nº 310

Relative aux fréquences à prevoir en vue de l'établissement et de la mise en œuvre future des systèmes de télémesures, de télécommande et d'echange de données pour des mouvements des navires

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La nécessité de spécifier des fréquences radioélectriques que pourra utiliser le service mobile maritime à l'échelon mondial, pour répondre aux besoins des mouvements des navires, à l'aide de techniques d'échange automatique de données numériques, de télémesures et de télécommande;

---

(1) Remplace la Résolution Nº Mar2-15 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

b) Les développements qui sont actuellement en cours dans différentes portions du spectre des fréquences, et en raison desquels il faudra à l'avenir prévoir des bandes des fréquences communes pour assurer une utilisation efficace du spectre;
c) L'importance des systèmes de communication correspondants, à courte distance, pour la sécurité et l'efficacité de l'exploitation des navires;
d) Les avantages que ces systèmes apportent aux autorités portuaires du point de vue de la sécurité et de l'efficacité de la gestion des ports et des opérations portuaires;

notant

a) Que, d'après les conclusions de la Réunion spéciale préparatoire du CCIR, les fréquences de 10 GHz semblent satisfaisantes pour de tels systèmes automatiques pour communications à courte distance;
b) Que des renseignements complémentaires opérationnels et techniques doivent encore être fournis pour permettre de déterminer l'utilisation la plus efficace possible du spectre, ainsi que les critères de partage;

décide

1. Que la prochaine conférence administrative mondiale des radiocommunications compétente devra examiner les fréquences pouvant être utilisées pour ces opérations, à la lumière des études ultérieures qui auront été effectuées;
2. Que le CCIR devra étudier la question des largeurs de bande et des formes de présentation des données, et donner son avis à ce sujet, en coordonnant ses travaux aavec les administrations qui mettent au point et qui expérimentent les systèmes de transmission numériques;

prie le Secrétaire général

de soumettre la présente Résolution à l'Organisation intergouvernementale consultative de la navigation maritime (OMCI), em l'invitant à définir les besoins opérationnels en matière d'échange de données avec des navires utilisant les techniques de transmission numériques, et de formuler des recommandations propres à aider les administrations à préparer une future conférence.

DB

RÉSOLUTION Nº 311

Relative à l'introdution d'un système d'appel sélectif numérique pour répondre aux besoins du service mobile maritime (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il existe un besoin urgent de disposer d'un seul et unique système d'appel sélectif numérique pour répondre aux besoins du service mobile maritime dans le monde entier;
b) Que l'Organisation intergouvernementale consultative de la navigation maritime (OMCI) (2) a fait connaître à la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) ainsi qu'au CCIR, ses besoins d'un système d'appel sélectif à des fins générales permettant de faciliter la transmission et la réception de toutes les communications;
c) Que les articles 25, 60, 62 et 65 du Règlement des radiocommunications prévoient l'utilisation d'un tel système;
d) Que les études concernant les caractéristiques techniques et d'exploitations d'un tel système, effectuées par le CCIR dans le cadre de sa Question 9-3/8 sont déjà très avancées;
e) Que les règles techniques applicables aux systèmes, telles qu'elles sont définies dans le Règlement des radiocommunications, sont essentiellement fondées sur les Avis du CCIR;
f) Que les Assemblées plénières du CCIR ont lieu tous les trois ans, alors que les conférences administratives des radiocommunications, lesquelles sont habilitées à modifier le Règlement des radiocommunications et procédent à ces modifications en faisant largement appel aux Avis du CCIR, se tiennent moins fréquemment et beaucoup moins régulièrement;

est d'avis

a) Que les Assemblées plénières du CCIR adopteront sans doute des Avis concernant les caractéristiques techniques et d'exploitation applicables à un seul et unique système d'appel sélectif numérique;
b) Qu'il convient que les administrations bénéficient des Avis les plus récents du CCIR concernant les systèmes d'appel sélectif destinés au service mobile maritime;

---

(1) Remplace la Résolution N° Mar2-19 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Résolution A.420 (XI) de l'OMCI.

décide en conséquence

1. D'inviter le CCIR à déterminer ses travaux pour répondre á la Question 9.3/8 et à établir dès que possible des Avis concernant les caractéristiques techniques et d'exploitation d'un système sélectif numérique;

2. Qu'il convient que chaque Assemblée pléniere du CCIR fasse le nécessaire pour porter à la connaissance du Secrétaire général de l'UIT les Avis du CCIR qui peuvent influer sur les critères techniques et d'exploitation relatifs à l'introduction d'un seul et unique système d'appel sélectif numérique dans le service mobile maritime;

3. Que, après leur avoir communiqué les textes pertinents du CCIR, le Secrétaire général écrira aux administrations en leur demandant d'indiquer, dans un délai de quatre mois, les Avis du CCIR ou les caractéristiques techniques et d'exploitation définies dans les Avis mentionnés au paragraphe 1 ci-dessus qu'elles choisissent d'appliquer dans le cadre des dispositions appropriées du Règlement des radiocommunications;

4. Que, passé ce délai, le Secrétaire général enverra aux administrations un résumé des réponses reçues.

DA

RÉSOLUTION Nº 312

Relative à l'introduction de nouvelles procédures d'appel en télégraphie Morse A1A à ondes décamétriques (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire d'utiliser de façon plus efficace le spectre des fréquences radioeléctriques ainsi que le temps de travail du personnel d'exploitation à bord des navires;

b) Qu'il est souhaitable d'améliorer l'efficacité de l'appel dans les bandes utilisées pour la télégraphie Morse A1A à ondes décamétriques;

c) Que la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) a adopté une nouvelle procédure d'appel pour la télégraphie Morse A1A à ondes décamétriques (article 63 et appendice 34);

d) Que pour assurer l'efficacité de cette nouvelle procédure d'appel, il faut que les administrations s'entendent au sujet des groupes indiqués à l'appendice 34, conformément à une répartition planifiée des stations côtières sur une base régionale et en fonction du trafic;

e) Que les administrations ayant participé à la Conférence de 1974 ont adopté le Plan de répartition (annexé à la presente Résolution) des stations côtières classées en quatre groupes par pays et par zones, afin d'assurer une meilleure répartition des apels;

invite

les administrations qui assurent un service international de correspondance publique à indiquer, en vue de la publication dans la Nomenclature des stations côtières, les vacations au cours desquelles la veille sera maintenue sur la ou les voies communes et, si nécessaire, la ou les voies de groupes;

invite en outre

les administrations qui désirent s'intégrer à un groupe du Plan de répartition, ou les administrations déjà incluses dans le Plan et qui désirent apporter une modification à ce Plan, à coordonner, dans toute la mesure du possible, les modifications envisagées avec les autres administrations intéressées et susceptibles d'être affectées qui figurent dans le groupe en question. Une administration qui a décidé de s'intégrer à un groupe en question. Une administration qui a décidé de s'intégrer à un groupe ou de changer de groupe dans le Plan fera part au Secrétaire général de sa décision qui sera publiée dans l'annexe à la Nomenclauture des stations côtières;

charge le Secrétaire général

1. De porter la présente Résolution à la connaissance de toutes les administrations dont dépendent des stations côtières dans le pays ou les zones figurant dans le plan de répartition, afin d'obtenir l'accord de ces administrations sur ce Plan ou sur des rectifications à ce Plan pour satisfaire leurs besoins;

2. De mettre à jour, compte tenu des résultats de cette consultation avec les administrations intéressées, le Plan de répartition qui se trouve annexé à la Nomenclature des stations côtières;

3. De publier toute modification du Plan de répartition dans le *Bulletin d'Exploitation*, avant la publication de toute révision du Plan dans la Nomenclature des stations côtières.

---

(1) Remplace la Résolution Nº Mar2-5 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

ANNEXE À LA RÉSOLUTION N° 312

Plan de répartition pour les voies de groupes-Stations côtières fonctionnant en télégraphie Morse A1A à ondes décamétriques

Pays et zones

Groupe 1

Açores.
Angola (République Populaire d').
Bahamas (Commonwealth des).
Bahrein (État de).
Bangladesh (République Populaire du).
Bermudes.
Brésil (République Fédérative du).
Canada (Côte Ouest et Arctique occidental).
Chili.
Côte d'Ivoire (République de).
Djibouti (République de).
Equateur.
Espagne (Îles Canaries).
Etats Unis d'Amérique (Côte Est).
Ethiopie.
France.
Inde (République de l') (Ouest).
Irlande.
Israël (État d').
Kenya (République du).
Libéria (République du).
Madagascar (République Démocratique de).
Martinique (Département français de la).
Maurice.
Nouvelle Calédonie et Dependences.
Nouvelles Hébrides.
Oman (Sultanat d').
Philippines (République des).
Polynésie française.
Porto Rico.
Réunion (Département français de la).
Roumanie (République Socialiste de).
Royaume Uni de Grande-Bretagne et d'Irlande du Nord.
São Tomé et Principe (République Démocratique de).
Singapour (République de).
Suisse (Confédération).
Union des Républiques Socialistes Soviétiques (Ukraine et Asie méridionale).

Groupe 2

Algérie (République Algérienne Démocratique et Populaire).
Antilles néerlandaises.
Arábie Saoudite (Royaume de l') (Ouest).
Barbade.
Belgique.
Bénin (République Populaire du).
Cameroun (République Unie du).
Cap Vert (République du).
Christmas (Îles) (Océan Indien).
Chypre (République de).
Colombie (République de).
Congo (République Populaire du).
Cook (Îles).
Costa Rica.
Cuba.
Dominicaine (République).
Egypte (République Arabe d').
États Unis d'Amérique (Côte du Golfe).
Falkland et Dépendences (Îles) (Malvinas).
France.
Gabonaise (République).
Gambie (République de).
Grèce.
Hong-Kong.
Hongroise (République Populaire).
Italie.
Kampuchea Démocratique.
Liban.
Liban.
Martinique (Département français de la).
Mexique.
Nouvelle Calédonie et Dépendances.
Nouvelles Hébrides.
Panama (République de).
Paraguay (République du).
Pays Bas (Royaume des).
Pérou.
Pologne (République Populaire de).
Polynésie française.
République de Corée.
Réunion (Département français de la).
Royaume Uni de Grande-Bretagne et d'Irlande du Nord (22 MHz seulement).
Soudan (République Démocratique du).
Sri Lanka (République Socialiste Démocratique de).
Tchécoslovaque (République Socialiste).
Thalande.
Union des Républiques Socialistes Soviétiques (Nord-Ouest et Extrême-Orient).
Yémen (République Arabe du).

Groupe 3

Alaska (État de l').
Argentine (République).
Brimanie (République Socialiste de l'Union de).
Canada (Côte Est et Arctique oriental).
Chine (République Populaire de).
Danemark.
États-Unis d'Amérique (Côte Ouest).
Finlande.
Ghana.
Guam.
Guinée Bissau (République de).
Guinée (République Populaire Revolutionnaire de).
Guyane.
Hawaï (État d').
Iran (République Islamique d').
Islande.
Jamaique.
Libye (Jamahiriya Arabe Libyenne Populaire Socialiste).
Madère.
Mariannes.
Maroc (Royaume du).
Mozambique (République Populaire du).
Nauru (République de).
Nigeria (République Fédérale de).
Norvège.
Pakistan (République Islamique du).
République Démocratique Allemande.
Suède.
Trinité et Tobago.
Turquie.
Union des Républiques Socialistes Soviétiques (Extrême-Orient et région européenne).
Venezuela (République de).
Yougoslavie (République Socialiste Fédérative de).

Groupe 4

Albanie (République Populaire Socialiste d').
Allemagne (République fédérale d').
Arabie Saoudite (Royaume de l') (Est).
Australie.
Bulgarie (République Populaire de).
Chine (République Populaire de) (Province de Taïwan).
Espagne (sauf les Îles Canaries).
Fidji.
Guinée équatoriale (République de la).
Inde (République de l') (Est).
Indonésie (République d').
Iraq (République d').
Japon.
Jordanie (Royaume Hachémite de).
Kowaït (État de).
Malaisie.
Malte (République de).
Mauritanie (République Islamique de).
Nouvelle Zélande.
Papua Nouvelle-Guinée.
Pitcairn (Île).
Portugal.
République Arabe Syrienne.
Salomon (Îles).
Samoa américain.
Sénégal (République du).
Seychelles (République des).
Sierra Leone.
Sudafricaine (République).
Suriname (République du).
Togolaise (République).
Tunisie.
Union des Républiques Socialistes Soviétiques (région européene et Artique)
Uruguay (République Orientale de l').
Viet Nam (République Socialiste du).
Yémen (République Démocratique Populaire du).
Zaïre (République du).

DD RÉSOLUTION Nº 313

Relative à l'introduction d'un nouveau système d'identification des stations du service mobile maritime et du service mobile maritime par satellite (identités dans le service mobile maritime)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) La nécessité d'attribuer aux fins le la sécurité et des télécommunications, une identité propre à chaque navire;
b) La nécessité de faire en sorte que cette identité soit utilisable dans le systèmes automatiques;
c) Le fait que, pour arriver à un format d'adresse commun convenant aux systèmes automatiques, les identités assignées aux stations de navire, aux stations terriennes de navire, aux stations côtières, aux stations terriennes côtières et celles utilisées pour les appels de groupe doivent être d'une nature similaire lorsqu'elles sont transmises sur le trajet radioéléctrique;

considérant de plus

a) Qu'il est très souhaitable que le code constitué par l'identité de la station de navire ou une partie de ce code puisse être utilisé par les abonnés aux réseaux publics avec commutation pour appeler les navires en exploitation automatique;
b) Que, dans certains pays, les réseaux publics commutés sont soumis à des limitations concernant le nombre maximal des chiffres pouvant être utilisés pour composer (au cadran ou au clavier) l'identité de la station de navire;
c) Qu'un Avis du CCITT (1) décrit une méthode d'identification des stations de navire qui tient compte de cette contingence;
d) Que, dans l'intérêt du développement de l'exploitation automatique dans les sens côtière-navire, les limitations, quelles qu'elles soient, devraient être réduites au minimum;

notant

que le CCIR étudie la mise en œuvre du nouveau système d'identités pour les stations du service mobile maritime et du service mobile maritime par satelllite;

décide

que, dans les administrations qui utilisent cette forme d'identification pour les stations du service mobile maritime et du service mobile maritime par satellite, l'attribution des identités se fera conformément aux dispositions de l'appendice

(1) Avis du CCITT E.210/F.120.

43 en attendant la décision appropriée de la prochaine conférence administrative mondiale des radiocommunications compétente;

invite les administrations

à continuer á participer aux études du CCIR et du CCITT en cette matière;

prie le Secrétaire général

de préparer le tableau des chiffres d'identification de nationalité (NID), en collaboration étroite avec le CCIR et le CCITT, et de présenter ce tableau à l'examen de la prochaine conférence administrative mondiale des radiocommunications compétente, pour inclusion dans l'appendice 43.

AR

RÉSOLUTION Nº 314

Relative à l'établissement d'un système mondial coordonné pour le rassemblement des données concernant l'océanographie (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le désir a été exprimé de voir établier un système mondial coordonée de rassemblement des données concernant l'océanographie;

b) Que, dans chacune des six bandes d'ondes décamétriques attribués en exclusivité au service mobile maritime, la Conférence administrative mondiale des radiocommunications (Génève, 1967) a désigné une bande de fréquences destinée à être utilisée, conformément aux dispositions de l'appendice 31 au Règlement des radiocommunications pour le rassemblement des données concernant l'océanographie;

c) Que les bandes de fréquences dont il s'agit ne seront utilisées avec le maximum de rendement que moyennant la collaboration des administrations et la coordination à laquelle elles procéderont;

d) Que certaines administrations ont manisfesté le désir qu'un système mondial coordoné de transmission des données concernant l'océanographie soit établi sur la base d'un plan coordonné dans les bandes attribuées par la présent Conférence;

e) Que d'autres administrations souhaient cependant utiliser dans un proche avenir des stations de rassemblement des données concernant l'océanographie dans le cadre des décisions prises sur cette question par la présente Conférence;

f) Qu'il convient par conséquent d'établir un programme coordonné de rassemblement des données concernant l'océanographie dans les bandes de fréquences dont il est question à l'alinéa *b*) ci-dessus;

g) Que la Commission océanographique intergouvernementale (COI) et l'Organisation météorologique mondiale (OMM) se concertent depuis 1962 sur les efforts de coopération à accomplir dans le domaine du rassemblement des données concernant l'océanographie (par exemple, le Groupe d'experts OMM/COI chargé d'étudier la coordination des besoins, Génève, 19-21 juillet 1967);

décide

1. D'inviter la COI et l'OMM à établir en commun, de concert avec l'IFRB et, selon le cas avec les administrations des Membres, un plan coordoneé conçu de façon à satisfaire les besoins présents et futurs de tous les Membres intéressées et à permettre aux stations participant au rassemblement des données concernant l'océanographie de fonctionner dans un système mondial dans le cadre des dispositions prises par la présente Conférence relativement à un tel système; ce plan devra comporter l'indications de la répartition géographique des stations océanographique, de leur mode d'exploitation, de l'utilisation des fréquences dans le système et de la façon dont les renseignements océanographiques sont à transmettre;

2. D'inciter les administrations à assigner, pour la partie du système mondial qui relève de leur juridiction, des fréquences conformes au plan ci-dessus ainsi qu'aux recommandation de la COI et de l'OMM;

3. D'inviter de plus la COI et l'OMM à assumer en commun, de concert avec l'IFRB, la responsabilité de tenir le plan à jour, compte tenu de l'évolution des besoins en données concernant l'océanographie;

4. Que la prochaine conférence administrative des radiocommunications compétente pour traiter de questions concernant le service mobile maritime devra prendre en considération le plan dont il est question aux paragraphes 1 et 3 ci-dessus, afin de déterminer les modifications éventuellement nécessaires pour améliorer son efficacité.

---

(1) Remplace la Résolution N° Mar20 de la Conférence administrative mondiale des radiocommunications (Génève, 1967).

AC

RÉSOLUTION N° 315

Relative à la suppression éventuelle des taxes de station mobile pour la correspondance publique du service mobile maritime

La Conférence administrative mondiale des radiocommunications (Genève, 1979).

considérant

a) Que la VI[e] Assemblée plénière du CCITT (Genève, 1976) a adopté le projet d'Avis concernant la taxation, la comptabilité et le remboursement dans le service mobile maritime à l'exception des points concernant notamment les taxes de station mobile pour la correspondance publique dans le service mobile maritime;

b) Que le projet d'Avis ci-dessus a été ultérieurement modifié, à la lumière de la décision prise par la VI[e] Assemblée plénière (Genève, 1976) concernant les taxes de station mobile; et que ce projet d'Avis a été approuvé à la suite par vote par correspondance;

c) Que l'Avis modifié conprend les dispositions suivantes (1):

> Les taxes de station mobile peuvent être appliqueés aux services de radiotélégraphie publique, de radiotéléphonie et de radiotélex assurés en ondes hectométriques et décamétriques. Elles ne doivent s'appliquer à aucun des services fonctionnant en ondes métriques, ni à aucun des services mobiles par satellite, ni à aucun service exploité automatiquement; toutefois, les taxes de station mobile peuvent aussi s'appliquer aux radiotélégrammes transmis sur ondes métriques.
>
> Les taxes de station mobile devront être abolies pour le trafic acheminé après 23 h 59 TMG le 31 décembre 1987.

décide

d'adopter la date recommandée pour la suppression des taxes de station mobile pour la correspondance publique dans le service mobile maritime.

CE

RÉSOLUTION N° 316

Relative à la coopération technique avec les pays en développement dans le domaine des radiocommunications maritimes (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

ayant noté

que l'assistance fournie par l'Union, de concert avec d'autres organisations, notamment l'Organisation intergouvernementale consultative de la navigation maritime (OMCI), dans le domaine des télécommunications maritimes, aux pays en développement, permet de bien augurer de l'avenir;

consciente

a) Du fait que le pays en développement ont besoin, pour intensifier leurs échanges commerciaux, d'accroître l'activité de leur marine marchande et d'attirer le trafic maritime d'autres pays;

b) Du rôle important que jouent les télécommunications dans les activités maritimes du monde entier, qu'il s'agisse de l'économie ou de la sécurité;

c) De la possibilité de donner à la marine marchande des moyens de sécurité satisfaisants et de meilleures perspectives économiques, tout en consacrant des sommes relativement modestes à la mise en place et à l'exploitation de services de télécommunications maritimes;

considérant

a) Que, pour de nombreux pays en voie de développement, il est nécessaire de renforcer l'efficacité des services intéressant:

> La sécurité de la navigation et la sauvegarde de la vie humaine en mer;
> La rentabilité des opérations portuaires;
> La correspondance publique destinée aux passagers et aux membres des équipages;

---

(1) Voir l'Avis D.90/F.111 du CCITT (paragraphes B12 et B13).

(2) Remplace la Résolution N° Mar2-18 de la La Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

b) Qu'il serait possible, à cet égard, d'étendre les activités de coopération technique de l'Union, de manière à fournir à ces pays une assistance des plus valables;

décide d'inviter le Secrétaire général

1. À offrir l'assistance de l'Union aux pays en développement qui s'effortent d'améliorer leurs télécommunications maritimes, en leur fournissant notamment des avis techniques concernant la mise en place, l'exploitation et la maintenance du matériel, ainsi qu'en contribuant à la formation professionnelle du personnel;

2. À demander pour ce faire, la collaboration de l'OMCI, de la Conférence des Nations Unies pour le commerce et le développement (CNUCED), d'autres institutions spécialisées des Nations Unies selon le cas;

3. À continuer de rechercher avec une attention particulière l'aide du Programme des Nations Unies pour le développement (PNUD) et d'autres sources de financement pour permettre à l'Union d'apporter une assistance technique à la fois suffisante et efficace en matière de télécommunications maritimes, le cas échéant en collaboration avec d'autres institutions spécialisées concernées;

d'inviter les pays Membres

à contribuer, en priorité, dans la mesure de leurs possibilités et de l'état de développement de leur technique, à la coopération technique fournie par l'Union aux pays en développement dans le domaine des télécommunications maritimes, en facilitant le recrutement d'experts qui devront être envoyés en mission pour travailler dans ces pays, en accueillant des stagiaires titulaires de bourses d'études octroyées par l'Union et venant desdits pays, en envoyant des conférenciers aux cycles d'études organisés par l'Union et, si celle-ci le leurs demande, en lui donnant des avis sur des questions techniques;

d'inviter les pays en développement

à inclure, selon leurs besoins, dans leurs programmes nationaux de demande d'assistance technique extérieure, les projets concernant les télécommunications maritimes et à soutenir les projets multinationaux dans ce domaine.

BH RÉSOLUTION N° 400

Relative au traitement des fiches de notification concernant les assignations de fréquence aux stations aéronautiques dans les bandes attribuées en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) sont entrés en vigueur le 1er septembre 1979;

b) Que le nouveau plan d'allotissement de fréquences contenu dans l'appendice 27 Aer2 entrera en vigueur le 1er février 1983, á 1 heure UTC;

c) Que certaines administrations peuvent désirer mettre en application certaines dispositions du nouveau Plan d'allotissement de fréquences avant la date spécifiée pour son entrée en vigueur dans les cas où des brouillages préjudiciables ne seront pas ainsi causés au service assuré par les stations fonctionnant conformément au Plan actuel d'allotissement de fréquences;

d) Qu'il est, en conséquence, nécessaire de prévoir une procédure intérimaire pour faciliter le passage du Plan actuel au nouveau Plan d'allotissement des fréquences;

décide

1. Que pendant la période transitoire qui s'écoulera entre la date d'entrée en vigueur des Actes finals susmentionnés et la date d'entrée en vigueur du nouveau Plan d'allotissement de fréquences;

1.1. Les dispositions des numéros **1334** à **1341** du Règlement des radiocommunications continueront d'être appliquées au cours de l'examen des fiches de notification concernant les assignations de fréquence aux stations aéronautiques du service mobile aéronautique (R), conformément aux allotissements du Plan existant;

1.2. Toutes ces assignations seront inscrites dans le Fichier de référence international des fréquences conformément aux conclusions formulées par l'IFRB;

1.3. L'IFRB examinera les assignations de fréquence dans une voie du nouveau Plan afin de déterminer si les allotissements du Plan existant bénéficient de la protection spécifiées dans l'appendice 27 Aer2 (partie I, section II-A,

(1) Remplace la Résolution N° Aer2-5 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

paragraphe 5). En procédent à cet examen, le Comité admettra que la fréquence en question sera utilisée conformément aux critères de partage entre les zones spécifiés dans l'appendice 27 Aer2 (partie I, section II-B, paragraphe 4);

1.4. Toute assignation conforme aux dispositions du paragraphe 1.3 ci-dessus et qui aura fait l'objet d'une conclusion favorable sera insérée dans le Fichier de référence;

1.5. La date à inscrire dans la colonne 2a ou dans le colonne 2b du Fichier de référence sera déterminée comme suit:

a) Si la conclusion est faborable relativement aux numéros **1336 à 1339,** la date du 29 avril 1966 sera inscrite dans la colonne 2a;

b) Si la conclusion est favorable relativement au numéro **1341,** la date du 29 avril 1966 sera inscrite dans la colonne 2b;

c) Pour toutes les autres assignations (y compris celles qui pourraient être conformes au nouveau plan d'allotissement de fréquences, mais non au Plan actuel), la date à inscrire dans la colonne 2b sera la date à laquelle l'IFRB aura reçu la fiche de notification;

1.6. Toute assignation conforme au nouveau Plan d'allotissement de fréquences sera spécifiée comme telle au moyen d'un symbole convenable que l'IFRB insérera dans la colonne «Observations» du Fichier de référence;

2. Qu'à la date d'entrée en vigueur du nouveau Plan d'allotissement de fréquences, l'IFRB examinera les assignations de fréquence aux stations aéronautiques du service mobile aéronautique (R) inscrites dans le Fichier de référence international des fréquences dans les bandes attribuées en exclusivité à ce service entre 2850 kHz et 22 000 kHz, du point de vue deleur confromité au nouveau Plan d'allotissement de fréquences, en suivant à cet effet les parties pertinentes de la procédure décrite aux numéros **1334** à **1341** du Règlement des radiocommunications et il inscrira en regard de ces assignations, dans la colonne 2a ou la colonne 2b du Fichier de référence internationale des fréquences, une date déterminée comme suit:

2.1. Pour les assignations avec émission en double bande latérale (A3E) qui sont déjà inscrites au Fichier de référence à la date d'entrée en vigueur du nouveau Plan d'allotissement de fréquences, cette date continuera d'être celle qui est inscrite dans la colonne 2a ou dans la colonne 2b, selon le cas, jusqu'au 1er février 1983. Une date figurant dans la colonne 2a pour une assignation de fréquence utilisant la double bande latérale (A3E) sera transférée dans la colonne 2b le 2 février 1983. Le 1er janvier 1987, l'IFRB examinera les inscriptions et, après consultation des administrations intéressées, annulera les inscriptions qui ne seront plus en usage, en conservant les autres pour information seulement, sans date dans la colonne 2b;

2.2. Si la conclusion est favorable relativement aux numéros **1335** à **1339,** la date du 5 mars 1978 sera inscrite dans la colonne 2a;

2.3. Si la conclusion est favorable relativement aux numéros **1335** et **1341,** la date du 5 mars 1978 sera inscrite dans la colonne 2b;

2.4. Pour toutes les autres assignations, la date du 6 mars 1978 sera inscrite dans la colonne 2b;

3. Qu'à la date d'entrée en vigueur du nouveau Plan d'allotissement de fréquences, les allotissements qui figurent dans ce plan remplaceront, dans le Fichier de référence international des fréquences, les allotissements qui figurent dans le Plan actuel;

invite les administrations

à notifier dès que possible à l'IFRB l'anulation des assignations de fréquence dont l'utilisation sera abandonnée par suite de la mise en service des allotissements du nouveau plan.

BI RÉSOLUTION N° 401

Relative à la mise en œuvre du Plan d'alllotissement de fréquences dans les bandes attribuées en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les bandes attribuées en exclusivité entre 2850 kHz et 22 000 kHz au service mobile aéronautique (R) par la Conférence administrative des radiocommunications (Génève, 1959) ont été modifiées par la Conférence administrative extraordinaire des radiocommunications aéronautiques (Génève, 1966);

b) Que la Conférence administrative extraordinaire des radiocommunications aéronautiques (Génève, 1966) a institué des procédures destinées à être appliquées par les administrations en ce qui concerne la mise en æuvre des modifications;

c) Que les dispositions ont été prises pour que l'IFRB mette ces procédures à exécution;

---

(1) Remplace la Résolution N° Aer2-4 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

reconnaissant

a) Que le service mobile aéronautique (R) est avant tout un service de sécurité;

b) Que la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) a apporté de nouvelles modifications auxdites bandes afin de tenir compte des techniques de la bande latérale unique;

c) Qu'il est nécessaire que toutes les administrations mettent en œuvre les modifications apportées par cette Conférence, en vue d'éviter des brouillages préjudiciables aux services assurés par des stations fonctionnant conformément aux dispositions du Règlement des radiocommunications;

décide

1. Que, trois mois au plus tard avant la date d'entrée en vigueur du nouveau Plan, les administrations notifieront à l'IFRB les modifications destinées à rendre conformes à ce Plan les inscriptions figurant déjà dans le Fichier de référence;

2. Que les assignations inscrites dans le Fichier de référence à la date du 1er février 1983 et qui ne seront pas conformes, à cette date, aux décisions de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) seront traitées comme suit:

2.1. L'IFRB fera parvenir aux administrations intéressées, dans les trente jours qui suivront le 1er février 1983, des extraits pertinents du Fichier de référence, en les informant que, conformément aux termes de la présente Résolution, les assignations en cause devront être transférées sur les fréquences appropriées dans un délai de six mois après la date d'expédition desdits extraits;

2.2. Si une administration ne notifie pas ce transfert à l'IFRB dans le délai prescrit, l'inscription existante sera maintenue dans le Fichier de référence, sans indication de date dans la colonne 2 et avec une observation appropriée dans la colonne «Observations». Les administrations seront informées de cette mesure;

3. Que, si une administration le désire, l'IFRB lui accordera toute l'aide nécessaire. En pareil cas, l'IFRB appliquera les dispositions des numéros **1445** à **1449** du Règlement des radiocommunications.

BG RÉSOLUTION Nº 402

Relative à la mise en œuvre du nouvel arrangement applicable aux bandes attribuées en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz(1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'utilisation de chacune des bandes de fréquences comprises entre 2850 kHz et 22 000 kHz et attribuées en exclusivité au service mobile aéronautique (R) par la Conférence administrative des radiocommunications (Génève, 1959) a été modifiée par la Conférence administrative extraordinaire des radiocommunications aéronautiques (Génève, 1966);

b) Que la Conférence administrative extraordinaire des radiocommunications aéronautiques (Génève, 1966) a décidé que les administrations devraient remplacer progressivement et le plus tôt possible, dans leurs radiocommunications du service mobile aéronautique (R), la technique de la double bande latérale par la technique de la bande latérale unique, en conséquence de quoi l'utilisation des bandes en question a été modifiée à nouveau par la Conférence administrative mondiale de radiocommunications du service mobile aéronautique (R) (Génève, 1978) pour permettre l'utilisation de la technique de la bande latérale unique;

c) Qu'un très grand nombre des assignations de fréquence aux stations d'aéronef et aux stations aéronautiques seront transférées actuelles aux nouvelles fréquences et voies désignées par cette Conférence;

d) Que les changements d'assignations des fréquences devraient être effectués dès que possible afin que les avantages qu'offrent les nouvelles voies désignées par cette Conférence puissent se matérialiser dès que possible;

e) Que le transfert des assignations devrait être réalisé en perturbant le moins possible le service rendu par chaque station;

f) Que le transfert des assignations devrait être réalisés de manière à éviter des brouillages préjudiciables entre les stations intéressées pendant la période de mise en œuvre;

g) Que les Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) sont entrés en vigueur le 1er septembre 1979;

h) Que le nouveau Plan d'allotissement des fréquences de l'appendice 27 Aer 2 entrera en vigueur le 1er février 1983;

---

(1) Remplace la Résolution Nº Aer2-3 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

reconnaissant

a) Que le service mobile aéronautique (R) est avant tout un service de sécurité;
b) Que certaines fréquences ont été allouées pour usage mondial;
c) Que la mise en œuvre des décisions de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) relatives au nouvel arrangement des bandes attribuées au Service Aéronautique (R) entre 2850 kHz et 22 000 kHz devrait se dérouler de manière ordonnée pour le transfert des services actuels des anciennes aux nouvelles assignations;

décide

1. Que, pendant la période comprise entre la date d'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) (1er septembre 1979) et la date d'entrée en vigueur du nouveau Plan d'allotissement de fréquences qui figure dans l'appendice 27 Aer2 (1er février 1983), l'utilisation des voies pour toute nouvelle exploitation en bande latérale unique s'effectuera conformément aux dispositions ci-après;

1.1. La fréquence porteuse (fréquence de référence) de la voie à bande latérale unique située dans la partie supérieure de l'ancienne voie à double bande latérale sera la même que la fréquence porteuse (fréquence de référence) de cette voie;

1.2. La fréquence porteuse (fréquence de référence) de la voie à bande latérale unique située dans la partie inférieure de l'ancienne voie à double bande latérale sera inférieure de 3 kHz à la fréquence porteuse (fréquence de référence) de cette voie;

1.3. Avant le 1er février 1983, les stations aéronautiques et les stations d'aéronef dotées d'un équipement à bande latérale unique peuvent utiliser l'une ou l'autre des moitiés de l'ancienne voie à double bande latérale [la fréquence porteuse (fréquence de référence) à bande latérale unique étant celle qui est indiquée aux paragraphes 1.1 et 1.2 ci-dessus];

1.4. Toute administration peut utiliser les voies du nouveau Plan à condition de ne pas causer de brouillages préjudiciables aux utilisateurs des voies du Plan actuel. Pour l'utilisation opérationelle des voies en question, il convient que les administrations tiennent compte des dispositions du Nº 27/20 de l'appendice 27 Aer2 au Règlement des radiocommunications;

2. Que, le 1er février 1983, les fréquences indiquées à l'appendice 27 au Règlement des radiocommunications seront remplacées par les fréquences indiquées dans la partie □, section □, article 2, de l'appendice 27 Aer2;

3. Qu'il est nécessaire que les administrations prennent toutes les mesures appropriées pour passer le plus tôt possible à la technique de la bande latérale unique, en ne permettant plus l'installation de nouveaux équipements à double bande latérale à partir du 1er avril 1981. Les stations d'aéronef et les stations aéronautiques devront pouvoir commencer le plus tôt possible à utiliser des appareils à bande latérale unique; de plus, elles devront cesser de faire des émissions à double bande latérale dans les délais les plus brefs et, en tout état de cause, le 1er février 1983 au plus tard;

4. Que, jusqu'au 1er février 1983, les stations aéronautiques et les stations d'aéronef dotées d'appareils à bande latérale unique devront également être équipées de façon à pouvoir faire, lorsque cela sera nécessaire, des émissions de la classe H3E compatibles avec l'emploi de récepteurs à double bande latérale;

5. Que, sauf dispositions contraires contenues dans les Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) à partir du 1er février 1983, seules seront autorisées les classes d'émission H2E, J3E, J2B, J2D et J9X. Toutefois, l'exploitation en double bande latérale pourra être poursuivie pour l'usage national jusqu'au 1er février 1987, à condition que cette exploitation se fasse en conformité avec les dispositions des numéros **299** et **307** du Règlement des radiocommunications et qu'elle ne cause pas de brouillages préjudiciables aux stations assurant des communications internationales dans le service mobile aéronautique (R) dans le mode bande latérale unique. Les administrations qui ont besoin de cette extension de la période d'application intégrale de la bande latérale unique sont, néanmoins, instamment priées de cesser l'exploitation en double bande latérale dès que possible.

CB RÉSOLUTION Nº 403

Relative à l'utilisation des fréquences 3023 kHz et 5680 kHz communes aux services mobiles aéronautiques (R) et (OR)(1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

ayant noté

qu'il semble exister certaines anomalies dans les conditions d'utilisation des fréquences 3023,5 kHz et 5680 kHz stipulées dans l'appendice 26 au Règlement des radiocommunications (Génève, 1959), telles qu'elles sont énoncées dans les

(1) Remplace la Résolution Nº Aer2-1 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

alinéas 2, *a*), et 2, *b*), figurant dans la colonne 3 de l'article 2 du plan d'allotissement de fréquences, et que des mesures ont été prises pour faire disparaître ces anomalies:

considérant

a) Que la coordination des opérations de recherche et de sauvetage sur les lieux d'un sinistre serait améliorée si, au cours de ces opérations l'utilisation des fréquences 3023 (précédemment 3023,5) kHz et 5680 kHz était étendue aux communications entre les stations mobiles et les stations terrestres qui y participent;

b) Qu'il serait dans l'intérêt général du service mobile aéronautique que les mêmes dispositions relatives à l'utilisation des fréquences 3023 (précédemment 3023,5) kHz et 5680 kHz soient appliquées dans le service mobile aéronautique (R) et dans le service mobilwe aéronautique (OR);

décide

d'inviter les administrations à appliquer dans le service mobile aéronautique (OR), à partir de la date d'entrée en vigueur du Plan d'allotissement de fréquences, adopté par la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978), les dispositions régissant l'utilisation des fréquences 3023 kHz et 5680 kHz qui sont stipulées à l'appendice 27 Aer2 (partie II, section II, article 3).

BT RÉSOLUTION Nº 404

Relative à la mise en æuvre de la nouvelle disposition des bandes de fréquences attribuées en exclusivité au service mobile aéronautique (R) entre 21 924 kHz et 22 000 kHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que dans sa Recommandation Nº Aer2-5, la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) avait recommandé aux administrations d'étudier les questions concernant l'utilisation future de la bande 21 924-22 000 kHz;

b) Que la présent Conférence a attribué cette bande en exclusivité au service mobile aéronautique (R);

décide

qu'il est nécessaire d'ajouter dans l'appendice 27 Aer2 une bande de fréquences supplémentaire pour mettre en service des fréquences mondiales appropriées aux communications à grande distance et réduite l'encombrement des bandes utilisées actuellement;

charge le Secrétaire général

de publier le nouvel appendice 27 Aer2 adopté par la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) avec l'inclusion d'un Plan pour la bande 21 924-22 000 kHz selon les indications énoncées en annexe à la présente Résolution;

reconnaissant

qu'il risque de résulter des brouillages préjudiciables au service mobile aéronautique (R) dans cette bande si, le 1er février 1983, les assignations existantes dans la bande 21 924-22 000 kHz ne sont pas transférées, soit sur les nouvelles fréquences pour le service mobile aéronautique (R), soit dans d'autres bandes plus appropriées pour les assignations de fréquence aux stations du service fixe aéronautique;

décide

1. Que la mise en œuvre des mesures prises par la présent Conférence concernant la nouvelle disposition de la bande d'ondes décamétriques attribuée au service mobile aéronautique (R) devra s'effectuer selon la procédure méthodique définie ci-après pour le passage des anciennes aux nouvelles assignations;

2. Que les assignations visées au paragraphe 1 doivent être traitées comme suit:

2.1. L'IFRB adressera des extraits pertinents du Fichier de référence aux administrations intéressées, dans un délai de trentre jours à partir do 1er février 1982, en les informant que, conformément aux dispositions de la présente Résolution, les assignations en cause doivent être transférées dans les bandes appropriées dans un délai de six mois près l'envoi de ces extraits;

2.2. Si une administration ne notifie pas le transfert dans le délai prescrit, l'inscription initiale sera maintenue dans le Fichier de référence, sans indication de date dans la colonne 2 et avec une observation appropriée dans la colonne «Observations»; l'administration intéressée sera avisée de cette mesure;

3. Que su une administration le désire, l'IFRB lui prêtera l'assistance nécessaire. Pour ce faire, il appliquera les dispositions des numéros **1445** à **1449** du Règlement des radiocommunications.

ANNEXE À LA RÉSOLUTION Nº 404

Indication de modifications à apporter à l'appendice 27 Aer2 du Règlement des radiocommunications

A. APPENDICE 27 Aer2

Table des matières, *partie II, dans le remplacer la fréquence* 17 970 kHz *par* 22 000 kHz.
Numéro **27/10**, *remplacer* 17 970 kHz *par* 22 000 kHz.
Número **27/16,** *ajouter dans le tableau les nouvelles fréquences suivantes:*

kHz 21 924-22 000	
21 925	21 964
21 928	21 967
21 931	21 970
21 934	21 973
21 937	21 976
21 940	21 979
21 943	21 982
21 946	21 985
21 949	21 988
21 952	21 991
21 955	21 994
21 958	21 997
21 961	
25 voies	

Numéro **27/31A**, *dans le titre qui précéde le numéro* **27/31A**, *remplacer* 18 MHz *par* 22 MHz; *dans le texte du numéro* **27/31A,** *remplacer* 13 MHZ *et* 18 MHz *par* 13 MHz, 18 MHz *et* 22 MHz.
Numéro **27/31B**, *2ª ligne, remplacer* la bande des 18 MHz *par* les bandes des 18 MHz et 22 MHz; *4ª ligne, après* 18 MHz *ajouter* et 22 MHz.

Partie II, *dans le tire, remplacer la fréquence* 17 970 kHz *par* 22 000kHz
Numéro **27/189,** *ajouter dans le tableau la nouvelle colonne suivante pour la bande des* 22 MHz:

Zones	Bandes (MHz) 22 kHz
W I	21 940 21 946 21 952 21 958 21 967 21 973 21 979 21 988 21 997
W II	21 964 21 985
W III	21 949 21 970
W IV	21 955 21 976 21 991
W V	21 943 21 961 21 982 21 994

Immédiatement après le numéro **27/207**, *ajouter le noveau tableau suivant correspondant à la bande des* 22 MHz:

ADD **27/207A** Bande/*band*/banda 21 924-22 000 **22 MHz**

1	2	3
21 940	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 943	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 946	W MONDIALE WORLDWIDE MUNDIAL	C100/I

1	2	3
21 949	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 952	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 955	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 958	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 961	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 964	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 967	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 970	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 973	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 976	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 979	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 982	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 985	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 988	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 991	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 994	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 997	W MONDIALE WORLDWIDE MUNDIAL	C100/I

CC

RÉSOLUTION N.º 405

Relative à l'utilisation des fréquences du service mobile aéronautique (R) (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) a élaboré et adopté un nouveau Plan d'allotissement de fréquences pour l'utilisation des ondes décamétriques par le service mobile aéronautique (R) (appendice 27 Aer2 au Règlement des radiocommunications);
b) Que le trafic aérien est sujet à des changements continuels;
c) Que ces changements doivent être pris en considération par les administrations intéressées; mais
d) Qu'en cherchant à satisfaire les nouveaux besoins en communications il convient de ne prendre aucune décision de nature à empêcher ou à compromettre l'utilisation coordonnée des ondes décamétriques par le service mobile aéronautique (R) telle qu'elle est prévue dans le Plan;

(1) Remplace la Résolution Nº Aer2-7 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

e) Que les familles de fréquences alloties aux zones de passage des lignes aériennes mondiales principales (ZLAMP), aux zones des lignes aériennes régionales et nationales (ZLARN), ainsi qu'aux subdivisions de ces zones et aux zones VOLMET ont été choisies tenu des conditions de propagation qui permettent le choix de fréquences convenant le mieux aux distances considérées;

f) Qu'il convient de prendre des mesures pour que l'ordre de grandeur des fréquences utilisées soit correct;

g) Qu'il est essentiel de répartir le trafic de communications aussi uniformément que possible entre les fréquences disponibles;

h) Que des fréquences ont été alloties pour une utilisation mondiale;

décide

que les administrations prendront, à titre individuel ou en collaboration, les mesures nécessaires afin:

1. D'assurer l'utilisation aussi large que possible de fréquences plus élevées afin de diminuer le trafic dans les bandes d'ondes décamétriques du service mobile aéronautique (R);

2. D'utiliser autant que possible des antennes ayant une directivité et un rendement appropriés, afin de réduire au minimum les risques de brouillages mutuels à l'intérieur d'une zone ou entre plusieurs zones;

3. De coordonner l'utilisation des familles de fréquences nécessaires pour un tronçon de ligne déterminé, conformément aux principes techniques exposés dans l'appendice 27 Aer2, et en tenant compte des données disponibles sur les conditions de propagation, afin que les fréquences qui conviennent le mieux soient utilisées pour la liaison entre le sol et un aéronef situé à une distance donnée de la station aéronautique qui assure le service sur le tronçon de ligne considéré;

4. D'améliorer les techniques et les procédures d'exploitation et d'utiliser le matériel qui permettra d'obtenir le rendement le plus élévé possible des communications air-sol sur ondes décamétriques;

5. De ressembler des données techniques précises sur le fonctionnement de leurs systèmes de communication sur ondes décamétriques, notamment des données ayant une influence sur les normes techniques et d'exploitation, afin de faciliter un réexamen du Plan;

6. De déterminer, au moyen d'arrangements régionaux, la meilleure méthode permettant d'assurer les communications nécessaires sur toute nouvelle ligne aérienne régionale ou internationale à longue distance, qui n'est pas ou ne peut pas être desservie dans le cadre des ZLAMP et des ZLARN, de manière à ne pas créer de brouillage préjudiciable dans l'utilisation des fréquences prévues dans le Plan.

BL RÉSOLUTION N° 406

Relative à l'utilisation de bandes de fréquences supérieures aux bandes d'ondes décamétriques, pour les communications et la diffusion de renseignements météorologiques dans le service mobile aéronautique (R) et le service mobile aéronautique par satellite (R) (1).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, du point de vue du service mobile aéronautique, les bandes de fréquences supérieures aux bandes d'ondes décamétriques permettent d'assurer des communications plus sûres et mieux protégées contre les brouillages que les communications en ondes décamétriques;

b) Que du point de vue technique ainsi que du point de vue de l'exploitation, l'utilisation des ondes métriques par l'aviation a fait des progrès notables;

c) Que la possibilité d'établir, à l'avenir, des communications par satellite est à présent reconnue;

d) Qu'en raison du développement constant des télécommunications aéronautiques dans toutes les régions du monde il existe une demande accrue de fréquences pour l'établissement de communications avec les aéronefs en vol et la diffusion de renseignements météorologiques à ces aéronefs;

décide

qu'il convient que les administrations envisagent, dans toute la mesure du possible, compte tenu des impératifs économiques et techniques, d'utiliser, pour répondre à leurs besoins de communications et de diffusion de renseignements météorologiques, des fréquences choisies dans des bandes de frequences supérieures aux bandes d'ondes décamétriques, attribuées au service mobile aéronautique (R) et au service mobile aéronautique par satellite (R).

---

(1) Remplace la Résolution N° Aer2-6 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

BF RÉSOLUTION Nº 407

Relative à l'utalisation non autorisée des fréquences des bandes attribuées au service aéronautique (R) (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les observations de contrôle des émissions relatives à l'utilisation des fréquences des bandes attribuées en exclusivité ao service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz montrent qu'un certain nombre de fréquences de ces bandes sont encore utilisées par des stations appartenant à des services autres que le service mobile aéronautique (R), notamment par des stations de radiodiffusion à grande puissance, dont certaines fonctionnent en contravention des dispositions du numéro **2665** du Règlement des radiocommunications;

b) Que ces stations causent ainsi des brouillages préjudiciables au service mobile aéronautique (R) et qu'un très grand nombre d'émissions dont les sources n'ont pas pu être identifiées avec certitude ont été observées dans les bandes en question;

c) Que les radiocommunications constituent le seul moyen de communication à la disposition du service mobile aéronautique (R) et que ce service est un service de sécurité;

considérant, en particulier

d) Qu'il est essentiel que les voies directement utilisées pour le fonctionnement des services de transport aérien dans de bonnes conditions de sécurité et de régularité soient exemples de brouillages préjudiciables, étant donné que ces voies sont indispensables à la sauvegarde de la vie humaine et des biens;

décide de prier instamment les administrations

1. De faire en sorte que des stations appartenant à des services autres que le service mobile aéronautique (R) s'abstiennent d'utiliser les fréquences des bandes attribuées à ce service, sauf dans le contidions stipulées aux numéros **342** et **956** du Règlement des radiocommunications;

2. *a*) De ne ménager aucun effort pour identifier et localiser la source de toute émission non autorisée capable de causer des brouillages préjudiciables au service mobile aéronautique (R) et susceptible de ce fait, de mettre en danger ce service de sécurité;

b) Et de communiquer leurs résultats à l'IFRB;

3. De participer aux programmes de contrôle des émissions que l'IFRB pourra être amené à organiser comme suite à la présente Résolution;

4. De demander à leurs gouvernements respectifs de promulguer telle législation qui pourra être nécessaire pour empêcher les stations situées à bord d'aéronefs de fonctionner en contravention des dispositions du numéro **2665** du Règlement des radiocommunications;

de charger l'IFRB

1. De continuer à organiser des programmes de contrôle des émissions dans les bandes attribuées en exclusivité au service mobile aéronautique (R), dans le dessein d'éliminer les émissions des stations d'autres services fonctionnant dans ces bandes, émissions qui causent des brouillages préjudiciables au service mobile aéronautique (R) ou sont susceptibles d'en causer;

2. De prendre les mesures nécessaires pour éliminer les émissions d'autres services fonctionnant dans ces bandes, émissions qui causent des brouillages préjudiciables au service mobile aéronautique (R) ou sont susceptibles d'en causer;

3. De rechercher, le cas échéant, la coopération des administrations d'une part pour identifier les sources de ces émissions en employant tous les moyens disponibles, d'autre part pour obtenir la cessation de ces émissions.

BS RÉSOLUTION Nº 500

Relative à la modification des fréquences porteuses des stations de radiodiffusion à ondes kilométriques dans la Région 1

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il a intérêt, tant du point de vue technique qu'économique, à réduire les brouillages qui se produisent dans les récepteurs domestiques de radiodiffusion par suite de fréquences de combinaison;

---

(1) Remplace la Résolution Nº Aer2-2 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

b) Que ces brouillages sont notablement réduits lorsque les valeurs nominales des fréquences porteuses des stations de radiodiffusion sont des multiples de l'écartement des canaux;
c) Que les valeurs nominales des fréquences porteuses des stations inscrites au Plan de radiodiffusion en ondes kilométriques pour la Région 1 (Génève, 1975) ne sont pas multiples de l'écartement des canaux (9 kHz);
d) Que, pour éviter des brouillages entre ces stations, il est nécessaire que les fréquences porteuses des stations de radiodiffusion à ondes kilométriques de la Région 1 soient modifiées à la même date, tout au moins pour toutes les stations qui utilisent en partage le même canal, sans en résulte une dominution de l'écartement entre les fréquences porteuses adjacentes;
e) Que la modification des fréquences porteuses des stations de radiodiffusion en ondes kilométriques augmentera, dans certains cas, les brouillages causés aux stations de radionavigation aéronautique;

notant

que le service de radionavigation aéronautique est un service de sécurité;

décide

1. Que, pendent la période allant du 1er février 1986 au 1er février 1990, les valeurs nominales des fréquences porteuses de toutes les stations à ondes kilométriques fonctionnant conformément à l'Accord de radiodiffusion à ondes kilométriques et hectométriques (Génève, 1975), ou projetées conformément aux dispositions de cet Accord, devront être réduites de 2 kHz, de manière que ces fréquences deviennent des multiples de 9 kHz, les autres caractéristiques des stations demeurant inchangées;

2. Que, afin de faire en sorte que toutes les dispositions puissent être prises pour éviter tout brouillage additionnel au service de radionavigation aéronautique, la modification des fréquences des stations de radiodiffusion devra se faire par groupes de cinq canaux adjacents, en commençant par le groupe ayant les fréquences les plus basses;

3. Que les modifications devront être opérées en trois étapes, à savoir:

Canaux 1 à 5 — le 1er février 1986
Canaux 6 à 10 — le 1er février 1988
Canaux 11 à 15 — le 1er février 1990 } à 1.00 UTC;

4. Que, à la date de la première modification (1er février 1986), la limite inférieure de la bande attribuée au service de radiodiffusion deviendra 148,5 kHz et que, après le 1er février 1990, la bande attribuée à ce service sera la bande 148,5-283,5 kHz;

5. Que toute modification d'une assignation de fréquence à une station de radionavigation aéronautique qui en résultera devra être notifiée à l'IFRB et, si son examen donne lieu à une conclusion favorable relativement aux dispositions des numéros **1240** et **1241**, elle devra être inscrite dans le Fichier de référence sans modification de date ou de statut. Si toutefois la conclusion du Comité n'est défavorable que relativement aux dispositions du numéro **1241**, la modification devra être inscrite dans le Fichier de référence conformément aux dispositions pertinentes de l'article 12, sans aucune modification de la date initiale;

décide en outre

que les administrations devront informer l'IFRB deux ans au moins avant d'apporter des modifications prévues aux caractéristiques de leurs stations de radiodiffusion existantes à ondes kilométriques, ou avant de mettre en service de nouvelles stations;

charfe l'IFRB

de publier ces renseignements dans une section spéciale de sa circulaire hebdomadaire;

charge le Secrétaire général

de communiquer la présent résolution au secrétaire général de l'OACI.

BU RÉSOLUTION Nº 501

Relative à l'examen par l'IFRB des fiches de notification concernant les stations du service de radiodiffusion de la Région 2 travaillant dans la bande 535-1605 kHz, au cours de la période précédant l'entrée en vigueur des Actes finals de la Conférence administrative régionale de radiodiffusion à ondes hectométriques (Région 2).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'une Conférence administrative régionale de radiodiffusion à ondes hectométriques (Région 2) sera convoquée, en deux sessions, afin d'établir un plan pour la service de radiodiffusion dans la bande 535-1605 kHz;

b) Que la première session de cette Conférence aura lieu en mars 1980 et la seconde session en novembre 1981;
c) Que les dispositions pertinentes de l'article 12 ont été modifiées par la présente Conférence;
d) Que la Conférence administrative régionale de radiodiffusion à ondes hectométriques (Région 2) adoptera les dispositions que le Comité devra appliquer pour la notification et l'inscription dans le Fichier de référence des assignations de fréquence figurant dans le plan;
e) Qu'il est en conséquence nécessaire d'établir la procédure que la Comité devra appliquer pour l'examen des fiches de notification relatives aux stations de radiodiffusion de la Région 2 travaillant dans la bande 535-1605 kHz au cours de la période allant de la date d'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979), à la date d'entrée en vigueur des Actes finals de la Conférence administrative régionale de radiodiffusion à ondes hectométriques (Région 2);

décide

que, entre la date d'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications (Génève, 1979) et la date d'entrée en vigueur des Actes Finals de la Conférence administrative régionale de radiodiffusion à ondes hectométriques (Région 2), le Comité n'examinera pas, en ce qui concerne les dispositions du numéro **1241,** les fiches de notification des assignations de fréquence aux stations de radiodiffusion de la Région 2 travaillant dans la bande 535-1605 kHz et qu'il inscrira sans mention de date dans la colonne 2a ou dans la colonne 2b, la date figurant dans la colonne 2c n'étant donnée qu'à titre d'information.

DJ RÉSOLUTION Nº 502

Relative à le période comprise entre la date d'entrée en vigueur des Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) et la date à laquelle les dispositions et le Plan associé adoptés par cette Conférence seront insérés en annexe au Règlement des radiocommunications (1).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiofiffusion par satellite (Génève, 1977) sont entrés en vigueur le 1er janvier 1979;
b) Que la Résolution Nº Sat-4 de ladite Conférence demande à la Conférence administrative mondiale des radiocommunications de 1979 d'insérer les dispositions et le Plan associé qu'elle a établi en annexe au Règlement des radiocommunications;
c) Qu'une période intérimaire sépare l'entrée en viguer des Actes finals de la Conférence de 1977 et la mise en application du Règlement des radiocommunications comportant l'insertion des dispositions et du Plan associé de la Conférence de 1977 (appendice 30);

considérant en outre

que les Actes finals de la Conférence de 1977 sont considérés comme contenant un Accord mondial et un Plan associé, conformément à la Résolution Nº Spa 2-2 de la Conférence administrative mondiale des télécomunications spatiales (Généve, 1971);

décide

1. Que pendant cette période intérimaire, et après la date de leur insertion en annexe au Règlement des radiocommunications, les dispositions et le Plan associé conserveront leur intégrité en tant qu'instrument juridique;
2. Que pendant cette période l'IFRB et les autres organes concernés de l'UIT devront s'appuyer sur les dispositions des Actes finals de la Conférence de 1977 et du Règlement des radiocommunications.

BC RÉSOLUTION Nº 503

Relative à la coordenation, la notification et l'inscription dans le Fichier de référence international des fréquences, des assignations de fréquence aux stations du service de radiodiffusion par satellite de la Région 2 (2).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Remplace la Résolution Nº Sat-3 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).
(2) Remplace la Résolution Nº Sat-5 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

considérant

a) Qu'un plan sera établi pour le service de radiodiffusion par satellite de la Région 2 conformément à la Résolution **701**;
b) Que, dans le Région 2, le service de radiodiffusion par satellite devrait être exploité conformément aux principes énoncés dans l'article 12 et les annexes 6 et 7 de l'appendice 30 du Règlement des radiocommunications;
c) Que certaines des dispositions adoptées par la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977), concernant les stations du service de radiodiffusion par satellite dans les Régions 1 et 3, peuvent également s'appliquer à la Région 2, jusqu'à l'entrée en vigueur du plan qui sera établi pour cette Région en vertu de la Résolution **701**;
d) Que, pendant la période intérimaire, les prócedures exposées dans la Résolution **33** continueront à être appliquées dans la Région 2;

décide

1. Qu'une administration désireuse de mettre en service une station spatiale de radiodiffusion par satellite dans la Région 2 devra, aux fins de la coordination avec les systèmes de radiocommunication spatiale des autres administrations, appliquer les dispositions appropriées de l'article 11 (numéros **1042** à **1056** inclus) du Règlement des radiocommunications;

2. Que les dispositions pertinentes de la Résolution **33** s'appliqueront à la coordination, la notification et l'inscription des assignations de fréquence aux stations de radiodiffusion par satellite dans la Région 2, chaque fois qu'une station du service de radiodiffusion par satellite ou du service fixe par satellite dans la Region 2 sera concernée;

2.1 Qu'une administration notifiant une assignation de fréquence à une station spatile du service de radiodiffusion par satellite dans la Région 2, aux termes du paragraphe 4.1 de la Résolution **33**, notifiera également une assignation de fréquence à une station terrienne de réception type;

3. Que les procédures de coordination, de notification et d'inscription pour les stations du service fixe par satellite qui sont décrites dans l'article 7 de l'appendice 30 au Règlement des radiocommunications seront appliquées également aux stations de radiodiffusion par satellite dans la Région 2, à l'égard des stations de radiodiffusion par satellite pour lesquelles une assignations de fréquence est conforme au Plan, dans tous le cas où:

La largeur de bande nécessaire de l'assignation de fréquence envisagée pour la Région 2 recouvre partiellement celle d'une assignation de fréquence de la Région 1 et ou de la Région 3; et
La puissance surfacique qui serait produite par l'assignation de fréquence envisagée pour une station spatiale de radiodiffusion de la Région 2 dépasse la valeur spécifiée dans l'annexe 1 de l'appendice 30;

4. Que, pour fournir les renseignements visés dans la section B de la Résolution **33** et dans la section II de l'article 7 de l'appendice 30, il conviendra d'utiliser l'annexe 2 de l'appendice 30;

5. Que chaque assignation de fréquence notifiée au titre du paragraphe 4.1 de la Résolution **33** ou du paragraphe 2.1 de la présente Résolution ou de la section III de l'article 7 de l'appendice 30 fera l'objet d'une fiche de notification distincte établie selon les dispositions de l'annexe 2 de l'appendice 30.

CK

RÉSOLUTION Nº 504

Relative aux Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) en ce qui concerne la Région 2

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) a adopté seulement des dispositions intérimaires pour la Région 2;
b) Que la presente Conférence a décidé d'apporter au Tableau d'attribution des bandes de fréquences pour la Région 2 des modifications qui influent sur les conditions sur lesquelles sont fondées ces dispositions intérimaires des Actes final de la Conférence de 1977;
c) Que la présente Conférence a aussi décidé d'incorporer les dispositons et le Plan associé adoptés par la Conférence de 1977 dans le Règlement des radiocommunications en tant qu'appendice 30;
d) Qu'une conférence administrative régionale des radiocommunications se réunira en 1983 afin d'établir un plan pour le service de radiodiffusion par satellite dans la Région 2, conformément à la Résolution **701**;

décide

1. Que les dispositions de l'article 12 de l'appendice 30 relatives à la segmentation de l'arc dans la Région 2 ne sont plus applicables dans la bande 11,7-12,1 GHz et qu'elles ne le seront plus dans le reste de la bande 11,7-12,2 GHz à la suite de la Conférence administrative régionale des radiocommunications de 1983;

2. Que les autres dispositions intérimaires de l'appendice 30 concernant uniquement la Région 2 continueront à s'appliquer en attendant les décisions de la Conférence administrative régionale des radiocommunications de 1983. Après cette date, les Actes finals de la Conférence régionale de 1983 seront considérés comme annulant les dispositions intérimaires intéressant la Région 2 et actuellement contenues dans l'appendice 30, sous réserve d'avoir été officiellement adoptés par la prochaine Conférence administrative mondiale des radiocommunications compétente.

CM

RÉSOLUTION Nº 505

Relative au service de radiodiffusion par satellite (radiodiffusion sonore) dans la gamme de fréquences de 0,5 GHz à 2 GHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le plusieurs administrations ont présenté des propositions concernant des attributions de bandes de fréquences au service de radiodiffusion par satellite (radiodiffusion sonore) dans la gamme 0,5-2 GHZ;
b) Que les bandes de fréquences actuellement attribuées au service de radiodiffusion par satellite ne permettent pas la réception individuelle de programmes sonores par des récepteurs portatifs et par des récepteurs installés à bord des automobiles;
c) Que l'introduction du service de radiodiffusion par satellite (radiodiffusion sonore) dans la gamme 0,5-2 GHz est techniquement réalisable et permettrait la réception individuelle par des récepteurs portatifs et par des récepteurs installés à bord des automobiles;
d) Que des expériences de simulation ont confirmé certaines des hypothèses avancées dans des études théoriques, mais cependant, aucune démonstration d'un système pratique n'as encore été fatite;
e) Que des études complémentaires doivent être faites avant la mise en œuvre de systemes opérationnels;
f) Que le CCIR a entrepris des études sur ce service, dans le cadre du Programme d'études 34B/10;
g) Que la gamme de fréquences convenant à ce service est limitée à 0,5 GHz pour l'extrémité inférieure (en raison de l'élévation du niveau du bruit artificiel et de l'argumentation des dimensions des antennes d'émission lorsque la fréquence décroît) et à 2 GHz pour l'extrémité supérieure (en raison de la diminution de la surface équivalente des antennes de réception lorsque la fréquence augmente);
h) Que, en raison du niveau élevé de la puissance surfacique nécessaire, le partage avec les services de Terre semble extrêmement difficile;

notant

a) Que les certaines administrations ont présenté des propositions concernant la bande de fréquences 1429-1525 MHz;
b) Que le service de radioastronomie dispose d'une attribution dans la bande inférieure avoisinante, de sorte que la partie inférieure de la bande 1429-1525 MHz ne peut pass ête envisagée pour attribution au service de radiodiffusion par satellite (radiodiffusion sonore);
c) Que, dans la phase expérimentale, il suffirait d'une largeur de bande de quelques centaines de kilohertz;

décide

1. Que les administrations devront être encouragées à faire des expériences sur le service de radiodiffusion par satellite (radiodiffusion sonore) à l'intérieur de la gamme de fréquences 0,5-2 GHz, dans de petites sous-bandes convenablement situées, sous réserve d'accord entre les administrations concernées. Une de ces sous-bandes peut se situer dans la bande 1429-1525 MHz;

2. Que le CCIR devra poursuivre et accélérer les études relatives aux caractéristiques techniques d'un système de radiodiffusion sonore par satellite pour la réception individuelle sur des récepteurs portatifs et sur des récepteurs pour véhicules automobiles, à la faisabilité du partage avec les services de Terre et aux critères de partage appropriés;

3. Que la prochaine Conférence administrative mondiale des radiocommunications devant traiter des services de radiocommunication spatiale en général, ou d'un de ces services en particulier, devra être habilitée à examiner les résultats des diverses études effectuées et à prendre les décisions voulues concernant l'attribution d'une bande de fréquences appropriées;

4. Que la Conférence susmentionnée devra en outre mettre au point des procédures appropriées visant à protéger et, les cas échéant, à transférer dans d'autres bandes, les assignations aux stations des services de Terre qui pourraient être affectés.

AP RÉSOLUTION Nº 506

Relative à l'utilisation de l'orbite des satellites géostationnaires à l'exclusion de toute autre orbite, par les stations spatiales fonctionnant dans les bandes de fréquences des 12 GHz attribuées su service de radiodiffusion par satellite (1).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) a approuvé, pour les Régions 1 et 3, um Plan spécifiant des assignations de fréquence dans les bandes mentionnées ci-dessus et des positions sur l'orbite des satellites géostationnaires;
b) Qu'une conférence régionale des radiocommunications qui se tiendra en 1983, doit élaborer un plan similaire pour la Région 2;
c) Que l'exploitation des services de radiocommunication spatiale dans lesdites bandes de fréquences, mais sur une orbite différente de celle des satellites géostationanaires, serait incompatible avec les plans mentionnées aux paragraphes *a*) et *b*);

décide

que les administrations doivent faire en sorte que leurs stations spatiales dans les bandes de fréquences considérées utilisent l'orbite géostationnaires, à l'exclusion de toute autre orbite.

AU RÉSOLUTION Nº 507

Relative à l'établissement d'accords et de plans associés pour le service de radiodiffusion par satellite (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est important de faire le meilleur usage possible de l'orbite des satellites géostationnaires et des bandes de fréquences attribuées au service de radiodiffusion par satellite;
b) Que le grand nombre d'installations de réception, utilisant des antennes directives, qui pourront être mises en place pour un service de radiodiffusion par satellite pourra être un obstacle au changement des emplacements des stations spatiales de ce service sur l'orbite des satellites géostationnaires à partir du moment où elles seront mises en service;
c) Que les émissions de radiodiffusion par satellite pourraient créer des brouillages nuisibles sur une grande partie de la surface de la Terre;
d) Que les autres services bénéficiant d'attributions dans la même bande ont desoin d'utiliser celle-ci avant la mise en œuver du service de radiodiffusion par satellite;

décide

1. Que les stations du service de radiodiffusion par satellite seron établies et exploitées conformément à des accords et des plans associés établis par des conférences administratives, mondiales ou régionales selon le cas, auxquelles pourront participer toutes les administrations intéressées et celles dont les services ont susceptibles d'être affectés;

2. Que, pendent la période précédant l'entrée en vigueur de tels accords et plans associées, les administrations et l'IFRB appliquent la precédure décrite dans la Résolution 33;

invite le consiel d'administration

à poursuivre l'examen de la question de la convocation de conférences administratives mondiales ou de conférences administratives régionales s'il y a lieu, en vue de fixer les dates et lieux ainsi que l'ordre du jour convenables.

---

(1) Remplace la Résolution Nº Sat-7 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusions par satellite (Génève, 1977).

(2) Remplace la Résolution Nº Spa2-2 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

DI

RÉSOLUTION Nº 508

Relative à la convocation d'une conférence administrative mondiale des radiocommunications pour la planification des bandes d'ondes décamétriques attribuées au service de radiodiffusion

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la situation existant actuellement dans les bandes d'ondes décamétriques attribuées en exclusivité au service de radiodiffusion n'est pas satisfaisante;

b) Qu'il importe de faire en sorte que soient garantis à tous les pays des droits égaux de libre utilisation de ces bandes;

décide

1. Que l'utilisation des bandes d'ondes décamétriques attibuées en exclusivité ou en partege au service de radiodiffusion (à l'exclusion des bandes réservées á la radiodiffusion dans la Zone tropicale) fasse l'objet d'une planification par une conférence administrative mondiale des radiocommunications;

2. Que la planification soit fondée sur l'utilisation d'émissions à double bande latérale (DBL). La conférence devrait également étudier la manière selon laquelle un système à bande latérale unique (BLU) pourrait être introdiut progressivement sans dégrader des émissions à double bande latérale;

3. Que la conférence visée au paragraphe 1 comporte deux sessions;

4. Que la première session:

4.1. Soit chargée de spécifier les critères techniques pour la planification et les principes devant régir l'utilisation des bandes d'ondes décamétriques attrubués au service de radiodiffusion, en particulier:

4.1.1. La puissance appropriée pour la radiodiffusion à ondes décamétriques, compte tenu des autres facteurs techniques pertinents;

4.1.2. Les besoins de chaque pays en matière de radiodiffusions nationale et internationale;

4.1.3. Le nombre maximal de fréquences à utiliser pour la diffusion d'un même programme à destination d'une même zome;

4.1.4. La spécification d'un système à bande latérale unique pouvant être utilisé dans l'avenir pour la radiodiffussion à ondes décamétriques;

4.2. Décide en outres des principes de planification à appliquer et de la méthode de planification á utiliser par la deuxième session;

5. Que, à sa seconde, qui devrait se tenir au plus tôt 12 mois et au plustard 18 mois après la première session, la conférence:

5.1. Procède à la planification conformémente aux principes et à la méthode fixés lors de la première session;

5.2. Passe en revue et, si besoin est, révise les dispositions pertinentes du Règlement des radiocommunications relatives au service de radiodiffusion à ondes décamétriques;

demande instamment aux administrations

en attendant que la conférence se tienne, de ne pas utiliser des émetteurs d'une puissance plus élevée qu'il n'est besoin pour assurer une réception satisfaisante et de faire em sorte que le nombre de fréquences utilisées corresponde au minimun nécessaire;

attire l'attention du Conseil d'administration

sur l'urgence que revêt cette conférence, et

invite le Conseil d'adnisnistration

à prendre toutes les dispositions nécessaires pour la convocation de la conférence et à fixer la date de la première session le plus tôt possible après la prochaine Assemblée plénière du CCIR compte tenu du délai minimal fixé dans l'article 58 (numéro **303**) de la Convention;

prie l'IFRB

d'effectuer les études techniques et les travaux préparatoires nécessaires, y compris ceux visés au numéro **1771** du Règlement des radiocommunications;

prie le CCIR

d'accélérer les études faisante l'objet des Recommandations 500 et 501.

CQ

RÉSOLUTION Nº 509

Relative à la convocation d'une conférence régionale de radiodiffusion chargée de réexaminer et de réviser les dispositions des Actes finals de la Conférence africaine de radiodiffusion sur ondes métriques et décimétriques (Génève, 1963).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le dernier Plan africain de radiodiffusion sur ondes métriques et décimétriques a été établi à Génève, en 1963, pour la radiodiffusion sonore dans la bande II (87,5-100 MHz) et pour la radiodiffusion télévisuelle dans les bandes I (47-68 MHz), III (174-233 MHz) et V (582-960 MHz);
b) Que certains pays africains n'ont pu participer à la Conférence africaine de radiodiffusion sur ondes métriques et décimétriques (Génève, 1963);
c) Que nombre d'autres pays africains sont, depuis lors, devenus indépendants et que ces pays devront être inclus dans un nouveau plan;

notant

a) Qu'il est prévu d'organiser une conférence de planification de la radiodiffusion sonore à modulation de fréquence pour la bande 87,5-108 MHz (voir Résolution **510**);
b) L'extension de 174-223 MHz, de l'attribution qui a été faite au service de radiodiffusion (télévision) à titre primaire dans la Région 1;

constantant

qu'il est nécessaire d'actualiser le Plain existant;

décide

qu'une conférence régionale sera convoquée aussitôt que possible, et de préference avant 1984, afin de réexamier et de réviser les dispositions du Plan actuel de radiodiffusion télévisuelle en ondes métriques et décimétriques (Génève, 1963) pour la Zone africaine de radiodiffusion, compte tenu des assignations contenues dans le Plan de Stockholm, 1961;

invite le Conseil d'administration

à prendre toutes les dispositions nécessaires pour convoquer cette conférence et pour en fixer la date et l'ordre du jour;

demande au CCIR

d'effectuer les études techniques nécessaires;

demande à l'IFRB

d'effecture les travaux préparatoires nécessaires à ladite conférence.

BM

RÉSOLUTION Nº 510

Relative à la convocation d'une conférence de planification de la radiodiffusion sonore dans la bande 87,5-108 MHz pour la Région 1 et certains pays concernés de la Région 3

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la bnde attribuée à titre primaire au service de radiodiffusion dans la Régions 1 a été élargie de 87,5-100 Mhz à 87,5-108 MHz;
b) Que dans la Région 1 la bande 100-108 MHz est actuellement attribuée au service mobile, sauf mobile aéronautique (R) et également au service fixe dans quelques pays;
c) Que plusieurs pays de la Région 3 ayant des frontiéres terrestres avec la Région 1 utilisent aussi cette bande pour le service de radiodiffusion;
d) Qu'il est nécessaire d'établir un nouveau plan de radiodiffusion sonore pour toute la bande 87,5-108 MHz, pour tous les pays de la Région 1 qui utilisent ou qui prévoient d'utiliser la bande 87,5-100 MHz pour la radiodiffusion sonore à modulation de fréquence;

e) Que, pour d'autres pays de la Régions 1, il y a lieu d'établir un plan de radiodiffusion sonore dans la bande 100-108 MHz;

f) Que ce nouveau plan ne devrait en aucun cas affecter les assignations existantes ou en projet, aux stations de télévision dans la bande 87,5-100 MHz, qui sont conformes à l'Accord régional de Stockholm, 1961;

g) Que ce nouveau plan, dans la bande 87,5-100 MHz, ne devrait pas avoir pour conséquence de détérioration des zones de service de stations existantes de radiodiffusion sonore fonctionnantt conformémente à l'Accord régional de Stockholm, 1961, situées dans la zone de coordination avec les pays utilisant cette bande pour la télévision conformément à l'Accord régional de Stockholm, 1961;

h) Qu'il est nécessaire d'introduire dès que possible des stations de radiodiffusion sonore dans la bande 100-108 MHz conformément à ce plan;

i) Qu'il est possible que les installations de radionavigation utilisées pour l'atterrissage automatique des aéronefs et fonctionnante dans la bande adjacente 108-112 MHz soient soumises à des brouillages préjudiciables par des stations de radiodiffusion situées à proximité et fonctionnant dans la bande 87,5-108 MHz, si les fréquences des stations respectives ne sont pas judicieusement choisies, et que de tels brouillages mettent en danger la vie humaine;

décide

1. Qu'une conférence régionale se tiendra avant le 31 décembre 1983 en vue d'établir um accord pour la Région 1 et les pays concernés de la Région 3 et un plan associé relatif á la radiodiffusion sonore dans la vande 87,5-108 MHz pour la Régions 1 et les parties de l'Afghanistan et de l'Iran contiguês à la Région 1.

2. Que cette conférence sera scindée en deux sessions:

La première session permattra d'établir les bases techniques pour la preéparation du plan, les critères mutuels de partage enter le service de radiodiffusion sonore et les autres services, y compris le service de radiodiffusion (télévision) foncionnant dans la bande 87,5-108 MHz;

La seconde session, que si tiendra se préférance six à douze mois après la première, devra élaborer l'accord et le plan associé;

3. Que l'on doit donner aux pays concernés de la Région 3 la possibilité de participer à cette conférence;

prie le CCIR

d'étudier l'urgence les bases techniques nécessaires à la planfication et à la détermination des critères de protection entre les stations de radiodiffusion sonore et les stations de radiodiffusion télévisuelle et entre les stations de radiodiffusion sonore et les stations des services fixe et mobile, sauf mobile aéronautique (R);

invite le Conseil d'adimistration

à fixer les dates et l'orde du jour de cette conférence;

demande aux administrations

de tenir compte, lors de la planification de la bande 87,5-108 MHz, des problèmes de compatibilité avec les installations de radionavigation fonctionnant dans la bande adjacente.

CO

RÉSOLUTION Nº 600

Relative à l'utilisation pour le service de radionavigation, des bandes de fréquences 2900-3100 MHz, 5470-5660 MHz, 9200-9300 MHz et 9500-9800 MHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la présente Conférence a adopté des dispositions relatives à la mise au point de répondeurs devant être installés à bord de navires et utilisés dans le service de radionavigation maritime, dans les bandes de fréquences 2930-2950 MHz, 5470-5480 MHz et 9280-9300 MHz;

b) Que des attributions de fréquence pour le service de radionavigation, dans les bandes utilisées pour la radionavigation aéronautique et maritime, font déjà l'objet de demandes accrues, en raison:

i) De l'accroissement du nombre de radiodétecteurs maritimes de bord, accroissement qui est appelé à s'intensifier du fait de l'exigence visant á rendre obligatoire l'instalation de ces équipements à bord des navires dans le monde entier;

ii) Des besoins accrus en matière d'auxiliaires de la navigation et de répondeurs appelés à fonctionner en association avec des radiodètecteurs primaires;

iii) De la nécessité d'accroître l'utilisation de cette bande para les stations du service de radionavigation aéronautique, compte tenu du fait que l'on exige aussi l'instalation de ces équipaments à bord d'áeronefs à tire obligatoire dans le monde entier;

c) Que des brouillages préjudiciables de produisent de plus en plus la bande 9300-9500 MHz en raisom de ces circonstances;
d) Que de telles applications des radiodétecteurs soulèvent d'importants problèmes de sécurité;

notant

a) Les dispositions de la Recommandation 605;
b) Les conclusions de la Réunion spéciale préparatoire du CCIR;
c) Le nécessité de disposer de renseignements complémentaires, concernant l'exploitation et les aspects techniques, pour décider de l'utilisation la plus efficace des fréquences;

décide

1. Que la prochaine conférence administrative mondiale des radiocommunications compétente devra:
1.1. Réexaminer les renvois relatifs à ces bandes attribuées au service de radionavigation et y apporter les modifications qu'elle jugera appropriées, à la lumière d'études complémentaires;
1.2. Élaborer des recommandations appropriées à caractère réglementaire;
2. Que le CCIR devra poursuivre l'examen des aspects techniques et formuler des Avis;

invite

1. Le Conseil d'administration á faire en sorte que les questions de radionavigation intéressant les services mobiles figurent à l'ordre du jour de la prochaine conférence de radiocommunications compétente en matière de services mobiles;
2. Les administrations à étudier l'utilisation de ces bandes par les services de radionavigation et à soumettre des propositions en vue de l'utilisation efficace desdites bandes;

prie le Secrétaire général

de soumettre la présente Résolution à l'OMCI et à l'OACI, et de demander à ces organisations d'examiner d'urgence les exigences opérationnelles des services de radionavigation maritime et aéronautique qui utilisent ces bandes de fréquences et de formuler des recommandation appropriées afin d'aider les administrations à préparer cette conférence.

AL

RÉSOLUTION N° 601

Relative aux Normes et aux Avis concernant les radiobalises de localisation des sinistres fonctionnant sur les fréquences 121,5 MHz et 243 MHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les radiobalises de localisation des sinistres qui fonctionnent sur les fréquences 121,5 MHz et 243 MHz sont destinées à faciliter les óperations de recherche et de sauvetage;
b) Que les fréquences 121,5 MHz et 243 MHz sont couramment utilisées par les aéronefs qui participent a des opérations de recherche et de sauvetage;
c) Que l'Organisation de l'aviation civile internationale a recommandé des caractéristiques du signal et des spécifications techniques applicables aux appareils d'aéronef qui fonctionnent sur la fréquence 121,5 MHz ou sur la fréquence 243 MHz, ou sur ces deux fréquences;

décide

qu'il convient que les administrations qui autorisent l'utilisation de radiobalises de localisation des sinistres qui fonctionnent sur la fréquence 121,5 MHz ou sur la fréquence 243 MHz, ou sur ces deux fréquences, fassent en sorte que ces radiobalises soient conformes aux Normes et aux Avis pertinents de l'Organisation de l'aviation civile internationale et du Comité consultatif international des radiocommunications.

---

(1) Remplace la Résolution N° Mar7 de la Conférence administrative mondiale des radiocommunications (Génève, 1967).

BN

RÉSOLUTION N° 640

Relative à l'utilisation internationale, en cas de catastrophe naturelle, des radiocommunications dans les bandes de fréquences attribuées au service d'amateur

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'en cas de catastrophe naturelle, les systèmes de communication normaux sont fréquemment surchargés, endommagés ou totalement inutilisables;

b) Qu'il est indispensable de rétablir rapidement les communications pour faciliter les opérations de secours organisées à l'échelle mondiale;

c) Que les bandes attribuées au service d'amateur ne sont pas soumises à des plans internationaux ou à des procédures de notification et qu'elles se prêtent donc bien à une utilisation à court terme dans le cas d'urgence;

d) Que les communications internationales en cas de catastrophe seraient facilitées par le recours provisoire à certaines bandes de fréquences attribuées au service d'amateur;

e) Que, dans de telles circonstances, les stations du service d'amateur, en raison de leur large dispersion et de leur capacité démontrée dans des cas semblables, peuvent aider à répondre aux besoins essentiels en communications;

f) Qu'il existe des réseaux nationaux et régionaux d'amateur, pour les cas d'urgence, qui utilisent certaines fréquences dans les bandes attribuées au service d'amateur;

g) Qu'en cas de catastrophe naturelles, la communication directe entre les stations du service d'amateur et d'autres stations pourrait se révéler utile, notamment pour effectuer des communications indespensables jusqu'au rétablissement des communications normales;

reconnaissant

que les droits et les responsabilités en matière de communications en cas de catastrophe naturelle relévent des administrations concernées;

décide

1. Que les bandes attribuées au service d'amateur, spécifiées au numéro **510,** peuvent être utilisées par les administrations pour répondre aux besoins de communications internationales en cas de catastrophe;

2. Que ces bandes ainsi utilisées ne doivent servir qu'à des communications se rapportant à des opérations de secours en cas de catastrophe naturelle;

3. Que, pour les communications en cas de catastrophe, l'utilisation des bandes attribuées au service d'amateur par des stations n'appartenant pas à ce service doit être limitée à la période d'urgence et aux zones géographiques particulières, définies par l'autorité responsable du pays affecté;

4. Que les communications établies en cas de catastrophe doivent être effectuées à l'intérieur de la zone sinistrée et entre la zone sinistrée et le siège permanent de l'organisation assurant les opérations de secours;

5. Que de telles communications ne doivent être effectuées qu'avec le consentement de l'administration du pays frappé par la catastrophe;

6. Que les communications de secours d'origine extérieure au pays sinistré ne doivent pas remplacer les réseaux d'amateur nationaux ou internationaux déjà prévus pour les situations d'urgence;

7. Qu'une étroite collaboration est souhaitable entre les stations du service d'amateur et les stations d'autres services de radiocommunication qui pourraient estimer nécessaire d'utiliser les fréquences attribuées au service d'amateur pour les communications en cas de catastrophe;

8. Que de telles communications internationales de secours doivent être, dans la mesure du possible éviter de causer des brouillages aux réseaux du service d'amateur;

invite les administrations

1. À satisfaire aux besoins pour les communications internationales en cas de catastrophe;

2. À prévoir, dans leur réglementation nationale, les moyens de satisfaire aux besoins pour les communications d'urgence.

CR

RÉSOLUTION N° 641

Relative à l'utilisation de la bande de fréquences 7000-7100 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Remplace la Résolution N° 10 de la Conférence administrative des radiocommunications (Génève, 1959).

considérant

a) Que le partage des bandes de fréquences entre le service d'amateur et le service de radiodiffusion n'est pas souhaitable et qu'il convient de l'éviter;
b) Qu'il est souhaitable que ces services reçoivent, dans la bande 7, des attributions mondiales exclusives;
c) Que la bande 7000-7100 kHz est attribuée en exclusivité au service d'amateur dans le monde entier;

décide

que la bande 7000-7100 kHz doit être interdite au service de radiodiffusion et que les stations de radiodiffusion doivent cesser d'émettre sur des fréquences de cette bande.

BV RÉSOLUTION N° 642

Relative à la mise en service des stations terriennes du service d'amateur par satellite

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaissant

que les procédures des articles **11** et **13** sont applicables au service d'amateur par satellite;

reconnaissant en outre

a) Que les caractéristiques des stations terriennes du service d'amateur par satellite sont très diverses;
b) Que les stations spatiales du service d'amateur par satellite sont conçues pour que les stations terriennes d'amateur de tous les pays y aient accès;
c) Que la coordination entre les stations des services d'amateur et d'amateur par satellite s'effectue sans qu'il soit besoin de recourir à des procédures officielles;
d) Qu'il incombe à l'administration qui autorise une station spatiale du service d'amateur par satellite de mettre fin à tout brouillage préjudiciable, en application des dispositions du numéro **2741** du Règlement des radiocommunications;

note

que certains renseignements spécifiés dans les appendices 3 et 4 ne peuvent raisonnablement être fournis pour des stations terriennes du service d'amateur par satellite;

décide

1. Que lorsqu'une administration (ou une administration agissant au nom d'un groupe d'administrations nommément désignées) se propose d'établir un système à satellites du service d'amateur par satelllite et souhaite publier des renseignements relatifs aux stations terriennes de ce système, elle pourra:

1.1. Communiquer à l'IFRB la totalité, ou une partie, des renseignements demandés dans l'appendice 3; l'IFRB publiera ces renseignements dans une section spéciale de sa circulaire hebdomadaire en demandant que des commentaires lui soient communiqués dans un délai de quatre mois à partir de la date de publication;

1.2. Notifier, aux termes des numéros **1488** à **1491**, la totalité ou une partie des renseignements énumérés dans l'appendice 3; l'IFRB les inscrira dans une liste spéciale;

2. Que ces renseignements comprendront au minimum les caractéristiques d'une station terrienne type du service d'amateur par satellite, pouvant transmettre des signaux à la station spatiale pour déclencher ou modifier les fonctions de la station spatiale ou pour y mettre fin.

CJ RÉSOLUTION N° 700

Relative au partage entre le service fixe par satellite dans les Régions 1 et 3 et le service de radiodiffusion par satellite dans la Région 2 dans la bande 12,2-12,7 GHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaissant

a) Qu'elle a fait une attribution au service de radiodiffusion par satellite dans la bande 12,1-12,7 GHz dans la Région 2;
b) Que l'attribution au service fixe par satellite a été maintenue dans la bande 12,5-12,75 GHz, dans les Régions 1 et 3, et qu'une attribution additionnelle a été faite dans la bande 12,2-12,5 GHz pour la Région 3;

c) Que, lors de l'établissement du Plan de radiodiffusion par satellite (Génève, 1977) pour les Régions 1 et 3, il a été dûment tenu compte des besoins d'exploitation futurs du service fixe par satellite dans la Région 2 et que, à cet effet, il a été nécessaire d'imposer des restrictions pour la préparation du Plan et la procédure de modification associée;

décide

1. Que, avant l'entrée en vigueur des dispositions appropriées et du plan associé que doit établir la conférence régionale pour la planification du service de radiodiffusion par satellite dans la Région 2, les dispositions de la Résolution 33 ainsi que les dispositions de l'article 11 s'appliqueront à la coordination entre les stations spatiales du service de radiodiffusion par satellite de la Région 2 et les stations spatiales du service fixe par satellite des Régions 1 et 3;

2. Qu'en établissant un plan (ainsi que toute procédure de modification associée) pour le service de radiodiffusion par satellite dans la Région 2, on devra tenir compte de la nécessité d'un fonctionnement satisfaisant, dans l'avenir, du service fixe par satellite dans les Régions 1 et 3, et que si l'on juge nécessaire d'imposer des contraintes á ce service, en sorte qu'aucun brouillage préjudiciable ne soit causé aux services fixes par satellite ou de radiodiffusion par satellite en question, il conviendra que ces contraintes ne soient en aucun cas plus strictes que celles imposées au service fixe par satellite dans la Région 2 par l'appendice 30;

3. Que, pour indiquer à la conférence régionale les principes directeurs à suivre pour atteindre l'objectif énoncé au point 2 ci-dessus, le CCIR devra étudier d'urgence les dispositions techniques requises, en tenant compte des systèmes existants ou projetés du service fixe par satellite pour l'exploitation dans la bande 12,5-12,7 GHz, dans la Région 1 et 12,2-12,7 GHz dans la Région 3.

CH

RÉSOLUTION N° 701

Relative à la convocation d'une conférence administrative régionale des radiocommunications chargée d'établir un plan détaillé pour le service de radiodiffusion par satellite dans la bande des 12 GHz et les liaisons de connexion associées dans la Région 2 (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Que la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) a adopté un Plan d'assignations de fréquence et de positions orbitales pour le service de radiodiffusion par satellite dans la bande des 12 GHz, pour les Régions 1 et 3;

b) Que ladite Conférence a adopté des dispositions intérimaires, en atendant l'établissement d'un plan analogue pour la Région 2;

c) Que, à la suite d'une consultation des Membres de la Région 2 par le Conseil d'administration, on prévoit la convocation, en 1983, d'une conférence administrative régionale des radiocommunications pour la radiodiffusion par satellite pour la Région 2;

d) Que la présente Conférence a adopté des modifications du Tableau d'attribution des bandes de fréquences, qui auront de sérieuses répercussions sur les conditions sur lesquelles la Conférence de la Région 2 se fondera pour établir son plan pour le service de radiodiffusion par satellite dans la bande des 12 GHz;

e) Que la présente Conférence a aussi décidé d'incorporer les dispositions et le Plan associé adoptés par la Conférence de 1977 dans le Règlement des radiocommunications en tant qu'appendice 30;

considérant

a) Que les annexes 8 et 9 de l'appendice 30 contiennent les données techniques et les critères de partage utilisés pour l'établissement des dispositions et du Plan associé;

b) Qu'il convient de tirer parti des progrés techniques découlant des expériences effectuées avec des satellites de radiodiffusion depuis 1977;

c) Qu'il convient aussi de tirer parti des études récentes du CCIR;

d) Que, en ce qui concerne les services de radiocommunication spatiale, la présente Conférence a attribué, dans la Région 1, la bande 12,3-12,7 GHz au service de radiodiffusion par satellite et la bande 12,1–12,3 GHz au service fixe par satellite et au service de radiodiffusion par satellite, conformément aux dispositions du renvoi **841** du Tableau d'attribution des bandes des fréquences;

e) Que la présente Conférence a désigné les bandes 14,5-14,8 GHz et 17,3-18,1 GHz pour être utilisées sur les liaisons de connexion vers les satellites de radiodiffusion;

f) Qu'il y a de sérieux avantages á planifier les liaisons montantes en même temps qu'on effectue la planification des systèmes de radiodiffusion par satellite fonctionnant dans la bande des 12 GHz;

---

(1) Remplace les Résolutions N° Sat–8 et N.° Sat–9 et la Recommandation Sat–8 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

reconnaissant

a) Qu'une segmentation de l'arc n'est plus nécessaire dans la bande 11,7-12,1 GHz et ne sera plus nécessaire dans la bande 12,1-12,3 GHz á la suite de la Conférence administrative régionale des radiocommunications de 1983;

b) Que les systèmes du service fixe par satellite fonctionnant dans la bande 11,7-12,2 GHz ne doivent pas imposer de restrictions à l'établissement d'un plan de radiodiffusion par satellite dans la Région 2, mais qu'il conviendra de prendre en considération dans les décisions de la conférence administrative régionale des radiocommunications de 1983, ceux d'entre eux qui seront développés jusqu'à la date de la conférence administrative régionale des radiocommunications de 1983, et qui seront conformes aux dispositions des Actes finals de la Conférence administrative mondiale des télécomunications spatiales (Génève, 1971) et de la Conférence Administrative Mondiale des Radiocommunications pour la radiodiffusion par satellite (Génève, 1977);

décide

1. Qu'une Conférence administrative régionale des radiocommunications (CARR) à laquelle se réfère *notant c)* se tiendra au plus tard en 1983, afin de:

1.1. Diviser la bande 12,1-12,3 GHz en deux sous-bandes et d'attribuer, à titre primaire, la sous-bande inférieure au service fixe par satellite et la sous-bande supérieure au service de radiodiffusion par satellite, au service de radiodiffusion, au service mobile, sauf mobile aéronautique, et au service fixe (voir le numéro **841**);

1.2. Établir un plan détaillé d'assignations de fréquence et de positions orbitales pour le service de radiodiffusion par satellite dans la Région 2, dans la bandes 12,3-12,7 GHz et dans la portion de la bande 12,1-12,3 GHz qu'elle attribuera au service de radiodiffusion par satellite;

1.3. Planifier les liaisons de connexion dans une partie de la bande 17,3-18,1 GHz, de même largeur que la bande totale attribuée au service de radiodiffusion par satellite dans la bande des 12 GHz. Toutefois, les administrations pourront, pour les liaisons de connexion vers les satellites de radiodiffusion, utiliser des bandes de fréquence autres que les bandes prévues dans le plan, à condition que cette utilisation ne nécessite aucune modification du plan;

1.4. Établir des procédures qui réglement l'utilisation, par le service de radiodiffusion par satellite, des bandes spécificiés au paragraphe 1.2 de la présente Résolution et, si nécessaire, des procédures applicables aux liaisons de connexion correspondantes;

2. Que la planification devra tenir compte des sections pertinentes de l'appendice 30, et en particulier des annexes 4 et 5, ainsi que d'autres décisions prises par la présente Conférence. En prenant en considération les annexes 6, 7 et 8, il conviendra également de tenir compte des Avis les plus récents du CCIR et des derniers progrès de la technique;

3. Que le plan précisera l'assignation détailée des positions orbitales et des canaux disponibles, garantissant ainsi que les besoins en matière de radiodiffusion par satellite présentés par chaque administration seront satisfaits de façon équitable pour tous les pays intéressés. Il connviendra de garantir, par principe, à chaque administration de la Région, um nombre minimal (4) de canaux pour l'exploitation du service de radiodiffusion par satellite. Au-delà de ce minimum, on tiendra compte des caractéristiques particulières des pays (superficie, zones horaires, diversité linguistique, etc);

4. Que toutes les administrations dela Région 2 devront présenter à l'IFRB leurs besoins en ce qui concerne le service de radiodiffusion par satellite au plus tard un an avant le début de la Conférence administrative régionale des radiocommunications chargée d'établir un plan pour ce service dans la Région 2. Ces besoins pourront être mis à jour au gré des administrations. On considère que le mot «besoin» inclut le nombre et les limites de chaque zone de service ainsi que le nombre de canaux nécessaires pour chaque zone. Six mois avant la date limite fixée pour envoyer les demandes, l'IFRB rappellera aux administrations, par lettre-circulaire ou télégramme, qu'elles sont dans l'obligation de faire connaître leurs besoins;

5. Que la planification se fera sur la base de la réception individuelle, mais que chaque administration pourra utiliser le système de réception qui répond le mieux à ses besoins (réception individuelle ou réception communautaire, ou les deux);

6. Que, lors de la planification, on ne devra pas perdre de vue que les systèmes doivent être conçus de manière à réduire au minimum les diférences et incompatibilités techniques avec les systèmes utilisés dans d'autres Régions;

7. Que la planification devrait tenir compte des dispositions des Résolutions **31** et **700** relatives à la question du partage interrégional;

invite le Conseil d'administration

à prendre les mesures nécessaires pour la convocation de ladite conférence administrative régionale des radiocommunications, en se fondant sur les dispositions de la présente Résolution pour en établir l'ordre du jour;

invite le CCIR

à effectuer les études nécessaires pour présenter em temps utile des renseignements techniques dont la conférence aura probablement besoin comme base de ses travaux (voir aussi la Recommandation 101);

invite l'IFRB

1. À demander à toutes les administrations des pays de la Région 2 de présenter leurs besoins en matière de service de radiodiffusion par satellite conformément aux dispositions du paragraphe 4 ci-dessus;

2. À rassembler les renseignements présentés par les administrations sous une forme permettant d'en faire une étude comparative, à communiquer ces renseignements au Secrétaire général pour publication et à les envoyer aux administrations au plus tard neuf mois avant l'ouverture de la conférence administrative régionale des radiocommunications.

DK RÉSOLUTION N° 702

Relative à la convocation d'une conférence administrative régionale des radiocommunications chargée de définir des critères de partage pour l'utilisation des bandes des ondes métriques et décimétriques attribuées aux services fixe, de radiodiffusion et mobile dans la Région 3.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les attributions de fréquences dans les bandes des ondes métriques et décimétriques ont subi pendant cette Conférence d'importantes révisions occasionnant des partages essentiellement entre les services fixe, de radiodiffusion et mobile;
b) Que le développement anarchique des services, qui partagent cette portion du spectre dans toute la Région, risque d'entraîner une utilisation désordonnée et inefficace de ce dernier;
c) Qu'aucun critère bien établi ne définit le partage du spectre entre les services auxquels ces bandes sont attribuées;
d) Que, dans la Région 3, nul arrangement régional ne régit l'installation de stations de radiodiffusion dans ces bandes;
e) Qu'il n'est pas certain, à ce stade, qu'un plan d'assignation soit nécessaire pour la Région 3;

notant

la priorité qu'elle a donnée à la convocation de futures conférences administratives des radiocommunications;

décide

1. Qu'une conférence administrative régionale des radiocommunications soit convoquée en temps voulu;
2. Que cette conférence régionale définisse les critères techniques de partage entre les services fixe, de radiodiffusion et mobile auxquels les bandes en cause sont attribuées;
3. Que, après définition de ces critères techniques, la conférence décide également des mesures à prendre par la suite;

invite le Conseil d'administration

à préparer la convocation de ladite conférence administrative régionale des radiocommunications en s'appuyant sur les indications données dans la présente Résolution pour établir l'ordre du jour de la conférence;

invite le CCIR

à mener les études nécessaires pour présenter, en temps voulu, les informations techniques vraisemblablement nécessaires pour servir de base aux travaux de la conférence régionale;

invite les administrations

à contribuer de manière appropriée aux études du CCIR.

CW RÉSOLUTION N° 703

Relative aux méthodes de calcul et aux critères de brouillage recommandés par le CCIR en ce qui concerne le partage des bandes de fréquences entre services de radiocommunication spatiale et services de radiocommunication de Terre ou entre services de radiocommunication spatiale (1).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, dans les bandes de fréquences utilisés en partage, avec égalité des droits, par les services de radiocommunications spatiale et les services de radiocommunication de Terre, il faut imposer à chacun de ces services certaines restrictions d'ordre technique et certaines procédures de coordination afin de limiter les brouillages mutuels;

(1) Remplace la Résolution Spa-6 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

b) Que, dans les bandes de fréquences utilisées en partage par des stations spatiales situées à bord de satellites géostationnaires, il faut imposer des procédures de coordination afin de limiter les brouillages mutuels;
c) Que les méthodes de calcul et les critères de brouillage se rapportant aux procédures de coordination mentionnées aux paragraphes *a*) et *b*) ci-dessus, sont fondés sur des Avis du CCIR;
d) Que, en raison d'une part des heureux résultats de l'utilisation partagée des bandes de fréquences par les services de radiocommunication spatiale et les services de radiocommunication de Terre, d'autre part des progrès constants de la technique spatiale, chaque Assemblée plénière du CCIR qui s'est depuis la X[e] Assemblée plénière (Génève, 1963) a amélioré certains des critères techniques que l'Assemblée plénière précédente avait préconisés;
e) Que l'Assemblée plénière du CCIR se réunit tous les trois ans alors que les conférences administratives des radiocommunications qui sont habilitées à modifier le Règlement des radiocommunications en tirant largement parti des Avis du CCIR se tiennent, en pratique, moins fréquemment et beaucoup moins régulièrement;
f) Que la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) reconnaît aux Membres de l'Union la faculté de conclure des accords particuliers sur des questions de télécomunications; toutefois, ces accords ne doivent pas aller à l'encontre des dispositions de la Convention ou des Règlements y annexés en ce qui concerne les brouillages préjudiciables causés aux services de radiocommunications des autres pays;

convaincre

a) Que les Assemblées plénières du CCIR qui se tiendront à l'avenir, apporteront vraisemblablement de nouvelles modifications aux méthodes de calcul et critères de brouillage recommandés;
b) Que les administrations devraient être informées à l'avance des projets d'Avis pertinents du CCIR;
c) Qu'il est souhaitable que les administrations appliquent, dans la mesure du possible, les Avis en vigueur du CCIR relatifs aux critères de partage, lorsqu'elles établissent des plans de système destinés à fonctionner dans les bandes de fréquences partagées, avec égalité des droits, entre services de radiocommunication spatiale et services de radiocommunication de Terre ou entre services de radiocommunication spatiale;

invite le CCIR

a) À demander aux comissions d'études de préparar, lors de leurs réunions finales précédant l'Assemblée plénière, une liste provisoire signalant les passages pertinents des projets d'Avis révisés et des projets de nouveaux Avis du CCIR qui ont une incidence sur les méthodes de calcul et les critères de brouillage, ainsi que les sections spécifiques du Règlement des radiocommunications auxquelles ils s'appliquent, pour ce qui est du partage entre services de radiocommunication spatiale et services de radiocommunication de Terre, ou entre services de radiocommunication spatiale;
b) À demander au Directeur du CCIR de faire parvenir cette liste aux administrations et à l'IFRB accompagnée des textes de ces projets d'Avis révisés et de nouveaux Avis dans le délai de trente jours qui suit les réunions finales des commissions d'études;

décide

1. Que l'IFRB diffusera immédiatement à toutes les administrations les renseignements mentionnés au paragraphe *b*) du point *invite* du dispositif, de telle manière que ces renseignements leur parviennent dès que possible avant la convocation de l'Assemblée plénière suivante.

Cet envoi devra être accompagné d'une note indiquant que les textes joints sont soumis à l'approbation de l'Assemblée plénière suivante du CCIR;

2. *a*) Que chaque Assemblée plénière du CCIR, après avoir adopté tout ou partie des Avis pertinents, examiné et approuvé les parties appropriées de la liste mentionnée au paragraphe *a*) du point *invite* du dispositif, prendra les dispositions nécessaires pour que le Secrétaire général soit informé de cette liste ainsi que des Avis qui ont une incidence sur les méthodes de calcul appropriées et les critères de brouillage à utiliser;

b) Que, dans um délai de 30 jours, le Secrétaire général diffusera cette liste, ainsi que les textes pertinents à toutes les administrations, pour leur demander d'indiquer, dans un délai de quatre mois, quels sont les Avis du CCIR ou les critères techniques définis dans les Avis mentionés au paragraphe 2, *a*), ci-dessus, dont elles acceptent l'utilisation dans l'application des dispositions pertinents du Règlement des radiocommunications;

3. Que les administrations qui ne répondront pas à la demande du Secrétaire général dans un délai de quatre mois recevront télégramme demandant de communiquer leur décision concernant l'application de ces Avis dans le cadre des dispositions pertinentes du Règlement des radiocommunications. Si aucune réponse n'est reçue d'une administration dans un délai de 30 jours à compter de la date d'expédition du télégramme, on considérera que cette administration ne souhaite pas exprimer une opinion à ce moment;

4. Que, au cas où une administration, dans sa réponse à la demande du Secrétaire général, indiquera que tel Avis du CCIR, ou tel critère technique défini dans ces Avis, n'est pas acceptable pour elle, dans le cas où une administration ne répondra pas à la demande du Secrétaire général comme il est indiqué au paragraphe 3 ci-dessus, les méthodes de calcul et les critères de brouillage pertinents définis dans le Règlement des radiocommunications continueront à s'appliquer dans les cas concernant cette administration;

5. Que le Secrétaire général publiera, à titre d'information pour les administrations, une liste établie par l'IFRB sur la base des réponses reçues à la demande susvisée, des Avis du CCIR ou des méthodes de calcul et des critères de brouillage

pertinents définis dans ces Avis, avec l'indication des administrations pour lesquelles chacun de ces Avis ou chacun de ces critères techniques est acceptable ou inacceptable. Cette liste récapitulative incluera aussi les noms des administrations mentionnées au paragraphe 3 ci-dessus;

6. Que l'IFRB devra tenir compte:

a) Des conditions d'application des méthodes de calcul et des critères de brouillage du CCIR, lorsqu'il procédera à des examens techniques dans des cas intéressant uniquement des administrations pour lesquelles ces méthodes et ces critères sont acceptables;

b) Des conditions d'application des méthodes de calcul et des critères de brouillage définis dans le Règlement des radiocommunications sur la base de la liste récapitulative mentionnée au paragraphe 5 ci-dessus, lorsqu'il procédera à des examens techniques, dans des cas intéressant les autres administrations;

7. Que le Secrétaire général rappellera annuellement aux administrations qui n'auront pas encore répondu, de lui communiquer leur décision en application du paragraphe 3 ci-dessus;

8. Que, si des questions se posent ultérieurement à l'égard de l'application de l'une ou l'autre des méthodes de calcul et de l'un ou l'autre des critères de brouillage pertinents, dans un cas impliquant des administrations dont il est question au paragraphe 3 ci-dessus, l'IFRB s'enquerra auprès des administrations intéressées afin de savoir si elles seraient d'accord pour que soient appliqués les méthodes et critères techniques définis dans les Avis pertinents du CCIR et dont il est question au paragraphe 2 ci-dessus.

9. Que la liste récapitulative publiée en application du paragraph 5 ci-dessus sera mise à jour sur la base des réponses reçues en application des paragaphes 7 e 8 ci-dessus.

RECOMMANDATIONS

Note du secrétaire général

En application des décisions prises par la Conférence, les Recommandations ont été classées et numérotées dans les catégories et selon le système de numérotation indiqués ci-dessous. En outre, dans l'application de ce processus de classification, il est apparu que certaines Recommandations faisant partie d'un groupe donné étaient en rapport direct avec des Recommandations figurant dans d'autres groupes; il a été tenu compte de ce fait, afin de faciliter la consultation des textes.

	Numéros
Recommandations d'application générale	1-99
Principes, procédures générales et coopération	1-20
Procédures spécifiques	30-39
Questions techniques	60-69
Se réfèrent également: N^os^ 8, 31, 100, 505 et 711.	
Equipement terminologie	70-79
Se réfèrent également: N^os^ 67 et 69.	
Service fixe service fixe par satellite	100-199
Se réfèrent également: N^os^ 12, 703 et 706	
Service mobile/service mobile par satellite	200-299
Se réfèrent également: N^os^ 12, 703 et 706.	
Service mobile maritime/service mobile maritime par satellite	300-399
Se réfèrent également: N^os^ 7, 9, 200, 201, 202, 203, 204 et 604.	
Service mobile aeronautique/service mobile aeronautique par satellite	400-499
Se réfèrent également: N^os^ 7, 9, 202, 204, 604 et 709.	
Service de radiodiffusion/service de radiodiffusion par satellite	500-599
Se réfèrent également: N^os^ 9, 12, 101, 704, 705 et 712.	
Autres services	600-699
Se réfèrent également: N^os^ 12, 701, 703, 704, 707 et 710.	
Relatives a plus d'un service	700-799
Se réfèrent également: N^os^ 2, 3, 12, 61 et 65.	

Voir également à ce propos, l'«Index analytique» (partie B) établi par le Secrétariat général.

XE

RECOMMANDATION N° 1

Relative à l'utilisation de systèmes de radiocommunications spatiales en cas de catastrophes naturelles, d'épidémies, de famines et d'autres situations critiques analogues (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, en cas de catastrophes naturelles, d'épidémies, de famines et d'autres situations critiques analogues, des vies peuvent être sauvées par des secours prompts et efficaces;
b) Que des télécommunications rapides et fiables sont essentielles pour ces opérations de secours;
c) Que, à la suite des dégats qu'ils ont subis ou pour d'autres raisons, les moyens de télécommunication normaux des zones sinistrées sont fréquemment insuffisants pour les opérations de secours et que les ressources locales ne permettent pas de les retablir ou de les compléter rapidement;
d) Que l'emploi de systèmes de radiocommunications spatiales constitue l'un des moyens qui permettrait d'assurer des télécommunications rapides et fiables pour les opérations de secours;

notant

a) Que, d'après ce que l'on sait de la planification en matière de systèmes de radiocommunications spatiales, il n'est pas prévu de fréquences ni de voies désignées pour les radiocommunications en cas de sinistre;
b) Que, faute de telles dispositions, il n'est pas possible d'établir des spécifications pour des stations terriennes à fonctionnement universel pouvant être transportées rapidement;
c) Que le Rapport 554-1 du CCIR donne les résultats les plus récents des études relatives aux stations terriennes transportables affectées aux opérations de secours;

recommande

1. Que les administrations, individuellement ou en collaboration, prennent des mesures en vue de satisfaire aux besoins d'éventuelles opérations de secours lorsqu'elles établissent les plans de leurs systèmes de radiocommunications spatiales et qu'elle déterminent à cet effet des voies radioélectriques et des moyens à utiliser de préférence, pouvant être mis en œuvre rapidement pour des opérations de secours;

2. Que les administrations intéressées renoncent à appliquer les procédures de coordination prévues dans le Règlement des radiocommunications dans le cas des stations terriennes transportables affectées aux opérations de secours;

invite le CCIR

à continuer ses études sur les spécifications types ainsi que des fréquences à utiliser de préférence, pour des stations terriennes transportables et pour des appareils compatibles transportables, pour les radiocommunications fixes et mobiles destinées aux opérations de secours.

ZI

RECOMMANDATION N° 2

Relative à l'examen, par les conférences administratives mondiales des radiocommunications, de l'état d'occupation du spectre des fréquences dans le domaine des radiocommunications spatiales (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les bandes de fréquences utilisables pour les applications spatiales sont limitées en nombre et en largeur;
b) Que les emplacements possibles pour des satellites dont l'objet principal est l'établissement de liaisons de télécommunications sont en nombre limité et que certains emplacements sont plus favorables que d'autres pour certaines liaisons;
c) Qu'il convient de permettre à toutes les administrations d'établir les liaisons spatiales qu'elles jugent nécessaires;
d) Que l'importance et le coût des réseaux ou systèmes spatiaux sont tels qu'il est nécessaire d'apporter le moins d'entraves possibles à leur exploitation et à leur développement;
e) Que la technique est en constante et rapide évolution et qu'il convient d'assurer la meilleure utilisation possible des ressources dans le domaine des radiocommunications spatiales;

---

(1) Remplace la Recommandation N° Spa2-13 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).
(2) Remplace la Recommandation N° Spa2-1 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

f) Que les administrations doivent faire en sorte que les assignations de fréquence pour des applications spatiales soient utilisées de façon aussi efficace que possible en tenant compte du développement de la technique et soient abandonnées lorsqu'elles ne sont plus en service;

g) Que, malgré les dispositions de l'article 11 du Règlement des radiocommunications et les principes adoptés par la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971) lesquels prévoient des procédures de consultation et de coordination très étendues entre administrations en vue d'aménager au mieux tous les systèmes spatiaux, il peut se faire que, avec l'accroissement de l'emploi des fréquences et des emplacements orbitaux, les administrations rencontrent indûment des difficultés dans une ou plusieurs bandes de fréquences pour faire face à leurs besoins en matière de radiocommunication spatiales;

recommande

que la prochaine Conférence administrative mondiale des radiocommunications appropriée soit habilitée à traiter de la situation décrite au *considérant g)*, si elle se présente;

invite en conséquence le Conseil d'administration

si une telle situation se présente, à fixer l'ordre du jour de la prochaine Conférence administrative mondiale des radiocommunications appropriée de manière à lui permettre d'examiner sous tous ses aspects l'utilisation de la ou des bandes de fréquences considérées, y compris notamment les assignattions en cause enregistrées dans le Fichier international de référence des fréquences, et de trouver une solution au problème.

XO

RECOMMANDATION N° 3

Relative à la transmission d'énergie électrique au moyen de fréquences radioélectriques à partir d'un engin spatial

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il peut être possible dans le futur, du point de vue technique, de transformer certains parties du rayonnement solaire en énergie éléctrique à bord d'un engin spatial et de transmettre cette énergie jusqu'à la Terre par des techniques de transmission radioélectrique, et que cette énergie pourrait compléter les ressources mondiales d'énergie;

b) Que la transmission éventuelle de rayonnements d'une telle puissance pourrait avoir des effets défavorables sur la propagation dans l'ionosphère des ondes radioélectriques destinées à d'autres services;

reconnaissant

a) Qu'il faudrait garantir que la transmission, au moyen de fréquences radioélectriques, de l'énergie électrique recueillie dans l'espace ne cause pas de brouillages préjudiciables aux services de radiocommunication;

b) Qu'il faut évaluer les conséquences écologiques et biologiques éventuelles de la transmission radioélectrique de cette énergie, notamment pour des aéronefs traversant les faisceaux des antennes qui serviront à cette transmission;

notant

que le Rapport de la Réunion spéciale préparatoire à la Conférence administrative mondiale des radiocommunications (Génève, 1979) fait état de la possibilité technique de construire un satellite pour recueillir l'énergie solaire;

notant également

les dispositions de l'article 6 du Règlement des radiocommunications relatives à l'obligation pour les administrations de ne pas causer de brouillage préjudiciable aux services de radiocommunication fonctionnant conformément aux dispositions du Règlement;

recommande au CCIR

d'étudier de manière appropriée, sous tous leurs aspects, les effets de cette transmission radioélectrique d'énergie à partir de l'espace sur un service de radiocommunication et de formuler des recommandations appropriées, compte tenu des incidences écologiques et biologiques;

invite le Secrétaire général

à transmettre cette Recommandation au Secrétaire général des Nations Unies.

YJ

RECOMMANDATION N° 4

Relative à l'amélioration du groupement des liaisons des réseaux nationaux et internationaux de radiocommunication fonctionnant dans les bandes comprises entre 4000 kHz et 27 500 kHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Les besoins en fréquences toujours croissants, notamment dans les bandes comprises entre 4000 kHz et 27 500 kHz;
b) La structure actuelle des réseaux nationaux et internationaux de radiocommunication dans ces bandes;
c) Le trafic relativement réduit sur certaines liaisons de ces réseaux;
d) Les dispositions de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973), relatives à l'utilisation rationelle des fréquences et du spectre (article 33);

tenant compte du fait

a) Que le rendement d'un groupe de liaisons est supérieur à la somme des rendements des liaisons individuelles;
b) Qu'il est, en conséquence, possible de diminuer le nombre total des fréquences nécessaires;
c) Que, dans certains parties du monde, il existe des zones et des pays interconnectés par plusieurs liaisons tant radioélectriques que par câbles;

recommande

1. Que, dans tous les cas où cela est possible, les administrations s'efforcent, en groupant plus efficacement les liaisons radioélectriques à faible trafic, de diminuer l'encombrement des bandes comprises entre 4000 kHz et 27 500 kHz;
2. Que les pays interconnectés par des liaisons radioélectriques ou par câbles concluent, chaque fois que c'est possible en pratique, des accords particuliers relatifs à l'utilisation en commun des liaisons radioélectriques internationales existantes et fonctionnant dans les bandes comprises entre 4000 kHz et 27 500 kHz;
3. Qu'en règle générale ces accords procurent à chacun des pays participants des avantages équivalents en ce qui concerne les conditions financières et les moyens d'exploitation;
4. Qu'en projetant de nouvelles liaisons radioélectriques ou l'extension de celles qui existent déjà, les administrations tiennent compte, autant que possible, des principes énonces aux points 1 à 3 ci-dessus.

YI

RECOMMANDATION N° 5

Relative aux moyens à mettre en œuvre pour réduire l'encombrement de la bande 7 (3-30 MHz) (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaissant

a) Qu'il est nécessaire de réduire d'urgence le volume des demandes portant sur la bande 7 du spectre des fréquences radioélectriques;
b) Qu'en tirant parti des derniers progrès de la technique des télécommunications, et notamment de ceux réalisés dans l'utilisation des bandes 8 et au-delá, dans l'emploi de câbles coaxiaux, etc., il est possible de contribuer à cette réduction;
c) Que l'utilisation de moyens techniques perfectionnés de remplacement conduirait à des frais considérables, tendis qu'il serait moins onéreux de continuer à employer les fréquences de la bande 7, et que, dans ces conditions, certaines administrations éprouveraient plus de difficultés que d'autres, plus favorisées, à mettre en œuvre ces nouveaux moyens;

recommande

1. Que toutes les administrations prennent les mesures nécessaires pour réduire le volume des demandes portant sur la bande 7, en donnant aux techniques nouvelles la plus grande extension possible;
2. Que les organisations internationales qui donnent leur assistance soient priées d'envisager tout spécialement de fournir aux administrations qui ne sont pas en mesure de se les procurer elles-mêmes pour des raisons d'ordre économique,

---

(1) Remplace la Recommandation N° 11 de la Conférence administrative des radiocommunications (Génève, 1959).
(2) Remplace la Recommandation N° 10 de la Conférence administrative des radiocommunications (Génève, 1959).

des matériels appropriés permettant à ces administrations de mettre en œuvre des moyens de télécommunication de remplacement, contribuant ainsi a une plus grande économie dans l'utilisation de la bande 7.

XH RECOMMANDATION Nº 6

Relative aux besoins pratiques des pays qui ont besoin d'assistance spéciale (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

recommande

à toutes les administrations de s'efforcer particulièrement de collaborer avec les administrations des pays qui ont besoin d'assistance spéciale, en leur fournissant des renseignements de contrôle des émissions et une assistance technique de nature à les aider à obtenir des assignations de fréquence convenant à leurs liaisons;

invite l'IFRB

à fournir aux administrations des pays qui ont besoin d'assistance spéciale les renseignements et données techniques qui leur sont nécessaires, y compris des explications détaillées sur le Règlement des radiocommunications, de manière à leur permettre de choisir et de se procurer des assignations de fréquence convenant au fonctionnement de leurs liaisons.

XK RECOMMANDATION Nº 7

Relative à l'adoption de modèles normalisés de licences délivrées aux stations de navire et aux stations d'aéronef (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la normalisation des modèles de licences délivrées aux stations des navires ou des aéronefs qui effectuent des parcours internationaux faciliterait considérablement l'inspection de ces stations;
b) Que des modèles normalisés de licences à délivrer aux stations de navire et d'aéronef serviraient utilement de guide aux administrations qui désirent améliorer leurs modèles actuels de licences nationales;
c) Que ces modèles normalisés de licence pourraient avantageusement être utilisés par ces administrations pour constituer l'attestation dont il est question au numéro **2027** du Règlement des radiocommunications;

considérant en outre

que la Conférence administrative des radiocommunications (Génève, 1959) a élaboré:

a) Une série de principes pour la mise au point des modèles normalisés de licences (voir l'annexe 1);
b) Des modèles de licences à délivrer aux stations de navire et aux stations d'aéronef (voir les annexes 2 et 3):

recommande

1. Que les administrations, si elles trouvent ces modèles pratiques et acceptables, les adoptent pour l'usage international;
2. Que les administrations s'efforcent, autant que possible, de rendre leurs modèles de licences nationales conformes à ces modèles normalisés.

ANEXXE À LA RECOMMANDATION Nº 7

Principes à suivre pour l'élaboration de modèles normalisés de licences à délivrer aux stations de navire et aux stations d'aéronef

La Conférence administrative des radiocommunications (Génève, 1959), a considéré que, lors de l'élaboration des modèles normalisés de licences de stations de navire et d'aéronef, il convient:

1. De présenter autant que possible les modèles de licences sous forme de tableaux. Les lignes et les colonnes de ce tableau sont à repérer par des lettres ou des chiffres;

---

(1) Remplace la Recommandation Nº 35 de la Conférence administrative des radiocommunications (Génève, 1959).
(2) Remplace la Recommandation Nº 17 de la Conférence administrative des radiocommunications (Génève, 1959)

2. De donner une forme aussi semblable que possible aux licences des stations de navire et aux licences des stations d'aéronef;

3. De donner aux licences de format international A4;

4. De présenter les licences sous une forme facilitant au maximum la vérification de ces documents à bord des navires ou des aéronefs;

5. D'imprimer les licences en caractères latins dans la langue nationale du pays qui les délivre. Les administrations des pays dont la langue nationale ne peut être écrite en caractères latins utiliseront cette langue nationale et, en outre, une langue de travail de l'Union;

6. De placer en tête de la licence le titre: «Licence de station de navire» ou «Licence de station d'aéronef». Ce titre sera libellé dans la langue nationale du pays dont il émane, ainsi que dans les trois langues de travail de l'Union.

Ces principes ont été appliqués lors de l'élaboration des modèles de licence qui font l'objet des annexes 2 et 3.

ANNEXE 2 À LA RECOMMANDATION Nº 7

(Nom complet de l'autorité délivrant le licence, écrit dans la langue nationale)

... (*a*)

SHIP STATION LICENCE

LICENCE DE STATION DE NAVIRE

LICENCIA DE ESTACIÓN DE BARCO

Nº ...

Durée de validité ...

Conformément à ... (*Réglementation nationale*) et au Règlement des radiocommunications annexé à la Convention internationale des télécommunications actuellement en vigueur, la présente autorisation est délivrée pour l'installation et pour l'utilisation de l'équipement radioélectrique décrit ci-dessous:

1	2	3	4
Nom du navire	Indicatif d'appel ou autre mode d'identification	Armateur du navire	Catégorie de correspondance publique

	Appareil	a	b	c	d
		Type	Puissance (watts)	Classe d'émission	Bandes de fréquences ou fréquences assignées
5	Emetteurs				(*b*)
6	Emetteurs de secours de navire				(*b*)
7	Emetteurs d'engin de sauvetage ...				(*b*)
8	Autre appareil	*(Facultatif)*			

(*a*) Les mots «Licence de station de navire» sont à écrire dans la langue nationale au cas où cette langue n'est pas une langue de travail de l'Union.

(*b*) Valeur numérique ou symbole.

Pour l'autorité délivrant la licence:

... (Lieu) ... (Date) ... (Marque d'authentification)

ANNEXE 3 À LA RECOMMANDATION Nº 7

(Nom complet de l'autorité délivrant le licence, écrit dans la langue nationale)

... (*a*)

AIRCRAFT STATION LICENCE

LICENCE DE STATION D'AÉRONEF

LICENCIA DE ESTACIÓN DE AERONAVE

Nº ...

Durée de validité ...

Conformément à ... *(Réglementation nationale)* et au Règlement des radiocommunications annexé à la Convention internationale des télécommunications actuellement en vigueur, la présente autorisation est délivrée pour l'installation et pour l'utilisation de l'équipement radioélectrique décrit ci-dessous:

1	2	3	4
Nationalité et signes d'immatriculation de l'aéronef	Indicatif d'appel ou autre mode d'identification	Type de l'aéronef	Propriétaire de l'aéronef

	Appareil	a	b	c	d
		Type	Puissance (watts)	Classe d'émission	Bandes de fréquences ou fréquences assignées
5	Emetteurs				(*b*)
6	Emetteurs d'engin de sauvetage *(s'il y a lieu).*				(*b*)
7	Autre appareil	*(Facultatif)*			

(*a*) Les mots «Licence de station d'aéronef» sont à écrire dans la langue nationale au cas où cette langue n'est pas une langue de travail de l'Union.

(*b*) Valeur numérique ou symbole.

Pour l'autorité délivrant la licence:

... (Lieu) ... (Date) ... (Marque d'authentification)

XN

RECOMMANDATION Nº 8

Relative à l'identification automatique des stations

La Conférence administrative mondiale des radiocommunications (Génève, 1979).

considérant

a) Que l'article 25 du Règlement des radiocommunications autorise, chaque fois que cela est possible, l'identification automatique des stations dans les services appropriés et dans certaines circonstances;

b) Qu'il n'est pas toujours réalisable ni opportun de donner une identification manuelle;

c) Que les sources de brouillage préjudiciable ne sont souvent pas identifiées pendant de longues périodes et que les mesures qui pourraient être prises en vue d'atténuer le brouillage s'en trouvent retardées;

d) Que les procédures relatives à l'identification automatique peuvent aider, le cas échéant, à pallier certains inconvénients de l'identification manuelle;

e) Que l'émission automatique d'un indicatif d'appel ou d'autres signaux peut permettre d'identifier certaines stations qu'il n'est pas toujours possible d'identifier, par exemple, les faisceaux hertziens et les systèmes spatiaux;

f) Qu'il est souhaitable de promouvoir une méthode d'identification automatique commune afin de faciliter la mise en application effective des dispositions de l'article 25, ce qui empêcherait la prolifération de nombreux systèmes et techniques de modulation variés qui pourraient être utilisés à cette fin;

recommande

au CCIR d'étudier la question de l'identification automatique des stations en vue de recommander des caractéristiques techniques et des méthodes de mise en application d'un système universel commun, y compris des techniques de modulation normalisées, qui seront appliquées conformément aux dispositions de l'article 25, en tenant dûment compte des besoins des différents services et types de stations.

ZG RECOMMANDATION Nº 9

Relative aux mesures à prendre pour empêcher le fonctionnement de stations de radiodiffusion à bord de navire ou d'aéronefs hors des limites des territoires nationaux (1)

La Conférence administrative mondiale des radiocommunications (Genève, 1979).

considérant

a) Que le fonctionnement de stations de radiodiffusion à bord de navires ou d'aéronefs situés hors des limites du territoire national d'un pays est contraire aux dispositions des numéros **2665** et **3603** du Règlement des raddiocommunications;
b) Que semblable fonctionnement est contraire à l'utilisation rationnelle des fréquences et peut finir par créer une situation extrémement confuse;
c) Que le fontionnement de telles stations de radiodiffusion peut faire en dehors de toute juridiction des pays Membres et rendre ainsi malaisée l'application directe des lois nationales;
d) Qu'on peut de trouver en présence d'une situation particulièrement difficile du point de vue juridique lorsque ces stations de radiodiffusion fonctionnent à bord de navires ou d'aéronefs qui n'ont été régulièrement immatriculés dans aucun pays;

recommande

1. Que les administrations demandent à leurs gouvernement respectifs d'une part d'examiner par quels moyens, directs ou indirects, il est possible d'éviter ou de faire cesser le fonctionnement des strations susmentionnées et, d'autre part, de prendre s'il y a lieu les mesures qui s'imposent;

2. Que les administrations communiquent au Secrétaire général le résultat de ces études et lui transmettent toute autre indication d'intérêt général afin qu'il puisse, à son tour, en informer les Membres.

XF RECOMMANDATION Nº 10

Relative à la présentation des propositions de modification aux textes du Règlement des radiocommunications (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979).

ayant pris note

a) Du fait que, dans le propositions présentées par certaines administrations, un système uniforme a été utilisé pour présenter les textes modifiés (textes nouveaux soulignés, textes supprimés biffés);
b) Que ce système s'est révélé très efficace lors de l'examen des textes proposés;
c) Que si ce système uniforme était appliqué aux différents stades d'élaboration des textes d'une conférence (sous-groupes de travail, groupes de travail), cela faciliterait la tâche des délégations et pourrait faciliter celle de la conférence;
d) Que le Secrétaire général a pris des mesures pour donner des directives administratives, afins de les aider dans la présentation de leurs propositions aux conférences administratives, conformément aux dispositions de la Convention internationale des télécomunications, et dans la coordination de leur présentation aux conférences;

---

(1) Remplace le Recommandation Nº 16 de la Conférence administrative des radiocommunications (Génève, 1959).
(2) Remplace le Recommandation Nº Mar2-20 de la Conférence administrative des radiocommunications maritimes (Génève, 1974).

recommande

1. Que les administrations soient invitées à présenter leurs propositions de manière uniforme;
2. Que, afin de faciliter cette présentation, le Secrétaire général publie des directives qui devront aussi être appliquées lors des futures conférences;
3. Que, lors de prochaines conférences administratives des radiocommunications, on utilise une présentation uniforme aux différents stades d'élaboration des textes au moins jusqu'au niveau des groupes de travail.

B

RECOMMANDATION Nº 11

Relative à la numérotation figurant dans la marge du Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979).

considérant

a) Qu'à chaque article du Règlement des radiocommunications esta associé un système logique de numérotation des paragraphes et des sous-paragraphes et que des numéros consécutifs sont ajoutés dans la marge, en regard de chaque disposition, principalement pour faciliter les références;
b) Que cette numérotation dans la marge est largement utilisée par les administrations et les organismes permanents de l'Union;
c) Que l'on a prévu des séries de numéros en réserve à la fin de chaque article du Règlement des radiocommunications révisé (Génève, 1979), pour faciliter l'adjonction para les futures conférences administratives mondiales des radiocommunications de nouvelles dispositions, et en particulier de nouveaux articles;

reconnaissant

a) Que de grands efforts sont nécessaires pour se familiariser avec de nouveaux numéros figurant dans la marge en sorte que leur modification éventuelle para une conférence administrative mondiale des radiocommunications entreprenant une révision partialle du Règlement des radiocommunicaions pourraît entraîner de difficultés;
b) Que la révision de ce système de numérotation dans la marge n'est indispensable que si une future conférence administrative mondiale des radiocommunications est convoquée pour entreprendre une révision générale du Règlement des radiocommunications;

recommande

1. Qu'une future conférence administrative mondiale des radiocommunications entreprenant une révision partielle du Règlement des radiocommunications n'utilise les numéros en réserve que lorsqu'il y a lieu d'inserer des dispositions supplémentaires à la fin des articles;
2. Que, s'il est nécessaire d'insérer une ou plusiers dispositions supplémentaires dans un article, des références alphabétiques supplémentaires soient utilisées comme suffixe à la suite des numéros de marge attribués;
3. Qu'en cas de suppression d'une disposition existante, le numéro figurant dans la marge ne soit pas réutilisé.

XM

RECOMMANDATION Nº 12

Relative à la convocation de futures conférences administratives des radiocommunications traitant de services déterminés

La Conférence administrative mondiale des radiocommunications (Genève, 1979).

notant

a) Que le point 2.10 de son mandat l'invite à proposer au Conseil d'administration et à la prochaine Conférence de plénipotentiaires un programme pour la convocation des futures conférences administratives des radiocommunications traitant de services déterminés;
b) Que plusieurs de ses Résolutions et Recommandations demandent ou mentionnent la convocation de ces futures conférences;

considérant

a) Qu'en établissant le calendrier des futures conférences administratives mondiales des radiocommunications, il convient de prendre en considération d'autres conférences auxquelles participent les Membres de l'Union et notamment les conférences régionales et sous-régionales, la Conférence de plénipotentiaires et les réunions du CCIR;
b) Que les conférences doivent être suffisamment espacées afin que les administrations et les organismes permanents de l'Union disposent de délais suffisants pour la préparation de chaque conférence;

c) Qu'un certain nombre de sujets particuliers, évoqués dans les Résolutions et les Recommandations mentionnées au paragraphe *b*) sous *notant*, doivent être traités par une conférence compétente et qu'il appartient au Conseil d'administration de prendre, en temps utile, les mesures nécessaires à l'inclusion de chaque question dans l'ordre du jour de la conférence appropriée;

recommande au Conseil d'administration et, s'il y a lieu, à la Conférence de plénipotentiaires

1. D'inclure les conférences administratives mondiales des radiocommunications suivantes dans le calendrier des futures conférences:

Conférence administrative mondiale des radiocommunications pour les services mobiles (voir la Résolution **202**);

Conférence administrative mondiale des radiocommunications pour la planification des bandes d'ondes décamétriques attribuées au service de radiodiffusion (voir la Résolution **508** et les Recommandations **500** et **501**);

Conférence administrative mondiale des radiocommunications sur l'utilisation de l'orbite des satellites géostationnaires et la planification des services spatiaux utilisant cette orbite (voir la Résolution **3**);

2. D'inclure les conférences administratives régionales des radiocommunications suivantes dans le calendrier des futures conférences:

Session finale de la Conférence pour la radiodiffusion en ondes hectométriques dans la Région 2 (déjà prévue pour novembre 1981);

Conférence pour la planification du service de radiodiffusion par satellite dans la Région 2 (déjà prévue pour le deuxième trimestre 1983) (voir la Résolution **701**);

Conférence pour la planification de la radiodiffusion sonore dans la bande 87,5-108 MHz pour la Région 1 et certains pays concernés de la Région 3 (voir la Résolution **510**);

Conférence pour la conclusion d'accords et l'établissement des plans associés pour les liaisons montantes vers les satellites de radiodiffusion fonctionnant dans la bande des 12 GHz dans les Régions 1 et 3 (voir la Résolution **101**);

Conférence administrative régionale des radiocommunications chargée de définir des critères de partage pour l'utilisation des bandes des ondes métriques et décimétriques attribuées aux services fixe, de radiodiffusion et mobile dans la Région 3 (voir la Résolution **702**);

Conférence chargée de réviser la Convention et le Plan de Copenhague de 1948 pour la Zone maritime européenne — Région 1 (voir également à ce sujet la Recommandation **300**);

Conférence chargée de réexaminer et de reviser les dispositions des Actes finals de la Conférence africaine de radiodiffusion en ondes métriques et décimétriques (Génève, 1963) (voir la Résolution **509**);

Conférence chargée de la préparation d'un plan de radiodiffusion dans la bande 1605-1705 kHz dans la Région 2 (voir la Recommandation **504**);

3. De prendre les mesures nécessaires pour convoquer chacune de ces conférences aussitôt que possible après l'achèvement des travaux préparatoires qui s'y rapportent, en tenant compte:

a) Des opinions relatives au calendrier des conférences, comme prévu dans les Recommandations et les Résolutions qui sont mentionnées aux paragraphes 1 et 2 sous *recommande*;

b) De la nécessité d'espacer ces conférences de façon adéquate afin que les administrations et les organismes permanentes de l'Union disposent de délais suffisants pour leur préparation;

c) Du programme des conférences projetées prévues, autres que les conférences administratives des radiocommunications, auxquelles doivent participer les Membres de l'Union;

d) Des ressources que les diverses administrations et l'Union dans son ensemble devront consacrer à la réalisation de ce programme de conférences.

XP RECOMMANDATION N° 13

Relative à une conférence administrative mondiale des radiocommunications pour une révision générale ou partielle du Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

que la présente Conférence a établi un programme des conférences administratives mondiales spécialisées des radiocommunications pour la prochaine décennie;

considérant

l'evolution très rapide de la technologie des télécommunications et les conséquences de son application notamment sur l'utilisation rationnelle du spectre radioélectrique;

considérant

la nécessité d'une révision générale ou partielle du Règlement des radiocommunications pour permettre le développement harmonieux de plusieurs services qui ne seront pas traités par les conférences spécialisées prévues par la présente Conférence;

recommande au Conseil d'administration

d'examiner, à partir de 1990, s'il est nécessaire de convoquer une conférence administrative mondiale des radiocommunications à l'effet de procéder à une révision générale ou partielle du Règlement des radiocommunications.

D

RECOMMANDATION N° 30

Relative au contrôle international des émissions (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est désirable d'obtenir une utilisation plus efficace du spectre des fréquences radioélectriques afin d'aider les administrations à satisfaire plus aisément leurs besoins en fréquences, et qu'à cette fin il est désirable de prendre des mesures pour la Liste international des fréquences reflète plus fidèlement l'utilisation réelle du spectre des fréquences;

b) Les dispositions du Règlement des radiocommunications (Génève, 1979), d'après lesquelles le Comité international d'enregistrement des fréquences doit réviser les inscriptions contenues dans le Fichier de référence international des fréquences en vue de les rendre aussi conformes que possible à l'utilisation réelle du spectre des fréquences;

c) Que les données provenant du contrôle international des émissions devraient aider ce Comité à s'acquitter de cette fonction;

reconnaissant

a) Qu'un système international de contrôle des émissions ne peut être pleinement efficace que s'il couvre toutes les zones du monde;

b) Que, dans certaines zones du monde, les moyens à cet effet sont actuellement inexistants ou insuffisants pour permettre un contrôle effectif;

invite le CCIR

à étudier et à élaborer, en collaboration avec le Comité, des avis techniques concernant les moyens supplémentaires requis pour assurer une couverture mondiale appropriée en vue de la mise en œuvre du Règlement des radiocommunications, plus spécialement les articles 10, 11, 12, 13, 14 et 20; et

invite les administrations

1. À faire tous les efforts afin de développer les moyens de contrôle, ainsi qu'il est envisagé à l'article 20 du Règlement des radiocommunications, compte tenu des possibilités offertes par les organismes des Nations Unies chargés de l'assistance technique;

2. À informer le Comité de la mesure dans laquelle elles sont disposées à coopérer à des contrôles de nature déterminée qui seraient demandés par ce Comité.

YG

RECOMMANDATION N° 31

Relative à un manuel sur l'application des techniques informatiques à la gestion du spectre radioélectrique

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'en raison de la demande croissante de fréquences radioélectriques, il convient d'améliorer l'utilisation du spectre radioélectrique;

b) Que, pour résoudre les problèmes posés par l'utilisation du spectre radioélectrique, il faut disposer de moyens de stockage, d'extraction e d'analyse des données que peuvent procurer les méthodes informatiques;

---

(1) Remplace le Recommandation N° 5 de la Conférence administrative des radiocommunications (Génève, 1959).

c) Que la gestion du spectre radioélectrique représente, pour les administrations, une série de tâches dont l'ampleur et la complexité vont croissant;
d) Que, grâce aux progrès techniques, on peut se procurer des ordinateurs puissants e des mini-ordinateurs d'un prix raisonnable;
e) Que beaucoup d'administrations ont besoin de directives sur les techniques informatiques applicables à la gestion du spectre radioélectrique;
f) Qu'une certains compatibilité est souhaitable pour faciliter le coordination entre administrations et l'échange de données avec l'IFRB;
g) Que de nombreuses administrations s'intéressent aux systèmes informatiques de gestion radioélectrique et que certaines d'entre elles mettent activement au point ces systèmes;
h) Que le Secrétariat général met des moyens informatiques à la disposition de tous les organismes permanentes de l'Union et leur fournit des conseils en ce domaine et, le cas échéant, en fournit également aux administrations;

recommande au CCIR

1. D'établir au plus tard eu 1982 un manuel qui décrive les différents aspects de l'application des techniques informatiques à la gestion du spectre radioélectrique, examine le différents façons dont la question a été abordée, donne des directives appropriées aux divers niveaux des applications pratiques et contienne des avis pour le cas où la coopération internationale entre en jeu;
2. De réexaminer et de réviser périodiquement ce manuel;

invite le Secrétariat général et l'IFRB

à participer à l'elaboration de ce manuel.

Q RECOMMANDATION Nº 60

Relative aux Normes techniques de l'IFRB (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaissant

que les Normes techniques du Comité international d'enregistrement des fréquences (IFRB) sont d'un usage quotidien pour l'examen technique des avis de notification d'assignation de fréquence;

prie instamment le CCIR

de hâter l'exécution de toutes les phases des programmes d'études qui son de nature à aider l'IFRB à perfectionner encore ses Normes techniques; et

invite les administrations

à accorder, dans leur participation aux travaux du CCIR et de ses comissions d'études, une priorité spéciale aux études dont il s'agit.

ZB RECOMMANDATION Nº 61

Relative aux normes techniques nécessaires à l'évaluation des brouillages préjudiciables dans les bandes de fréquences supérieures à 28 MHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la définition du brouillage préjudiciable (numéro 163 du Règlement des radiocommunications), de caractère qualitatif, donne lieu à une estimation purement subjective de la nuisance;
b) Que pour l'accomplissement de ses tâches réglementaires, l'IFRB a adopté pour ses Normes techniques dans les bandes de fréquences inférieures à 28 MHz, des valeurs du rapport signal utile/signal brouilleur au-dessous desquelles on peut s'attendre à un brouillage préjudiciable;

---

(1) Remplace la Recommandation Nº 2 de la Conférence administrative des radiocommunications (Génève, 1959).
(2) Remplace la Recommandation Nº Spa2-12 de la Conférence administrative des radiocommunications (Génève, 1959).

c) Que le «brouillage préjudiciable» implique un degré de brouillage ou une probabilité de brouillage considérable;

d) Qu'en conséquence, il est souhaitable de déterminer le niveau de brouillage pour lequel les émissions, rayonnements ou inductions influencent défavorablement un service de radiocommunication au-delà des limites spécifiques établies pour son fonctionnement, du point de vue de la qualité et de la fiabilité réquises para la nature de ce service;

e) Que l'évaluation du niveau de brouillage et liée à des facteurs tels que la nature des services en cause, le nombre des sources de brouillage, les pourcentages du temps durant lesquells le signal brouiller influence défavorablement le signal utile;

notant

a) Que jusqu'ici l'IFRB a considéré les valeurs maximales admissibles du brouillage, telles qu'elles sont spécifées dans les Avis pertinents du CCIR, comme étant des valeurs qui permettent d'assurer un service satisfaisant;

b) Que l'IFRB ne possède cependant pas de renseignements sur la mesure dans laquelle ces valeurs recommandées et les pourcentages de temps associés peuvent être dépassés sans qu'un service en soit défavorablement influencé au-delà des limites spécifiques établies pour son fonctionnement, du point de vue de la qualité et de la fiabilité requises para la nature de ce service;

invite le CCIR

à poursuivre, l'étude de cette question et à recommander des critères techniques pour les bandes de fréquences supérieures à 28 MHz attribuées aux services de radiocommunication spatiale, à la radioastronomie et aux services de radiocommunications de Terre intéressés, afin de permettre à l'IFRB et aux administrations d'appliquer les critères ainsi définis pour ces bandes.

K RECOMMANDATION Nº 62

Visant à compléter les caractéristiques additionnelles de classification des émissions et à fournir de nouveaux exemples de désignations complètes des émissions tels qu'ils figurent dans l'appendice 6 (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que ladite Conférence a adopté dans l'article 4 une nouvelle méthode de désignation des émissions fondée sur l'Avis 507 du CCIR;

b) Qu'une partie essentielle de cette nouvelle méthode est la classification des émissions;

c) Que la nouvelle méthode de classification des émissions établit une distinction entre les caractéristiques fondamentales (premier, deuxième et troisième symbole) dont l'utilisation est obligatoire et les caractéristiques additionnelles (quatrième et cinquième symbole) dont l'utilisation est facultative;

d) Que la classification complète des émissions couvre l'ensemble de ces cinq symboles;

e) Que la liste des caractéristiques additionnelles donnée dans la partie A de l'appendice 6, n'est peut-être pas suffisamment complète pour tenir compte dans l'avenir des nouvele techniques et que, de ce fait, elle peut faire l'object de compléments à intervalles relativament fréquents;

f) Qu'un Avis du CCIR fournirait un cadre approprié pour ce complément;

considérant en outre

a) Qu'un liste d'exemples de désignations complètes d'émissions est donnée dans la partie B de l'appendice 6;

b) Que cette liste n'est toutefois pas exhaustive et que le numéro **265** du Règlement des radiocommunications en conséquence que d'autres exemples pourraient être donnés dans les Avis le plus récents du CCIR et que ces exemples pourraient également être publiés dans le préface à la Liste internationale des fréquences;

invite le CCIR

À poursuivre ses études sur la classification des émissions, en vue de compléter la liste des caractéristiques additionnelles pour tenir compte dans l'avenir des nouvelles techniques sans toutefois modifier les caractéristiques additionnelles ayant fait l'objet d'accord et figurant dans la partie A de l'appendice 6;

---

(1) Remplace le Recommandation Nº 8 de la Conférence administrative des radiocommunications (Génève, 1959).

2. À fournir des exemples de désignations complètes d'émission qui ne sont pas données dans la partie B de l'appendice 6, compte tenu également des compléments au paragraphe 1 ci-dessus;

invite le Comité international d'enregistrement des fréquences

à publier, dans la préface à la Liste international des fréquences, les nouvelles caractéristiques additionnelles ainsi que les nouveaux exemples mentionnées aux paragraphes 1 et 2 ci-dessous, aussitôt qu'ils seront consignés dans les Avis pertinents du CCIR;

et recommande

que les administrations utilisent les caractéristiques additionnelles complétées dont ils est question au paragraphe 1 ci-dessus.

M RECOMMANDATION Nº 63

Relative à la présentation de formules et d'exemples pour le calcul des largeurs de bande nécessaires

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, selon l'article 4 du Règlement des radiocommunications, la largeur de bande nécessaire doit faire partie de la désignation complète des émissions;
b) Que la partie B de l'appendice 6 donne une liste partielle d'exemples et des formules pour le calcul de la largeur de bande nécessaire de certaines émissions typiques;
c) Que l'on ne dispose pas de données suffisantes pour déterminer les facteurs K urtilisés dans tout le tableau d'exemples de largeurs de bande nécesssaire qui figure dans l'appendice 6;
d) Que, du point de vue plus particulier de l'utilisation efficace du spectre radioélectrique, ainsi que du contrôle et de la notification des émissions, il faut connaître les largeurs de bande nécessaire pour les différentes classes d'émission;
e) Qu'il est souhaitable, pour des raisons de simplicité et d'uniformité internationale, que les mesures visant à déterminer la largeur de bande nécessaire soient faites aussi rarement que possible;

recommande que le CCIR

1. Fournisse à intervalles de temps convenables des formules additionnelles permettant de déterminer la largeur de bande nécessaire pour les classes d'émissons courantes ainsi que des exemples destinés à compléter ceux de la partie B de l'appendice 6;
2. Étudie et indique des valeurs pour les facteurs K supplémentaires dont on a besoin pour calculer la larguer de bande nécessaire pour les classes d'émissons courantes;

invite l'IFRB

à publier des exemples de tels calculs dans la Préface à la Liste internationale des fréquences.

R RECOMMANDATION Nº 64

Relative aux rapports de protection et aux champs minimaux nécessaires (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaissant

que les renseignements dont on dispose sur le rapport de protection et le champ minimal nécessaires pour chaque service doivent être encore plus précis pour pouvoir établir les plans le plus efficaces pour l'utilisation du spectre des fréquences radioélectriques;

invite le CCIR

1. À poursuivre l'étude des rapports de protection qui définissent le seuil de brouillage préjudiciable pour les différents services;

(1) Remplace le Recommandation Nº 3 de la Conférence administrative des radiocommunications (Génève, 1959).

2. À poursuivre l'étude des rapports signal/bruit et des champs minimaux nécessaires pour recevoir de façon satisfaisante les différentes classes d'émission dans les différents services;

3. À poursuivre l'étude des marges contre les évanouissements dans les différents services;

4. À accorder une attention particulière à ces études qui aideront l'IFRB à améliorer encore les Normes techniques qu'il emploie.

ZM

RECOMMANDATION Nº 65

Relative aux techniques permettant d'elaborer de nouveaux schémas de partage du spectre et d'utilisation des bandes de fréquences

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaisant

a) Que les progrès techniques, notamment en ce qui concerne les techniques radioélectriques numériques, ainsi que les nouveaux procédés de codage, de modulation et d'accès rendent possible l'établissement de nouveaux schémas de partage offrant des avantages économiques et techniques et permettant d'accroitre l'efficacité du partage du spectre et de l'utilisation des bandes de fréquences;

b) Que l'on constate des progrès rapides en ce qui concerne les techniques connexes;

invite le CCIR

1. À procéder à l'étude des techniques radioélectriques numériques et des nouveaux procédés de codage, de modulation et d'accès, par exemple dans les techniques de radiocommunication par paquets et d'étalement du spectre et des systèmes à fonctions multiples;

2. À mettre au point de nouvelles méthodes pour l'utilisation d'une porteuse en partage dans le temps par différents services de radiocommunication, autremment dit l'utilisation d'une même partie du spectre par plusieurs services;

3. À présenter des Avis sur les sujets suivants pour les futures conférences administratives mondiales des radiocommunications pertinentes:

Critères techniques et spécifications des schémas de partage du spectre les plus efficaces pour les divers services;

Critères techniques et critères de qualité permettant d'assurer la compatibilité et l'interfonctionnement des systèmes;

Critères sur lesquels fonder la gestion du spectre pour les systèmes conformes à ces nouvelles techniques.

L

RECOMMANDATION Nº 66

Au sujet d'études sur les niveaux maximaux tolérés de rayonnements non essentiels

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'appendice 8 au Règlement des radiocommunications spécifie les niveaux maximaux tolérés des rayonnements non essentiels, exprimés en niveau de puissance moyenne de n'importe quelle composante non essentielle fournie par un émetteur à la ligne d'alimentation de l'antenne, pour les bandes de fréquences inférieurs à 17,7 GHz;

b) Que l'objectif principal de l'appendice 8 est de spécifier les niveaux maximaux tolérés des rayonnements non essentiels qui, tout en étant réalisables, assurent une protection suffisante contre les brouillages préjudiciables;

c) Que des niveaux excessifs des rayonnements non essentiels peuvent causer des brouillages préjudiciables;

d) Que, si l'appendice 8 ne traite que de la puissance moyenne de l'émetteur et des rayonnements non essentiels, il existe toutes sortes de rayonnements pour lesquels l'interprétation du terme «puissance moyenne» est difficile ainsi, par conséquent, que la mesure de cette puissance;

e) Que le CCIR, bien qu'il étudie cette question, n'a pas encore émis des Avis appropriés concernant l'appendice 8 dans le cas des bandes de fréquences supérieures à 960 MHz;

f) Que les rayonnements non essentiels d'émetteurs fonctionnant dans des stations spatiales peuvent causer des brouillages préjudiciables, notamment par les composantes d'intermodulation d'amplificateurs à large bande qui ne peuvent être réglées aprés le lancement;

g) Que les rayonnements non essentiels de stations terriennes nécessitent aussi des études spéciales;

h) Que le CCIR n'a pas publié de renseignements concernant les rayonnements non essentiels de stations utilisant des techniques de modulation numériques et fonctionnant dans des bandes fréquences supérieurs à 960 MHz;

notant

la très forte utilisation du spectre radioélectrique au-dessus de 960 MHz dans les grandes zones urbaines et le développement rapide de cette utilisation qui s'effectue actuellement surtout au-dessus de 10 GHz;

recommande que le CCIR

1. Étudie d'urgence la question des rayonnements non essentiels résultant des émissions de services spatiaux et élabore, sur la base de ces études, des Avis concernant les niveaux maximaux tolérés des rayonnements non essentiels exprimés en puissance moyenne des composantes non essentielles fournies par l'émetteur à la ligne d'alimentation de l'antenne;

2. Poursuive l'étude des niveaux des rayonnements non essentiels dans toutes les bandes de fréquences, en insistant sur les bandes de fréquences, les services et les techniques de modulation qui ne sont pas actuellement traités dans l'appendice 8;

3. Établisse des techniques de mesure appropriées pour les rayonnements non essentiels incluant la détermination de niveaux de référence pour les transmissions à large bande ainsi que la possibilité d'application de largeurs de bande de référene pour les mesures;

4. Étudie la catégorisation des émissions et des rayonnements nons essentiels d'après leur «puissance moyenne» et élabore des Avis appropriés pour faciliter l'interprétation de ce terme et la mesure de la puissance moyenne pour les différentes catégories d'émission.

YH RECOMMANDATION N° 67

Relative à la définition des termes «zone de service» et «zone de couverture»

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que dans les textes officiels de l'UIT on rencontre souvent les termes «zone de service» et «zone de couverture»;

b) Que ces deux termes sont utilisés avec le même sens ou des sens différents, selon les divers services de radiocommunication;

c) Qu'il n'existe pas de définition des termes «zone de service» et «zone de couverture» dans l'article 1 du Règlement des radiocommunications;

notant

a) Que le terme «zone de service» est déjà employé dans les textes des appendices 1, 3, 4, 5 et 25 Mar2 du Règlement des radiocommunications;

b) Qu'il existe une définition de «zone de service» pour la radiodiffusion de Terre, dans l'Avis 499-1 du CCIR, basée sur le champ utilisable;

c) Qu'une définition très semblable à celle de l'Avis 499-1 figure à l'annexe 2 des Actes finals de la Conférence administrative régionale de radiodiffusion à ondes kilométriques et hectométriques (Régions 1 et 3) (Génève, 1975);

d) Qu'une définition de «zone de service» pour la radiodiffusion par satellite figure à annexe 8 des Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977). Cette définition est de nature administrative. Elle est accompagnée d'une note technique, dans laquelle on se référe à une puissance surfacique appropriée et à une protection contre les brouilleurs basée sur un rapport de protection convenu;

e) Que des aspects techniques et administratifs sont quelquefois compris dans la définition de la «zone de service» et qu'ils ne peuvent pas être séparés aisément;

f) Qu'une définition de «zone de couverture» pour la radiodiffusion par satellite, basée sur le niveau de puisance surfacique qui assure, en l'absence, de brouillage, une qualité de récption spécifiée, figure à l'annexe 8 precitée;

reconnaissant

que les définitions existantes de «zone de service» et «zone de couverture» sont liées définitions du champ utilisable ou de la puissance surfacique utilisable, soit en la présence, soit en l'absence de signaux brouilleurs;

invite le CCIR

1. À établir une définition générale de la «zone de couverture»;

2. À établir les bases techniques d'une définition générale de la «zone de service» qui tienne compte de la présente utilisation de ce terme dans tous les textes officiels de l'UIT en vue de permettre à de futures conférences administratives de déterminer des aspects administratifs de cette définition.

E

RECOMMANDATION N° 68

Relative aux études et à la prévision de la propagation et des bruits radioélectriques (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'utilisation efficace des fréquences radioélectriques dépend de l'emploi des données et normes techniques les plus sûres, surtout dans les parties du spectre qui sont les plus encombrées;
b) Que l'on peut faciliter la satisfaction de nouveaux besoins en fréquences et le développement des services de radiocommunication en améliorant partout où c'est nécessaire les Normes techniques actuellement employées par l'IFRB;
c) Que l'ancien appendice A du Règlement des radiocommunications (édition de 1968), intitulé «Étude et prévision de la propagation et des bruits radioélectriques» reconnaissait que l'importance des données sur la propagation et les bruits radioélectriques est déterminante pour l'utilisation optimale des fréquences et l'établissement de plans efficaces pour les services de radiocommunication;
d) Que cet appendice avait pour objectif principal l'établissement et le fonctionnement de systèmes mondiaux de stations d'observation, afin d'obtenir des données sur les bruits radioélectriques et sur les phénomènes ionosphériques, troposphériques et autres qui influencent la propagation des ondes;
e) Que les administrations prennent les dispositions les plus appropriées pour étudier, coordonner et diffuser rapidement ces données et les prévisions relatives à ces données, et qu'elles s'efforcent également de promouvoir les études sur la propagation et sur les bruits radioélectriques par l'intermédiaire du CCIR;
f) Que le CCIR a adopté des programmes d'études qui traitent d'un grand nombre de ces problèmes;
g) Que, dans certaines parties du monde, aucune mesure de la propagation et des bruits radioélectriques n'a été effectuée;

demande au CCIR

1. D'encourager et d'aider à entreprendre l'étude de la propagation et des bruits radioélectriques dans les régions qui ne sont pas encore dotées d'un système approprié de station d'observation;
2. De continuer l'étude de la propagation et des bruits radioélectriques et de prendre les mesures nécessaires en vue de coordonner les résultats obtenus dans différents pays;
3. D'accorder une attention particulière à ces études qui aideront l'IFRB à améliorer encore les Normes techniques employées par ce Comité;
4. De fournir régulièrement des rapports sur ces questions, même si les études ne sont pas achevées;
5. De continuer à consulter régulièrement les autres organisations qui effectuent des études sur la propagation et les bruits radioélectriques, par exemple l'Union radioscientifique internationale, afin de réaliser une coordination aussi large que possible;

recommande aux administrations

1. D'entreprendre l'étude de la propagation et des bruits radioélectriques dans les régions qui ne sont pas encore dotées d'un système approprié de stations d'observation et d'en communiquer les résultats au CCIR;
2. De continuer à favoriser l'établissement et le fonctionnement d'un système mondial de stations d'observation afin d'obtenir des données sur les bruits radioélectriques et sur les phénomènes ionosphériques, troposphériques et autres qui influencent la propagation des ondes;
3. De continuer à prendre les dispositions les plus appropriées pour étudier, coordonner te diffuser rapidement ces données et les prévisions relatives à ces données;
4. De tenir compte, dans l'établissement et la mise en œuvre de leurs programmes de travaux sur la propagation et les bruits radioélectriques, des Avis, Rapports, Questions et Programmes d'études du CCIR s'appliquant à ces problèmes notamment des résultats déjà obtenus, des plans établis pour les études futures et des modes de présentation recommandés dans ces documents.

P

RECOMMANDATION N° 69

Relative aux tolérances de fréquence des émetteurs (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Remplace la Recommandation N.º 4 de la Conférence administrative des radiocommunications (Génève, 1959).
(2) Remplace la Recommandation N° 7 de la Conférence administrative des radiocommunications (Génève, 1959).

considérant

a) Que l'appendice 7 ao Règlement des radiocommunications spécifie les tolérances de fréquence à respecter par les émetteurs;
b) Que le principal objectif de cet appendice a été de diminiuer la fraction du spectre des fréquences nécessaire pour chaque voie, par le jeu d'une réduction des tolérances de fréquence, et que, dans bien des cas il est encore possible d'obtenir une amélioration considérable dans l'utilisation du spectre, grâce à une nouvelle réduction des tolérances de fréquence;
c) Qu'en améliorant, dans divers services, la tolérance de fréquence pour la porter à la valuer la plus stricte qu'il est possible d'atteindre en l'état de la technique, on pourrait augmenter le rapport signal/bruit, améliorer l'intelligibilité et réduire les erreurs;
d) Que, dans certains cas, une tolérance de fréquence plus stricte n'augmenterait pas, en pratique, le nombre des voies disponibles;
e) Que, dans certaines bandes de fréquences, les tolérances spécifiées à l'appendice 7 se rapprochent peut-être déjà de la valeur minimum utilisable pour certaines catégories de stations, lorsqu'elles appliquent les techniques et les méthodes d'exploitation actuelles;
f) Qu'il sera d'un très grand secours pour les administrations, lorsqu'elles auront à planifier leurs services et à s'équiper en matériel, de connaître des tolérances de fréquence qui peuvent être considérées comme la valeur limite minimum utilisable pour les stations, lorsqu'elles appliquent les tecnhiques et les méthodes d'exploitation actuelles;
g) Que, dans certains cas, l'obtention d'une tolérance de fréquence plus stricte est soumise à des restrictions d'ordre économique qu'il convient de connaître et don il convient de tenir compte;

invite le CCIR

1. À poursuivre l'étude des tolérances de fréquence en vue de réduire la fraction du spectre des fréquences nécessaire pour une voie donnée;
2. À considérer si, dans certains cas, il est ou non possible de prévoir des valeurs de tolérance limites qu'il ne serait pas nécessaire de rendre plus strictes dans les conditions d'exploitation actuellement connues, et de préciser quelles pourraient être ces valeurs;
3. À faire un rapport sur la possibilité d'atteindre ces valeurs limites, compte tenu des impératifs économiques et de conception et d'autres considérations pratiques;
4. À indiquer, s'il y a lieu, celles des tolérances spécifiées à l'appendice 7 qui ont déjà atteint ces valeurs limites.

S

RECOMMANDATION Nº 70

Relative à l'étude des caractéristiques technhiques du matériel (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaisant

que les renseignements techniques dont on dispose sur les divers types d'appareils utilisés pour la réception des différentes classes d'émission dans les différents services doivent être encore plus complets et plus précis pour pouvoir établir les plans les plus efficaces pour l'utilisation du spectre des fréquences radioélectriques;

invite le CCIR

1. À poursuivre sus études sur les caractéristiques qui devraient présenter les divers types d'appareils utilisés pour la réception des différentes classes d'émission dans les différents services en ce qui concerne la largeur de bande, la sélectivité, la sensibilité et la stabilité, et à formuler des Avis à ce sujet;
2. À poursuivre l'étude des méthodes pratique permettant d'obtenir les caractéristiques recommandées;
3. À étudier l'écart minimal pratiquement réalisable entre voies adjacentes en considérant les différentes classes d'emission, les différents services et les différentes bandes de fréquences;
4. À étudier les autres conditions auxquelles il est désirable que satisfassent dans leur ensemble les systèmes employés par les différents services, en vue de déterminer les conditions techniques auxquelles doit satisfaire le matériel, y compris l'appareillage terminal des stations et les antennes;
5. À étudier les méthodes permettant de déterminer si le matériel satisfait aux conditions recommandées;
6. À accorder une attention particulière aux études qui aideront le Comité international d'enregistrement des fréquences à améliorer encorre les Normes techniques qu'il emploie.

---

(1) Remplace la Recommandation Nº 6 de la Conférence administrative des radiocommunications (Génève, 1959).

ZN RECOMMANDATION Nº 71

Relative à la normalisation des caractéristiques techniques et d'exploitation des matériels radioélectriques

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les administrations se trouvent confrontées à la nécessité de consacrer de plus en plus de ressources à le réglementation de la qualité de fonctionnement des matériels radioélectriques;
b) Que les administrations, en particulier celles des pays en développement des difficultés à obtenir ces ressources;
c) Quil y aurait avantage à appliquer, dans toute la mesure pratiquement possible, des normes mutuellement reconnues ainsi que les procédures d'homologation associées;
d) Qu'un certain nombre d'organismes internationaux, dont le CCIR, l'OACI, l'OMCI, le CISPR et la CEI établissent des recommandations et des normes concernant les caractéristiques techiniques et d'exploitationl applicables à la qualité de fonctionnemtn des matériels et à la mesure de cette qualité;
e) Que, dans ce domaine, les besoins spécifiques des pays en développement n'ont pas toujours été pleinement pris en considération;

recommande

1. Que les administrations s'efforcent de coopérer en vue d'établir des spécifications internationales de qualité de fonctionnement et les méthodes de mesure associées qui pourraient être utulisées comme modèles pour les normes nationales applicables aux matériels radioélectriques;
2. Que ces spécifications internationales de qualité de fonctionnement et les méthodes de mesure associées répondent à des conditions largement représentatives ainsi qu'aux besoins spécifiques des pays en développement;
3. Que, lorsqu'il existe de telles spécifications internationales de qualité de fonctionnement pour les matériels radioélectriques, les administrations adoptent, dans toute la mesure pratiquement possible, ces spécifications comme vase pour leurs normes nationales;
4. Que les administrations envisagent dans toute la mesure pratiquement possible l'acceptation mutuelle des procédures d'homologation pour les matériels conformes à ces spéfications de qualité de fonctionnement.

ZR RECOMMANDATION Nº 72

Relative à la terminologie

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les discussions relatives à certains termes et définitions techniques figurant à l'article 1 ont fait apparaître divers problèmes qui n'ont pas été résolus de façon, entièrement satisfaisante au cours de ladite Conférence;
b) Que l'évolution de la technique et des modes d'expression peut conduire à ajourter, modifier on éventuellement supprimer certaines définitions;

invite le CCIR et le CCITT

chacun dans son domaine propre, à examiner les définitions des termes techniques figurant dans l'article 1 et à proposer toute modification qu'ils jugent utile;

charge le Secrétaire général

de transmettre les propositions élaborées par ces deux organismes aux conférences administratives intéressées pour que ces dernières les prennent en considération dans le cadre de leur mandat.

J RECOMMANDATION Nº 73

Relative à l'emploi du terme «canal» dans le Règlement des radiocommunications

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le terme «voie» (en anglais: channel, en espagnol: «canal») est utilisé très largement dans le Règlement des radiocommunications pour les plans d'allotissement des fréquences dans les appendices 16, 18, 25 Mar2, 26, 27, 27 Aer2, 32, 33 et 34 (1);

b) Que le terme «canal» (en anglais: channel, en espagnol: «canal») a des sens différents dans d'autres dispositions du Règlement des radiocommunications et pour les différents services de radiocommunication;

c) Qu'il ne doit y avoir aucune ambiguïté au sujet du sens du terme «canal» lors de son emploi dans les textes du Règlement des radiocommunications;

invite le CCIR

à définir le terme «canal» de façon qu'il puisse être utilisé de manière cohérente et sans confusion dans les textes du Règlement des radiocommunications pour toutes les langues de travail de l'UIT.

ZO

RECOMMANDATION N° 74

Relative à l'emploi du système international d'unités (SI) (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le système SI permet de résoudre de nombreux problèmes que posent les systèmes d'unités plus anciens;

b) Que l'Organisation internationale de normalisation e approuvé le système SI et en recommande l'adoption générale;

reconnaissant

a) Que le système SI, déjà adopté par nombre d'organisations internationales, est recommandé par le CCIR et le CCITT et utilisé par le CCIR et par les organismes permanents de l'Union;

b) Que le système SI a statut de norme nationale dans de nombreux pays;

c) Que, dans les pays qui n'ont pas encore adopté le système SI comme norme nationale, les ingénieurs des radiocommunications, les scientifiques et les auteurs de publications relatives à la radioélectricité recourent très souvent à ce système;

d) Que l'emploi du système SI ne fait que s'étendre dans toutes les parties du monde;

recommande

que les administrations utilisent le système SI dans leurs relations avec l'Union et les organismes qui la composent.

YX

RECOMMANDATION N° 100

Relative aux bandes de fréquences préférentielles pour les systèmes qui utilisent la propagation par diffusion troposphérique

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications spatiales (Génève, 1971) a demandé au CCIR d'étudier les bandes de fréquences préférentielles pour les systèmes de diffusion troposphérique et qu'elle a invité une future conférence administrative mondiale des radiocommunications à examiner cette question;

b) Les difficultés techniques et d'exploitation mentionnées par le CCIR (rapport de la Réunion spéciale préparatoire, Génève, 1978) dans les bandes de fréquences utilisées en partage par les systèmes à diffusion troposphérique, les systèmes spatiaux et les autres systèmes de Terre;

c) Les attributions additionnelles de bandes de fréquences qui ont été faites par la présente Conférence aux services spatiaux pour tenir compte de leur développement croissant;

d) Que l'IFRB a besoin que les administrations lui fournissent des renseignements spécifiques sur les systèmes qui utilisent la diffusion troposphérique, pour pouvoir s'assurer que les dispositions pertinentes du Règlement des radiocommunications (par exemple, le renvoi **763**, et les numéros **2560** et **2564** ont été appliquées;

---

(1) Le terme «voie» est actuellement utilisé en français dans ces appendices, mais on pourrait éventuellement envisager son remplacement ultérieur par le terme «canal», en tenant compte de la définition de ce terme qu'établira le CCIR.

(2) Remplace la Recommandation N° 9 de la Conférence administrative des radiocommunications (Génève, 1959).

reconnaissant toutefois

que les administrations voudront continuer à utiliser des systèmes à diffusion troposphérique pour répondre à certains besoins des télécommunications;

notant

que la prolifération de ces systèmes dans toutes les bandes de fréquences, en particulier dans celles qui sont utilisées en partage avec les systèmes spatiaux, ne fera qu'aggraver une situation déjà difficile;

recommande au CCIR

1. De poursuivre d'urgence l'étude des bandes de fréquences possédant les caractéristiques les mieux adaptées du point de vue de la propagation, aux systèmes qui utilisent la diffusion troposphérique;
2. De poursuivre l'étude des possibilités et des critères de partage entre les systèmes qui utilisent la diffusion troposphérique et les autres systèmes, en particulier les systèmes spatiaux;
3. D'élaborer, à la suite des études susmentionnées, un Avis relatif aux bandes de fréquences spécifiques qui ont été jugées les plus satisfaisantes pour de tels systèmes et cela, si possible avant sa prochaine Assemblée plénière. Ces bandes de fréquences devront être définies compte tenu des attributions à d'autres services, en particulier des attributions aux services spatiaux;

recommande aux administrations

1. De collaborer d'urgence et dans la mesure de leurs possibilités avec le CCIR en lui envoyant des contributions portant sur les études susmentionnées;
2. De tenir compte, pour assigner des fréquences aux nouvelles stations des systèmes qui utilisent la diffusion troposphérique, des renseignements publiés jusqu'à présent par le CCIR, afin que les systèmes qui seront établis à l'avenir emploient un nombre limité de bandes de fréquences déterminées;
3. D'indiquer explicitement dans les fiches de notification des assignations de fréquence qu'elles envoient à l'IFRB si ces assignations correspondent à des stations de systèmes à diffusion troposphérique;

invite le Conseil d'administration

à adopter les dispositions nécessaires pour qu'une future conférence administrative mondiale des radiocommunications examine les bandes de fréquences du service fixe à attribuer de préférence aux nouveaux systèmes utilisant la propagation par diffusion troposphérique, compte tenu des attributions de fréquence au service de radiocommunication spatiale et des Avis élaborés à cet effet par le CCIR.

ZE RECOMMANDATION N° 101

Relative aux liaisons de connexion dans le service de radiodiffusion par satellite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire de disposer d'une documentation abondante sur les caractéristiques des liaisons de connexion pour la planification du service de radiodiffusion par satellite;
b) Que le CCIR poursuit l'étude de ce problème au titre du Programme d'études pertinent;
c) Que les rapports porteuse/bruit sur les liaisons de connexion vers les satellites de radiodiffusion devraient avoir des valeurs de l'ordre de dix fois supérieures à celles des liaisons descendantes;
d) Qu'en ce qui concerne le brouillage sur les liaisons de connexion entre des satellites de radiodiffusion occupant des emplacements différents sur l'orbite, des rapports de protection sur les liaisons montantes (supérieurs d'environ 10 dB aux rapports de protection sur les liaisons descendantes) semblent pouvoir être aisément obtenus par la discrimination du diagramme des antennes d'émission des stations terriennes, dont le diamètre devra, bien entendu, être supérieur à celui des antennes de réception utilisées pour la liaison descendante;
e) Que, lorsque la planification est basée sur des paramètres de séparation tels que diagrammes de rayonnement pour les antennes d'émission des stations spatiales, entrelacement des porteuses ou discrimination de polarisation ou des deux paramètres, dans le but d'obtenir, sur la liaison descendante, le rapport porteuse/brouillage requis entre les zones de service desservies à partir d'un même emplacement sur orbite, le rapport porteuse/brouillage plus élevé à prévoir sur les liaisons montantes qui aboutissent à la ou aux stations spatiales occupant cet emplacement doit être obtenu au moyen des mêmes paramètres de séparation, à condition que ce rapport permette d'améliorer la séparation nette d'environ 10 dB. Les caractéristiques de la station terrienne d'émission n'influent naturellement pas sur cette séparation, sauf en ce qui concerne la pureté de la polarisation dans l'axe du faisceau;

(1) Remplace la Recommandation N° Sat-5 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

f) Que, pour la mise en œuvre effective des systèmes de radiodiffusion par satellite, il faut tenir compte de toutes les fonctions connexes des satellites d'exploitation spatiale (poursuite, télémesure, télécommande et mesure des distances) liées au fonctionnement des stations spatiales de radiodiffusion;

invite le CCIR

1. À poursuivre, pour les antennes de réception des stations spatiales du service de radiodiffusion par satellite, l'étude des caractéristiques de rayonnement qui permettent d'obtenir par elles-mêmes, ou combinées à d'autres moyens de discrimination, les rapports de protection nécessaires sur les liaisons de connexion des systèmes du service de radiodiffusion par satellite, pour les émissions de la ou des stations spatiales occupant une position donnée sur l'orbite des satellites géostationnaires;

2. À poursuivre, pour les antennes de réception des stations spatiales du service de radiodiffusion par satellite, l'étude des caractéristiques de polarisation qui permettent d'obtenir par elles-mêmes, ou combinées à d'autres moyens de discrimination, les rapports de protection nécessaires sur les liaisons de connexion des systèmes du service de radiodiffusion par satellite, pour les émissions de la ou des stations spatiales occupant une position donnée sur l'orbite des satellites géostationnaires;

3. À poursuivre l'étude des caractéristiques techniques des liaisons de connexion qui doivent être prises en considération lors de la mise en œuvre du Plan pour ce service;

4. À l'étudier les caractéristiques et les conditions techniques et de conception qui influent sur la mise en œuvre des «fonctions des services d'exploitation spatiale» des stations spatiales du service de radiodiffusion par satellite;

5. À étudier les conditions requises pour la séparation des canaux adjacents sur les liaisons de connexion vers la ou les stations spatiales du service de radiodiffusion par satellite occupant une position donnée sur l'orbite des satellites géostationnaires.

X RECOMMANDATION Nº 102

Relative à l'étude des méthodes de modulation pour les faisceaux hertziens du point de vue du partage des bandes de fréquences avec les systèmes du service fixe par satellite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que, d'après l'article 8 du Règlement des radiocommunications, certaines bandes de fréquences peuvent être utilisées en partage par le service fixe par satellite et par le service fixe;

b) Que les articles 27 et 28 du Règlement des radiocommunications fixent les critères de partage qu'il y a lieu de respecter afin d'éviter les brouillages mutuels entre les stations de ces deux services;

c) Que la réduction des brouillages entre deux services semble être le plus important des nombreux facteurs dont dépend l'efficacité de l'utilisation des bandes de fréquences;

notant

a) Que l'efficacité de l'utilisation des bandes de fréquences partagées par ces deux services dépend des méthodes de modulation utilisées dans les systèmes intéressés;

b) Que l'étude des caractéristiques de modulation préférées pour les systèmes du service fixe par satellite est prévue dans le Programme d'études 2D-1/4 du CCIR;

recommande que le CCIR

étudie spécialement, dans le cadre de la Question 2-3/4, les méthodes de modulation (comme la modulation par impulsions codées utilisée avec la modulation de phase ou de fréquence), en particulier pour les faisceaux hertziens en visibilité directe, du point de vue du partage des bandes de fréquences avec les systèmes du service fixe par satellite.

ZA RECOMMANDATION Nº 103

Relative à la dispersion de l'énergie de la porteuse dans les systèmes du service fixe par satellite (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'utilisation de techniques de dispersion de l'énergie de la porteuse dans les systèmes du service fixe par satellite peut conduire à une réduction sensible des brouillages causés aux stations d'un service de radiocommunication de Terre qui fonctionnent dans les mêmes bandes de fréquences;

---

(1) Remplace la Recommandation Nº Spa-4 de la Conférence administrative extraordinaire des radiocommunications (Génève, 1963).
(2) Remplace la Recommandation Nº Spa2-11 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

b) Que l'utilisation de ces techniques peut conduire à une réduction sensible des brouillages entre systèmes du service fixe par satellite fonctionnant dans les mêmes bandes de fréquences et à une augmentation correspondante de l'efficacité d'utilisation de l'orbite des satélites géostationnaires;
c) Que ces techniques sont couramment utilisées avec succés dans les systèmes du service fixe par satellite sans dégradation sensible de la qualité de fonctionnement;

recommande

1. Que les systèmes du service fixe par satellite employant une modulation angulaire par des signaux analogiques utilisent, dans la mesure où cela est pratiquement possible, des techniques de dispersion de l'énergie de la porteuse afin d'étaler à tout moment l'énergie d'une façon compatible avec un fonctionnement satisfaisant de ces systèmes;
2. Que les systèmes du service fixe par satellite employant une modulation numérique utilisent des techniques de dispersion de l'énergie de la porteuse lorsque cela sera devenu possible des points de vue techniques et pratique.

ZZ

RECOMMANDATION Nº 200

Relative à la date d'entrée en vigueur de la bande de garde de 10 kHz pour la fréquence 500 kHz dans le service mobile (détresse et appel)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire d'utiliser le spectre des fréquences de la façon la plus efficace possible;
b) Que la présente Conférence a adopté une bande de garde de 495 kHz à 505 kHz pour la fréquence 500 kHz, qui est la fréquence internationale d'appel et de détresse en radiotélégraphie dans le service mobile;

reconnaissant

a) Qu'il est nécessaire de prévoir un délai suffisant d'amortissement pour les matériels radioélectriques actuellement en service;
b) Que les progrès de la technique ont permis la réalisation de matériels plus stables et plus fiables;

recommande

à la prochaine conférence administrative mondiale des radiocommunications compétente de prendre une décision sur la date d'entrée en vigueur de cette nouvelle disposition;

demande au Secrétaire général

de communiquer la présente Recommandation à l'Organisation intergouvernementale consultative de la navigation maritime (OMCI) en la priant d'inclure l'examen de ce sujet dans le cadre de l'étude du système de détresse et de sécurité maritime et de soumettre à la conférence mentionnée ci-dessus une recommandation relative à la date d'entrée en vigueur de la nouvelle bande de garde.

YS

RECOMMANDATION Nº 201

Relative au trafic de détresse, d'urgence et de sécurité (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

ayant noté

que l'Organisation intergouvernementale consultive de la navigation maritime (OMCI):

a) A adopté une résolution (2) au sujet du système de détresse maritime;
b) Développe un futur système mondial de détresse et de sécurité maritime comportant des améliorations à court terme qui ont été proposées et la définition des besoins et des mesures transitoires proposées en vue d'une amélioration à long terme;

prenant note d'autre part

que les études ayant trait aux mesures à prendre pour la détresse et la sécurité dans le cadre d'un système de radiocommunications maritimes par satellite font l'objet de Questions et de Programmes d'études du CCIR;

---

(1) Remplace la Recommandation Nº Mar2-16 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Résolution A.420 (XI) de l'OMCI.

considérant

a) L'importance particulière du besoin, souligné par l'OMCI, d'un système qui transmettrait automatiquement, en cas de détresse, des signaux d'alarme, suivis de la transmission, également automatique, de renseignements supplémentaires concernant le cas de détresse;
b) Qu'il convient que l'alarme automatique en cas de détresse, suivie de la transmission automatique de renseignements supplémentaires concernant le cas de détresse, ait lieu sur une ou, plusieurs fréquences réservées à des fins de détresse;
c) Qu'il faut prévoir des fréquences appropriées aux besoins connexes en matière d'appel et de communications de sécurité;
d) Que l'émission des messages de détresse, d'urgence et de sécurité et leur enregistrement à la réception doivent pouvoir s'effectuer sans interruption, que les stations intéressées fonctionnent ou non sous la surveillance de personnel;

recommande

1. Que l'OMCI soit invitée à poursuivre ses études afin de parvenir à la mise en œuvre prochaine du futur système de détresse;
2. Que le CCIR poursuive ses travaux en vue de déterminer le rôle des radiocommunications maritimes par satellite aussi bien dans le cadre d'un système de détresse coordonné que pour la sécurité;
3. Que les administrations, en tenant compte des progrés continuels de la technologie, envisagent la nécessité de réserver une ou, éventuellement, plusieurs fréquences à des fins de détresse;
4. Que les administrations, en s'inspirant des progrés techniques, envisagent une automatisation plus poussée des systèmes de télécommunications permettant de diffuser sans interruption les messages de détresse, d'urgence et de sécurité, en vue de remplacer la radiotélégraphie en code Morse et, éventuellement, la radiotéléphonie;
5. Que les administrations se fixent comme objectif de prendre une décision en la matière lors de la prochaine conférence administrative mondiale des radiocommunications compétente.

F RECOMMANDATION N° 202

Relative à l'amélioration de la protection, contre les brouillages préjudiciables, des fréquences de détresse et de sécurité et de celles qui ont un rapport avec la détresse et la sécurité

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il importe de réduire au minimun les risques de brouillages préjudiciables sur les fréquences utilisées pour la sauvegarde de la vie humaine;
b) Que cette Conférence, lorsqu'elle a examiné l'article 18 relatif aux brouillages, a reconnu à l'unanimité qu'il convient d'améliorer la protection, contre les brouillages préjudiciables, des fréquences de détresse et de sécurité et de celles qui ont un rapport avec la détresse et la sécurité;
c) Que l'on pourrait notamment contribuer à l'amélioration de cette protection en insérant dans le Règlement des radiocommunications des dispositions stipulant que les essais sur ces fréquences doivent être effectués, chaque fois que pratiquement possible, à l'aide d'une antenne fictive ou avec une puissance réduite;
d) Que ces dispositions sont contenues dans l'article 38 relatif aux fréquences de détresse et de sécurité;

notant cependant

que la présente Conférence n'est pas habilitée à réviser l'article 38;

invite les administrations

à étudier cette question et à soumettre des propositions à la prochaine conférence administrative mondiale des radiocommunications compétente.

YA RECOMMANDATION N° 203

Relative à l'utilisation future de la bande 2170-2194 kHz

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la fréquence 2182 kHz est la fréquence internationale de détresse en radiotéléphonie;
b) Que, exception faite des émissions autorisées sur la fréquence porteuse 2182 kHz, toute émission est interdite sur les fréquences comprises entre 2173,5 kHz et 2190,5 kHz;

c) Que, dans la Région 1, les bandes de fréquences adjacentes 2170-2173,5 kHz et 2190,5-2194 kHz sont utilisées respectivement par les stations côtières appelant des stations de navire (y compris les appels sélectifs) et par les stations de navire appelant les stations côtières;

notant

a) Que la présente Conférence a modifié le Tableau d'attribution des bandes de fréquences pour réduire la bande de garde autour de la fréquence 2182 kHz à ± 8,5 kHz et qu'elle a attribué les bandes 2170-2173,5 kHz et 2190,5-2194 kHz en exclusivité au service mobile maritime dans le monde entier;
b) Qu'il est maintenant nécessaire de réorganiser l'ensemble de la bande 2170-2194 kHz et de réexaminer les dispositions réglementaires, surtout en ce qui concerne les articles 38 et 60;

recommande

que la prochaine conférence administrative mondiale des radiocommunications compétente soit invitée:

1. À examiner les attributions à l'intérieur de la bande 2170-2194 kHz;
2. À revoir les paramètres techniques et d'exploitation appropriès en vue de réduire encore davantage la bande de garde autour de la fréquence 2182 kHz;
3. À mettre au point toutes dispositions réglementaires éventuellement nécessaires;
4. À elaborer sur ces bases des plants pour la mise en œuvre de toute nouvelle disposition;
5. À fixer la date d'entrée en vigueur de ces plans et de ces dispositions;

demande au Secrétaire général

de communiquer la présente Recommandation au Secrétaire général de l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) pour qu'elle soit étudiée par les organes compétents et que ceux-ci formulent des recommandations à ce sujet;

invite

les administrations à étudier cette question et à présenter des propositions pour examen par la prochaine conférence administrative mondiale des radiocommunications compétente.

C

RECOMMANDATION N° 204

Relative à l'application des chapitres NX, NXI et NXII du Remaniement du Règlement des radiocommunications (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le Règlement des radiocommunications constitue le cadre réglementaire fondamental pour tous les services mobiles et que ses dispositions doivent répondre, d'aussi près que possible, aux besoins et aux conditions d'exploitation pratiques de ces services;
b) Que le présente Conférence a adopté le Remaniement du Règlement des radiocommunications proposé par le Goupe d'Experts, compte tenu des propositions formulées par un certain nombre d'administrations en vue d'une amélioration de ce Remaniement;
c) Que la subdivision des précédentes dispositions relatives au service mobile en plusieurs chapitres correspondant aux divers services mobiles a fait apparaître certaines anomalies à propos de ces services, s'agissant en particulier de leur applicabilité au service mobile aéronautique et au service mobile terrestre;
d) Que certaines de ces anomalies soulèvent des problèmes fondamentaux d'exploitation qui ne sont pas de la compétence de la présente Conférence;
e) Que le service mobile aéronautique a pour objet les communications devant assurer une exploitation súre et régulière des aéronefs;
f) Qu'à cet effet, l'Organisation de l'aviation civile internationale a approuvé des normes et pratiques recommandées adaptées aux besoins de l'exploitation des aéronefs, lesquelles ont fait leurs preuves dans la pratique et sont aujourd'hui d'un usage courant;

recommande

que la prochaine conférence administrative mondiale des radiocommunications compétente révise les chapitres NX, NXI et NXII (1) afin de les adapter aux besoins et aux pratiques actuels des services concernés;

---

(1) Chapitres X, XI et XII du Règlement des radiocommunications de 1979.

prie le Secrétaire général

de communiquer le texte de la présente Recommandation à l'OACI et à l'OMCI et d'attirer l'attention de ces organisations sur l'étude du contenu des chapitres NX et NXI (1) respectivement en vue d'assister les administrations pour la préparation de cette conférence.

YD RECOMMANDATION N° 300

Relative à la planification de l'utilisation des fréquences par le service mobile maritime dans la bande 435-526,5 kHz dans la Région 1

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la présente Conférence a modifié les attributions au service mobile maritime dans la bande 415-526,5 kHz;
b) Que la présente Conférence a adopté les Recommandations **200** et **309** relatives à cette bande;
c) Que la présente Conférence a révisé certaines normes techniques utilisées dans le service mobile maritime:
d) Que certains des normes techniques qui ont servi de base au plan d'assignations pour les pays européens contenu dans les Actes finals de la Conférence maritime européenne (Copenhague, 1948) sont maintenant dépassées;
e) Que les navires qui utilisent les fréquences de cette bande naviguent dans le monde entier;
f) Que certains pays ont déjà attribué des fréquences à d'autres services fonctionnant dans cette bande, ce qui peut imposer des contraintes pour la planification du service mobile maritime;
g) Qu'il est en conséquence nécessaire d'examiner en détail l'utilisation et la planification de cette bande en tenant compte des normes et des progrès techniques les plus récents;

notant

que la présente Conférence a recommandé de convoquer une conférence administrative des radiocommunications pour les services mobiles;

recommande au Conseil d'administration

de veiller à ce que la conférence pour les services mobiles soit compétente pour prendre des décisions à propos de la planification et de l'utilisation des fréquences de cette bande dans la Région 1;

demande au CCIR

d'entreprendre, d'urgence, l'étude des aspects techniques et d'exploitation de ces problèmes, y compris les critères de partage avec d'autres services;

invite

1. Le Secrétaire général à communiquer la présente Recommandation à l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) en la priant d'examiner d'urgence les besoins d'exploitation du service mobile maritime qui utilise cette bande de fréquences, et de formuler les recommandations qu'elle juge appropriées;
2. Les administrations de la Région 1 à étudier cette question et à soumettre pour examen des propositions à la conférence pour les services mobiles.

YE RECOMMANDATION N° 301

Relative à la planification de l'utilisation des fréquences dans les bandes attribuées au service mobile maritime entre 1606,5 kHz et 3400 kHz dans la Région 1

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la présente Conférence a modifié les attributions au service mobile maritime dans les bandes comprises entre 1606,5 kHz et 3400 kHz;
b) Que la présente Conférence a adopté la Recommandation **203** et la Résolution **38** relatives à ces bandes;
c) Qu'il est souhaitable d'utiliser ces bandes de la façon la plus efficace lors de la mise en application du Tableau révisé d'attribution des bandes de fréquences;
d) Que les navires qui utilisent les fréquences de ces bandes naviguent dans le monde entier;
e) Que les plans existants sont limités à l'utilisation régionale;
f) Qu'il est en conséquence nécessaire d'examiner en détail l'utilisation et la planification de ces bandes;

(1) Chapitres X et XI du Règlement des radiocommunications de 1979.

notant

que la présente Conférence a recommandé de convoquer une conférence administrative des radiocommunications pour les services mobiles;

recommande au Conseil d'administration

de veiller à ce que la conférence pour les services mobiles soit compétente pour prendre des decisions a propos de la planification et de l'utilisation des fréquences de ces bnandes dans la Région 1;

demande au CCIR

d'entreprendre d'urgence, l'étude des aspects techniques et d'exploitation de ces problèmes, y compris les critères de partage avec d'autres services;

invite

1. Le Secrétaire général, à communiquer la présente Recommandation à l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) en la priant d'examiner d'urgence les besoins d'exploitation du service mobile maritime qui utilise ces bandes de fréquences, et de formuler les recommandations qu'elle juge appropriées;

2. Les administrations de la Région 1, à étudier cette question et à soumettre pour examen des propositions à la conférence pour les services mobiles.

YM

RECOMMANDATION N° 302

Relative à une meilleure utilisation des voies radiotéléphoniques à ondes décamétriques par les stations côtières dans les bandes de fréquences attribuées en exclusivité au service mobile maritime (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'un grand nombre de demandes d'allotissements concernant des voies radiotéléphoniques à ondes décamétriques avaient été soumises à la Conférence administrative des radiocommunications maritimes (Génève, 1974);

b) Que le nombre de voies qui découle de la révision de l'appendice 16 ne suffit pas à répondre à ces demandes dans les meilleures conditions;

c) Que les modalités de portage qui en découlent ont été établies essentiellement en fonction de critères d'exploitation;

d) Qu'après la présent Conférence, il sera encore plus important d'assurer la meilleure utilisation possible des voies radiotéléphoniques à ondes décamétriques dans les bandes attribuées en exclusivité au service mobile maritime;

e) Qu'il convient que les administrations s'assurent les unes aux autres, dans chaque voie, une qualité de service équivalente;

f) Que l'on poursuit actuellement la mise au point de moyens techniques pour faciliter l'utilisation en commun des fréquences par les stations côtières voisines dépendant d'administrations différentes ou par une station côtière exploitée pour le compte de plusieurs administrations;

recommande aux administrations

1. De déployer tous leurs efforts en vue de conclure des arrangements d'exploitation mutuellement satisfaisants, concernant notamment:

Les différents schémas de partage dans le temps;
Le décalage des heures d'ouverture du service;
Volontairement et dans le cadre régional, l'utilisation des voies radiotéléphoniques à ondes décamétriques dans un ordre de priorité lié au volume du trafic;

2. D'utilisation tous les moyens à leur disposition, y compris ceux qui sont indiqués ci-dessus, pour permettre la meilleure utilisation possible des voies radiotéléphoniques à ondes décamétriques par les stations côtières dans les bandes attribuées au service mobile maritime;

invite les administrations

1. À tenir compte, lorsqu'elles assignent à des stations côtières des fréquences des bandes d'ondes décamétriques, des dispositions des numéros 954 et 1804 du Règlement des radiocommunications;

---

(1) Remplace la Recommandation N° Mar2-7 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

2. À faire en sorte que le stations côtières:

Utilisent la bande de fréquences et la puissance minimale adaptées aux conditions de propagation et à nature du service;

Utilisent chaque fois que cela est possible des antennes à effet directif;

Donnent aux stations de navire des instructions appropriées, comme il est indiqué au número **5056** du Règlement des radiocommunications;

invite le CCIR

à poursuivre ses études afin d'améliorer toues les critères de partage, techniques et d'exploitation, qui ont une incidence sur l'utilisation par les stations côtières des voies radiotéléphoniques à ondes décamétriques dans les bandes attribuées en exclusivité au service mobile maritime, ainsi que les méthodes de choix des voies disponibles par des moyens électroniques ou autres, on vue d'en faciliter l'accès multiple.

XJ RECOMMANDATION N.° 303

Relative à l'utilisation des fréquences porteuses 4125 kHz et 6215,5 kHz en plus de la fréquence porteuse 2182 kHz, aux fins de détresse et de sécurité ainsi que pour l'appel et la réponse dans la zone des Régions 1 et 2 située au sud du parallèle 15° N, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° N (1).

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que dans certaines zones du monde, il n'est pratiquement pas possible d'assurer une couverture fiable aux fins de détresse et de sécurité sur la fréquence international de détresse en radiotéléphonie (2182 kHz) parce que les stations côtières qui maintiennent la veille sur cette fréquence sont très éloignées les unes des autres;

b) Qu'un grand nombre de navires équipés seulement pour la radiotéléphonie croisent dans ces zones et sont alors souvent hors de portée des stations côtières qui assurent la veille sur la fréquence porteuse 2182 kHz;

c) Que pour surmonter cette difficulté, de nombreuses administrations des zones susmentionnées ont instauré dans leurs stations côtières des veilles sur les fréquences porteuses 4125 kHz et 6215,5 kHz aux fins de détresse et de sécurité ainsi que pour l'appel et la réponse; il est apparu que ces veilles complétent efficacement celle qui est effectuée sur la fréquence 2182 kHz;

d) Que le Règlement des radiocommunications prévoit la possibilité d'utiliser, aux fins de détresse et de sécurité ainsi que pour l'appel et la réponse, en plus de la fréquence porteuse 2182 kHz, d'une part la fréquence porteuse 4125 kHz dans la zone des Régions 1 et 2 située au sud du parallèle 15° N, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° N, d'autre part la fréquence porteuse 6215,5 kHz dans la zone de la Région 3 située au sud du parallèle 25° N;

e) Qu'il pourrait y avoir intérêt à ce que les navires équipés seulement pour la radiotéléphonie et qui naviguent dans ces zones aient les moyens d'émettre et de recevoir sur les fréquences porteuses 4125 kHz et 6125,5 kHz, lorsque les appels sur la fréquence 2182 kHz risquent d'être inefficaces;

recommande

1. Que les administrations fassent connaître aux exploitants des navires équipés seulement pour la radiotéléphonie et qui relèvent de leur juridiction, que certaines stations terrestres figurant dans la Nomenclature des stations côtières ont les moyens de compléter le service assuré sur la fréquence porteuse 2182 kHz aux fins de détresse et de sécurité ainsi que pour l'appel et la réponse, par un service fonctionnant sur la fréquence porteuse 4125 kHz dans la zone des Régions 1 et 2 située au sud du parallèle 15° N, y compris le Mexique, et dans la zone de la Région 3 située au sud du parallèle 25° N, et sur la fréquence porteuse 6215,5 kHz dans la zone de la Région 3 située au sud du parallèle 25° N;

2. Que les administrations dont certaines navires sont équipés seulement pour la radiotéléphonie ne perdent pas de vue que, s'il n'est pas obligatoire que les stations de navire et les stations côtières soient dotées d'installations permettant d'émettre et de recevoir sur les fréquences 4125 kHz et 6215,5 kHz, il n'en reste pas moins que de telles installations peuvent être essentielles à la sécurité de ces navires lorsqu'ils naviguent dans les zones susmentionnées.

---

(1) Remplace la Recommandation N° Mar2-4 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

YP RECOMMANDATION Nº 304

Relative aux fréquences de l'appendice 16 (section B) au Règlement des radiocommunications, destinées à être utilisées dans le monde entier par les navires de toutes catégories ainsi que par les stations côtières (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les fréquences indiquées dans la table des fréquences d'émission à bande latérale unique pour l'exploitation simplex (voie à une fréquence) et pour l'exploitation à bandes croisées entre navires (deux fréquences) ne sont pas encore utilisées à l'échelle mondiale pour les communications entre les navires et les stations côtières;
b) Que les navirers long-courriers, dans le monde entier, ont besoin de pouvoir communiquer avec les stations côtières de n'importe quelle administration;

recommande

que les administrations assurent, autant que possible, un service sur ces fréquences dans leurs principales stations côtières radiotéléphoniques et notifient au Secrétaire général des renseignements détaillés concernant ces services en vue de leur publication dans la Nomenclature des stations côtières.

ZW RECOMMANDATION Nº 305

Relative à utilisation des voies 15 et 17 de l'appendice 18 par les stations de communications de bord (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la Conférence administrative mondiale des radiocommunications (Génève, 1967) a prévu l'utilisation des voies 15 et 17 de l'appendice 18 pour les communications internes d'exploitation à bord des navires dans les eaux territoriales, avec une puissance apparente rayonnée ne dépassant pas 0,1 W, et que la Conferénce administrative mondiale des radiocommunications maritimes (Génève, 1974) a porté cette limite de puissance à 1 watt;
b) Qu'un certain nombre d'administrations font un grand usage de ces voies;
c) Que certaines administrations ne les ont pas utilisées pour les communications internes à bord des navires en raison du manque de voies à ondes métriques pour les autres besoins du service mobile maritime;
d) Que pour cette même raison, ces administrations désirent que ces voies cessent d'être utilisées pour les communications de bord;
e) Que, en la matière, la présente Conférence a maintenu les dispositions du Tableau d'attribution des bandes des fréquences;

notant

que le CCIR a adopté l'Avis 542 et le Rapport 589-1;

reconnaissant

a) Qu'il est nécessaire de disposer sur le plan international, de plusieurs voies communes pour les stations de communications de bord afin de pouvoir répondre aux besoins mondiaux dans l'avenir;
b) Qu'il peut être nécessaire de disposer de fréquences permettant d'utiliser des stations relais sur les grands navires tels que les porte-conteneurs, les bateaux-citernes, etc.;
c) Que l'on a peut-être besoin d'acquérir davantage d'expérience en ce qui concerne l'efficacité d'emploi des voies à ondes décimétriques maintenues disponibles à cet effet par la présent Conférence;

recommande

1. Que la prochaine conférence administrative mondiale des radiocommunications compétente détermine si l'utilisation des voies 15 et 17 de l'appendice 18 est encore nécessaire pour les communications de bord et, si tel n'est pas le cas, qu'elle fixe la date à laquelle il convient que cette utilisation cesse;

---

(1) Remplace la Recommandation Nº Mar2-6 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Remplace la Recommandation Nº Mar2-11 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

2. Que cette même conférence examine le cas des voies à ondes décimétriques utilisées par les stations de communications de bord en vue de déterminer si leur mombre et leur emplacement dans le sprectre des fréquences répondent bien aux besoins de ces stations;

3. Que cette même conférence détermine s'il est nécessaire de procéder à des attributions supplémentaires de fréquences que les stations de communications de bord pourraient utiliser dans le monde entier, y compris dans les eaux territoriales de tous les pays;

4. Que les administrations accordent toute l'attention requise aux normes techniques de ces stations et à leur fonctionnement, afin d'assurer leur compatibilité mutuelle au sein d'un système international efficace.

YQ RECOMMANDATION Nº 306

Relative à l'établissement d'une veille sur la fréquence 156,8 MHz par les stations côtières aux fins de détresse (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la fréquence 156,8 MHz a été désignée comme fréquence internationale de détresse pour les stations du service mobile maritime fonctionnant dans les bandes autorisées entre 156 MHz et 174 MHz;

b) Que cette fréquence est très utile pour les communications à courte distance et que son utilisation, dans des situations de détresse, contribuera à améliorer notablement la sécurité de la vie humaine en mer, en particulier dans les zones à trafic élevé où l'on peut maintenir une écoute efficace;

c) Que bien des administrations desservent d'ores et déjà leurs côtes dans la bande 156-174 MHz;

d) Qu'il serait cependant peu pratique on inutile pour certaines administrations, dans les conditions qui leur sont propres, d'assurer une desserte suffisante de leurs côtes dans la bande 156-174 MHz, permettant une veille efficace aux fins de détresse sur la fréquence 156,8 MHz;

recommande

que les administrations, lorsqu'elles le jugent nécessaire et possible dans la pratique, prennent les mesures nécessaires à la mise en œuvre d'une veille sur la fréquence 156,8 MHz aux fins de détresse sur les côtes de leur pays.

YL RECOMMANDATION Nº 307

Relative aux choix, dans les bandes du service mobile maritime comprises entre 1605 Hz et 3800 Hz, d'une fréquence réservée aux besoins de la sécurité (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la radiotéléphonie à ondes hectométriques présent une utilité croissante pour la sécurité des navires puisque:

i) Conformément aux dispositions de la Convention internationale pour la sauvergarde de la vie humaine en mer (Londres, 1960), les navires de charge d'une jauge brute comprise entre 300 et 1600 tonneaux, à moins d'être pourvus d'une station radiotélégraphique, doivent être pourvus d'une station radiotéléphonique;

ii) L'Organisation intergouvernementale consultive de la navigation maritime (OMCI) recommande (3) que les navires obligatoirement équipés, soit, d'une installation radiotélégraphique (navires de plus de 1600 tonneaux de jauge brute), soit d'une installation radiotéléphonique, soient en outre dotés d'installations leur permettant une écoute permanente, lorsqu'ils sont en mer, sur la fréquence radiotéléphonique de détresse; que l'on encourage, sur les navires équipés pour la radiotélégraphie, l'installation d'un émetteur radiotéléphonique pouvant fonctionner dans la bande des 2 MHz; et que les administrations envisagent d'adopter une réglementation nationale imposant l'installation d'une récepteur de veille sur la fréquence de détresse radiotéléphonique à bord des navires auxquels la Convention de Londres (1960) ne s'applique pas;

---

(1) Remplace la Recommandation Nº Mar2-10 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Remplace la Recommandation Nº Mar2-2 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(3) Résolution A.217 (VII) de l'OMCI.

b) Que néanmoins, dans bien des régions, la veille sur la fréquence radiotéléphonique de détresse en ondes hectométriques est très difficile à cause des nombreux appels transmis sur cette fréquence pour le trafic courant;

c) Que des difficultés analogues se présenteraient même si des systèmes de veille et d'alarme plus évolués que les systèmes actuels étaient adoptés;

d) Que, dans certaines régions, le trafic radiotéléphonique sur ondes hectométriques s'accroît constamment;

invite le CCIR

à entreprende d'urgence une étude des aspects techniques et d'exploitation des problèmes que soulève la situation exposée ci-dessus;

recommande

que la prochaine conférence administrative mondiale des radiocommunications compétente détermine, en fonction des résultats des travaux du CCIR:

1. Une fréquence réservée à la transmission des appels et messages de détresse et, éventuellement, des signaux et messages d'urgence ainsi que des signaux et certains messages de sécurité, à l'exclusion de tout appel destiné au trafic courant;

2. Une fréquence, différente de la précédente, destinée à l'appel à la voix et à l'appel sélectif pour le trafic courant;

3. Pour chacune de ces deux fréquences, une bande de garde de largeur convenable.

YO

RECOMMANDATION Nº 308

Relative à la désignation de fréquences des bandes d'ondes hectométriques à utiliser en commun par les stations côtières radiotéléphoniques pour les communications avec les stations de navire de nationalités autres que la leur (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Que sur les navires de faible tonnage dotés d'appareils à bande latérale unique, il est essentiel de disposer d'un récepteur à fréquences fixes pilotées par quartz afin que le réglage correct soit facilité;

b) Que les navires de ce type qui effectuent des voyages internationaux et communiquent avec des stations côtières de nationalités autre que la leur, ont besoin de disposer d'un nombre considérable de quartz supplémentaires;

c) Que réduire le nombre des quartz nécessaires permet de maintenir à un niveau satisfaisant le coût des récepteurs à bande latérale unique;

considérant

a) Qu'il convient d'assigner à toutes les stations côtières des fréquences de travail internationales pour leurs communications avec des navires de nationalités autres que la leur, une telle utilisation de ces fréquences n'excluant par leur emploi pour les besoins nationaux;

b) Qu'en examinant le Fichier de référence international des fréquences, il est apparu que, pas plus à l'échelon régional qu'à échelon mondial, il ne semblait exister de fréquence disponible susceptible d'être utilisée par les stations côtières pour leurs communications avec des navires de nationalités autres que la leur;

recommande

1. Que les administrations étudient cette question au plus tôt afin de formuler des propositions destinées à être présentées à la prochaine conférence administrative des radiocommunications habilitée à traiter de cette question;

2. Que, entre-temps, le pays recherchent la possibilité de conclure des arrangements régionaux, bilatéraux ou multilatéraux, afin de mettre à la disposition des stations côtières des fréquences de travail communes pour communiquer avec des stations de navire de nationalités autres que la leur.

---

(1) Remplace la Recommandation Nº Mar5 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

YB RECOMMANDATION Nº 309

Relative à la désignation d'une fréquence dans les bandes 435-495 kHz ou 505-526,5 kHz (525 kHz dans la Région 2) sur une base mondiale pour l'émission par les stations côtières des bulletins météorologiques et des avis aux navigateurs, à l'intention des navires, au moyen de la télégraphie à impression directe à bande étroite.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que pour améliorer les dispositions existantes du système actuel d'urgence et de sécurité maritimes, l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) a recommandé (1) aux administrations d'introduire des émissions de télégraphie à impressim directe à bande étroite pour diffuser les bulletins météorologiques et les avis aux navigateurs;
b) Que ces émissions auraient pour effet de renforcer la sécurité de la vie humaine en mer;
c) Que le CCIR a recommandé (2) un système automatique de télégraphie à impression directe pour la transmision aux navires d'informations concernant la navigation et la météorologie;
d) Que, dans certains pays d'Europe, des administrations assurent déjà de telles émissions à titre expérimental en utilisant la fréquence 518 Hz;
e) Qu'un certain nombre d'administration ont proposé à la présent Conférence de désigner la fréquence 518 kHz pour être utilisée à cet effet sur une base mondiale;
f) Que la présente Conférence estime que cette question relève de la prochaine conférence administrative mondiale des radiocommunications compétente;
g) Qu'il est encore nécessaire d'assurer la transmission des avis aux navigateurs et de bulletins météorologiques aux navires au moyen de la télégraphie Morse normale;

recommande

que la prochaine conférence administrative mondiale des radiocommunications compétente étudie cette question et prenne les mesures nécessaires en vue de désigner une fréquence internationale appropriée pour transmettre les avis aux navigateurs et les bulletins météorologiques au moyen de la télégraphie à impression directe à bande étroite, tout en conservant les dispositions relatives à la télégraphie Morse normale actuellement utilisée pour transmettre ces avis;

invite les administrations

à étudier cette question en vue de présenter des propositions pertinentes à la prochaine conférence administrative mondiale des radiocommunications compétente;

demande au Secrétaire général

de comuniquer la présente Recommandation à l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) en la priant de poursuivre son étude de cette question et de formuler les recommandations qui s'imposent.

ZY RECOMMANDATION Nº 310

Relative à un système automatique de radiocommunications sur ondes décimétriques pour le service mobile maritime

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

consciente

a) De la croissance continue de la population du globe et des besoins qui en découlent pour ce qui est du transport sûr et efficace de denrées alimentaires et d'autres marchandises essentielles;
b) De la nécessité d'une croissance économique rapide et efficace dans le monde entier;
c) De ce que les flottes maritimes participent activement au commerce et sont en pleine expansion;

considérant

a) Que la bande d'ondes métriques attribuée au service mobile maritime (appendice 18) est désormais encombrée dans bien des régions du monde;
b) Que les besoins en matière de voies radiotéléphoniques supplémentaires en ondes décimétriques pour les opérations portuaires, le mouvement des navires ainsi que la correspondance publique dans le service mobile maritime sont, pour l'avenir, de l'ordre de 200 à 240 voies duplex dans certaines régions encombrées;

---

(1) Voir la Résolution A-420 (XI) de l'Assemblée de l'OMCI.
(2) Voir l'Avis 540 du CCIR.

c) Qu'il est hautement souhaitable que le système maritime fonctionnant en ondes décimétriques et d'autres systèmes internationaux de correspondance publique du service mobile soient intégralement automatisés, afin d'assurer l'utilisation efficace des voies et d'exploitation économique des services, dans l'intérêt de leurs usagers;

d) Que la normalisation est d'une grande importance dans les services mobiles internationaux;

e) Que les administrations peuvent souhaiter utiliser toutes les voies ou une partie des voies, désignées pour l'utilisation maritime, pour d'autres services mobiles automatisés. Ce peut être le cas lorsqu'il faut assurer des radiocommunications communes ou combinées dans les ports, les voies navigables et sur les jetées adjacentes. Dans les zones où besoins des services mobiles sont nuls, ces voies pourraient être utilisées pour d'autres services de radiocommunication;

ayant pris note

a) Du rapport 587-1 que le CCIR a établi à ce sujet en réponse à la Question 23-2/8;

b) De la Décision 30 par laquelle le CCIR a chargé le Groupe de travail intérimaire 8/5 de poursuivre l'étude de ce sujet sur la base de la Question 23-2/8 et en tenant compte des résultats des études décrites dans le Rapport 587-1;

c) De la Circulaire COM 73 de l'Organization intergouvernementale consultive de la navigation maritime (OMCI) d'après laquelle, en matière de télécommunications à coute distance, les services maritimes internationaux automatiques ont besoin d'une bande de 10 MHz de largeur;

recommande

à la prochaine conférence administrative mondiale des radiocommunications compétente:

1. De désigner des bandes appropriées de largeur suffisante pour un système de communication du service mobile maritime, y compris la correspondance publique, en les prenant dans les bandes actuellement atribuées au service mobile sur le plan mondial;

2. De définir les moyens permettant d'établir, selon les besoins, des plans d'assignation régionaux qui tiennent compte des besoins mondiaux du service mobile maritime et soient compatibles avec l'exploitation d'autres services;

invite le CCIR

1. À étudier d'urgence les bandes auxquelles il y a lieu de donner le préférence pour des raisons d'exploitation et de partage, et de publier un Avis ou un Rapport avant la prochaine conférence administrative mondiale des radiocommunications compétente;

2. À étudier, de concert avec le CCITT, les aspects techniques et d'exploitation d'un système maritime et mobile terrestre intégré et automatisé;

prie le Secrétaire général

de porter le présente Recommandation à la connaissance de l'Organization intergouvernementale consultive de la navigation maritime (OMCI) pour examen et commentaires.

XL RECOMMANDATION Nº 311

Relative à l'utilisation d'un signal à fréquence acoustique consécutif au signal d'alarme radiotéléphonique émis par les stations côtières (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les stations côtières reçoivent de nombreux signaux d'alarme radiotéléphoniques qu'elles ne peuvent identifier, soit parce qu'ils ne sont pas suivis d'un message parlé, soit parce que ce message est inintelligible du fait du niveau trop faible de la modulation, ou d'un brouillage;

b) Que les stations côtières sont tenues de prendre des mesures afin d'identifier tous les signaux d'alarme qu'elles reçoivent et d'alerter les services de recherches et de sauvetage pour la suite à donner;

c) Que bien des signaux d'alarme radiotéléphoniques qui précèdent le message MAYDAY RELAY proviennent de stations côtières situées à des distances considerábles de la station côtière qui les reçoit;

d) Qu'il pourrait être fort utile que l'on pût distinguer les signaux d'alarme radiotéléphoniques émis par les stations côtières de ceux qui sont émis par les stations de navire;

---

(1) Remplace la Recommandation Nº Mar2-5 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

reconnaissant

a) Qu'aucune caractéristique nécessaire pour établir une distinction entre les signaux d'alarme radiotéléphoniques émis par les stations côtières de ceux qui sont émis par les stations de navire ne devrait affecter la réception normale du signal d'alarme radiotéléphonique;

b) Que la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974) a été saisie de propositions tendant à faire suivre par une fréquence acoustique unique le signal d'alarme radiotéléphonique émis par les stations côtières et que des essais pratiques, efectués dans la région de la mer du Nord pendant ladite Conférence, ont montré qu'un signal acoustique à 1300 Hz d'une durée de 10 secondes convient à cet effet;

c) Que les dépenses nécessaires pour transformer les appareils en service dans les stations côtières seraient probablement peu élevées;

recommande

de faire suivre le signal d'alarme radiotéléphonique, lorsqu'il est émis par une station côtière, par un signal acoustique à 1300 Hz d'une durée de 1 secondes (voir le numéro **3272**).

YT

RECOMMANDATION Nº 312

Relative aux études de l'interconnexion des systèmes de radiocommunications mobiles maritimes avec les réseaux téléphonique et télégraphique internationaux (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

notant

a) Qu'elle a adopté et inclus dans l'article 62 des dispositions concernant l'utilisations d'un système numérique d'appel sélectif;

b) Que le CCIR a adopté la Question 9-3/8 relative à un système d'appel sélectif approprié aux futures conditions d'exploitation du service mobile maritime;

c) Que les études caractéristiques techniques et d'exploitation d'un système numérique d'appel sélectif effectuées par le CCIR sont déjà avancées;

d) Que le CCIR a adopté la Question 23-2/8 relative aux systèmes radiotéléphoniques automatiques à ondes métriques pour le service mobile maritime;

e) Que le CCITT étudie l'interconnexion des différents services téléphoniques mobiles internationaux — notamment du service mobile maritime et du service mobile maritime par satellite — et du réseau téléphonique international;

f) Que l'étude de nouvelles Questions (7/I, 4/X) relatives á l'interconnexion des services de télécommunications maritimes par satellite et du service télex international a été proposée au CCITT;

considérant

a) Qu'il est souhaitable de pouvoir réaliser une interconnexion des systèmes de radiocommunication du service mobile maritime avex les réseaux téléphonique et télégraphique publics internationaux, qui permette l'acheminement automatique du trafic échangé entre les stations de navire et les réseaux nationaux;

b) Que cette interconnexion améliorerait très sensiblement les radiocommunications maritimes;

invite instamment le CCIR et le CCITT

à entreprendre toutes les études nécessaires concernant la compatibilité des systèmes de radiocommunications mobiles maritimes avec les systèmes téléphoniques et télégraphiques internationaux, notamment les divers critères de qualité de service permettant une interconnexion totale des services mobiles maritimes avec les réseaux téléphonique et télégraphique internationaux;

et invite des administrations

à donner la priorité à ces études dans leur participation aux travaux du CCIR et du CCITT.

---

(1) Remplace la Recommandation Nº Mar2-19 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

YR RECOMMANDATION Nº 313

Relative à des dispositions temporaires concernant les aspects tecnhiques et d'exploitations du service mobile maritime par satellite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'elle a adopté un minimum de dispositions destinées à préparer de façon méthodique l'introduction du service mobile maritime par satellite;
b) Que les administrations n'ont encore qu'une expérience faible ou nulle en matière d'exploitation du service mobile maritime par satellite;
c) Que l'on ne saurait en conséquence arrêter dès maintenant des dispositions réglementaires couvrant de façon détaillée et complète les aspects techniques et d'exploitation de ce service;
d) Que cependant des dispositions provisoires d'ordre administratif, technique et relatives à l'exploitation pourraient se révéler nécessaires avant la prochaine conférence administrative des radiocommunications compétente;

recommande

que tout en acquérant l'expérience voulue pour servir de base à l'adoption de dispositions réglementaires détailes par la prochaine conférence administrative des radiocommunications compétente, les administrations qui participent au service mobile maritime par satellite conviennente dispositions temporaires, d'ordre administratif, technique et relatives à l'exploitation, qu'elles les notifient au Secrétaire général et qu'elles invitent les autres administrations à s'y conformer, sans engagement pour l'avenir.

ZK RECOMMANDATION Nº 400

Relative au passage du Plan au nouveau Plan d'allotissement de fréquences dans les bandes attribuées en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz (2)

La Conférence administrative mMondiale des radiocommunications (Génève, 1979),

considérant

a) Que les Actes finals de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) sont entrés en vigueur le 1er septembre 1979;
b) Que le nouveau Plan d'allotissement de fréquences contenu dans l'appendice 27 Aer2 entrera en vigueur le 1er février 1983 à 00.01 heure UTC;
c) Que quelques administrations souhaiteront peut-être mettre en vigueur certaines dispositions du nouveau Plan d'allotissement de fréquences avant cette dernière date, lorsque cela sera possible sans causer de brouillages préjudiciables aux stations fonctionnant conformément aux dispositions de l'actuel Plan d'allotissement de fréquences;
d) Que, à la suite de la Conférence administrative extraordinaire des radiocommunications aéronautiques (Génève, 1966), l'Organisation de l'aviation civile internationale (OACI), en vertu des dispositions du numéro 27/20 de l'appendice 27 et agissant dans l'esprit et dans le cadre de la Résolution Nº Aer6 de cette Conférence, a élaboré un programme de transition pour le service mobile aéronautique (R), afin de passer du Plan d'allotissement de fréquences de l'appendice 26 à celui de l'appendice 27;
e) Que le programme de transition de l'OACI a été ensuite transmis au Comité international d'enregistrement des fréquences pour diffusion aux administrations des Membres de l'UIT;
f) Qu'il sera utile, une fois encore, d'adopter un programme de nature à faciliter le passage du Plan actuel au nouveau Plan d'allotissement de fréquences;

recommande

1. Que l'OACI soit invitée à élaborer un programme de transition, dans le cadre de l'appendice 27 Aer2, pour l'utilisation opérationnelle par les stations aéronautiques, des fréquences figurant dans le Plan d'allotissement de fréquences, sauf pour les zones des lignes aériennes régionales et nationales (ZLARN) qui n'interviennent pas dans l'exploitation internationale;

2. Que l'OACI soit invitée à transmettre au Comité international d'enregistrement des fréquences, pour diffusion aux administrations, le programme de transition pour le nouveau Plan d'allotissement de fréquences;

---

(1) Remplace la Recommandation Nº Mar 2-15 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(2) Remplace la Recommandation Nº Aer2-4 de la Conférence administrative mondiale des radiocommunications maritimes (R) (Génève, 1978).

3. Que les administrations mettent en œuvre les dispositions du programme de transition en coordination avec l'OACI et en conformité avec des principes énoncés au numéro 27/20 de l'appendice 27 Aer2;

prie le Secrétaire général

de porter la présente Recommandation à l'attention de l'Organisation de l'aviation civile internationale.

YN RECOMMANDATION Nº 401

Relative à l'emploi efficace des fréquences du service mobile aéronautique (R) désignées pour utilisation mondiale (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

que la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978), a alloti un nombre limité de fréquences pour utilisation mondiale, aux fins de contrôle de la régularité des vols et de la sécurité des aéronefs;

recommande aux administrations

1. Que le nombre total des stations aéronautiques à ondes décamétriques fonctionnant sur les voies désignées pour utilisation mondiale soit maintenu à un minimum compatible avec une utilisation économique et efficace des fréquences;
2. Que, lorsque cela est possible et pratique, une seule de ce type desserve les exploitants d'aéronafs de pays limitrophes et que, normalement, il n'y ait pas plus d'une station par pays.

ZJ RECOMMANDATION Nº 402

Relative à la coopération en vue de l'emploi efficace des fréquences du service mobile aéronautique (R) désignes pour utilisation mondiale (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire d'utiliser el plus efficacement possible les fréquences du service mobile aéronautique (R) désignées pour utilisation mondiale;
b) Qu'un Plan a été adopté en vue de l'allotissement par zones des fréquences du service mobile aéronautique (R) désignées pour utilisation mondiale;
c) Qu'une coordination est souhaitable entre les administrations des pays situés dans les zones définies par les Plan d'allotissement;
d) Que l'administration d'un pays a le droit de choisir et de notifier à l'IFRB, en vue de son inscription dans le Fichier de référence international des fréquences, toute assignation de fréquence dans une voie allotie à la zone dans laquelle ce pays est situé;
e) Le rôle que joue l'IFRB dans les procédures de réglementation, conformément à l'article 12 du Règlement des radiocommunications;
f) Le rôle que joue l'Organisation de l'aviation civile internationale (OACI) dans le domaine de l'exploitation aéronautique internationale;

invite

1. Les administrations des pays situés dans une zone mondiale d'allotissement, lorsqu'elles le jugent opportun, et l'OACI à demander l'avis de l'IFRB en vue de procéder, du point de vue tecnhique, au meilleur choix de fréquences, afin d'utiliser avec une efficacité maximale les fréquences du service du service aéronautique (R) désignées pour utilisation mondiale;
2. Les administrations des pays situés dans une zone mondiale d'allotissement, lorsqu'elles le jugent opportun, à coordonner mutuellement l'utilisation de ces fréquences du point de vue de l'exploitation aéronautique et, à cet égard, à ne pas perdre de vue l'avantage qu'elles pourraient avoir à recuellier l'avis de l'OACI dans ce processus;

---

(1) Remplace la Recommandation Nº Aer2-2 de la Conférence administrative mondiale des radiocommunications maritimes (R)(Génève, 1978).
(1) Remplace la Recommandation Nº Aer2-3 de la Conférence administrative mondiale des radiocommunications maritimes (R) (Génève, 1978).

3. L'IFRB à aider toute administration ou groupe d'administrations des pays situés dans une zone mondiale d'allotissement et qui souhaitent coordonner leurs besoins en fréquences désignées pour utilisation mondiale, et à poursuivre sa coopération avec l'OACI à cette fin;

prie le Secrétaire général

de porter la présente Recommandation à l'attention de l'Organisation de l'aviation civile internationale.

V RECOMMANDATION Nº 403

Relative à la mise au point de tecnhiques qui contribueront à réduire l'encombrement des bandes d'ondes décamétriques atrribuées au service mobile aéronautique (R) (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que plusieurs administrations travaillent activement à mettre au point des techniques de télécommunication dont l'utilisation, si elle était plus répandue dans le service mobile aéronautique (R), contribuerait à réduire l'encombrement des bandes d'ondes décamétriques attribuées à ce service; parmi ces techniques, il y a lieu de signaler l'utilisation de fréquences supérieures à celles correspondant aux bandes d'ondes décamétriques avec des stations télécommandées, des antennes à effet directif, des techniques de radiocommunication spatiale et de transmission automatique de données;

b) Qu'il serait utile aux autres administrations de prendre connaisance de ces techniques afin d'en étudier l'application à leurs liaisons du service mobile aéronautique (R);

c) Que l'Organisation de l'aviation civile internationale (OACI) travaille activement à coordonner l'utilisation pratique de ces techniques;

recommande

aux administrations qui travaillent à la mise au point de techinques contribuant à reduire l'encombrement des bandes d'ondes décamétriques d'informer périodiquement l'IFRB des progrés accomplis;

charge l'IFRB

de diffuser périodiquement les renseignements qu'il aura ainsi reçus aux administrations ainsi qu'à l'OACI.

ZX RECOMMANDATION Nº 404

Relative à l'utilisation de la bande 136-137 MHz par le service mobile aéronautique (R) (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que le Tableau d'attribution des bandes de fréquences modifié par la présente Conférence, comporte des attributions au service mobile aéronautique (R) à titre primaire, et aux services fixe et mobile, sauf mobile aéronautique (R) à titre secondaire dans la bande 136-137 MHz;

b) Qu'il est prévu également des attributions au service d'exploitation spatiale (espace vers Terre), au service de météorologie par satellite (espace vers Terre) et au service de recherche spatiale (espace vers Terre) à titre primaire jusqu'au 1er janvier 1990, et ensuite à titre secondaire, et que le service mobile aéronautique (R) ne peut être indroduit à titre primaire qu'après le 1er janvier 1990, conformément aux plans approuvés à l'échelle internationale pour ce service;

c) Que le service mobile aéronautique (R) risque, à partir de cette date, d'être soumis à des brouillages dangereux pour la sécurité de la navigation aérienne et qu'il importe au plus haut point de protéger ce service contre les brouillages causés par des stations des services suivants: fixe, mobile, sauf mobile aéronautique (R), de recherche spatiale (espace vers Terre), d'exploitation spatiale (espace vers Terre) et de météorologie par satellite (espace vers Terre);

---

(1) Remplace la Recommandation Nº Aer2-1 de la Conférence administrative mondiale des radiocommunications maritimes (R) (Génève, 1978).
(2) Remplace la Recommandation Nº Spa7 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1963).

recommande

1. Que, dans toutes les Régions, les administrations utilisant ou ayant l'intention d'utiliser, après le 1er janvier 1990, des stations des services fixe, mobile, sauf mobile aéronautique (R), d'exploitation spatiale (espace vers Terre), de météorologie par satellite (espace vers Terre) et de recherche spatiale (espace vers Terre) dans la bande 136-137 MHz prennent toutes les dispositions possibles pour assurer la protection nécessaire au service mobile aéronautique (R) et pour faire cesser le fonctionnement des stations des autres services auxquels la bande est attribuée à tire secondaire, au fur et à mesure de la mise en service des stations du service mobile aéronautique (R);

2. Que les administrations notifient au Comité international d'enregistrement des fréquences (IFRB), leurs plans de mise en service mobile aéronautique (R);

3. Que les administrations notifient à l'IFRB, de préférence à l'avance, la date à laquelle les stations autorisées à fonctionner à titre secondaire cesseront de fonctionner, en se référant à la présente Recommandation:

et prie l'IFRB

de publier ces renseignements touts les six mois à partir du 1er janvier 1985.

Y RECOMMANDATION N° 405

Relative à une étude de l'utilisation du service mobile aéronautique (R) par satellite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Les efforts suivis déployés dans le service mobile aéronautique (R) en vue d'améliorer les communications en proportion de l'accroissement du nombre, des dimensions et de la vitesse des aéronefs;
b) Les efforts déployés par l'Union internationale des télécommunications pour réduire l'encombrement des bandes de fréquences comprises entre 4 MHz et 27,5 MHz;
c) La nécessité d'utiliser avec économie les ondes décamétriques;

notant

a) Que l'application des techniques des radiocommunications spatiales aux besoins de l'aviation civile internationale offre la possibilité d'améliorer substantiellement les communications du service mobile aéronautique (R) tout en évitant l'encombrement des bandes comprises entre 4 MHz et 27,5 MHz;
b) Que des essais on prouvé qu'il est possible d'établir des communications entre les aéronefs et des stations aéronautiques en utilisent comme relais un satellite géostationnaire;
c) Que la technologie des radiocommunications spatiales progresse rapidement;
d) Que les possibilités techniques laissent supposer que, dans un proche avenir, on pourra disposer de moyens de radiocommunications spatiales qui devraient permettre de satisfaire bon nombre des besoins du service mobile aéronautique (R) sur les lignes aériennes mondiales principales, sauf toutefois sur les lignes polaires;
e) Qu'avant que les administrations soient disposés à mettre en œuvre un programme visant à l'application des techniques des radiocommunications spatiales, il convient de procéder à une étude approfondie de ces techniques et de définir les mesures à prendre;
f) Que la mesure dans laquelle les administrations peuvent mettre en œuvre un tel programme est étroitement liée aux conséquences économiques de son application;
g) Que l'Organisation de l'aviation civile internationale (OACI) est l'institution internationale intéressée au premier chef par l'établissement de normes et pratiques recommandées régissant les systèmes et techniques de radiocommunication utilisés au profit de l'aviation civile internationale;
h) Que le CCIR a étudié l'application des techniques de radiocommunication spatiale dans le service mobile aéronautique (R), mais que ces études pourraient nécessiter une révision;

invite le CCIR

à poursuivre ses études sur l'application des techniques de radiocommunication spatiale dans le service mobile aéronautique (R) en coopération avec l'OACI:

recommande

1. Que les administrations, tenant compte des facteurs économiques et d'exploitation en jeu, prennent en considération les possibilités de donner satisfaction aux besoins du service mobile aéronautique (R) sur les lignes aériennes mondiales principales en recourant aux techniques des radiocommunications spatiales;

2. Que les administrations poursuivent l'étude de ces questions en se fondant sur les facteurs exposés dans l'annexe à la présente Recommandation.

---

(1) Remplace la Recommandation N° Aer2 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1966).

ANNEXE A LA RECOMMANDATION Nº 405 (1)

1. Caractéristiques techniques du système de réception et d'émission des satellites et des aéronefs:

a) Puissance (porteuse) requise à la réception dans le sens aéronef-satellite;
b) Puissance (porteuse) requise à la réception dans le sens satellite-aéronef;
c) Puissance apparente rayonnée par la station de satellite (par voie);
d) Puissance apparente rayonnée par la station terrienne d'aéronef (par voie);
e) Type de transmission à utiliser;
f) Largeur de bande de chaque voie;
g) Disposition des voies;
h) Conditions de polarisation;
i) Nécessité d'utiliser à bord de l'aéronef une antenne sans effet directif; réflexions sur la mer (ou sur le sol);
j) Écart requis entre les fréquences d'émission et de réception du satellite;
k) Caractéristiques du satellite permettant aux aéronefs d'utiliser indépendamment chaque voie (accés multiple ou aléatoire);
l) Conditions concernant la fiabilité du système;
m) Divers.

2. Nombre et emplacement des satellites:

a) Service à assurer; répartition géographique des lignes aériennes et nombre de vols sur chacune d'elles;
b) Groupe de lignes aériennes susceptibles d'être desservies à l'aide d'un satellite commun;
c) Nombre de satellites nécessaires pour desservir chaque groupe de lignes aériennes;
d) Emplacement de chacun des satellites;
e) Nombre de voies dont chaque satellite doir disposer;
f) Divers.

3. Caractéristiques techniques requises pour les stations terriennes aéronautiques:

a) Caractéristiques convenables des antennes d'émission et de réception; gain, largeur du faisceau, emplacement, etc;
b) Puissance apparente rayonnée minimale;
c) Mise au point et utilisation de stations terriennes terminales à prix modique;
d) Nécessité d'un système d'appel sélectif (SELCAL);
e) Divers.

4. Mode de fonctionnement et emplacement des stations terriennes aéronautiques:

a) Mode de fonctionnement; lorsque la station de satellite dispose de multiples fréquences, est il nécessaire ou non de continuer à appliquer la méthode actuelle consistant á assurer la séparation des lignes aériennes en utilisant des fréquences distinctes, c'est-à-dire:

De mettre à la disposition de toutes les stations terriennes toutes les fréquences du service (R) utilisées par le satellite; ou
De répartir la charge du trafic entre les fréquences disponibles, l'utilisation de chacune d'elles étant limitée à une région géographique déterminée; ou encore
De prévoir quelque autre arrangement;

b) Le cas échéant, établissement d'une liste (par ordre de fréquences) mentionnant les station terriennes qui doivent utiliser une fréquence déterminée du satellite;
c) Divers.

5. Dispositions permettant l'acheminement du trafic aéronautique entre points fixes:

a) Caractéristiques techniques relatives aux installations terminales;
b) Caractéristiques techniques relatives au matériel installé à bord du satellite;
c) Caractéristiques du satellite permettant aux installations terminales d'avoir indépendamment accès aux relais établis au moyen de ce satellite (accès multiple ou aléatoire);
d) Bandes de fréquences à utiliser;
e) Écart requis entre les fréquences d'émission et de réception du satellite;
f) Mise au point et utilisation d'installations terminales à prix modique;

---

(1) La liste de facteurs ci-dessus n'a pas la prétention d'être exhaustive. Elle n'a pas non plus pour objet de restreindre l'examen de tout autre aspect de l'utilisation du service mobile aéronautique (R) par satellite.

g) Organismes qui devraient fournir, posséder ou exploiter des satellites et des installations terminales; mesure dans laquelle il convient d'acheminer les communications entre points fixes du service aéronautique;
h) Divers.

6. Estimation du coût d'un système à satellites comprenant le matériel à terre, le matériel à bord des aéronefs et le matériel à bord du ou des satellites.

7. Questions d'exploitation concernant un système à satellites, y compris le matériel énuméré au paragraphe 6 ci-dessus, en particulier:

a) Le cadre général dans lequel le système a à fonctionner;
b) Le processus évolutif de mise en œuvre du système.

YF RECOMMANDATION N.° 406

Relative à la révision du Plan d'allotissement des fréquences pour le service mobile aéronautique (OR) (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les Plans d'allotissement des fréquences pour le service mobile aéronautique établis par la Conférence Internationale administrative des radiocommunications aéronautiques (CIARA) (Génève, 1949), et adoptés par la Conférence administrative extraordinaire des radiocommunications (Génève, 1951), ont été adoptés dans une grande mesure par la Conférence administrative des radiocommunications (Génève, 1959) et inclus dans le Règlement des radiocommunications;
b) Que la Conférence administrative extraordinaire des radiocommunications chargée de la révision du Plan d'allotissement pour le service mobile aéronautique (R) (Génève, 1966) a décidé d'inclure ce Plan comme appendice 27;
c) Que la Conférence Administrative Mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978) a adopté des principes techniques pour l'établissement du Plan d'allotissement de fréquences pour le service mobile aéronautique (R) dont notamment l'eploi de l'espacement entre fréquences porteuses de 3 kHz pour une utilisation de classes d'émission et de puissance déterminées qui peuvent être repris directement pour l'établissement du Plan d'allotissement du service mobile aéronautique (OR);
d) Que depuis la Conférence administrative des radiocommunications (Génève, 1959), il n'y a eu aucune révision du Plan d'allotissement du service mobile aéronautique (OR);
e) Que depuis 1959 de nombreux pays sont devenus Membres de l'Union;
f) Que la présente Conférence a adopté la Résolution **403** relative à utilisation des fréquences 3023 kHz et 5680 kHz communes aux services mobiles aéronautiques (R) et (OR);
g) Que la Convention internationale des télécommunications (Malaga-Torremolinos, 1973) prévoit au numéro 44 de l'article 7 qu'une conférence administrative mondiale des radiocommunications peut procéder à la révision partielle du Règlement des radiocommunications.

émet l'avis

que le Plan du service mobile aéronautique (OR), tel qu'il figure à l'appendice 26 du Règlement des radiocommunications, doit faire l'objet d'un nouvel examen et qu'il importe que les administrations procédent d'urgence à l'étude des besoins en communications de leurs liaisons aéronautiques tant nationales qu'internationales, afin de déterminer à quel moment il faudra entreprendre ce nouvel examen dans les conditions les plus favorables aux intérêts aéronautiques;

recommande

que le Conseil d'administration convoque une conférence administrative mondiale des radiocommunications chargée de procéder à un nouvel examen de l'appendice 26 et des dispositions connexes du Règlement des radiocommunications.

XB RECOMMANDATION N° 407

Relative au numéro 27, 123 de l'appendice 27 Aer2 (subdivision de Zone 5B) (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

---

(1) Remplace la Résolution N° 13 de la Conférence administrative des radiocommunications (Génève, 1959) et la Recommandation N.° Aer-8 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

(2) Remplace la Recommandation N° Aer-7 de la Conférence administrative mondiale des radiocommunications du service mobile aéronautique (R) (Génève, 1978).

considérant

a) Les discussions qui ont eu lieu au sujet de la proposition de modification du numéro 27/123 de l'appendice 27 Aer2;

b) Le fait que les administrations intéressés sont convenues de poursuivre entre elles les consultations relatives à la subdivision de Zone 5B;

recommande

1. Que les administrations intéressées procédent à ces consultations afin de parvenir à une solution satisfaisante;

2. Que les administrations concernées présentent les résultats de leurs consultations à la prochaine conférence administrative mondiale des radiocommunications compétente, afin que celle-ci aboutisse à une conclusion définitive concernant le numéro 27/123.

H RECOMMANDATION N.º 500

Relative à l'élaboration de la documentation technique nécessaire pour la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

que, si les taxes du CCIR fournissent déjà un volume important de documentation technique sur la radiodiffusion à ondes décamétriques, certains sujets nécessitent néanmoins des études complémentaires et que, dans certains cas, la documentation disponible doit être adaptée en vue de son utilisation aux fins de planification;

notant en particulier

a) Que le CCIR a recommandé une méthode d'évaluation du champ et de l'affaiblissement de transmission dans la bande 7 (ondes décamétriques) fondée sur les renseignements disponibles les plus fiables, et qu'il a entrepris d'élaborer une nouvelle méthode informatique qui englobe les éléments spéciaux jugés nécessaires pour améliorer la précision de ces évaluations pour les longues et moyennes distances, ainsi que dans les régions équatoriales et les régions à latitude élevée;

b) Que l'on possède peu de renseignements sur les prévisions de propagation dans le nombreuses régions équatoriales;

c) Que l'emploi d'antennes directives et indispensables pour une utilisation efficace du sprectre dans la bande 7 (ondes décamétriques) et que les rayonnements dans des directions autres que la direction désirée peuvent causer des brouillages;

prie le CCIR

1. D'achever ses travaux relatifs à l'établissement d'une méthode améliorée de prévisions par ordinateur (Avis 533), en tenant compte particulièrement des trajets transéquatoriaux de moyenne et grande longueur, et des régions situées à des latitudes élévées;

2. D'adapter la méthode appliquée actuellement pour les prévisions de propagation de façon qu'elle soit mieux adaptée à la planification du service de radiodiffusion et de recommander les valeurs des indices d'activité solaire;

3. D'émettre, lorsqu'il n'en existe pas encore, des Avis relatifs aux rapports de protection, y compris dans les cas où le signal non désiré et d'un type différent, aux valeurs appropriées d'espacement des canaux et à la valeur minimale du rapport signal/bruit pour une réception satisfaisante;

4. De faire en sorte que le recueil des diagrammes d'antennes du CCIR tienne compte de tous les principaux types d'antennes d'usage courant;

5. De préparer des données sur les performances pratiques des antennes directives et de les présenter sous une forme qui convienne à la planification;

invite les administrations

à participer activement à ces études et à fournir au CCIR les renseignements dont elles disposent sur les questions énumérées ci-dessus et particulièrement sur les valeurs de champ observées dans la bande 7 (ondes décamétriques) en vue d'une comparaison avec les valeurs prévues.

I RECOMMANDATION Nº 501

Relative à l'étude de l'introduction de la technique de la bande latérale unique dans les bandes d'ondes décamétriques attribuées au service de radiodiffusion, pour la préparation de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques.

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que l'emploi de la bande latérale unique permet une utilisation plus efficace du spectre;
b) Que l'introduction de cette technique aux fins de la radiodiffusion à ondes décamétriques pose des problèmes d'ordre technique et économique;

prie le CCIR

de hâter les études concernant l'introduction de la technique de la bande latérale unique dans le service de radiodiffusion à ondes décamétriques et les spécifications d'un système à bande latérale unique approprié, en prêtant une attention particulière aux problèmes économiques concernant les émetteurs et les récepteurs;

invite les administrations

à fournir au CCIR des renseignements sur ce sujet.

ZP RECOMMANDATION N° 502

Relative aux spécifications des récepteurs de télévision à prix modique

La Conférence Administrative Mondiale des Radiocommunications (Génève, 1979),

considérant

a) Que l'on prend de plus en plus conscience des possibilités offertes par la télévision en tant qu'instrument de développement national;
b) Qu'il a été démontré que la réception directe d'émissions de télévision à partir de satellites est réalisable sur le plan technique et intéressante du point de vue économique;
c) Que, dans le limite des ressources restreintes dont ils disposent, de nombreaux pays en développement pourraient souhaiter exploiter au maximum les avantages de la télévision;
d) Que l'existence d'un récepteur de télévision efficace et à prix modique constituerait un stimulant puissant à la mise en place et au développement de services de radiodiffusion télévisuelle dans les pays en développement;
e) Que l'on peut prévoir qu'on aura besoin de récepteurs de télévision monochrome et en couleur pour recevoir les émissions en provenance de stations de Terre et de satellites;
f) Que le CCIR a déjà entrepris l'étude de spécifications pour des récepteurs à de télévision monochrome à prix modique, à usage domestique et à usage communautaire, de même que celle des caractéristiques d'un système de réception pour le service de radiodiffusion (télévision) par satellite;
g) Qu'un accord général sur la qualité de fonctionnement de récepteurs de télévision appropriés aiderait considérablement les constructeurs de ces récepteurs à produire des appareils du type voulu, répondant à des normes de qualité adéquates, et cela pour un prix de revient aussi bas que possible;
h) Qu'il faut tenir compte, dans la conception et la production des récepteurs de télévision, des progrés rapides de la technique ainsi que de l'obsolescence;

invite le CCIR

1. À établir des spécifications de qualité de fonctionnement pour un ou plusieurs types de récepteurs de télévision à prix modique, conformément au point *e*) ci-dessus, et convenant à la production en série;
2. À collaborer, si besoin est, avec d'autres organismes internationaux qui travaillent dans le même domaine afin de mettre au point dans les plus brefs délais des spécifications pour ces récepteurs à prix modique;

prie le Secrétaire général

de communiquer au Secrétaire général des Nations Unies, notamment à l'intention du directeur de l'organisation des Nations Unies pour de Développement Industriel, les résultats de ces travaux, accompagnés de suggestions en ce qui concerne les mesures à prendre et au directeur général de l'UNESCO pour information.

ZS RECOMMANDATION N° 503

Relative à la radiodiffusion en ondes décamétriques

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) L'encombrement des bandes d'ondes décamétriques attribuées au service de radiodiffusion;
b) L'importance des brouillages dans la voie adjacente;

notant

qu'il est possible d'améliorer cette situation en appliquant les Avis pertinents du CCIR;

recommande aux administrations

1. D'accorder une attention particulière aux dispositions relatives au «sprectre hors bande» contenues dans l'avis 328-4 du CCIR;

2. D'encourager, dans toute le mesure du possible, les constructeurs à mettre au point et à construire des récepteurs de radiodiffusion conformes aux dispositions de l'avis 332-4 du CCIR relatif à la sélectivité des récepteurs;

invite les administrations

à tirer parti, dans toute la mesure pratiquement possible, du fonctionnement synchronisé des émetteurs en tenant compte de l'avis 205-1 du CCIR;

invite le CCIR

à effectuer d'autres études relatives aux Avis mentionnés ci-dessus, en tenant compte des besoins de la radiodiffusion en ondes décamétriques, en vue de mettre à jour ces trois avis chaque fois que cela est nécessaire.

YC RECOMMANDATION Nº 504

Relative à la préparation d'un plan de radiodiffusion dans la bande 1605-1705 kHz dans la Région 2

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que la bande 1605-1705 kHz a été attribuée par la présente Conférence au service de radiodiffusion dans la Région 2;

b) Que, conformément au numéro **480**, l'utilisation de cette bande par le service de radiodiffusion est subordonnée à l'élaboration d'un plan de radiodiffusion par une conférence administrative régionale des radiocommunications;

c) Que le Tableau d'attribution des bandes de fréquences prévoit en outre que, dans la Région 2, la bande 1605-1625 kHz est attrivuée en exclusivité au service de radiodiffusion et que la bande 1625-1705 kHz est attribuée au service de radiodiffusion en partage avec d'autres services;

tenant compte

des dispositions du numéro **346** du Règlement des radiocommunications;

recommande

1. Qu'une conférence administrative régionale des radiocommunications soit convoquée en vue d'établir un plan pour le service de radiodiffusion dans la bande 1605-1705 kHz dans la Région 2;

2. Que cette conférence soit convoquée en 1985 au plus tard;

3. Que la date exacte d'entrée en vigueur du plan soit fixée lors de ladite conférence administrative régionale des radiocommunications. Toutefois, l'utilisation de ces bandes par le service de radiodiffusion ne devrait pas commencer avant le 1er juillet 1987 pour les fréquences comprises entre 1625 kHz et 1665 kHz et avant le 1er juillet 1990 pour les fréquences comprises entre 1665 kHz et 1705 kHz;

invite

1. Le Conseil d'administration à prendre les mesures nécessaires pour la convocation d'une conférence administrative des radiocommunications pour la Région 2 chargée de planifier l'utilisation de la bande 1605-1705 kHz par le service de radiodiffusion;

2. Le CCIR à effectuer les études techniques nécessaires pour la convocation d'une conférence de radiodiffusion pour la Région 2, en tenant compte des attributions faites à d'autres services dans les Régions 1 et 3 et de la nécessité d'établir des critères de partage;

encourage les administrations de la Région 2

à favoriser le développement et la production en quantité suffisante de récepteurs convenant pour la bande de radiodiffusion étendue à la fréquence 1705 kHz.

ZL

RECOMMANDATION N° 505

Relative à des études de propagation dans la bande des 12 GHz pour le service de radiodiffusion par satellite (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que les critères techniques adoptés lors de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) chargée d'établir un plan d'assignations pour le service de radiodiffusion par satellite dans les Régions 1 et 3, comprenaient une marge maximale de 2 dB, sous un angle de site de 45°, pour l'affaiblissement par les précipitations;

b) Que certaines études ont indiqué que la marge nécessaire dans la Zone tropicale pourrait être supérieure à 2 dB;

c) Que la Réunion spéciale préparatoire du CCIR (Génève, 1978) a reconnu que, pour l'application de la technique proposée dans le Rapport 721 du CCIR, les données disponibles sur les taux de précipitation sont de nature à conduire à une sous-estimation de l'affaiblissement qui se produit dans les régions tropicales;

d) Qu'il est également nécessaire de rassembler une masse de renseignements sur divers autres facteurs de propagation à prendre en compte pour planifier le service de radiodiffusion par satellite;

recommande au CCIR

1. D'accélérer l'étude des effets de l'affaiblissement dû aux précipitations dans les régions tropicales et de spécifier, le plus rapidement possible, les valeurs de l'affaiblissement compatibles avec un fonctionnement satisfaisant du service de radiodiffusion par satellite;

2. De poursuivre l'étude des effets de l'affaiblissement dû aux précipitations sous de petits angles de site, dans toutes les zones hydrométéorologiques;

3. De poursuivre l'étude des effets des tempêtes de sable et de poussière;

4. D'étudier la relation existant entre les caractéristiques de propagation pendant 99 % du mois le plus défavorable et celles de la propagation pendant l'année;

5. D'étudier, pour le émissions à polarisation circulaire, le niveau de la composante dépolarisée par rapport à la composante polarisée;

demande au directeur du CCIR

de porter à la connaissance de toutes les administrations les valeurs de l'affaiblissement dû aux précipitations qui auront été spécifiées.

ZC

RECOMMANDATION N.° 506

Relative aux harmoniques de la fréquence fondamentale des stations de radiodiffusion par satellite (2)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que la bande de fréquences 23,6-24 GHz est attribuée au service de radioastronomie à titre primaire;

b) Que le second harmonique de la fréquence fondamentale des stations de radiodiffusion par satellite fonctionnant dans la bande 11,8-12 GHz pourrait perturber considérablement les observations de radioastronomie dans la bande 23,6-24 GHz si des mesures efficaces n'étaient pas prises pour abaisser le niveau de cet harmonique;

vu

les dispositions du numéro **306** du Règlement des radiocommunications;

recommande

que, lorsqu'elles déterminent les caractéristiques de leurs stations spatiales du service de radiodiffusion par satellite, notamment dans la bande 11,8-12 GHz les administrations prennent toutes les mesures nécessaires pour abaisser le niveau du seconde harmonique au-dessus des valeurs indiquées dans les Avis pertinents du CCIR.

---

(1) Remplace la Recommandation N° Sat-3 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

(2) Remplace la Recommandation N° Sat-2 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

ZF

RECOMMANDATION Nº 507

Relative aux rayonnements non essentiels dans le service de radiodiffusion par satellite (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que, du fait du niveau élevé de leur puissance, les stations spatiales du service de radiodiffusion par satellite causeront vraisemblablement, par suite de rayonnements non essentiels, des brouillages aux services assurés dans les bandes de fréquences adjacentes ou en relation harmonique;

b) Que l'on doit tenir compte, lors de la planification du service de radiodiffusion par satellite, de la nécessité de réduire à un niveau acceptable la brouillage causé:

Aux services assurés dans les bandes adjacentes se trouvant à la limite inférieure et à la limite supérieure de la bande 12 GHz attribuée au service de radiodiffusion;

Au service de radioastronomie auquel la bande 23,6-24 GHz est attribuée;

c) Que le CCIR poursuit l'étude de ce problème au titre du Programme d'études pertinent;

invite le CCIR

à poursuivre d'urgence l'étude des questions techniques et d'exploitation que posent les rayonnements non essentiels des stations spatiales du service de radiodiffusion par satellite.

ZD

RECOMMANDATION Nº 508

Relative aux antennes d'émission du service de radiodiffusion par satellite (2)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Qu'il est nécessaire de disposer d'une documentation abondante sur les antennes d'émission pour la planification du service de radiodiffusion par satellite;

b) Que le CCIR poursuit l'étude de ces problèmes au titre des questions et des programmes d'études pertinents;

invite le CCIR

1. À poursuivre l'étude des diagrammes de référence pour les composants copolaire et contrapolaire des antennes d'émission du service de radiodiffusion par satellite, aussi bien pour la réception individuelle que pour la réception communautaire et, en particulier, l'étude des moyens permettant d'obtenir une meilleure suppression des lobes latéraux et des conséquences économiques qui en découlent;

2. À poursuivre l'étude des caractéristiques techniques permettant d'obtenir une précision de pointage de l'antenne d'émission telle que:

L'écart du faisceau d'antenne par rapport à sa direction de pointage nominale ne dépasse pas 0,1°;

L'angle de rotation du faisceau d'émission autour de son axe ne dépasse pas ± 2°;

YZ

RECOMMANDATION Nº 600

Relative à l'utilisation de la bande de fréquences 9300-9500 MHz (3) (4)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

notant

a) Qu'il existe deux classes principales de radiodétecteurs météorologiques d'aéronef fonctionnant respectivement dans les bandes 5350-5460 MHz et 9300-9500 MHz;

---

(1) Remplace la Recommandation Nº Sat-6 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

(2) Remplace la Recommandation Nº Sat-4 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

(3) Voir aussi la Résolution 600.

(4) Remplace la Recommandation Nº 12 de la Conférence administrative des radiocommunications (Génève, 1959).

b) Qu'il existe un nombre considérable de radiodétecteurs de navire dont la mejeure partie fonctionne dans la bande 9300-9500 MHz;
c) Qu'il existe également dans la bande 9300-9500 MHz des radiodétecteurs à terre du service de radionavigation maritime, du service de radionavigation aéronautique et du service météorologique;
d) Que l'utilisation de la bande 5350-5460 MHz attribuée à titre primaire, au seul service de radionavigation aéronautique, est limitée aux dispositifs de radiodétection aéroportés;
e) Que les radiodétecteurs de navire partagent uniquement avec les radiodétecteurs de terre l'utilisation des bandes 2900-3100 MHz et 5470-5650 MHz attribuées à titre primaire respectivement au seul service de radionavigation et au seul service de radionavigation maritime;
f) Qu'il s'est avéré nécessaire d'attribuer la bande 9300-9500 MHz, sur la base de l'égalité des droits, au service de radionavigation aéronautique et au service de radionavigation maritime;
g) Que, dans la bande 9300-9320 MHz, l'utilisation de radiodétecteurs de navire n'est plus autorisée, afin de faciliter le développement des balises de radiodétection à fréquence fixe dans cette bande;
h) Que, dans la bande 9320-9500 MHz, l'utilisation de balises de radiodétection à fréquence fixe du service de radionavigation maritime, sur terre ou en mer, n'est pas autorisée;

considérant

a) Qu'il est de la plus haute importance qu'aucun brouillage préjudiciable ne soit causé aux services de radionavigation qui assurent la sauvegarde de la vie humaine;
b) Qu'il convient que les conditions de fontionnement d'un service de sauvegarde de la vie humaine soient les mêmes dans le monde entier;
c) Que l'accroissement de l'utilisation de la bande 9300-9500 MHz ne peut, en l'absence de coordination, qu'augmenter la probabilité de brouillages préjudiciables entre le service de radionavigation aéronautique et le service de radionavigation maritime;

recommande

1. Que les administrations, l'Organisation de l'aviation civile internationale (OACI) et l'Organisation consultative intergouvernementale de la navigation maritime (OMCI) étudient cette question dès qu'elles le pourront, et notamment;
2. Qu'elles déterminent si, et dans quelles proportions, un brouillage reconnu techniquement possible entre les deux services devient préjudiciable en cours d'exploitation;
3. Qu'elles recherchent, si une telle éventualité se produit, la possibilité de réduire le brouillage préjudiciable par les moyens techniques d'exploitation et de procédure, en admettant que les nouveaux matériels doivent toujours correspondre aux normes techniques les plus élevées;

invite

les administrations, l'Organisation de l'aviation civile internationale et l'Organisation consultive intergouvernementale de la navigation maritime à communiquer à l'Union les résultats de leurs études ainsi que leurs opinions et les propositions qui en découlent.

YK RECOMMANDATION Nº 601

Concernant les fréquences à utiliser dans le service de radionavigation aéronautique pour un système destiné à éviter les collisions entre aéronefs (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que l'on n'a pas encore mis au point un système efficace pour éviter les collisions d'aéronefs et améliorer ainsi la sécurité de la navigation aéronautique, compte tenu notamment de leur vitesse de plus en plus grande, mais qu'un tel système s'impose d'urgence;
b) Que si, une fois mis au point, ce système exigeait l'emploi de fréquences radioélectriques, il devrait fonctionner dans l'une des bandes attribuées au service de radionavigation aéronautique;
c) Qu'il est impossible de prévoir, à l'heure actuelle, si les bandes attribuées au service de radionavigation aéronautique conviendront pour un tel système;

recommande

que les administrations et l'Organisation de l'aviation civile internationale (OACI) accordent une attention spéciale aux travaux de mise au point d'un système efficace pour éviter les collisions entre aéronefs, en tenant compte du fait que si des fréquences radioélectriques se révèlent nécessaires et si les bandes attribuées au service de radionavigation aéronautique ne conviennent pas à ce système, il y aura lieu d'étudier la question sur une base internationale.

---

(1) Remplace la Recommandation Nº 20 de la Conférence administrative des radiocommunications (Génève, 1959).

XD

RECOMMANDATION Nº 602

Relative aux radiophares maritimes

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que les radiophares maritimes sont régis dans la Zone européenne maritime par l'«Arrangement régional concernant les radiophares maritimes dans la Zone européenne de la Région 1, Paris, 1951» appelé ci-après «Arrangement de Paris, 1951»;

b) Que l'Arrangement de Paris, 1951, est largement fondé sur la disposition géographique des radiophares existants avant 1939 et sur la situation de la navigation maritime à cette époque;

c) Que, depuis la conclusion de l'Arrangement de Paris, 1951, la disposition géographique et certaines caractéristiques des radiophares maritimes ont été modifiées par accords bilatéraux ou multilatéraux pour tenir compte, en particulier, des changements intervenus dans les habitudes ou la réglementation de la navigation maritime dans la zone concernée;

d) Que l'Arrangement de Paris, 1951, est essentiellement fondé sur l'utilisation radiogoniométriques auditifs;

e) Qu'on assiste, depuis plusieurs années, à une augmentation importante du nombre de récepteurs radiogoniométriques, qui ne font appel qu'à l'onde porteuse des radiophares et qui, d'autre part, n'utilisent pas la modulation pour séparer les radiophares fonctionnant sur la même fréquence;

f) Qu'il est donc souhaitable qu'à la suite de l'examen des caractéristiques techniques de fonctionnement des radiophares maritimes par une conférence administrative mondiale des radiocommunications compétente, une conférence spécialisée soit convoquée sur la base de l'article 32 de la Convention internationale des télécommunications (Malaga-Torremolinos, 1973), afin de procéder à la révision de l'Arrangement de Paris, 1951;

g) Que cet examen devrait concerner tant l'étendue de la zone intéressée par l'Arrangement que les caractéristiques techniques de portée, de valeur du champ aux limites de portée, d'espacement entre canaux adjacents, de taux de modulation ainsi que toute autre disposition jugée nécessaire;

notant

L'existence au chapitre VIII du Règlement des radiocommunications (article 35, section IV, paragraphe C «Radiophares maritimes») des dispositions des numéros **2860** à **2866**;

L'existence au chapitre III (article 8, section 1) du numéro **405** qui définit la Zone européenne maritime;

recommande

1. Que les administrations concernées examinent la question des limites de la zone couverte par l'Arrangement et soumettent des propositions à ce sujet à la prochaine conférence administrative mondiale des radiocommunications compétente;

2. Que toutes les administrations et le CCIR portent d'urgence leur attention sur les caractéristiques techniques des radiophares maritimes et soumettent leurs conclusions à ce sujet à la prochaine conférence administrative mondiale des radiocommunications compétente;

invite le Conseil d'administration

à prendre les mesures nécessaires pour que les questions relatives aux stations de radiophares maritimes, que intéressent les services mobiles, soient inscrites à l'ordre du jour de la prochaine conférence administrative mondiale des radiocommunications pour les services mobiles, de telle manière que cette dernière puisse envisager une modification des articles pertinents du Règlement des radiocommunications;

prie le Secrétaire général

de communiquer le texte de cette Recommandation à l'Organisation consultive intergouvernementale de la navigation maritime (OMCI) et à l'Association internationale de signalisation maritime (AISM).

ZH

RECOMMANDATION Nº 603

Relative aux dispositions techniques concernant les radiophares maritimes dans la Zone africaine (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

(1) Remplace la Recommandation Nº 21 de la Conférence administrative des radiocommunications (Génève, 1959).

considérant

la nécessité de faciliter l'établissement de nouveaux radiophares maritimes dans la bande 283,5-315 kHz, particulièrement dans les localités voisines des Zones européenne et africaine;

recommande

que les administrations des pays de la zone africaine adoptent des dispositions analogues à celles de l'Arrangement régional concernant les radiophares maritimes dans la Zone auropéenne de la Région 1.

XI RECOMMANDATION N° 604

Relative à l'utilisation future et aux caractéristiques des radiobalises de localisation des sinistres (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que selon les termes de l'article 39 du Règlement des radiocommunications, les signaux des radiobalises de localisation des sinistres ont pour but essentiel de faciliter le repérage de la position de naufragés au cours des opérations de recherche et de sauvetage;

b) Que la Résolution A.91 (IV) de l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) indique que les radiobalises de localisation des sinistres sont destinées principalement au radioralliement, elles peuvent néanmoins être utilisées pour l'alerte lorque les circonstances s'y prêtent;

c) Que par sa Résolution A.217 (VII), l'OMCI recommande aux administrations d'exiger que tous les navires soient équipés, si cela convient, de radiobalises de localisation des sinistres fonctionnant sur les fréquences radioélectriques les plus appropriées;

d) Que l'OMCI envisage actuellement l'équipement obrigatoire de tous les navires à passagers et les navires de charge de jauge brute supérieure ou égale à 300 tonneaux avec des radiobalises de localisation des sinistres;

considérant en particulier

que dans sa Résolution A.279 (VIII), l'OMCI a souligné le besoin urgent d'uniformiser les caractéristiques des radiobalises de localisation des sinistres;

constant

a) Que dans le Règlement des radiocommunications, il existe pour les radiobalises de localisation des sinistres, des dispositions relatives aux fréquences 2182 kHz, 121,5 MHz et 243 MHz;

b) Que la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971), en ce qui concerne les radiobalises de localisation des sinistres, a réservé la bande de fréquences 406-406,1 MHz au service mobile par satellite, uniquement pour l'utilisation et le développement de systèmes de radiobalises de localisation de sinistres à faible puissance faisant appel à des techniques spatiales;

c) Que la Résolution A.91 (IV) de l'OMCI recommande que la fréquence porteuse de 2182 kHz soit utilisée comme fréquence de premier choix pour les radiobalises de localisation des sinistres;

d) Que les caractéristiques techniques des radiobalises de localisation des sinistres fonctionnant sur la fréquence porteuse 2182 kHz sont spécifiées dans l'article 39 du Règlement des radiocommunications et dans son appendice 37 ainsi que dans l'Avis 439 du CCIR;

e) Qu'aux termes de la Résolution 601 les radiobalises de localisation des sinistres fonctionnant sur les fréquences 121,5 MHz ou 243 MHz doivent être conformes aux Avis pertinents du CCIR ainsi qu'aux normes et pratiques recommandées de l'Organisation de l'aviation civile internationale (OACI);

recommande

1. Que compte tenu des sujets d'intérêt commun qu'elles ont dans ce demaine, l'OMCI et l'OACI soient invitées à réexaminer dans les délais les plus brefs, leurs concepts sur les radiobalises de localisation des sinistres pour ce qui est des opérations de recherche et de sauvetage et de la sauvegarde de la vie humaine en mer;

2. Qu'après que l'OMCI et l'OACI auront précisé leurs conceptions, le CCIR soit prié d'étudier les questions techniques et d'exploitation propres aux radiobalises de localisation des sinistres, y compris les fréquences préférées, notamment pour ce qui est des besoins fondamentaux du radioralliement et des caractéristiques techniques de ces radiobalises, compte tenu de la nécessité de leur uniformisation.

---

(2) Remplace la Recommandation N° Mar2-12 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).

XA

RECOMMANDATION Nº 605

Relative aux caractéristiques techniques et aux fréquences des répondeurs à bord des navires (1) (2)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que le tonnage et la vitesse des navires de commerce s'accroissent dans le monde entier;
b) Que chaque année, un grand nombre de navires marchands sont victimes de collisions entraînant des pertes de vies humaines et de biens, et que ces collisions comportent des risques élevés pour l'environnement naturel;
c) Qu'il importe d'établir une corrélation entre les cibles radar et les navires faisant des émissions radiotéléphoniques à ondes métriques;
d) Que des études et des essais ont montré que les répondeurs à bord des navires peuvent rendre plus visibles et améliorer les images des cibles radar par rapport aux images radar normales;
e) Que les études en cours et les essais relatifs aux répondeurs à bord des navires montrent que l'on peut s'attendre à brève échéance à un développement de ces appareils, ce qui permettra une amélioration adéquate des images radar et une identification des cibles radar, et offrira éventuellement des possibilités de transmission de données;
f) Qu'il peut être nécessaire de protéger ces répondeurs contre les brouillages;
g) Qu'il convient que le choix des caractéristiques techniques de ces répondeurs soit coordonné avec les autres utilisateurs du spectre des fréquences radioélectriques dont les opérations pourraient être gênées;

demande au CCIR

de recommander, après consultastion des organisations internationales appropriées, l'ordre de grandeur des fréquences et des largeurs de bande requises à cet effet et convenant le mieux, ainsi que les caractéristiques techniques auxquelles doivent satisfaire de tels dispositifs, en tenant compte de la compatibilité électromagnétique avec les autres services auxquels la même bande de fréquences est attribuée;

invite

les administrations et l'Organisation intergouvernementale consultive de la navigation maritime (OMCI) à continuer d'étudier les avantages qui pourraient résulter, pour l'exploitation, de l'utilisation, généralisée de répondeurs à bord des navires, et à examiner s'il y aurait avantage à adopter, en vue de le mettre en œuvre ultérieurement, un système approuvé sur le plan international;

recommande

qu'en attendant des développements et des évaluations plus avancés de nature technique ou ayant trait à l'exploitation, les administrations se préparent à prendre, lors de la prochaine conférence administrative mondiale des radiocommunications compétente, les mesures nécessaires pour l'utilisation de tels dispositifs.

ZT

RECOMMANDATION Nº 620

Relative au service des auxiliaires de la météorologie dans la bande 27,5-28 MHz (3)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

recommande

aux administrations qui ont assigné des fréquences de la bande 27,5-28 MHz aux stations du service des auxiliaires de la météorologie de prendre des dispositions pour transférer ces assignations, aussitôt que possible, dans des bandes plus élevées, attribuées au même service;

invite l'Organisation météorologique mondiale

à étudier cette question et à procéder, le cas échéant, à la coordination nécessaire entre les administrations.

---

(1) Récepteur-émetteur qui émet automatiquement un signal lorsqu'il reçoit l'interrogation voulue.
(2) Remplace la Recommandation Nº Mar2-14 de la Conférence administrative mondiale des radiocommunications maritimes (Génève, 1974).
(3) Remplace la Recommandation Nº 33 de la Conférence administrative des radiocommunications maritimes (Génève, 1959).

XC RECOMMANDATION Nº 700

Relative à l'utilisation et au partage des bandes de fréquences attribuées aux radiocommunications spatiales (1)

La Conférence Administrative Mondiale de Radiocommunications (Génève, 1979),

considérant

les Résolutions 1721 (XVI), partie D, et 1802 (XVII), partie IV.3, de l'Assemblée générale des Nations Unies, dans chacune desquelles est notamment mentionnée la conviction des Membres des Nations Unies que les systèmes de télécommunication par satellites doivent être organisés sous une forme mondiale et d'une manière telle que tous les pays puissent y avoir accès sans aucune discrimination;

considérant de plus

les conséquences d'ordre économique et social qu'entraînera pour toutes les nations l'introduction d'un système de télécommunication mondial par satellite, comme l'a mis en lumière un rapport établi à l'intention des Membres et Membres associés de l'UNESCO en exécution d'une décision prise en décembre 1962 par la 12ème session de la Conférence générale de cette institution;

reconnaissant

que les Membres de l'Union internationale des télécommunications ont tous intérêt à utiliser de manière equitable et rationnelle les bandes de fréquences attribuées aux radiocommunications spatiales et qu'ils ont le droit de les utiliser ainsi;

recommande aux Membres de l'Union

que l'utilisation et l'exploitation des bandes de fréquences attribuées aux radiocommunications spatiales soint soumises à des accords internationaux fondés sur des principes de justice et d'équité et de nature à permettre l'utilisation et le partage de ces bandes dans l'intérêt mutuel de toutes les nations.

YY RECOMMANDATION Nº 701

Relative à l'utilisation de la bande de fréquences 1330-1400 MHz par le service de radioastronomie

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que les observations de rayonnements radioélectriques d'atomes d'hydrogène neutre, dans la bande 1330-1400 MHz, ont une importance primordiale pour la compréhension de la structure de galaxies lointaines et, par conséquent, de l'évolution de l'univers;
b) Que le service de radioastronomie a été inscrit dans le Tableau d'attribution des bandes de fréquences dans la bande 1330-1400 MHz;
c) Que le service de radioastronomie se consacre à la réception de rayonnements électromagnétiques de niveau extrêmement faible, d'origine extra-terrestre, et qu'il doit être protégé des rayonnements artificiels dans toute la mesure du possible;
d) Que la possibilité, pour le service de radioastronomie, de partager des bandes de fréquences avec d'autres services est limitée;

recommande

1. Qu'en préparant leurs propositions pour la prochaine conférence administrative des radiocommunications compétente, les administrations étudient les dispositions à prendre, dans la bande 1330-1400 MHz, afin d'assurer au service de radioastronomie une protection accrue contre d'autres services qui produisent des rayonnements;

2. Que, lorsqu'elles établissent des plans d'assignations de fréquence, les administrations tiennent compte que des observations de radioastronomie sont effectuées dans la bande 1330-1400 MHz.

YU RECOMMANDATION Nº 702

Relative à l'utilisation des bandes de fréquences 1400-1727 MHz, 101-120 GHz et 197-220 GHz pour la recherche d'émissions intentionnelles d'origine extra-terrestre

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

---

(1) Remplace la Recommandation Nº Spa 10 de la Conférence administrative extraordinaire des radiocommunications (Génève, 1963).

considérant

a) Qu'il est particulièrement important pour l'humanité de déterminer s'il existe des civilisations extra-terrestres;
b) Que c'est dans les bandes 1400-1727 MHz, 101-120 GHz et 197-220 GHz que la probabilité de déceler un signal émis par une civilisation extra-terrestre est la meilleure, parce que ces bandes contiennent des raies spectrales dont l'intérêt es fondamental en physique et qui sont liées aux phénomènes universels;
c) Que, dans les bandes mentionnées au *considérant b*), il existe une probabilité de déceler avec un rapport signal/bruit maximal, un rayonnement émis par des civilisations extra-terrestres;
d) Que la recherche de civilisations extra-terrestres a été inscrite dans les bandes 1400-1727 MHz, 101-120 GHz et 197-220 GHz du Tableau d'attribution des bandes de fréquences;
e) Que les tentatives visant à reconnaître des signaux émanant de civilisation extra-terrestres supposent la réception de rayonnements de niveau extrêmement faible, et que cette réception doit par conséquent être protégée par des rayonnements artificiels dans toute la mesure du possible;
f) Que, pour la réception de signaux émis par une civilisation extra-terrestre, il y a très peu de possibilités de partager des bandes de fréquences avec des services radioélectriques actifs;

recommande

qu'en préparant leurs propositions pour la prochaine conférence administrative des radiocommunications compétente, les administrations étudient l'opportunité de prendre des dispositions visant à assurer, dans les bandes 1400-1727 MHz, 101-120 GHz et 197-220 GHz, un environnement protégé approprié à la réception de rayonnements d'origine extra-terrestre;

invite

les organisations intéressées à la recherche de civilisations extra-terrestres à prendre en considération les points suivants:

1. Les dispositions pertinentes di Règlement des radiocommunications;
2. La nécessité de maintenir une coordination étroite avec leurs administrations nationales en matière d'utilisation des fréquences;
3. La nécessité de choisir, pour les installations de récéption servant à ces observations, des emplacements aussi éloignés que possible des sources de brouillage radioélectrique;
4. Les Rapports et Avis pertinents du CCIR.

ZU RECOMMANDATION Nº 703

Relative à la nécessité de faire cesser le fonctionnement des stations des services fixe et mobile dans les bandes de fréquences 149,9-150,05 MHz et 399,9-400,05 MHz attribuées au service de radionavigation par satellite (1)

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que les bandes de fréquences 149,9-150,05 MHz et 399,9-400,05 MHz ont été attribuées en exclusivité, dans le monde entier, au service de radionavigation par satellite;
b) Que de nombreuses administrations ont besoin de délais prolongés pour pouvoir assurer, dans d'autres bandes appropriées, le fonctionnement des services fixe et mobile existants;
c) Qu'il est de l'intérêt de toutes les administrations que le service de radionavigation par satellite soit mis en œuvre à bref délai, notamment en ce qui concerne son application à la navigation maritime;
d) Que les brouillages causés aux utilisateurs du service de radionavigation par satellite pourraient mettre en danger la sécurité de la vie humaine et des biens;
e) Que le CCIR étudie actuellement les possibilités de partage des bandes de fréquences entre le service de radionavigation par satellite et les services de Terre, mais qu'il n'est pas encore en mesure de formuler de conclusions à cet égard;

recommande

1. Que, dans l'attente d'une conclusion positive du CCIR concernant la possibilité de partage entre les stations du service de radionavigation par satellite et les services fixe et mobile, les administrations prennent toutes les mesures possibles pour protéger contre les brouillages préjudiciables le fonctionnement des stations terriennes mobiles faisant usage du service de radionavigation par satellite;
2. Que, à la lumière des dispositions du paragraphe précédent, les administrations soient invitées à mettre, dès que possible, un terme au fonctionnement des stations des services fixe et mobile dans les bandes 149,9-150,05 MHz et 399,9-400,05 MHz, notamment de celles qui sont situées dans des régions côtières.

---

(1) Remplace la Recommandation Nº Spa 8 de la Conférence administrative extraordinaire des radiocommunications (Génève, 1963).

ZV RECOMMANDATION N° 704

Relative à la compatibilité entre le service de radiodiffusion dans la bande 100-108 MHz et le service de radionavigation aeronáutique dans la bande 108-117,975 MHz

La Conférence administrative mondiale de radiocommunications (Génève, 1979),

considérant

a) Que la radiodiffusion en ondes métriques est de plus utilisée avec des puissances élevées, dans la bande 100-108 MHz;
b) Que la bande 108-117,975 MHz est utilisée mondialement par des systèmes de radionavigation aéronautique agrées au plan international;
c) Que la partie de la bande comprise entre 108 MHz et 111,975 MHz est utilisée par les systèmes d'atterrissage aux instruments (ILS), employés par les aéronefs pour l'atterrissage automatique;
d) Que la bande comprise entre 108 MHz et 117,975 MHz est utilisée par le système de radiophare d'alignement omnidirectionnel à ondes métriques (VOR);
e) Que, dans certains parties des Régions 3 et 3, des brouillages se sont produits entre le service de radiodiffusion et le service de radionavigation aéronautique;

consciente

a) Que les produits d'intermodulation provenant de combinaisons d'émissions de radiodiffusion peuvent tomber dans la bande 108 MHz et 117,975 MHz attribuée au service de radionavigation aéronautique;
b) Que des produits d'intermodulation peuvent se former dans le récepteur de radionavigation;
c) Que des émissions de radiodiffusion à grande puissance peuvent entraîner le blocage des récepteurs de radionavigation;
d) Que les émissions du service de radionavigation aéronautique peuvent causer des brouillages au service de radiodiffusion;

prie le CCIR

1. D'étudier d'urgence le problème des brouillages entre les deux services;
2. De déterminer les critères appropriés de protection des deux services;

invite

l'Organisation de l'aviation civile internationale (OACI) et les autres organisations internationales appropriées à étudier d'urgence le problème et à communiquer les résultats de leurs études au CCIR;

recommande

qu'en assignant des fréquences au service de radiodiffusion dans la bande 100-108 MHz et au service de radionavigation aéronautique dans la bande 108-117,975 MHz, les administrations prennent note des risques possibles de brouillage et appliquent des mesures de protection appropriées.

T RECOMMANDATION N° 705

Relative aux critères à appliquer au partage des fréquences entre le service de radiodiffusion par satellite et le service de radiodiffusion de Terre dans la bande 620-790 MHz (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que des fréquences de la bande 620-790 MHz peuvent être assignées à des stations de télévision modulation de fréquence du service de radiodiffusion par satellite;
b) Qu'il est nécessaire de fixer une limite de la puissance surfacique afin de protéger efficacement le service de radiodiffusion de Terre;

(1) Remplace la Recommandation N° Spa2-10 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

notant

a) Que, dans ces conclusions, la Reúnion spéciale mixte du CCIR (Génève, 1971) a indiqué les limites suivantes de la puissance surfacique afin de protéger le service de radiodiffusion de Terre:

— 121 dB (W/m²)	pour $\delta \leq 20°$
— 121 + 0,4 (δ – 20) dB (W/m²)	pour $20° < \delta \leq 60°$
— 105 dB (W/m²)	pour $60° < \delta \leq 90°$

δ étant l'angle d'arrivé au-dessus du plan horizontal (en degrés);

b) Que des essais supplémentaires effectués par une administration après la Réunion spéciale mixte du CCIR ont montré qu'il peut être nécessaire d'adopter les valeurs suivantes, plus prudentes, pour les limites de puissance surfacique:

— 130 dB (W/m²)	pour $\delta \leq 20°$
— 130 + 0,4 (d – 20) dB (W/m²)	pour $20° < \delta \leq 60°$
— 114 dB (W/m²)	pour $60° < \delta \leq 90°$

δ étant l'angle d'arrivé au-dessus du plan horizontal (en degrés);

c) Que le Rapport 631-1 du CCIR donne le résultat des études effectuées jusqu'en 1978;

d) Qu'il est nécessaire de recueillir des renseignements supplémentaires sur le rapport de protection contre le brouillage causé par un signal de télévision à modulation de fréquence à un signal de télévision à bande latérale résiduelle, tant pour les systèmes à 625 lignes qu'à 525 lignes;

e) Qu'avec les sytèmes de réception de télévision de Terre utilisant les techniques actuelles, le champ minimal à protéger peut en certains cas être inférieur aux valeurs recommandées dans l'Avis 417-2 du CCIR;

f) Que l'ont peut être amené à tenir compte des réflexions sur le sol;

g) Que la technique de dispersion de l'energie peut réduire le rapport de protection requis et qu'il convient d'y faire appel si elle se révèle efficace;

recommande

1. Qu'en raison de l'absence de renseignements suffisants sur les essais effectués dans les conditions d'exploitation, et afin de fournir des critères de partage à tire provisoire, la puissance surfacique maximale produite à la surface de la Terre dans le zone de service d'une station de radiodiffusion de Terre (voir l'Avis 417-2 du CCIR) par une station spatiale du service de radiodiffusion par satellite ne dépasse pas les valeurs suivantes dans la bande 620-790 MHz:

— 129 dB (W/m²)	pour $\delta \leq 20°$
— 129 + 0,4 (δ – 20) dB (W/m²)	pour $20° < \delta \leq 60°$
— 113 dB (W/m²)	pour $60° < \delta \leq 90°$

δ étant l'angle d'arrivé au-dessus du plan horizontal (en degrés);

2. Que ces limites ne soient dépassées sur le territoire d'un pays que sous réserve de l'accord de l'administration de celui-ci;

3. Que l'on évite d'émettre des porteuses non modulées;

4. Que le CCIR étudie d'urgence les critères à appliquer pour le partage des fréquences entre le service de radiodiffusion par satellite et le service de radiodiffusion de Terre dans la bande 620-790 MHz et qu'il rédige un Avis sur les valeurs de la puissance surfacique à utiliser pour remplacer les limites provisoires indiqués ci-dessus;

5. Que, dans ses études, le CCIR prenne en considération, en particulier, les facteurs suivants:

5.1. Rapport de protection requis contre le brouillage causé par un signal de télévision à modulation de fréquence à un signal de télévision à bande latérale residuelle, tant pour les systèmes à 525 lignes qu'à 625 lignes;

5.2. Champ minimal à protéger pour le service de télévision de Terre, compte tenue de l'état de la technique;

5.3. Effet des réflexions sur le sol;

5.4. Nombre des satellites de radiodiffusion visibles d'un récepteur de radiodiffusion de Terre;

5.5. Effet de la discrimination de polarisation;

5.6. Effet de la directivité de l'antenne;

6. Que, dans ses études, le CCIR examine les avantages de la technique de dispersion de l'energie dans le service de radioddifusion par satellite (télévision).

YW RECOMMANDATION Nº 706

Relative au partage des fréquences entre, d'une part le service d'exploitation de la Terre par satellite (détecteurs passifs) et le service de recherche spatiale (détecteurs passifs), et d'autre part les services fixe, mobile, sauf mobile aéronautique, et fixe par satellite dans la bande 18,6–18,8 GHz.

La Conferénce administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que des attributions aux services d'exploration de la Terre par satellite et de recherche spatiale pour le fonctionnement des détecteurs passifs à bord d'engins spatiaux ont été faites dans diverses bandes de fréquences;

b) Que les attributions faites dans la bande 18,6-18,8 GHz le sont en partage avec les services fixe, mobile, sauf mobile aéronautique, et fixe pr satellite;

c) Que l'application des critères de partage contenus dans le Rapport 694 du CCIR pourrait limiter le développement des services fixe, mobile, sauf mobile aéronautique, et fixe par satellite;

invite le CCIR

1. À faire réexaminer le contenu du Rapport 694 par toutes les commissions d'études concernées (notamment les Comissions d'études 4 et 9);

2. À poursuivre les études ayant déjà donné lieu au Rapport 609-1, en tenant compte des besoins des services d'exploration de la Terre par satellite (détecteurs passifs) et de recherche spatiale (décteurs passifs);

3. À étudier les restrictions minimales qui pourraient être appliquées aux services fixe, mobile, sauf mobile aéronautique, et fixe par satellite (espace vers Terre) pour assurer un fonctionnement satisfaisant des detécteurs passifs;

4. À étudier les restrictions maximales que peuvent tolérer les services fixe, mobile, sauf mobile aéronautique et fixe par satellite, sans compromettre le fonctionnement de tous les services susceptibles d'utiliser cette bande de fréquences.

YV RECOMMANDATION Nº 707

Relative à l'utilisation de la bande de fréquences 32-22 GHz en partage entre le service inter-satellites et le service de radionavigation

La Conferénce administrative mondiale des radiocomnunications (Génève, 1979),

considérant

a) Que la bande 32-33 GHz est attribuée au service inter-satellites et au service de radionavigation;

b) Que le service de radionavigation présente des aspects de sécurité;

c) Que le renvoie 893 a été inclus dans l'article 8;

recommande

que des études soient entreprises d'urgence, concernant les critères à appliquer pour le apartage de la bande de fréquences 32-33 GHz entre les deux services précités;

prie le CCIR

d'effectuer ces études;

recommande en outre

qu'une future conférence administrative mondiale des radiocommunications compétente passe en revue les Avis du CCIR, dans le but d'inclure les critères de partage susmentionnées dans l'article 28.

ZQ RECOMMANDATION Nº 708

Relative aux bandes de fréquences partagées par les srvices de radiocommunication spatiale entre eux ainsi qu'entre les services de radiocommunication spatiale et les services de radiocommunication de Terre (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

reconnaisant

a) La valeur, pour la Conférence, de la documentation contenue dans le Rapport de la Réunion spéciale préparatoire du CCIR (Génève, 1978);

---

(1) Remplace la Recommandation Nº Spa2-15 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

b) Le fait de la XIV[e] Assemblée plénière du CCIR a aprouvé un certain nombre de Questions et de Programmes d'études au titre desquels ce Comité doit encore étudier des problèmes très divers concernant les radiocommunications spatiales;

considérant cependant

a) Que certains Avis du CCIR, dont la liste suit, nécessitent la poursuite des travaux et des études;

Avis 335-2 «Partage de fréquences entre systèmes du service fixe par satellite et des services de radiocommunication de Terre fonctionant dans la même bande de fréquences»;

Avis 465-1 «Diagramme de rayonnement de réference de station terrienne, à utiliser pour la coordination et pour l'évaluation des brouillages dans la gamme des fréquences comprises entre 2 et 10 GHz environ»;

Avis 466-2 «Niveau maximal admissible du brouillage, dans une voie téléphonique d'un réseau à satellite géostationnaire du service fixe par satellite utilisant la modulation de fréquence avec multiplexage en fréquence, produit par d'autres réseaux de ce service»;

b) Que les débats de la présent Conférence, notamment ceux relatifs aux articles 27, 28 et 29 et aux autres articles pertinents du Règlement des radiocommunications, ont montré que l'on a besoin de renseigments supplémentaires pour répondre aux Questions et Programmes d'études ci-aprées en cours d'examen par le CCIR:

Question 1-2/4 «Antennes pour le systèmes du service fixe par satellite»;

Question 2-3/4 «Caractéristiques techniques des systèmes du service fixe par satellite»;

Programme d'études 2A-3/4 «Possibilité de partage des bandes de fréquences entre les systèmes du service fixe par satellite et les services de radiocommunication de Terre»;

Programme d'études 2J-2/4 «Facteurs techniques dont dépende l'efficacité d'utilisation de l'orbite des satellites géostationnaires par des réseaux à satellite de radiocommunication partageant des bandes de fréquences attribuées au service fixe par satellite»;

c) Qu'il serait utile de connaître les valeurs numériques précises de la puissance surfacique produite par les stations spatiales du service de radiodiffusion par satellite, qui permettraient d'établir une distinction entre la «réception individuelle» et la «réception communautaire» dans le service de radiodiffusion par satellite;

d) Que le partage des fréquences entre le service de radionavigation et le service fixe par satellite (Terre vers espace) a été adopté dans la bande de fréquences 14-14,3 GHz;

recommande

1. Aux administrations, exploitations privées reconnues et autres participants aux travaux du CCIR, de donner une priorité à la présentation de contributions à l'étude des questions précitées, de manière que des projets d'Avis puissent être préparés lors des réunions des Comissions d'études compétentes aux fins d'examen par l'Assemblée plénière du CCIR:

2. Au CCIR, d'étudier, ou, selon le cas, de continuer à étudier:

2.1. Les diagrammes de référence d'antennes de station terrienne qui pourraient convenir à la fixation de normes de fonctionnement minimales, en vue de recommander des diagrammes à cette fin pour améliorer l'utilisation des bandes de fréquences partagées entre le service fixe par satellite et les services de radiocommunication de Terre ainsi qu'entre services de radiocommunication spatiale et améliorer l'utilisation de l'orbite des satellites géostationnaires;

2.2. Les diagrammes de référence d'antennes de satellite qui pourraient convenir à la fixation de normes de fonctionnement minimales, notamment en dehors du faisceau de rayonnement principal, pour améliorer l'utilisation de l'orbite des satellites géostationnaires et pour accoître les possibilités de réutilisation des fréquences;

2.3. Les diagrammes de réference d'antennes à polarisation croisées qui pourraient convenir à la fixation de normes de fonctionnement minimales et, à cet égard, d'étudier également:

2.3.1. Les parties du spectre des fréquences dans lesquelles, il serait le plus avantageux d'utiliser des polarisations orthogonales linéaires ou des polarisations orthogonales circulaires;

2.3.2. L'opportunité, compte tenu de facteurs techniques et de considérations relatives à l'utilisation de l'orbite, d'utiliser des polarisations orthogonales dans un même satellite comparativement à une telle utilisation dans deux satellites;

2.4. Les limites à imposer aux rayonnements non essentiels ainsi que les tolérances de fréquence dans les services de radiocommunication spatiale et les services de radiocommunication de Terre, dans la mesure où ces limites et ces tolérances peuvent affecter le partage des bandes de fréquences;

2.5. Les critères de brouillage admissible pour les divers services de radiocommunication spatiale et de radiocommunication de Terre partageant les bandes de fréquences attribuées par la présente Conférence, afin de permettre la détermination:

2.5.1. De la distance de coordination et de la probabilité de brouillage entre stations en-deçà de cette distance;

2.5.2. Des limites à imposer à la puissance surfacique produite à la surface de la Terre par les stations spatiales;

2.6. Le niveaux maximal de brouillage admissible pouvant être causé à une liaison par satellite géostationnaire par tout autre réseau à satellite géostationnaire et par l'ensemble de tous les autres réseaux à satellite géostationnaire, en particulier dans le cas:

2.6.1. De signaux téléphoniques modulés en fréquence;

2.6.2. De signaux de télévision modulés en fréquence;

2.6.3. De signaux à modulation numérique;

ainsi que la manière la plus appropriée dont il convient de spécifier ces brouillages admissibles dans ces cas et dans d'autres cas;

2.7. Les critères de brouillage à appliquer au partage de fréquences entre réseaux à satellite non géostationnaire et réseaux à satellite géostationnaire;

2.8. La possibilité d'établir un critère technique pour exprimer l'efficacité d'utilisation de l'orbite des satellites géostationnaires;

2.9. La possibilité d'améliorer et de simplifier la méthode permettant de déterminer la zone de coordination, telle qu'elle est décrite dans l'appendice 28 au Règlement des radiocommunications;

2.10. Les conditions de partage des fréquences dans les bandes attribuées par la présente Conférence au service de radiodiffusion par satellite, en vue d'émettre aussitôt que possible des Avis appropriés permettant aux administrations et à l'IFRB de disposer des données techniques nécessaires pour appliquer les procédures d'examen, nottamment celles qui sont énoncées aux articles 11, 12 et 13 du Règlement des radiocommunications et dans le Résolution **33**;

2.11. La détermination des niveaux de puissance surfacique requis pour la réception individuelle et la réception communautaire dans le service de radiodiffusion par satellite, en vue de spécifier des valeurs numériques qui permettront d'établir une distinction entre ces types de réception;

2.12. Les critères de partage des fréquences entre le service de radionavigation et le service fixe par satellite (Terre vers espace) dans la bande de fréquences 14-14,3 GHz;

O RECOMMANDATION Nº 709

Relative au partage des bandes de fréquences entre le service mobile aéronautique et le service inter-satellites

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que les bandes 54,25-58,2 GHz, 59-64 GHz, 116-134 GHz, 170-182 GHz et 185-190 GHz sont attribuées au service inter-satellites et au service mobile;

b) Que les bandes susmentionnées son situées dans des parties du spectre des fréquences radioélectriques voisines de crêtes d'absorpotion aunosphérique;

c) Que, néanmoins, l'absorption aunonsphérique elle seule ne suffit pas toujours pour empêcher que des brouillages préjudiciables soient causés aux stations du service inter-satellites par des stations fonctionnant à bord d'aéronefs volant à haute altitude;

d) Que, pour cette raison, les stations d'aéronef du service mobile aéronautique peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellite (voir le numéro **909** dont le text est reproduit ci-après) (1);

recommande

que l'on procède d'urgence à des études des critères de partage applicables à ces deux services dans les bandes de fréquences susmentionnés;

prie le CCIR

d'effectuer ces études;

recommande en outre

qu'une future conférence administrative mondiale des radiocommunications compétente examine à nouveaux les attributions dans ces bandes, compte tenu des résultats des travaux du CCIR.

---

(1) **909** Dans les bandes 54,25-58,2 GHz, 59-64 GHz, 116-134 GHz, 170-182 GHz et 185-190 GHz, les stations du service mobile aéronautique peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellites (voir le numéro **435**).

N

RECOMMANDATION Nº 710

Relative à l'utilisation de radiodétecteurs aéroportés dans les bandes de fréquence partagées par le service inter-satellites et le service de radiolocalisation

La Conférence administrative mondiale des radiocommunications (Genève, 1979),

considérant

a) Que les bandes 59-64 GHz et 126-134 GHz sont attribuées au service inter-satellites et au service de radiolocalisation;

b) Que les bandes susmentionnées sont situées dans les parties du spectre des fréquences radioélectriques voisines de crêtres d'absorption atmosphérique;

c) Que, néanmoins, l'absorption atmosphérique à elle seule en suffit pas toujours pour empêcher que des brouillages préjudiciables soient causés à des stations du service inter-satellites par des radiodécteurs fonctionnant à bord d'aéronefs volant à haute altitude;

d) Que, pour cette raison, les radiodétecteurs aéroportés du service de radiolocalisation peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellites (voir le numéro **910,** dont le texte est reproduit ci-après) (1);

recommande

que l'on procède d'urgence à des études des critères de partage applicables à ces deux services dans les bandes de fréquences susmentionnées;

prie le CCIR

d'effectuer ces études;

recommande en outre

qu'une future conférence administrative mondiale des radiocommunications compétente examine à nouveau les attributions dans ces bandes, compte tenu des résultats des travaux du CCIR.

Z

RECOMMANDATION Nº 711

Relative à la coordination des stations terriennes (2)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Qu'aux termes de l'article 11 du Règlement des radiocommunications, les assignations de fréquence aux stations terriennes das certaines bandes partagées, avec égalité des droits, entre services de radiocommunication de Terre et services de radiocommunication spatiale, doivent faire l'objet d'une coordination de façon à éviter les brouillages préjudiciables mutuels;

b) Que la méthode de calcul décrite à l'appendice 28 au Règlement des radiocommunications s'applique seulement aux fréquences de la gamme de 1 GHz à 40 GHz;

c) Que les Tableaux I et II de cet appendice ne comportent pas les valeurs numériques de tous les paramètres nécessaires pour certains services de radiocommunication spatiale et pour certains services de radiocommunication de Terre partageant des bandes de fréquences avec egalité des droits;

invite le CCIR

à poursuivre d'urgence ses études:

Sur les données relatives aux services de radiocommunication spatiale et de radiocommunication de Terre partageant des bandes de fréquences avec egalité des droits, qui ne figurent pas dans les Tableaux I et II de l'appendice 28 au Règlement des radiocommunications;

Sur l'élaboration de méthodes de calcul permettant de determiner la zone de coordination des stations terriennes pour les fréquences inférieures à 1 GHz et supérieures à 40 GHz;

---

(1) **910** Dans les bandes 59-64 GHz et 126-134 GHz, les radiodétecteurs aéroportés du service de radiolocalisation peuvent fonctionner sous réserve de ne pas causer de brouillage préjudiciable au service inter-satellites (voir le numéro **435**).

(2) Remplace la Recommandation Nº Spa2-9 de la Conférence administrative mondiale des télécommunications spatiales (Génève, 1971).

recommande aux administrations

d'utiliser jusqu'à la prochaine conférence administrative mondiale des radiocommunications compétente:

Les Avis du CCIR éventuellement applicables, pour ce qui est des valeurs qui ne figurent pas dans les Tableaux I et II de l'appendice 28 au Règlement des radiocommunications;

Les méthodes de détermination de la zone de coordination pour des fréquences inférieures à 1 GHz et supérieures à 40 GHz, qui feraient l'objet d'Avis du CCIR.

U RECOMMANDATION Nº 712

Relative à l'interdépendance entre le conception des récepteurs, le groupement des canaux et les critères de partage dans le service de radiodiffusion par satellite (1)

La Conférence administrative mondiale des radiocommunications (Génève, 1979),

considérant

a) Que la conception des récepteurs, le groupement des canaux et les critères de partage sont interdépendants et qu'ils ont une influence importante sur l'élaboration d'un plan pour le service de radiodiffusion par satellite;

b) Que, jusqu'à présent, on n'a peut-être pas accordé une attention suffisante à ces facteurs et à l'influence qu'ils exercent sur la mise en œuvre d'un tel plan;

invite le CCIR

à étudier le problème de l'interdépendance entre la conception des récepteurs, le groupement des canaux et les critères de partage, ainsi que l'influence de ces facteurs sur l'exploitation du service de radiodiffusion par satellite.

---

(1) Remplace la Recommandation Nº Sat-7 de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977).

TABLES DE CONCORDANCE

TABLE DE CONCORDANCE Nº 1

Articles du RR

(Numéros d'origine/numéros définitifs)

A.I	N1	1		N17	19		N35	38		N54	57
	N2	2		N18	20		N36	39		N55	58
	N2A	3		N19	21		N37	40		N56	59
	N3	4		N20	22		N38	41		N57	60
II	N4	5	VI	N21	23		N39	42		N58	61
III	N5	6		N22	24	X	N40	43		N59	62
	N6	7		N23	25		N41	44		N60	63
	N7	8	VII	N24	26		N42	45		N61	64
	N8	9	B.VIII	N25	27		N43	46		N62	65
IV	N9	10		N26	28		N44	47		N62A	66
	N10	SUP		N27	29		N45	48		N63	SUP
	N11	11		N28	30		N46	49		N64	SUP
	N12	12		N29	31		N47	50	XII	N65	67
	N13	13		N30	32		N48	51		N66	SUP
	N13A	14		N31	33		N49	52		N67	SUP
	N13B	15		N32	34		N50	53		N68	68
	N14	16		N33	35	XI	N51	54		N69-N72	
	N15	17		N33A	36		N52	55		+ RA	SUP
V	N16	18	IX	N34	37		N53	56	XIII	N73	69

TABLE DE CONCORDANCE Nº 1A

Articles 1, Termes et définitions

(Numéros d'origine/numéros définitifs)

3000	1	3034	59	3082	74	3125	171
3001	2	3034.1	SUP	3083	93	3125.1	SUP
3001A	3	3035	92	3084	32	3126	172
3002	4	3036	21	3085	75	3127	173
3003	SUP	3037	63	3086	33	3127A	174
3004	7	3038	23	3087	28	3127B	175
3005	6	3039	64	3088	68	3128	176
3006	5	3040	36	3089	69	3129	177
3006A	133	3041	80	3090	104	3130	178
3007	111	3042	47	3091	105	3131	179
3008	115	3043	103	3092	106	3132	180
3009	SUP	3044	53	3093	107	3133	181
3010	112	3045	90	3094	108	3133A	182
3011	113	3046	50	3094A	109	3133B	131
3012	114	3047	89	3094B	110	3133C	132
3013	117	3048	SUP	3095	127	3133D	138
3014	118	3049	38	3096	SUP	3133F	140
3015	122	3050	81	3097	129	3134	142
3016	116	3051	40	3098	130	3135	143
3019	119	3052	83	3099	52	3136	144
3019.1	119.1	3053	82	3100	25	3137	145
3020	120	3054	44	3101	24	3138	141
3020.1	120.1	3055	42	3102	22	3139	147
3021	121	3056	46	3103	37	3140	146
3021.1	121.1	3057	85	3103.1	SUP	3140A	160
3017	125	3058	84	3104	123	3140B	162
3018	126	3059	94	3105	124	3140B.1	162.1
3018A	128	3060	95	3106	48	3141	139
3021A	134	3061	96	3107	49	3142	163
3021B	135	3062	97	3108	54	3142A	161
3021C	136	3063	98	3109	51	3142A.1	161.1
3021D	137	3064	99	3110	SUP	3142B	164
3022	158	3065	100	3111	39	3143	150
3023	159	3066	101	3112	41	3144	151
3023A	16	3067	102	3113	45	3145	152
3023B	17	3068	13	3114	43	3146	153
3023C	18	3069	86	3115	27	3147	156
3023D	19	3070	87	3115A	66	3147A	157
3023E	20	3071	88	3116	35	3148	155
3024	9	3072	26	3116A	79	3149	154
3025	8	3073	67	3117	31	3150	SUP
3025.1	SUP	3074	65	3118	73	3151	SUP
3026	10	3075	62	3118A	71	3152	SUP
3027	11	3076	34	3119	29	3153	SUP
3028	12	3077	76	3120	14	3153C	148
3029	56	3077A	77	3120A	15	3153D	149
3030	57	3078	78	3121	55	3154	168
3031	58	3079	30	3122	91	3155	167
3032	61	3080	70	3123	169	3156	166
3033	60	3081	72	3124	170	3157	165

TABLE DE CONCORDANCE Nº 1B

Articles 8, Attributions des bandes de fréquences

(Numéros d'origine/numéros définitifs)

A.N7/5	SUP		401	3427	413	3432	425
3414A	391		402	3428	414	3433	426
3415	392		403		415	3434	427
3415.1	392.1	3423	404		416	3435	428
3416	393	3424	405		417	3436	429
3417	394	3425	406		418	3437	430
3418	395		407	3429	419	3438	431
3419	396		408	3430	420	3439	432
3420	397		409		421	3440	433
3421	398		410		422	3441	434
3422	399	3426	411		423	3442	435
3422A	400	3426A	412	3431	424	3443	436

3444	437	3493C	496	3534	SUP	3589	603
3445	438	3493D	499	3535	SUP	3589A	605
3446	439	3494	500	3536	549	3590	SUP
3446A	440	3495	501	3537	SUP	3591	608
3447	441	3495A	502	3538	551	3591A	611
3448	442	3496	503	3538A	550	3592	SUP
3449	443	3496A	506	3538AB	552	3593	609
3450	SUP	3496AA	521	3539	555	3594	SUP
3451	444	3497	SUP	3540	SUP	3594A	616
3451A	445	3497A	504	3541	553	3594B	617
3452	448	3498	SUP	3541A	554	3595	613
3452A	446	3498A	507	3541B	559	3596	614
3453	447	3499	495	3541C	561	3596A	615
3454	SUP	3499A	510	3542	556	3596C	618
3455	SUP	3499B	508	3543	SUP	3597	SUP
3455A	449	3500	505	3543A	558	3598	SUP
3456	451	3500B	509	3543B	557	3598A	607
3457	SUP	3500C	512	3543C	562	3599	SUP
3458	452	3500D	511	3544	SUP	3600	SUP
3459	450	3501	SUP	3545	560	3601	623
3460	SUP	3501A	513	3546	565	3601A	621
3461	454	3502	SUP	3547	SUP	3601AA	622
3461A	453	3502A	514	3548	564	3601B	620
3462	SUP	3502AA	515	3548A	575	3601C	619
3463	456	3502B	516	3548B	563	3602	SUP
3464	455	3502C	517	3548C	578	3602A	624
3465	SUP	3503	518	3549	SUP	3602B	625
3466	457	3504	519	3350	571	3603	SUP
3466A	458	3505	520	3550A	567	3604	SUP
3467	SUP	3506	SUP	3551	569	3605	SUP
3468	SUP	3507	522	3552	570	3606	SUP
3469	460	3508	523	3553	566	3607	SUP
3469A	462	3508A	524	3553A	579	3608	SUP
3469AB	461	3508B	525	3554	SUP	3608A	628
3469AC	463	3508BA	526	3554A	574	3608AA	627
3470	SUP	3508C	527	3554B	573	3608AB	626
3471	465	3508D	528	3555	SUP	3608AC	630
3472	459	3509	SUP	3556	SUP	3608B	632
3472A	464	3509A	529	3557	SUP	3608C	633
3472B	466	3510	SUP	3558	572	3608CA	634
3473	467	3510A	531	3558X	576	3609	SUP
3474	SUP	3510B	530	3559	SUP	3610	SUP
3475	468	3511	SUP	3560	577	3611	SUP
3476	SUP	3511A	532	3561	SUP	3612	635
3477	SUP	3512	SUP	3562	SUP	3612A	636
3478	475	3512A	533	3563	581	3612B	637
3478A	476	3513	534	3564	582	3612C	638
3479	470	3514	535	3565	SUP	3612CA	639
3479A	469	3515	SUP	3566	580	3612D	631
3479B	471	3515A	536	3566A	586	3613	SUP
3480	472	3515B	537	3567	SUP	3614	640
3480A	474	3515C	538	3568	SUP	3615	SUP
3481	473	3516	SUP	3569	SUP	3616	SUP
3482	SUP	3517	539	3569A	583	3617	SUP
3483	478	3517A	540	3570	SUP	3618	641
3484	477	3518	541	3570A	584	3619	642
3484A	479	3518A	542	3570B	587	3620	SUP
3484B	480	3518B	543	3570C	589	3621	643
3484C	481	3519	SUP	3570CA	590	3622	644
3485	SUP	3520	SUP	3570D	588	3623	SUP
3485A	483	3521	SUP	3571	585	3624	645
3485B	485	3521A	544	3572	593	3625	SUP
3486	SUP	3521B	545	3572A	592	3626	646
3487	SUP	3522	546	3573	591	3627	647
3488	488	3523	SUP	3574	594	3628	SUP
3489	SUP	3524	SUP	3575	SUP	3629	SUP
3490	484	3525	SUP	3576	SUP	3630	SUP
3490A	487	3526	SUP	3577	602	3631	SUP
3490B	486	3527	SUP	3578	SUP	3632	SUP
3491	SUP	3528	SUP	3578A	595	3633	SUP
3492	489	3529	SUP	3579	SUP	3633A	648
3492A	494	3530	SUP	3580	599	3634	649
3492B	482	3531	610	3581	SUP	3635	SUP
3492C	492	3531	650	3582	SUP	3636	653
3492D	490	3531A	547	3583	598	3637	672
3492E	491	3531A	832	3584	596	3638	669
3492F	493	3531B	880	3584A	597	3639	670
3493	497	3531C	612	3584AA	606	3640	651
3493B	498	3531L	795	3585	SUP	3640A	652
		3531P	887	3585A	601	3640B	660
		3531X	568	3586	600	3640C	666
		3532	SUP	3587	604	3640D	667
		3533	548	3588	SUP	3641	668
						3642	663

3643	658	3684	SUP	3743	791	3793A	853
3644	664	3685	730	3743A	789	3793B	858
3645	662	3686	732	3744	790	3794	894
3645A	661	3687	733	3745	SUP	3794B	859
3646	656	3688	727	3746	SUP	3794D	854
3646A	655	3689	SUP	3746A	793	3794F	866
3646B	657	3690	SUP	3746B	794	3794FA	867
3646C	659	3691	729	3747	SUP	3794G	868
3646D	654	3692	SUP	3748	788	3794H	869
3646E	665	3693	SUP	3748B	792	3795	856
3647	SUP	3694	735	3749	SUP	3795B	860
3648	SUP	3695	744	3750	797	3795C	857
3649	SUP	3695A	728	3750AA	796	3795D	861
3650	671	3695B	731	3751	798	3796	SUP
3650A	676	3695C	726	3752	SUP	3796A	863
3650B	675	3695E	734	3753	799	3797	862
3650BA	674	3696	739	3754	800	3798	855
3650C	673	3696A	738	3755	802	3799	865
3650E	678	3696B	736	3755A	801	3799A	870
3650F	679	3697	SUP	3756	807	3799B	897
3651	686	3698	741	3757	803	3799C	864
3651A	680	3698A	737	3758	804	3800	883
3652	SUP	3698B	740	3758A	805	3800A	871
3653	681	3699	SUP	3759	SUP	3800B	872
3653A	682	3700	742	3760	806	3800M	873
3653AA	683	3701	SUP	3761	898	3801	SUP
3653B	685	3701B	743	3761B	809	3801A	874
3654	684	3702	SUP	3761C	808	3801B	875
3655	SUP	3703	745	3762	SUP	3801BA	876
3656	SUP	3704	746	3762A	810	3801C	878
3656.1	SUP	3705	SUP	3762B	814	3801D	879
3657	687	3706	SUP	3763	811	3802	877
3657A	691	3707	SUP	3764	SUP	3802A	888
3657B	692	3707A	747	364B	812	3803	881
3658	690	3707B	748	3765	SUP	3804	SUP
3659	694	3707C	750	3766	SUP	3805	SUP
3659B	704	3707D	749	3767	SUP	3805A	882
3660	689	3708	SUP	3768	SUP	3806	SUP
3660A	688	3709	752	3769	818	3806A	889
3661	693	3710	SUP	3770	SUP	3807	891
3661A	696	3711	SUP	3770A	815	3807A	893
3662	SUP	3712	SUP	3770B	813	3807C	899
3662A	695	3713	753	3771	817	3807D	892
3662B	697	3714	755	3771A	816	3807E	890
3662BA	698	3715	757	3772	820	3808	896
3662C	701	3716	756	3772A	819	3808A	895
3662CA	699	3717	758	3773	821	3809	SUP
3662DA	702	3717A	767	3774	822	3810	SUP
3662E	703	3717B	768	3774A	823	3811	SUP
3663	SUP	3718	763	3775	824	3812	SUP
3664	SUP	3719	769	3776	825	3813	885
3665	SUP	3720	SUP	3777	827	3813A	884
3666	SUP	3721	764	3778	826	3814	886
3667	SUP	3722	762	3779	828	3814A	900
3668	677	3723	761	3780	829	3814B	901
3669	SUP	3723A	766	3780A	830	3814C	903
3669A	705	3723B	754	3781	SUP	3814CA	902
3669B	706	3724	759	3782	SUP	3814D	904
3670	707	3725	765	3783	SUP	3814E	905
3670A	708	3726	760	3783B	831	3815	907
3670B	700	3727	770	3784	834	3815A	906
3671	709	3727A	771	3784A	835	3815B	908
3672	SUP	3728	773	3784B	833	3815BA	909
3673	712	3729	774	3785	838	3815C	910
3673A	710	3730	775	3785A	847	3815D	911
3674	711	3730A	772	3785B	845	3815E	912
3675	SUP	3731	777	3785H	840	3815F	913
3675A	713	3732	776	3786	SUP	3815G	914
3675B	714	3732A	778	3787	839	3816	SUP
3676	717	3733	780	3787A	836	3816A	916
3677	716	3734	SUP	3787B	841	3816B	915
3678	715	3735	SUP	3787C	842	3816C	918
3679	719	3735A	782	3787D	844	3816D	917
3679A	722	3736	785	3787E	843	3816E	919
3679B	721	3736A	784	3787F	846	3816F	920
3680	718	3737	SUP	3787G	837	3816G	921
3680A	751	3738	781	3788	848	3816H	922
3680C	723	3739	779	3788A	850	3816I	923
3680D	720	3739A	783	3789	849	3816J	924
3681	SUP	3740	SUP	3790	SUP	3816K	925
3682	SUP	3741	786	3791	851	3816L	926
3683	724	3742	SUP	3792	SUP	3816M	927
3683A	725	3742A	787	3793	852		

TABLE DE CONCORDANCE Nº 2

Appendices

(Numéros d'origine/numéros définitifs)

1	1	12	12	18	18	25 Mar2	25 Mar2
1A	3	13	13	19	19	26	26
1B	4	13A	14	19A	20	27	27
1C	5	14	15	20	36	27 Aer2	27 Aer2
2	2	15 Mar2	31	20A	37	28	28
3	7	15	SUP	20B	38	29	29
4	8	15A	32	20C	39	29A	30
5	6	15B	33	20D	40	A	SUP
6	21	15C	34	21	SUP	B	SUP
7	22	15D	35	21A	SUP	C	42
8	23	16	24	22	SUP	CA	43
9	9	17	SUP	23	41	CB	44
10	10	17 Rév.	16	24	SUP	–	
11	11	17A	17	25MOD	SUP	–	

TABLE DE CONCORDANCE Nº 3

Résolutions

(Numéros d'origine/numéros définitifs)

AA	35	AX	302	BU	501	CR	641
AB	201	AY	2	BV	642	CS	102
AC	315	AZ	300	BW	6	CT	9
AD	7	BA	301	BX	37	CU	30
AE	66	BB	308	BY	4	CV	8
AF	10	BC	503	BZ	103	CW	703
AG	63	BD	100	CA	1	CX	16
AH	65	BE (*a*)	–	CB	403	CY	11
AI	32	BF	407	CC	405	CZ	15
AJ	60	BG	402	CD	68	DA	312
AK	36	BH	400	CE	316	DB	311
AL	601	BI	401	CF	64	DC	12
AM	62	BJ	67	CG	5	DD	313
AN	200	BK	61	CH	701	DE	13
AO	305	BL	406	CI	31	DF	17
AP	506	BM	510	CJ	700	DG	14
AQ	307	BN	640	CK	504	DH	202
AR	314	BO	33	CL	34	DI	508
AS	304	BP	3	CM	505	DJ	502
AT	309	BQ	101	CN	310	DK	702
AU	507	BR	38	CO	600	–	
AV	303	BS	500	CP (*a*)	–	–	
AW	306	BT	404	CQ	509	–	

(*a*) Non utilisé.

TABLE DE CONCORDANCE Nº 4

Recommandations

(Numéros d'origine/numéros définitifs)

A (*a*)	–	Y	405	ZW	305	YU	702
B	11	Z	711	ZX	404	YV	707
C	204	ZA	103	ZY	310	YW	706
D	30	ZB	61	ZZ	200	YX	100
E	68	ZC	506	YA	203	YY	701
F	202	ZD	508	YB	309	YZ	600
G (*a*)	–	ZE	101	YC	504	XA	605
H	500	ZF	507	YD	300	XB	407
I	501	ZG	9	YE	301	XC	700
J	73	ZH	603	YF	406	XD	602
K	62	ZI	2	YG	31	XE	1
L	66	ZJ	402	YH	67	XF	10
M	63	ZK	400	YI	5	XG (*a*)	–
N	710	ZL	505	YJ	4	XH	6
O	709	ZM	65	YK	601	XI	604
P	69	ZN	71	YL	307	XJ	303
Q	60	ZO	74	YM	302	XK	7
R	64	ZP	502	YN	401	XL	311
S	70	ZQ	708	YO	308	XM	12
T	705	ZR	72	YP	304	XN	8
U	712	ZS	503	YQ	306	XO	3
V	403	ZT	620	YR	313	XP	13
W (*a*)	–	ZU	703	YS	201	–	
X	102	ZV	704	YT	312	–	

APPENDICE 25 Mar2

Plan d'allotissement de fréquences aux stations côtières radiotéléphoniques fonctionnant dans les bandes exclusives du service mobile maritime entre 4000 kHz et 23 000 kHz

(Voir les numéros 448 et 457 du Règlement des radiocommunications et l'appendice 17 Rév.)

Note a) —Les fréquences indiquées dans la colonne (1) sont des fréquences assignées (voir le numéro **85**) telles qu'elles figurent à l'appendice 17 Rév. au Règlement des radiocommunications. Chaque fréquence est suivie, entre parenthèses, de l'indication de la fréquence porteuse ainsi que du numéro de la voie. (Voir la Section A de l'appendice 17 Rév. au Règlement des radiocommunications.)

Note b) — Les stations côtières radiotéléphoniques qui fonctionnent dans les bandes exclusives du service mobile maritime entre 4000 kHz et 23 000 kHz doivent utiliser la puissance minimale nécessaire pour couvrir leur zone de service. Elles ne doivent en aucun cas utiliser une puissance de crête supérieure à 10 kW par voie. (Voir le numéro **1351C** du Réglement des radiocommunications.)

Note c) — La mise à jour du plan figurant dans le present appendice s'effectuera conformément à la procédure qui fait l'objet de l'article 9B du Réglement des radiocommunications et qui est reproduite en annexe.

Colonne 1	Colonne 2	Colonne 3
Fréquence assignée (fréquences porteuse) (numéro de la voie)	Pays ou zone	Observations

1	2	3
4358,8 (4357,4) (Voie N° 401)	Allemagne (République Fédérale d'). Chili. Îles Cook. Corée. Cuba. Danemark. Espagne États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Gabon. Gibraltar. Grèce. Indonésie. Japon. Île Niue. Norvège. Panama. Paraguay. Samoa Occidental. Somalie. Sudafricaine (Rép.). Suède. Thaïlande. Îles Turques et Caïques. Turquie. Ukraine. Uruguay. URSS (Asie méridionale). URSS (Asie septentrionale). URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest). Yémen (RDP du). Yougoslavie. Zaïre.	
4361,9 (4360,5) (Voie N° 402)	Alaska. Albanie. Argentine. Bangladesh. Bolivie.	

1	2	3
	Chine. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ghana. Guam. Guatemala. Hawaï. Honduras. Iran. Italie. Japon. Madagascar. Panama (Zone du Canal de). Papua Nouvelle Guinée. Pologne (République Populaire de). Porto-Rico. Royaume-Uni. Thaïlande. Tunisie. URSS (Asie méridionale). URSS (Nord-Ouest).	
4365 (4363,6) (Voie Nº 403	Argentine. Canada (Est). Canada (Nord). Canada (Ouest). Danemark. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Éthiopie. Fidji. Gabon. Grèce. Hawaï. Inde (Est). Iraq. Macau. Mexique. Monaco. Norvège. Pakistan. Panama. Pérou. Porto-Rico. Sri Lanka (Ceylan). Sudafricaine (Rép.). Suède. Togo. Ukraine. URSS (Extrême-Orient).	
4368,1 (4366,7) (Voie Nº 404)	Alaska. Australie. Bangladesh. Brésil. Chili (Sud). Chine. Congo (Brazzaville). Côte d'Ivoire. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Gibraltar. Guadeloupe (Departement français de la). Iran. Israël. Japon. Martinique (Département français de la). Mexique.	

1	2	3
	Nouvelle Calédonie et Dépendances. Oman. Île de Pâques. Pologne (République Populaire de). Réunion (Département français de la). Îles S. Pierre et Miquelon. Sénégal. Thaïlande.	
4371,2 (4369,8) (Voie Nº 405).	Alaska. Australie (Est). Barbade. Brésil. Cameroun. Canaries. Chili. Chine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Gambie. Grèce. Hawaï. Iran. Jamaïque. Pays-Bas. Rèpublique Démocratique Allemande. Roumanie. Singapour. Sudafricaine (Rép.) Uruguay. URSS (Asie méridionale). URSS Europe). URSS (Extrême-Orient).	
4374,3 (4372,9) (Voie Nº 406)	Alaska. Albanie. Arabie Saudite. Argentine. Chine. Chypre. Colombie. Congo (Brazzaville). Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Finlande. Guam. Hawaï. Islande. Khmère (République). Madagascar. Nouvelles-Hébrides. Pakistan. Panama (Zone du Canal de). Pologne (République Populaire de). Porto-Rico. Royaume-Uni. Sri Lanka (Ceylan). Tunisie.	
4377,4 (4376) (Voie Nº 407)	Alaska. Argentine. Barbade. Cameroun. Canada (Centre). Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï.	

1	2	3
	Inde (Est). Iran. Japon. Kenya. Norvège. Pays-Bas. Pérou. Porto-Rico. République Démocratique Allemande. Singapour. Sudafricaine (Rép.). Turquie. URSS (Asie septentrionale). URSS (Nord-Ouest).	
4380,5 (4379,1) (Voie Nº 408)	Alaska. Antilles néerlandaises. Argentine. Belgique. Canada (Est). Canada (Ouest). Egypte. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Indonésie. Iran. Italie. Japon. Libéria. Mexique. Mozambique. Nouvelle Zélande. Pologne (République Populaire de). Suisse. Surinam. Yougoslavie.	
4383,6 (4382,2) (Voie Nº 409)	Arabie Saoudite. Bolivie. Brésil. Canaries. Chine. Cuba. Danemark. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ghana. Inde (Ouest). Italie. Norvège. Papua-Nouvelle-Guinée. Philippines. Suède. Thaïlande. Turquie. Venezuela. Zaïre.	
4386,7 (4385,3) (Voie Nº 410)	Algérie. Argentine (Sud). Bermudes. Canada (Ouest). Canaries. Chine. États-Unis d'Amérique (Est). Fidji. Grèce. Guam. Hongroise (République Populaire). Iran. Israël.	

1	2	3
	Jamaïque. Khmère (République). Malte. Mauritanie. Nouvelle-Zélande. Paraguay. Pays-Bas. République Démocratique Allemande. Roumanie. Royaume-Uni. Seychelles. Sri Lanka (Ceylan).	
4389,8 (4388,4) (Voie Nº 411)	Argentine (Nord). Bangladesh. Belgique. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Îles Falkland (Malvinas). Îles Gilbert et Ellice. Hongkong. Indonésie. Iran. Japon. Îles Kergueien. Libéria. Turquie. Ukraine. URSS (Nord-Ouest).	
4392,9 (4491,5) (Voie Nº 412)	Allemande (République Fédérale d') Australie. Barbade. Dahomey. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Inde (Ouest). Iraq. Italie. Japon. Pérou. Philippines. Ukraine. URSS (Asie septentrionale). URSS (Europe). URSS (Nord Ouest). Yémen (RDP du).	
4396 (4394,6) (Voie Nº 413)	Açores. Alaska. Algérie. Allemagne (République Fédérale d'). Angola. Argentine. Bahreïn. Bangladesh. Canada (Est). Canada (Ouest). Îles du Cap-Vert. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Finlande. Grèce. Guam. Guinée-Bissau. Hawaï. Japon. Madère. Mexique. Monaco.	

1	2	3
	Panama (Zone du Canal de). Porto-Rico. Portugal. São Tomé et Príncipe. Timor portugais. Ukraine. URSS (Extrême-Orient).	
4399,1 (4397,7) (Voie Nº 414)	Alaska. Allemagne (République Fédérale d'). Ascension. Chypre. Comores. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Finlande. Indonésie Islande. Japon. Kenya. Nigérie. Pakistan. Pérou. Porto-Rico. S. Héléne URSS (Europe). URSS (Extrême-Orient).	
4402,2 (4400,8) (Voie Nº 415)	Alaska. Argentine. Australie. Bahreïn. Chine. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Grèce. Guam. Hawaï. Iran. Libéria. Madagascar. Malaisie. Norvège. Pakistan. Panama (Zone du Canal de). Porto-Rico. Roumanie. URSS (Europe. URSS (Nord-Ouest).	
4405,3 (4403,9) (Voie Nº 416)	Alaska. Bangladesh. Brésil. Canaries. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Grèce. Hongroise (République Populaire). Indonésie. Iran. Islande. Jamaïque. Japon. Maurice. Pérou. Polynésie française. Royaume-Uni. URSS (Europe).	

1	2	3
4408,4 (4407) (Voie Nº 417)	Argentine. Australie. Belgique. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Hongkong. Inde (Ouest). Japon. Malaisie. Maroc. Papua-Nouvelle Guinée. Royaume-Uni. Tanzanie (Tanganyika). Tanzanie (Zanzibar). Tchécoslovaquie. Turquie. URSS (Extrême-Orient). Yémen (RDP du). Yougoslavie.	
4411,5 (4410,1) (Voie Nº 418)	Territoires français des Afars et des Issas. Argentine. Bulgarie. Canada (Est). Canada (Ouest). Cuba. Danemark. Egypte. Espagne. États-Unis d'Amérique (Centre). Hawaï. Indonésie. Israël. Japon. Mauritanie. Norvège. Philippines. Réunion (Département français de la). Roumanie. Îles S. Pierre et Miquelon. Suède. URSS (Asie méridionale).	
4414,6 (4413,2) (Voie Nº 419)	Australie. Brésil. Chili. Chine. Corée. Côte d'Ivoire. États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Guam. Hawaï. Islande. Japon. Koweït. Libye. Pakistan. Pays-Bas. Porto-Rico. République Démocratique Allemande. Tanzanie (Tanganyika). Tanzanie (Zanzibar). Tchécoslovaquie. URSS (Nord Ouest). Venezuela. Yougoslavie.	
4417,7 (4416,3) (Voie Nº 420)	Alaska. Bulgarie. Cameroun. Danemark.	

1	2	3
	États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Inde (Est). Iran. Italie. Japon. Jordanie. Malaisie. Maroc. Norvège. Panama (Zone du Canal de). Philippines. Porto-Rico. Suède. Turquie. URSS (Asie méridionale). URSS (Asie septentrionale).	
4423,9 (4422,5) (Voie Nº 422)	Alaska. Belgique. Canada (Ouest). Canaries. Chine. Cuba. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Grèce. Guyane (Departement français de la). Hongroise (République Populaire). Indonésie. Iraq. Japon. Libérie Libye. Maroc. Royaume-Uni. URSS (Europe).	
4427 (4425,6) (Voie Nº 423)	Alaska. Allemagne (République Fédérale d'). Chine. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Indonésie. Israël. Italie. Japon. Kenya. Nigérie. Pakistan. Panama (Zone du Canal de). Papua-Nouvelle Guinée. Pologne (République Populaire de).	
4430,1 (4428,7) (Voie Nº 424)	Alaska. Algérie. Argentine. Australie (Ouest). Chine. Danemark. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guadeloupe (Departement français de la). Guiana. Hawaï. Maroc. Martinique (Département français de la).	

1	2	3
	Norvège. Pakistan. Panama. Porto-Rico. Suède. Suisse. Thaïlande.	
4433,2 (4431,8) (Voie Nº 425)	Alaska. Belgique. Chili. Danemark. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Grèce. Guam. Hawaï. Hongoise (République Populaire). Japon. Koweït. Libye. Malaisie. Nigérie. Norvège. Nouvelle-Zélande. Panama (Zone du Canal de). Pays-Bas. Porto-Rico.	
4436,3 (4434,9) (Voie Nº 426)	Açores. Alaska. Algérie. Angola. Argentine. Bulgarie. Îles du Cap Vert. Chine. Chypre. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Guinée-Bissau. Hawaï. Japon. Liban. Madère. Mozambique. Norvège. Pakistan. Panama (Zone du Canal de). Porto-Rico. Portugal. Royaume-Uni. São Tomé et Príncipe. Thaïlande. Timor portugais.	
6507,8 (6506,4) (Voie Nº 601)	Alaska. Algérie. Allemagne (République Fédérale d'). Arabie Saoudite. Argentine (Centre). Argentine (Sud). Bangladesh. Canada (Ouest). Canaries. Chili (Centre). Chili (Nord). Chine.	

1	2	3
	Congo (Brazzaville). Egypte. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ghana. Grèce. Guam. Hawaï. Hongoise (République Populaire). Indonésie. Iran. Iraq. Islande. Japon. Libye. Malaisie. Mexique (Est). Mexique (Ouest). Nigérie. Nouvelle-Zélande. Pakistan. Pérou. Porto-Rico. Ukraine. Roumanie. Sri Lanka (Ceylan). Tchécoslovaquie. URSS (Asie méridionale). URSS (Europe). Yougoslavie.	
6510,9 (6509,5) (Voie N° 602)	Alaska. Bangladesh. Belgique. Bolivie. Bulgarie. Canada (Est). Canada (Ouest). Corée. Côte d'Ivoire. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Gabon. Ghana. Gibraltar. Guam. Hawaï. Indonésie. Iran. Italie. Koweït. Madagascar. Monaco. Panama. Pays-Bas. Pérou. Pologne (République Populaire de). Porto-Rico. Portugal. Singapour. Sudafricaine (Rép.). Tunisie. Turquie. URSS (Asie méridionale). URSS (Asie septentrionale). URSS (Europe). URSS (Extrême-Orient). Venezuela. Yougoslavie.	

1	2	3
6514 (6512,6 (Voie Nº 603)	Alaska. Albanie. Algérie. Arabie Saoudite. Argentine. Bangladesh. Bermudes. Canada (Nord). Canada (Ouest). Chypre. Côte d'Ivoire. Danemark. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Gabon. Grèce. Guam. Hawaï. Hongkong. Hongroise (République Populaire). Inde (Est). Indonésie. Iran. Iraq. Islande. Israël. Japon. Kenya. Libye. Mauritanie. Mexique. Norvège. Pérou. Philippines. Porto-Rico. Ukraine. Roumanie. Samoa occidental. Suède. Thaïlande. Togo. URSS (Extrême-Orient). URSS (Nord-Ouest).	
6517,1 (6515,7) (Voie Nº 604)	Alaska. Australie. Bangladesh. Bulgarie. Cameroun. Canada (Ouest). Chili. Chine. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Hongkong. Indonésie. Iran. Israël. Italie. Khmére (République). Madagascar. Mauritanie. Mexique. Nigérie. Pakistan. Papua-Nouvelle-Guinée. Pérou. Pologne (République Populaire de).	

1	2	3
	Porto-Rico. Tunisie. Turquie. URSS (Nord-Ouest). Yougoslavie.	
6520,2 (6518,8) (Voie Nº 605)	Alaska. Algérie. Bangladesh. Barbade. Bolivie. Bulgarie. Canada (Est). Canada (Ouest). Canaries. Congo (Brazzaville). Corée. Dahomey. Danemark. Egypte. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Guam. Hawaï. Hongroise (République Populaire). Inde (Ouest). Indonésie. Iran. Iraq. Jamaïque. Japon. Koweït. Libye. Madagascar. Nigérie. Norvège. Pays-Bas. Pérou. Philippines. Porto-Rico. Ukraine. Suède. Thaïlande. Uruguay. URSS (Extrême-Orient). Yougoslavie.	
8720,3 (8718,9) (Voie Nº 801)	Alaska. Bahreïn. Bangladesh. Bolivie. Chili. Danemark. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Guam. Hawaï. Israël. Japon. Malaisie. Nigérie. Norvège. Panama (Zone du Canal de). Porto-Rico. Roumanie. Sudafricaine (Rép.). Suède. URSS (Asie septentrionale).	

1	2	3
8723,4 (8722) (Voie Nº 802)	Açores. Alaska. Algérie. Angola. Argentine. Australie. Îles du Cap-Vert. Chine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Finlande. Grèce. Guinée-Bissau. Hawaï. Inde (Est). Iraq. Madère. Mozambique. Pays-Bas. Portugal. République Démocratique Allemande. Royaume-Uni. São Tomé et Príncipe. Sri Lanka (Ceylan). Timor portugais.	
8726,5 (8725,1) (Voie Nº 803)	Antilles néerlandaises. Belgique. Canada (Est). Corée. Cuba. Espagne. États-Unis d'Amérique (Centre). Norvège. Pakistan. Papua-Nouvelle-Guinée. Sénégal. Sudafricaine (Rép.). Suède. Turquie. URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest).	
8729,6 (8728,2) (Voie Nº 804)	Argentine. Canaries. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Grèce. Iraq. Japon. Kenya. Monaco. Pérou. Pologne (République Populaire de). Sierra Leone. Singapour. URSS (Asie méridionale). URSS (Asie septentrionale). URSS (Extrême-Orient).	
8732,7 (8731,3) (Voie Nº 805)	Albanie. Belgique. Bolivie. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Finlande. Hongkong. Iran.	

1	2	3
	Islande. Israël. Japon. Libéria. Nouvelle Calédonie et Dépendances. Papua-Nouvelle Guinée. Pays-Bas. Sudafricaine (Rép.). URSS (Europe). URSS (Extrême-Orient).	
8735,8 (8734,4) (Voie Nº 806)	Alaska. Argentine. Bahreïn. Bangladesh. Belgique. Côte d'Ivoire. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Gabon. Grèce. Guam. Hawaï. Italie. Japon. Panama (Zone du Canal de). Pays-Bas. Philippines. Pologne (République Populaire de). Porto-Rico. Thaïlande. Ukraine.	
8738,9 (8737,5) (Voie Nº 807)	Canada (Ouest). Chili. Chypre. Congo (Brazzaville). Cuba. Egypte. États-Unis d'Amérique (Centre). Gibraltar. Islande. Japon. Koweït. Madagascar. Mauritanie. Nouvelle-Zélande. Pakistan. S. Hélène. Tchécoslovaquie. URSS (Asie méridionale). URSS (Asie septentrionale). URSS (Europe).	
8742 (8740,6) (Voie Nº 808)	Alaska. Arabie Saoudite. Argentine. Ascension. Îles Bahamas. Canaries. Danemark Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Japon. Norvège. Nouvelles-Hébrides. Philippines. Roumanie. Sri Lanka (Ceylan). Sudafricaine (Rép.). Suède. Surinam.	

1	2	3
8745,1 (8743,7) (Voie Nº 809)	Algérie. Australie (Ouest). Canaries. Chili. Cuba. Dahomey. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Grèce. Islande). Japon. Kenya. Koweït. Mexique. Monaco. Norvège. Pakistan. République Démocratique Allemande. Royaume-Uni. Tchécoslovaquie. Thaïlande.	
8748,2 (8746,8) (Voie Nº 810)	Argentine. Bangladesh. Bulgarie. Canada (Est). Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Indonésie. Iran. Japon. Mozambique. Norvège. Pologne (République Populaire de). Timor portugais. Togo. Turquie. Yougoslavie.	
8751,3 (8749,9) (Voie Nº 811)	Arabie Saoudite. Argentine. Australie. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Gabon. Hongkong. Hongroise (République Populaire). Japon. Norvège. Pérou. Suède. Turquie. Yougoslavie.	
8754,4 (8753) (Voie Nº 812)	Alaska. Argentine (Sud). Bahreïn. Belgique. Canada (Nord). Chine. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Hawaï. Indonésie.	

1	2	3
	Israël. Jamaïque. Japon. Nouvelle-Zélande. Pakistan. Pologne. Royaume-Uni. URSS (Europe). URSS (Nord-Ouest). Zaire.	
8757,5 (8756,1) (Voie Nº 813)	Açores. Alaska. Algérie. Angola. Australie. Belgique. Îles du Cap-Vert. Chili (Nord). Chine. Danemark. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guam. Guinée-Bissau. Hawaï. Hongroise (République Populaire). Inde (Ouest). Madère. Mozambique. Norvège. Panama (Zone du Canal de). Porto-Rico. Portugal. São Tomé et Príncipe. Timor portugais.	
8760,6 (8759,2) (Voie Nº 814)	Alaska. Argentine. Canada (Ouest). Cuba. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Îles Gilbert et Ellice. Grèce. Hawaï. Indonésie. Italie. Japon. Kenya. Libérie. Pakistan. Philippines. Royaume-Uni. Thaïlande. URSS (Asie méridionale). URSS (Asie septentrionale). URRS (Europe). URSS (Extrême-Orient).	
8763,7 (8762,3) (Voie Nº 815)	Allemagne (République Fédérale d'). Australie (Ouest). Belgique. Chili. Chine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud).	

1	2	3
	Grèce. Guyane (Departement français de la). Iraq. Japon. Maroc. Singapour. URSS (Europe). URSS (Nord-Ouest). Zaïre.	
8766,8 (8765,4) (Voie Nº 816)	Alaska. Argentine. Barbade. Chine. Congo (Brazzaville). Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Grèce. Guam. Hawaï. Indonésie. Pakistan. Porto-Rico. Royaume-Uni. Tunisie. Îles Turques et Caïques. URSS (Europe). URSS (Nord-Ouest).	
8769,9 (8768,5) (Voie Nº 817)	Alaska. Allemagne (République Fédérale d'). Australie. Bangladesh. Bermudes. Canada (Est). Chili. Egypte. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Guam. Hawaï. Iran. Mexique. Nigérie. Panama. Philippines. Porto-Rico. Roumanie. Thaïlande. URSS (Europe). URSS (Extrême-Orient). Yémen (RDP du).	
8773 (8771,6) (Voie Nº 818)	Alaska. Argentine. Bahreïn. Bulgarie. Cameroun. Canaries. Chine. Chypre. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Libye. Malaisie. Norvège. Nouvelles-Hébrides.	

1	2	3
	Pakistan. Panama (Zone du Canal de). Porto-Rico. Seychelles. Suède. Ukraine.	
8776,1 (8774,7) (Voie Nº 819)	Alaska. Brésil. Canada (Ouest). Dominicaine (République). États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guam. Hawaï. Indonésie. Italie. Japon. Nigérie. Panama. Îles de Pâques. Reunion (Departement français de la). Royaume-Uni. Thaïlande. URSS (Asie méridionale). URSS (Asie septentrionale). URSS (Europe). URSS (Nord-Ouest). Yémen (RDP du).	
8779,2 (8777,8 (Voie Nº 820)	Alaska. Allemagne (République Fédérale d'). Argentine. Chypre. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Inde (Est). Iran. Italie. Japón. Panama (Zone du Canal de). Philippines. Porto-Rico. Samoa occidental. Tanzanie (Tanganyika). Tanzanie (Zanzibar). URSS (Nord-Ouest). Zaïre.	
8785,4 (8784) (Voie Nº 822)	Bangladesh. Barbade. Brésil. Chine. Côte d'Ivoire. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Hongroise (République Populaire). Iran. Kenya. Maroc. Royaume-Uni. Suisse. Thaïlande. Turquie. Ukraine. Yougoslavie.	

1	2	3
8788,5 (8787,1) (Voie Nº 823)	Argentine. Canada (Est). Danemark. Ghana. Grèce. Inde (Ouest). Iraq. Italie. Jamaïque. Japon. Norvège. Roumanie. Suède. Tanzanie (Tanganyika). Tanzanie (Zanzibar). Timor portugais. URSS (Extrême-Orient). URSS (Nord-Ouest).	
8791,6 (8790,2) (Voie Nº 824)	Allemagne (Rèpublique Fédérale d'). Brésil. Chine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guyane. Iran. Jamaïque. Maroc. Oman. Pérou. Pologne (République Populaire de). Reunion (Departement français de la). Royaume-Uni. Singapour. Suisse. Tunisie. URSS (Nord-Ouest).	
8794,7 (8793,3) (Voie Nº 825)	Alaska. Algérie. Argentine. Barbade. Canada (Centre). Îles Cook. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Ghana. Guadeloupe (Département français de la). Hongroise (République Populaire). Inde (Est). Iran. Îles Kerguelen. Martiniqué (Département français de la). Norvège. Philippines. Ukraine. URSS (Asie méridionale). URSS (Extrême-Orient).	
8797,8 (8796,4) (Voie Nº 826)	Cameroun. Canada (Ouest). Chine. Colombie. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). Guam. Indonésie. Italie. Japon.	

1	2	3
	Kenya. Mexique. Pakistan. Paraguay. Pays-Bas. République Démocratique Allemande. Royaume-Uni. Ukraine.	
8800,9 (8799,5) (Voie Nº 827)	Territoires français des Afars et des Issas. Alaska. Argentine. Bangladesh. Corée. Danemark. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Ethiopie. Guam. Hawaï. Iran. Israël. Macau. Île Niue. Norvège. Panama (Zone du Canal de). Pérou. Porto-Rico. Suède. Venezuela. Yougoslavie.	
8804 (8802,6) (Voie Nº 828)	Alaska. Albanie. Allemagne (République Fédérale d'). Brésil. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Guadeloupe (Département français de la). Guam. Hawaï. Hongroise (République Populaire). Indonésie. Japon. Khmère (République). Liban. Maroc. Martinique (Département français de la). Maurice. Mauritanie. Norvège. Pakistan. Panama (Zone du Canal de). Porto-Rico. Turquie. Ukraine.	
8807,1 (8805,7) (Voie Nº 829)	Australie. Bangladesh. Belgique. Chine. Chypre. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Finlande. Gambie. Iran. Libye. Mexique. Norvège. Paraguay.	

1	2	3
	Polynésie française. Suède. Ukraine. Venezuela.	
8810,2 (8808,8) (Voie Nº 830)	Brésil. Bulgarie. États-Unis d'Amérique (Sud). France. Inde (Ouest). Indonésie. Iran. Khmère (République). Papua Nouvelle-Guinée. Pérou. Pologne (République Populaire de). Porto-Rico. Îles S. Pierre et Miquelon. Îles Salomon. URSS (Asie méridionale). URSS (Extrême-Orient). Yémen (RDP du). Yougoslavie.	
8813,3 (8811,9) (Voie Nº 831)	Chine. Congo (Brazzaville). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Îles Falkland (Malvinas). Gambie. Iran. Islande. Italie. Japon. Madagascar. Malaisie. Maroc. Pakistan. Porto-Rico. République Démocratique Allemande. Royaume-Uni. Suisse. Turquie.	
13 102,2 (13 100,8) (Voie Nº 1201)	Argentine. Canada (Nord). Chine. Chypre. Dahomey. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Gabon. Guyane (Département français de la). Indonésie. Pakistan. Philippines. Royaume-Uni. Ukraine. URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest)	
13 105,3 (13 103,9) (Voie Nº 1202)	Arabie Saoudite. Bangladesh. Chili. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Ghana. Grèce.	

1	2	3
	Hongroise (République Populaire). Japon. Maroc. République Démocratique Allemande. Royaume-Uni. Suisse. Tunisie. URSS (Asie septentrionale).	
13 108,4 (13 107) (Voie Nº 1203)	Açores. Alaska. Angola. Australie (Est). Îles du Cap-Vert. Chine. Colombie. Danemark. Egypte. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guinée-Bissau. Hawaï. Iraq. Libye. Madère. Mozambique. Norvège. Portugal. São Tomé et Príncipe. Suède. Timor portugais. URSS (Extrême-Orient). Venezuela.	
13 111,5 (13 110,1 Voie Nº 1204	Alaska. Bolivie. Congo (Brazzaville). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. France. Grèce. Guam. Hawaï. Israël. Japon. Macau. Norvège. Pakistan. Panama. Panama (Zone du Canal de). Porto-Rico. République Démocratique Allemande. Thaïlande. URSS (Europe).	
13 114,6 (13 113,2) (Voie Nº 1205)	Alaska. Allemagne (République Fédérale d'). Argentine. Bangladesh. Côte d'Ivoire. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Italie. Japon. Mozambique. Norvège. Nouvelle-Calédonie et Dépendances.	

1	2	3
	Porto-Rico. Timor portugais. Ukraine. URSS (Europe). Yémen (RDP du).	
13 117,7 (13 116,3) (Voie Nº 1206	Albanie. Australie (Ouest). Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Iran. Islande. Italie. Japon. Khmère (République). Madagascar. Maroc. Pérou. République Démocratique Allemande. Royaume-Uni. Turquie.	
13 120,3 13 119,4 (Voie Nº 1207	Açores. Algérie. Angola. Antilles néerlandaises. Belgique. Canada (Ouest). Îles du Cap-Vert. Chine. Îles Gilbert et Ellice. Grèce. Guinée-Bissau. Iran. Israël. Japon. Madère. Mozambique. Pakistan. Pays-Bas. Portugal. São Tomé et Príncipe. Surinam. Timor portugais. URSS (Nord-Ouest). Yougoslavie.	
13 123,9 (13 122,5) (Voie Nº 1208)	Allemagne (République Fédérale d'). Argentine. Bangladesh. Canaries. Chine. Chypre. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Grèce. Hongroise (République Populaire). Islande. Japon. Kenya. Libérie. URSS (Europe).	
13 127 (13 125,6) (Voie Nº 1209)	Alaska. Bahreïn. Brésil. Canada (Ouest). Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande.	

1	2	3
	Indonésie. Italie. Japon. Mexique. Nouvelle-Zélande. Pérou. Pologne (République Populaire de). Sudafricaine (Rép.). Turquie. URSS (Europe). URSS (Nord-Ouest).	
13 130,1 (13 128,7) (Voie Nº 1210)	Territoire français des Afars et des Issas. Chili. Danemark. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Gabon. Grèce. Guam. Inde (Ouest). Indonésie. Norvège. Réunion (Département français de la). Roumanie. Suède. Uruguay. URSS (Asie septentrionale). URSS (Extrême-Orient).	
13 133,2 (13 131,8) (Voie Nº 1211)	Alaska. Brésil. Chine. Cuba. Danemark. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Iraq. Italie. Japon. Malaisie. Norvège. Île de Pâques. Suède. Turquie. URSS (Asie méridionale). URSS (Asie septentrionale).	
13 136,3 (13 134,9) (Voie Nº 1212)	Alaska. Allemagne (République Fédérale d'). Côte d'Ivoire. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Gibraltar. Grèce. Hawaï. Indonésie. Japon. Maurice. Pérou. Porto-Rico. Royaume-Uni. URSS (Europe). URSS (Extrême-Orient).	
13 139,4 (13 138) (Voie Nº 1213)	Argentine. Barbade. Belgique. Canada (Est). Canaries. Chine.	

1	2	3
	Corée. Finlande. Grèce. Inde (Est). Iran. Iraq. Israël. Italie. Kenya. Libérie. Norvège. Pays-Bas. Samoa occidental. URSS (Asie septentrionale).	
13 142,5 (13 141,1) (Voie Nº 1214)	Alaska. Australie. Brésil. Canada (Ouest). Cuba. Danemark. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Grèce. Guam. Hongroise (Rèpublique Populaire). Iran. Norvège. Porto-Rico. Royaume-Uni. Suède. Thaïlande. URSS (Extrême-Orient).	
13 145,6 (13 144,2) (Voie Nº 1215)	Algérie. Belgique. Cameroun. Danemark. Espagne. États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Inde (Ouest). Islande. Israël. Japon. Pakistan. Panama (Zone du Canal de). Pays-Bas. Pérou. Porto-Rico. Roumanie. Seychelles. Suède.	
13 148,7 (13 147,3) (Voie Nº 1216)	Alaska. Albanie. Argentine. Chine. Congo (Brazzaville). Egypte. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Guam. Hawaï. Iran. Liban. Maroc. Panama (Zone du Canal de). Pologne (République Populaire de). Porto-Rico.	

1	2	3
	Singapour. Turquie.	
13 151,8 (13 150,4) (Voie Nº 1217)	Algérie. Bulgarie. Cuba. Danemark. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guadaloupe (Département français de la). Guam. Inde (Est). Iraq. Japon. Martinique (Département français de la). Norvège. Paraguay. S. Hélène. Suède. URSS (Asie méridionale). URSS (Extrême-Orient).	
13 154,9 (13 153,5) (Voie Nº 1218)	Alaska. Allemagne (République Fédérale d'). Bangladesh. Belgique. Cameroun. Canaries. Chili. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Iran. Italie. Japon. Île Niue. Norvège. Panama (Zone du Canal de). Porto-Rico. Turquie. URSS (Europe).	
13 158 (13 156,6) (Voie Nº 1219)	Alaska. Belgique. Brésil. Bulgarie. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Japon. Maroc. Norvège. Pays-Bás. Singapour. Suède. Ukraine. URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest). Venezuela.	
13 161,1 (13 159,7) (Voie Nº 1220)	Alaska. Argentine. Bangladesh. Bermudes. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Fidji. Grèce.	

1	2	3
	Guam. Hawaï. Iran. Islande. Japon. Nigèrie. Panama (Zone du Canal de). Philippines. Pologne (République Populaire de). Porto-Rico. Royaume-Uni. Tunisie.	
13 167,3 (13 165,9) (Voie Nº 1222)	Argentine. Canada (Est). Îles Cook. France. Guadeloupe (Département français de la). Hawaï. Inde (Ouest). Iran. Japon. Martinique (Département français de la). Mexique. Norvège. Roumanie. Royaume-Uni. Turquie. URSS (Extrême-Orient).	
13 170,4 (13 169) (Voie Nº 1223)	Arabie Saoudite. Bangladesh. Brésil. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guam. Japon. Maroc. Norvège. Suède. Tchécoslovaquie. Ukraine.	
13 173,5 (13 172,1) (Voie Nº 1224)	Alaska. Allemagne (République Fédérale d'). Chili. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Ghana. Guam. Hawaï. Jamaïque. Japon. Koweït. Monaco. Nouvelle-Zélande. Panama (Zone du Canal de). Porto-Rico. Royaume-Uni. Sri Lanka (Ceylan). Sudafricaine (Rép.). Yougoslavie.	
13 176,6 (13 175,2) (Voie Nº 1225)	Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Grèce. Iran. Madagascar. Mexique. Nigèrie.	

1	2	3
	Norvège. Papua-Nouvelle Guinée. Roumanie. URSS (Nord-Ouest).	
13 179,7 (13 178,3) (Voie Nº 1226)	Autralie. Bangladesh. Chili. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Iran. Japon. Norvège. Tchécoslovaquie. Togo. Turquie. URSS (Nord-Ouest).	
13 182,8 (13 181,4) (Voie Nº 1227)	Alaska. Australie. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Guam. Hawaï. Hongkong. Inde (Est). Koweït. Panama (Zone du Canal de). Paraguay. Pologne (République Populaire de). Porto-Rico. Suisse. Tanzanie (Tanganyika). Tanzanie (Zanzibar). Turquie. URSS (Extrême-Orient). Yougoslavie. Zaïre.	
13 185,9 (13 184,5) (Voie Nº 1228)	Brésil. Chili. Chine. Cuba. Espagne. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Ethiopie. Hongroise (République Populaire). Norvège. Pakistan. Royaume-Uni. Ukraine. URSS (Europe).	
13 189 (13 187,6) (Voie Nº 1229)	Argentine. Australie. Bulgarie. Canada (Est). Corée. États-Unis d'Amérique (Ouest). France. Japon. Kenya. Pologne (République Populaire de). URSS (Asie méridionale). URSS (Asia septentrionale). URSS (Europe). URSS (Nord-Ouest). Yougoslavie.	

1	2	3
13 192,1 (13 190,7) (Voie Nº 1230)	Argentine. Bangladesh. Chypre. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Hawaï. Italie. Japon. Kenya. Mauritanie Royaume-Uni. Suisse. Ukraine.	
13 195,2 (13 193,8) (Voie Nº 1231)	Alaska. Australie. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Ethiopie. France. Grèce. Guam. Hawaï. Hongkong. Iran. Libye. Nigèrie. Norvège. Panama (Zone du Canal de). Paraguay. Pérou. Pologne (République Populaire de). Porto-Rico.	
13 198,3 (13 196,9) (Voie Nº 1232)	Alaska. Algérie. Argentine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Japon. Mauritanie. Pakistan. République Démocratique Allemande. Royaume-Uni. URSS (Asie méridionale).	
17 234,3 (17 232,9) (Voie Nº 1601)	Alaska. Argentine. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Hawaï. Japon. Norvège. Seychelles. Suède. Tunisie. Ukraine. URSS (Europe). URSS (Nord-Ouest).	
17 237,4 (17 236) (Voie Nº 1602)	Arabie Saoudite. Australie (Est). Bangladesh. Cameroun. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Maroc. Royaume-Uni.	

1	2	3
	URSS (Asie septentrionale). URSS (Europe). URSS (Extrême-Orient).	
17 240,5 (17 239,1) (Voie Nº 1603)	Alaska. Argentine (Nord). Bangladesh. Bolivie. Chine. Chypre. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guadeloupe (Département français de la). Hongroise (République Populaire). Italie. Martinique (Département français de la). Norvège. Suède.	
17 243,6 (17 242,2) (Voie Nº 1604)	Australie. Canada (Est). Congo (Brazzaville). Ethiopie. France. Grèce. Japon. Khmère (République). Mexique. Norvège. Roumanie. Venezuela.	
17 246,7 (17 245,3) (Voie Nº 1605)	Côte d'Ivoire. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Inde (Ouest). Iran. Japon. Norvège. Philippines. Polynésie française. Suède. Ukraine. URSS (Europe).	
17 249,8 (17 248,4) (Voie Nº 1606)	Bangladesh. Brésil. Cuba. États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Islande. Italie. Japon. Nouvelle-Zélande. Porto-Rico. Royaume-Uni. Turquie. URSS (Europe).	
17 252,9 (17 251,5) (Voie Nº 1607)	Alaska. Antilles néerlandaises. Canada (Est). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Îles Gilbert et Ellice. Grèce. Inde (Est). Iran. Libérie. Monaco.	

1	2	3
	Norvège. Pologne (République Populaire de). URSS (Extrême-Orient). URSS (Nord-Ouest).	
17 256 (17 254,6) (Voie Nº 1608)	Canada (Ouest). Chine. Danemark. Italie. Mauritanie. Norvège. Pakistan. Pérou. Sudafricaine (Rép.). Suède. Surinam. Tchécoslovaquie. Turquie.	
17 259,1 (17 257,7) (Voie Nº 1609)	Arabie Saoudite. Belgique. Congo (Brazzaville). Îles Cook. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Inde (Est). Israël. Japon. Royaume-Uni. URSS (Nord-Ouest).	
17 262,2 (17 260,8) (Voie Nº 1610)	Allemagne (République Fédérale d'). Australie. Chine. Egypte. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Indonésie. Iran. Mauritanie. Norvège. Tunisie. Ukraine. Uruguay. URSS (Nord-Ouest).	
17 265,3 (17 263,9) (Voie Nº 1611)	Brésil. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Finlande. Gibraltar. Japon. Libye. Malaisie. Pérou. Royaume-Uni. Suisse. Turquie. Yougoslavie.	
17 268,4 (17 267) (Voie Nº 1612)	Alaska. Australie. Cuba. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Maroc. Pakistan.	

1	2	3
	Porto-Rico. Ukraine. URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest).	
17 271,5 (17 270,1) (Voie Nº 1613)	Alaska. Belgique. Brésil. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guam. Hawaï. Iran. Israël. Norvège. Panama (Zone du Canal de). Porto-Rico. Roumanie. Singapour. URSS (Extrême-Orient).	
17 274,6 (17 273,2) (Voie Nº 1614)	Canada (Ouest). Chine. Danemark. Egypte. Ethiopie. Finlande. Gabon. Italie. Mexique. Île Niue. Norvège. Suède. URSS (Asie septentrionale).	
17 277,7 (17 276,3) (Voie Nº 1615)	Açores. Angola. Îles du Cap-Vert. Colombie. Finlande. Guinée-Bissau. Iran. Islande. Madère. Mozambique. Portugal. Royaume-Uni. São Tomé et Príncipe. Suisse. Timor portugais. Turquie. URSS (Extrême-Orient).	
17 280,8 (17 279,4) (Voie Nº 1616)	Alaska. Allemagne (République Fédérale d'). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ghana. Hawaï. Iran. Italie. Japon. Maroc. Turquie. URSS (Nord-Ouest).	
17 283,9 (17 282,5) (Voie Nº 1617)	Bangladesh. Brésil. Canaries. Danemark. France.	

1	2	3
	Gabon. Grèce. Hongroise (République Populaire). Iran. Israël. Mexique. Norvège. Pérou. Suède. URSS (Asie septentrionale). URSS (Extrême-Orient).	
17 287 (17 285,6) (Voie Nº 1618)	Argentine. Bahreïn. Bermudes. Danemark. Inde (Ouest). Japon. Maroc. Norvège. Royaume-Uni. Suède. Turquie. Yougoslavie.	
17 290,1 (17 288,7) (Voie Nº 1619)	Alaska. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Grèce. Guam. Hawaï. Koweït. Libérie. Maurice. Norvège. Panama (Zone du Canal de). Pérou. Porto-Rico. République Démocratique Allemande. URSS (Extrême-Orient).	
17 293,2 (17 291,8) (Voie Nº 1620)	Canaries. États-Unis d'Amérique (Centre). États-Unis d'Amérique (Est). Ethiopie. Japon. Libye. Norvège. Turquie. Ukraine. URSS (Europe).	
17 299,4 (17 298) (Voie Nº 1622)	Australie. Bangladesh. Danemark. France. Ghana. Grèce. Japon. Koweït. Norvège. Roumanie. Suède. Venezuela.	
17 302,5 (17 301,1) (Voie Nº 1623)	Alaska. Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Guam. Hawaï.	

1	2	3
	Pakistan. Panama (Zone du Canal de). Paraguay. Pays-Bas. Porto-Rico. Réunion (Département français de la). Royaume-Uni. Ukraine.	
17 305,6 (17 304,2) (Voie Nº 1624)	Allemagne (République Fédérale d'). Bangladesh. Dahomey. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Italie. Japon. Kenya. Samoa occidental. Turquie. URSS (Europe).	
17 308,7 (17 307,3) (Voie Nº 1625)	Alaska. Belgique. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guam. Hawaï. Iran. Islande. Japon. Nigérie. Pologne (République Populaire de). Porto-Rico.	
17 311,8 (17 310,4) (Voie Nº 1626)	Canada (Ouest). Cuba. États-Unis d'Amérique (Est). Grèce. Hongkong. Iraq. Pays-Bas. Royaume-Uni. URSS (Asie septentrionale). URSS (Extrême-Orient). URSS (Nord-Ouest).	
17 314,9 (17 313,5) (Voie Nº 1627)	Belgique. Espagne. Ethiopie. Grèce. Hongroise (République Populaire). Japon. Nigèrie. Norvège. Pérou. URSS (Europe). Yougoslavie.	
17 318 (17 316,6) (Voie Nº 1628)	Bangladesh. Cuba. France. Grèce. Guadeloupe (Département français de la). Iraq. Israël. Martinique (Département français de la). Roumanie. URSS (Extrême-Orient). URSS (Nord-Ouest).	

1	2	3
17 321,1 (17 319,7) (Voie Nº 1629)	Algérie. Australie. Canada (Est). Grèce. Iran. Japon. Norvège. République Démocratique Allemande. Royaume-Uni.	
17 324,2 (17 322,8) (Voie Nº 1630)	Sénégal. Alaska. Belgique. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Inde (Ouest). Islande. Panama (Zone du Canal de). Porto-Rico. URSS (Europe).	
17 327,3 (17 325,9) (Voie Nº 1631)	Algérie. Bulgarie. Chili. Chine. États-Unis d'Amérique (Est). Grèce. Iraq. Pologne (République Populaire de). Suisse. Togo.	
17 330,4 (17 329) (Voie Nº 1632)	Açores. Alaska. Argentine. Bangladesh. Chypre. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Hongroise (République Populaire). Japon. Madagascar. Madère. Pakistan. Portugal. Royaume-Uni.	
17 333,5 (17 332,1) (Voie Nº 1633)	Alaska. Brésil. Chine. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). France. Grèce. Guam. Hawaï. Panama (Zone du Canal de). Pologne (République Populaire de). Porto-Rico. République Démocratique Allemande. Sudafricaine (Rép.). URSS (Asie méridionale).	
17 336,6 (17 335,2) (Voie Nº 1634)	Allemagne (République Fédérale d'). Canada (Nord). Corée. Côte d'Ivoire. Espagne.	

1	2	3
	Grèce. Iraq. Japon. Roumanie.	
17 339,7 (17 338,3) (Voie Nº 1635)	Açores. Angola. Australie. Bangladesh. Bulgarie. Îles du Cap-Vert. Danemark. Guinée-Bissau. Japon. Macau. Madère. Mozambique. Norvège. Portugal. Royaume-Uni. São Tomé et Príncipe. Suède. Timor portugais.	
17 342,8 (17 341,4) (Voie Nº 1636)	Alaska. Algérie. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Grèce. Guam. Hawaï. Inde (Est). Japon. Pakistan. Panama (Zone du Canal de). Pays-Bas. Porto-Rico.	
17 345,9 (17 344,5) (Voie Nº 1637)	Corée. Espagne. Hongkong. Jamaïque. Madagascar. Nouvelle-Zelande. Paraguay. Royaume-Uni. URSS (Asie méridionale).	
17 349 (17 347,6) (Voie Nº 1638)	Alaska. Bulgarie. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Finlande. Guam. Hawaï. Maroc. Pakistan. Pologne (République Populaire de). Yougoslavie.	
17 352,1 (17 350,7) (Voie Nº 1639)	Alaska. Albanie. Allemagne (République Fédérale d'). Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Iraq. Panama (Zone du Canal de). Pays-Bas. Porto-Rico. Zaïre.	

1	2	3
17 355,2 (17 353,8) (Voie Nº 1640)	Barbade. Chili. Ethiopie. Grèce. Japon. Nigérie. République Démocratique Allemande. Royaume-Uni. Sri Lanka (Ceylan). Thaïlande. URSS (Europe).	
17 358,3 (17 356,9) (Voie Nº 1641)	Algérie. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Iraq. Japon. Norvège. Singapour. Suède. Ukraine.	
22 597,4 (22 596) (Voie Nº 2201)	Australie. Cameroun. Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Ethiopie. Grèce. Guam. Hongroise (République Populaire). Pakistan. URSS (Nord-Ouest).	
22 600,5 (22 599,1) (Voie Nº 2202)	Argentine. Bangladesh. Canada (Est). Hongroise (République Populaire). Iran. Italie. Mauritanie. Nigèrie. Norvége. Pérou. Royaume-Uni. Ukraine. URSS (Extrême-Orient).	
22 603,6 (22 602,2) (Voie Nº 2203)	Australie (Est). Bulgarie. Côte d'Ivoire. Danemark. Iran. Japon. Khmère (République). Maroc. Norvège. Suède. Venezuela.	
22 606,7 (22 605,3) (Voie Nº 2204)	Argentine. Bermudes. Canada (Nord). Finlande. France. Israël. Koweït. Nigèrie. Sudafricaine (République). URSS (Extrême-Orient). URSS (Nord-Ouest). Yougoslavie.	

1	2	3
22 609,8 (22 608,4) (Voie Nº 2205)	Algérie. Australie. Congo (Brazzaville). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Iran. Pays-Bas. URSS (Europe). URSS (Extrême-Orient). URSS (Nord-Ouest).	
22 612,9 (22 611,5) (Voie Nº 2206)	Alaska. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Inde (Ouest). Japon. Maroc. Nigèrie. Pérou. Pologne (République Populaire de). Porto-Rico. Royaume-Uni. Sudafricaine (République). Venezuela. Yougoslavie.	
22 616 (22 614,6) (Voie Nº 2207)	Açores. Allemagne (République Fédérale d'). Angola. Bangladesh. Îles du Cap-Vert. Chine. Israël. Madère. Mozambique. Portugal. Timor portugais. Tunisie. URSS (Europe).	
22 619,1 (22 617,7) (Voie Nº 2208)	Argentine (Nord). Bulgarie. Congo (Brazzaville). Danemark. Inde (Est). Japon. Maroc. Norvège. Suède.	
22 622,2 (22 620,8) (Voie Nº 2209)	Alaska. Belgique. Bolivie. Corée. Dahomey. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Maroc. Pakistan. Panama (Zone du Canal de). Pologne (République Populaire de). Porto-Rico. URSS (Nord-Ouest).	

1	2	3
22 625,3 (22 623,9) (Voie Nº 2210)	Bangladesh. Espagne. États-Unis d'Amérique (Est). Finlande. Grèce. Japon. Pays-Bas. Ukraine.	
22 628,4 (22 627) (Voie Nº 2211)	Cuba. Danemark. Gabon. Italie. Japon. Norvège. Pakistan. Pérou. Suède. Ukraine.	
22 631,5 (22 630,1) (Voie Nº 2212)	Alaska. Australie. Chypre. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Ethiopie. Gibraltar. Guam. Hawaï. Hongroise (République Populaire). Panama (Zone du Canal de). Porto-Rico. Royaume-Uni. Singapour.	
22 634,6 (22 633,2) (Voie Nº 2213)	Bulgarie. Canada (Est). Danemark. Espagne. Ghana. Iraq. Libye. Norvège. Nouvelle-Zélande. Suède. Turquie. URSS (Europe). URSS (Extrême-Orient).	
22 637,7 (22 636,3) (Voie Nº 2214)	Bangladesh. Belgique. Chine. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Iran. Royaume-Uni. Suisse. Turquie. Uruguay. URSS (Nord-Ouest).	
22 640,8 (22 639,4) (Voie Nº 2215)	États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Ghana. Grèce. Iraq. Japon. Norvège. Pérou. Pologne (République Populaire de).	

1	2	3
22 643,9 (22 642,5) (Voie Nº 2216)	Canada (Ouest). Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Sud). Ethiopie. Grèce. Guam. Italie. Japon. Koweït. Mauritanie. Norvège.	
22 647 (22 645,6) (Voie Nº 2217)	Alaska. Allemagne (République Fédérale d'). Bangladesh. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Hongkong. Iran. Israël. Libérie. Panama (Zone du Canal de). Pérou. Porto-Rico.	
22 650,1 (22 648,7) (Voie Nº 2218)	Alaska. Chypre. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Guam. Hawaï. Hongkong. Norvège. Pakistan. Porto-Rico. Suède. Ukraine.	
22 653,2 (22 651,8) (Voie Nº 2219)	Bangladesh. Belgique. Chine. Cuba. Grèce. Libérie. Monaco. Pologne (République Populaire de). Samoa occidental.	
22 656,3 (22 654,9) (Voie Nº 2220)	Canada (Ouest). Grèce. Pakistan. Philippines. République Démocratique Allemande. Royaume-Uni. Sénégal. Tchécoslovaquie.	
22 662,5 (22 661,1) (Voie Nº 2222)	Açores. Allemagne (République Fédérale d'). Angola. Arabie Saoudite. Îles du Cap-Vert. Corée. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. Grèce.	

1	2	3
	Madère. Mozambique. Portugal. Timor portugais.	
22 665,6 (22 664,2) (Voie Nº 2223)	Alaska. Allemagne (République Fédérale d'). Australie. Bangladesh. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Hawaï. Italie. Japon. Porto-Rico. Togo. Turquie.	
22 668,7 (22 667,3) (Voie Nº 2224)	Alaska. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Guam. Hawaï. Iraq. Maurice. Panama (Zone du Canal de). Porto-Rico. République Démocratique Allemande.	
22 671,8 (22 670,4) (Voie Nº 2225)	Algérie. Belgique. Chili. Côte d'Ivoire. Grèce. Inde (Ouest). Islande. Japon. Mexique.	
22 674,9 (22 673,5) (Voie Nº 2226)	Albanie. Bangladesh. Canaries. Chine. Egypte. Ethiopie. France. Islande. République Démocratique Allemande. Roumanie.	
22 678 (22 676,6) (Voie Nº 2227)	Algérie. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Grèce. Guadeloupe (Département français de la). Inde (Est). Japon. Martinique (Département français de la). Pakistan. Royaume-Uni. Ukraine.	
22 681,1 (22 679,7) (Voie Nº 2228)	Australie. Bangladesh. Danemark. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Kenya. Maroc. Norvège. Suède. URSS (Extrême-Orient)	

1	2	3
22 684,2 (22 682,8) (Voie Nº 2229)	Canada. Espagne. Ethiopie. Inde (Ouest). Japon. Royaume-Uni. Thaïlande. Ukraine.	
22 687,3 (22 685,9) (Voie Nº 2230)	Alaska. Australie. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Norvège. Panama (Zone du Canal de). Porto-Rico. République Démocratique Allemande. Suède. Turquie. URSS (Asie méridionale).	
22 690,4 (22 689) (Voie Nº 2231)	Alaska. Arabie Saoudite. Canada (Ouest). États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Finlande. France. Grèce. Japon. Malaisie. Île Niue. URSS (Europe).	
22 693,5 (22 692,1) (Voie Nº 2232)	Cuba. Grèce. Iraq. Pays-Bas. Pologne (République Populaire de). Suisse. URSS (Europe). URSS (Extrême-Orient).	
22 696,6 (22 695,2) (Voie Nº 2233)	Alaska. Bangladesh. Îles Cook. Egypte. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Guam. Hawaï. Iran. Norvège. Panama (Zone du Canal de). Porto-Rico. Roumanie. Royaume-Uni.	
22 699,7 (22 698,3) (Voie Nº 2234)	Argentine. Canaries. Danemark. Ethiopie. Indonésie. Japon. Libye. Mexique. Norvège. Roumanie. Suède.	

1	2	
22 702,8 (22 701,4) (Voie Nº 2235)	Alaska. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). France. Grèce. Guam. Hawaï. Iran. Japon. Porto-Rico. URSS (Nord-Ouest).	
22 705,9 (22 704,5) (Voie Nº 2236)	Danemark. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Grèce. Iraq. Japon. Norvège. Nouvelle-Zélande. Ukraine.	
22 709 (22 707,6) (Voie Nº 2237)	Açores. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). États-Unis d'Amérique (Sud). Iran. Italie. Japon. Madère. Norvège. Portugal. Roumanie.	
22 712,1 (22 710,7) (Voie Nº 2238)	Algérie. Allemagne (République Fédérale d'). Australie. Brésil. Grèce. Hongroise (République Populaire). Iraq. Japon. Mexique. URSS (Europe).	
22 715,2 (22 713,8) (Voie Nº 2239)	Alaska. Belgique. Espagne. États-Unis d'Amérique (Est). États-Unis d'Amérique (Ouest). Guam. Hawaï. Inde (Est). Iran. Norvège. Panama (Zone du Canal de). Porto-Rico. Turquie. Yougoslavie.	
22 718,3 (22 716,9) (Voie Nº 2240)	Chili. Grèce. Jamaïque. Japon. Madagascar. Norvège. Pakistan. Royaume-Uni. Tunisie.	

ANNEXE

Mar2 **Article 9B du Règlement des radiocommunications**

Procédure de mise à jour du Plan d'allotissement (1) de fréquences aux stations côtières radiotélégraphiques fonctionnant dans le bandes exclusives du service mobile maritime entre 4000 kHz et 23 000 kHz

(Appendice 25 Mar2)

639DY Mar2 § 1. (1) Avant de notifier au Comité international d'enregistrement des fréquences ou de mettre en service une assignation de fréquence à une station côtière radiotéléphonique pour laquelle aucun allotissement correspondant ne figure dans le Plan d'allotissement de fréquences contenu dans l'appendice 25 Mar2, toute administration qui:

a) Se propose de mettre en service une station côtière radiotéléphonique et n'a aucun allotissement dans le plan; ou

b) Se propose de développer le service radiotéléphonique assuré par sa ou ses stations côtières et a besoin d'un allotissement additionnel.

envoie au Comité au plus tôt deux années dans le cas *a*) mentionné ci-dessus, ou au plus tôt six mois dans le cas *b*) mentionné ci-dessus mais en tout cas au plus tard trois mois avant la date prévue de mise en service de son service radiotéléphonique en projet, les renseignements énumérés à l'appendice 1C.

639DZ Mar2 (2) Le Comité publie dans une section spéciale de sa circulaire hebdomadaire les renseignements dont il est question au numéro **639DY**, accompagnés des cas d'incompatibilité apparente que le Comité peut déceler entre l'allotissement en projet faisant l'objet de la publication en toute autre allotissement existant ou en projet. Le Comité fournit également toute information de caractère technique et toute suggestion qu'il peut présenter en vue d'éviter ces incompatibilités.

639EA Mar2 (3) Si la demande lui en est faite par une administration quelconque et, en particulier, par une administration d'un pays qui a besoin d'assistance spéciale, et si les circonstances paraissant le justifier, le Comité, utilisant á cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

a) Detérmination d'une ou de voies qui conviennent le mieux pour le service projéte par l'administration avant que celle-ci communique les renseignements à publier;

b) Application de la procédure prévue au numéro **639EB**;

c) Toute autre asssistance de caractère technique afin que les procédures décrites dans le présent article puissent être menées à bien.

639EB Mar2 § 2. (1) En même temps qu'elle envoie au Comité les renseignements énumérés à l'appendice 1C en vue de leur publication, l'administration concernée recherche, relativement à l'allotissement en question, l'accord des administrations auxquelles la voie est allotie. Elle envoie au Comité une copie de toute la correspondance y afférente.

639EC Mar2 (2) Si, après avoir étudié les renseignements publiés par le Comité, une administration est d'avis que ses services existants ou ses services en projet destinés à être mis en service dans les délais mentionnées au numéro **639DY** pourraient être défavorablement influencés, elle a le droit d'être partie à la procédure entamée aux termes du numéro **639EB**.

639ED Mar2 § 3. (1) Toute administration qui reçoit une demande aux termes du numéro **639EB** en accuse immédiatement réception, par télégramme. Si l'administration qui a envoyé la demande n'a pas reçu d'accusé de réception dans le délai de trente jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés conformément aux dispositions du numéro **639DZ**, elle envoie un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans un nouveau délai de quinze jours.

639EE Mar2 (2) Au reçu de la demande faite aux termes du numéro **639EB**, l'administration intéressée étudie rapidement la question, eu égard à la date prévue de mise en service de la ou des assignations correspondant à l'allotissement pour lequel l'accord est demandé, du point de vue du brouillage nuisible qui serait causé au service assuré par sa ou ses station(s) côtière(s):

a) Qui utilise(ent) une assignation de fréquence conforme à un allotissement figurent dans le Plan, ou

b) Qui sera (seront) mise(s) en service, dans le délai prescrit au numéro **639EV**, et pour laquelle (lesquelles) un allotissement figure dans le Plan; ou

c) Qui sera (seront) mise(s) en service dans le délai prescrit au numéro **639EV**, et pour laquelle (lesquelles) un allotissement en projet a été communiqué au Comité aux termes du numéro **639DY**, aux fins de publication conformément au numéro **639DZ**.

---

(1) Voir la Resolution N.° 6.

639EF (3) Toute administration qui reçoit une demande aux termes du numéro **639EB** et qui considère que
Mar2 le projet d'utilisation d'une voie ne causera pas un brouillage nuisible au service assuré par ses stations côtières dont il est question au numéro **639EE,** communique son accord à l'administration qui le lui a demandé, le plus rapidement possible et au plus tard soixante jours après la date de la circulaire hebdomadaire pertinente.

639EG (4) Toute administration qui reçoit une demande aux termes du numéro **639EB** et qui considère que
Mar2 le projet d'utilisation d'une voie pourrait causer un brouillage nuisible au service assuré par ses stations côtières dont il est question au numéro **639EE,** communique à l'administration qui lui a envoyé la demande les raisons de son désaccord le plus rapidement possible et au plus tard soixante jours après la date de la circulaire hebdomadaire pertinente. Elle lui fournit également toute information et suggestion en vue d'arriver à une solution satisfaisante du problème. L'administration recherchant l'accord s'efforce d'adapter ses besoins, dans la mesure du possible, en prenant en considération les observations qu'elle a reçues.

639EH (5) Dans le cas où une administration recherchant un accord n'a pas d'allotissement dans la bande
Mar2 considérée, toute administration à laquelle la demande d'accord est adressée recherche, de concert avec l'administration requérente, tous les moyens de faire face aux besoins de celle-ci.

639EI § 4. (1) L'administration qui recherche un accord peut demander au Comité de s'efforcer d'obtenir
Mar2 cet accord dans les circonstances suivantes:

a) Une administration à laquelle une demande d'accord a été envoyée aux termes du numéro **639EB** n'envoie pas d'accusé de réception de cette demande dans un délai de quarante-cinq jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés;

b) Une administration a envoyé un accusé de réception aux termes du numéro **639ED** mais ne communique pas sa décision dans un délai de soixante jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés;

c) L'administration qui rechercher un accord et l'administration auprès de laquelle l'accord est recherché sont en désaccord sur les possibilités de partage;

d) Il n'est pas possible d'arriver à un accord pour toute autre raison.

639EJ (2) L'administration qui recherche un accord, ou toute administration à laquelle une demande d'accord
Mar2 a été adressée, ou bien le Comité, peuvent demander des renseignements supplémentaires dont ils estiment avoir besoin pour l'étude des problèmes relatifs à cet accord.

639EK (3) Lorsque le Comité reçoit une demande aux termes de l'alinéa *a*) du numéro **639EI,** il envoie
Mar2 sans délai un télégramme à l'administration intéressée en lui demandant d'en accuser réception immédiatement.

639EL (4) Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il a prise aux termes
Mar2 du numéro **639 EK** ou lorsque le Comité reçoit une demande aux termes de l'alinéa *b*) du numéro **639EI,** il envoie sans délai un télégramme à l'administration intéressée en lui demandant de prendre rapidement une décision sur la question.

639EM (5) Lorsque le Comité reçoit une demande aux termes de l'alinéa *d*) du numéro **639EI,** il s'efforce
Mar2 d'obtenir l'accord mentionné au numéro **639EB.** Lorsque le Comité ne reçoit pas d'une administration un accusé de réception à la demande qu'il a formulée en application des dispositions du numéro **639EB** dans le délai spécifié au numéro **639ED,** il agit, en ce qui concerne cette administration, conformément aux dispositions du numéro **639EK.**

639EN (6) Lorsqu'une administration ne répond pas dans le délai de quinze jours qui suit l'envoi du télégramme
Mar2 que le Comité lui a envoyé aux termes du numéro **639EK** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suir l'envoi du télégramme du Comité aux termes du numéro **639EL,** l'administration est réputée s'être engagée, une fois que l'allotissement en projet est inséré dans le Plan:

a) À ne pas formuler de plainte concernant les brouillages nuisibles qui pourraient être causés au service assuré par ses station côtières radiotéléphoniques par l'utilisation d'assignations de fréquence conformes à l'allotissement pour lequel l'accord a été recherché;

b) À faire en sorte que ses stations côtières radiotéléphoniques existantes ou en projet ne causeront pas de brouillages nuisibles à l'utilisation d'assignations de fréquence conformes à l'allotissement pour lequel l'accord a été recherché.

Le Comité inscrit dans le Fichier de référence en regard de l'allotissement et des assignations qui en découlent une observation dans la colonne Observations indiquant que ces assignations ne bénéficient par des dispositions du numéro **607** du Règlement des radiocommunications en ce qui concerne les assignations de l'administration qui recherche l'accord.

639EO (7) Le Comité examine l'allotissement en projet du point de vue de la probabilité du brouillage nuisible
Mar2 que cet allotissement serait susceptible de subir de la part d'un allotissement figurant dans le Plan au nom de l'administration qui n'a pas répondu à la demande du Comité, on qui a communiqué son désaccord sans en fournir les raisons; si sa conclusion est favorable et si l'application de la présente procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

639EP Mar2 (8) Dans le cas d'une conclusion défavorable, le Comité informe l'administration concernée du résultat de son examen; si cette dernière insiste et, si l'application de la présente procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

639EQ Mar2 (9) Lorsque le Comité reçoit une demande aux termes de l'alinéa *c*) du numéro **639EI,** il évalue les possibilités de partage et il communique aux administrations intéressées les résultats obtenus.

639ER Mar2 (10) En cas de désaccord persistant, le Comité examine l'allotissement en projet du point de vue du brouillage nuisible qui serait causé au service assuré par les stations de l'administration ayant manifesté son désaccord. Dans le cas où la conclusion du Comité est favorable et si l'application de le présente procédure aux autres administrations concernées le permet, il insère l'allotissement en projet dans le Plan.

639ES Mar2 (11) Si, à la suite de l'examen dont il est question au numéro **639ER,** le Comité aboutit à une conclusion défavorable, il examine l'allotissement en projet du point de vue du brouillage nuisible susceptible d'être causé aux services assurés dans les différentes voies dans la bande considérée. Si le Comité formule une conclusion défavorable dans tous les cas, il choisit la voie la moins défavorablement influencée et, si l'administration qui recherche l'accord lui en fait la demande il insère l'allotissement en projet dans cette voie du Plan.

639ET Mar2 § 5. L'administration qui recherche l'accord pour un allotissement informe le Comité des résultats de ses consultations avec les administrations concernées. Lorsque le Comité conclut que la procédure décrite dans le présent article a été appliquée à l'égard de toutes les administrations concernées, il publie sa conclusion dans une section spéciale de sa circulaire hebdomadaire et, selon le cas, il met le Plan à jour.

639EU Mar2 § 6. Nonobstant les dispositions qui précédent et si les circonstances le justifient, une administration peut, dans des cas exceptionnels, notifier au Comité, en vue de son inscription provisoire dans le Fichier de référence, une assignation de fréquence non couverte par un allotissement. Elle doit cependent commencer en même temps la procédure décrite au présente article.

639EV Mar2 § 7. Lorsque, dans le délai de douze mois qui suit la date d'insertion d'un allotissement dans le Plan, le Comité ne reçoit pas la notification d'une première assignation de fréquence relative à cet allotissement ou lorsque cette première assignation notifiée n'a pas été mise en service dans les délais prescrits dans le Règlement des radiocommunications, avant de procéder à la suppression de l'allotissement dans le plan, il consulte l'administration concernée sur l'opportunité d'une telle suppression et publie cette information dans le cadre de la mise à jour du Plan. Cependant, au cas où à la suite d'une demande reçue de l'administration concernée, le Comité conclut que des circonstances exceptionnelles motivent un délai supplémentaire, ce dernier ne doit en aucun cas dépasser six mois, sauf dans le cas d'une administration qui n'a pas de station côtière en service, administration pour laquelle ce délai peut être étendu à dix-huit mois.

639EW Mar2 § 8. Toute administration au nom de laquelle un allotissement figure dans le Plan et qui a besoin, en vue d'améliorer son service, de remplacer cet allotissement par un autre dans la même bande de fréquences, applique le procédure décrite dans le présent article. Dans le cas où cette administration aboutit dans l'application de cette procédure à un résultat positif, le Comité remplace, à sa demande, l'allotissement existant dans le Plan par l'allotissement en projet.

639EX Mar2 § 9. Le Comité tient à jour un Plan de référence, tel qu'il résulte de l'application de la présente procédure. Il établit sous une forme appropriée, aux fins de publication par le Secrétaire général, tout ou partie d'une version révisée du Plan chaque fois que les circonstances le justifient, et en toute cas une fois par an.

APPENDICE 26

PARTIE I

Dispositons générales

SECTION I

Définitions

1. *Plan d'allotissement des fréquences.*

Plan qui indique les fréquences à utiliser dans une zone ou par un pays, sans préciser les stations auxquelles ces fréquences peuvent être assignées.

2. *Signification de la terminologie* employée dans le présent Appendice pour les différentes méthodes de répartition des fréquences:

Répartition des fréquences à des:	En français	En englais	En espagnol
Services	Attibution (attribuer)	Allocation (to allocate)	Atribución (atribuir)
Zones	Allotissement (allotir)	Allotment (to allot)	Adjudicación (adjudicar)
Stations	Assignation (assigner)	Assignment (to assign)	Asignación (asignar)

3. *Une ligne aérienne mondiale principale* est une ligne de grande longueur, comprenant un ou plusieurs tronçons, dont le caractère est essentiellement international, qui s'étend sur plusieurs pays et qui exige des communications à longue distance.

4. *Une zone de passage des lignes aériennes mondialles principales* (ZLAMP) est une zone englobant un certain nombre de lignes aériennes mondiales principales qui suivent généralement un même courant de trafic et qui son géographiquement assez voisines pour pouvoir être desservies logiquement à l'aide des mêmes familles de fréquences.

5. *Les lignes aériennes régionales et nationales* sont toutes les lignes aériennes utilisant le service mobile aéronautique (R) qui n'entrent pas dans la définition des lignes aériennes mondiales principales donnée au paragraphe 4 ci-dessus.

6. *Une zone des lignes aériennes régionales et nationales* (ZLARN) est une zone englobant un certain nombre de lignes aériennes au numéro précédent.

7. *Famille de fréquences du service mobile aéronautique.*

Groupe de fréquences choisies dans différentes bandes du service mobile aéronautique pour permettre l'établissement de communications entre les aéronefs en vol et les stations aéronautiques correspondantes quelles que soient les heures et les distances.

SECTION II

Principes techniques et d'exploitation appliqués pour l'établissement du plan d'allotissement des fréquences pour les services mobiles aéronautiques (R) et (OR)

A) Détermination de la largeur des voies

1. *Espacement entre fréquences.*

Les espacements entre fréquences qu'indique le tableau suivant permettent l'emploi de systèmes de communication à rendement élevé.

Bande (kHz)	Espacement entre fréquences (kHz)	Bande (kHz)	Espacement entre fréquences (kHz)
2 850-3 155	7	8 815- 9 040	8,5
3 400-3 500	7	10 005-10 100	9
3 900-3 950	7	11 175-11 400	9,5
4 650-4 750	7	13 200-13 360	10
5 450-5 480	7,5	15 010-15 100	10
5 480-5 730	7,5	17 900-18 030	10
6 525-6 765	7,5	–	–

a) On suppose que, pour les émissions de classe A3. les fréquences de modulation ont pour limite supérieure 3000 Hz et que, pour les autres classes d'émissions autorisées, le rayonnement des bandes latérales ne dépasse pas celui des émissions de classe A3.

b) Afin d'éviter les brouillages susceptibles de résulter de l'emploi simultané d'une même voie pour des émissions de classes différentes, l'utilisation pour les diverses classes d'émission (A1, A2, A3, A4 et F1) des voies telles qu'elles résultent du tableau précédent fera l'objet d'arrangements particuliers entre les administrations intéressees, aucune priorité de principe n'étant accordée à une classe d'émission particulière.

c) On reconnaît qu'il est possible de fractionner chacune des voies résultant des espacements ci-dessus en deux voies, ou davantage, convenant pour les émissions de classe A1.

d) Pour satisfaire des besoins particuliers, on pourra grouper des voies adjacentes qui résultent du tableau précédent, sous réserve que les administrations intéressées concluent des arrangements particuliers.

e) Les arrangements visés aux alinéas *b*), *c*), *d*) ci-dessus seront conclus en vertu des dispositions de l'article 43 (Arrangements particuliers) de la Convention internationale des télécommunications, et de l'article 4 du Règlement des radiocommunications.

2. *Fréquences à allotir.*

On trouvera dans le tableau ci-contre la liste des fréquences à allotir dans les bandes exclusives réservées au service mobile aéronautique, sur la base de la largeur de bande prévue au paragraphe 1 ci-dessus.

kHz

2850-3155	4650-4750	8815-9040	15 010-15 100
3 023,5 (R) et (OR) 3 032 3 039 3 046 3 053 3 060 3 067 3 074 3 081 3 088 3 095 3 102 3 109 3 116 3 123 3 130 3 137 3 144 3 151 (OR) 18 voies	4 703,5 4 710,5 4 717,5 4 724,5 4 731,5 4 738,5 4 745,5 (OR) 7 voies	8 967 8 975,5 8 984 8 992,5 9 001 9 009,5 9 018 9 026,5 9 035 (OR) 9 voies	15 016 15 026 15 036 15 046 15 056 15 066 15 076 15 086 (*a*) 15 092,5 (*a*) 15 096,5 (OR) 11 voies
3900-3950	5480-5730	11 175-11 400	17 900-18 030
Région 1 3 904 3 911 3 918 3 925 3 932 3 939 3 946 (OR) 7 voies	5 680 (R) et (OR) 5 688 5 695,5 5 703 5 710,5 5 718 5 725,5 (OR) 6 voies	11 180,5 11 190 11 199,5 11 209 11 218,5 11 228 11 237,5 11 247 11 256,5 11 266 (*a*) 11 273 (OR) 11 voies	(*a*) 17 975 17 983,5 17 993,5 18 003,5 18 013,5 18 023,5 (OR) 6 voies
	6525-6765	13 200-13 360	
	(*a*) 6 685 (*a*) 6 687,5 6 693 6 700,5 6 708 6 715,5 6 723 6 730,5 6 738 6 745,5 6 753 6 760,5 (OR) 12 voies	13 205,5 13 215,5 13 225,5 13 235,5 13 245,5 13 255,5 (OR) 6 voies	

(*a*) Cette fréquence ne doit être utilisée que pour des émissions de classe A1.

3. *Voies communes aux services (R) et (OR).*

L'usage des voies communes aux services (R) et (OR) et dont les fréquences centrales sont 3023,5 kHz et 5680 kHz est autorisé dans le monde entier comme l'indique la partie II du présent appendice.

Nonobstant les dispositions du Plan d'allotissement figurant à la parte II du présent appendice, la fréquence 5680 kHz peut également être utilisée dans les stations aéronautiques pour les communications avec des stations d'aéronef lorsque les autres fréquences des stations aéronautiques sont indisponibles ou inconnues. Cette utilisation sera cependant limitée à des zones et à des conditions telles qu'il ne puisse en résulter aucun brouillage nuisible aux autres communications autorisées du service mobile aéronautique.

4. L'Organisation de l'Aviation Civile Internationale (OACI) assure dans une grande partie du monde la coordination internationale entre les radiocommunications du service aéronautique (R). Il convient donc, le cas échenté, de consulter cette organisation en particulier pour utilisser en exploitation les fréquences prévues dans le Plan.

5. *Adaptation de la procédure d'allotissement.*

Les plans d'allotissement contenus dans cet appendice n'épuisent évidemment pas toutes les possibilités de partage. Aussi, afin de faire face à des besoins particuliers d'exploitation auxquels les présents plans d'allotissement ne satisfont pas d'une autre manière, les administrations peuvent assigner des fréquences prises dans les bandes d'ondes décamétriques du service mobile aéronautique dans des zones autres que celles auxquelles elles sont alloties dans lesdits plans. Toutefois, l'utilisation des fréquences ainsi assignées ne doit pas diminuer la protection dont bénéficient ces mêmes fréquences, dans les zones où elles sont alloties par les plans au-dessous de la valeur déterminée par l'application de la procédure prévue par la section II-B de la partie I et le paragraphe 4, *d*), de la section II de la partie III du présent appendice pour les services (R) et (OR) respectivement.

6. Lorsqu'il est nécessaire de satisfaire les exigences de l'exploitation des lignes aériennes internationales, les administrations pourront adapter les procédures d'allotissement pour l'assignation des fréquences du service mobile aéronautique (R) et ces assignations seront ensuite sujettes à l'approbation préalable des administrations intéressées.

7. On aura recours à la coordination décrite au paragraphe 4 lorsqu'il sera opportun de la faire pour l'utilisation rationelle des fréquences en question.

8. En plus des dispositions de cert appendice qui prévoient l'extension de certaines fréquences des ZLAMP EU et ME, pour répondre aux besoins des vols internationaux en provenance et à destination du territoire de l'URSS, l'administration de ce pays pourra utiliser, dans la même intention, les fréquences alloties aux ZLARN 2 et 3 à leurs subdivisions. Il ne devra pas en résulter une diminution de la protection au-dessous des normes mentionées au paragraphe 5 ci-dessus pour l'ensemble des stations du service mobile aéronautique.

B) Courbes indiquant des portées de brouillage

1. *Définition des courbes.*

Sur les calques insérés dans une pochette à la fin du présent appendice, des courbes indiquent, pour les différents ordres de grandeur de fréquences, la limite des distances minima acceptables devant séparer deux stations terrestres émettant sur la même fréquence et dont la puissance rayonnée serait de 1 kW (émission non modulée), afin d'assurer, à la limite de portée utile de l'emission désirée d'une des stations terrestres, un rapport signal utile/signal brouilleur de 15 db à bord d'une station d'aéronef.

La portée utile n'est pas inidiquée sur les courbes.

2. *Type de carte utilisé.*

Ces calques ne peuvent être utilisés que sur un planisphère établi selon une projection de Mercator et dont l'échelle est identique à celle indiquée sur chacun des calques. Ils ne doivent donc pas être utilisés sur des cartes qui ne seraient pas conformes à ces définitions. Les planisphères, que l'on trouvera également à la fin de cet appendice, sur lesquels figurent les limites des ZLAMP et celles des ZLARN, sont établis à l'échelle convenable et les calques peuvent être utilisés sur ceux-ci.

3. *Changement d'échelle ou de systeme de projection.*

Si l'on désire utiliser d'autres cartes en projection de Mercator, avec une échelle différente, il est nécessaire de dessiner, à partir des coordonnées figurant dans les tableaux ci-dessous, de nouvelles courbes pour tenir compte du changement d'échelle.

En dessinant les nouvelles courbes, il faut se rappeler que le point d'intersection de l'axe vertical de symétrie, c'est-à-dire um méridien, et de l'axe perpendiculaire représentant um parallèle, doit être à la latitude 00° pour la courbe 00°, à celle de la latitude 20° N pour la courbe 20°, 40° N pour 40°, etc.

Les coordonnées géographiques apparaissant dans les tableaux ci-dessous sont données par rapport au méridien 180° pris comme axe de symétrie pour la construction des courbes.

4. *Conditions adoptées pour le partage des fréquences entre les zones.*

Les différents calques sont établis dans les conditions de partage de fréquences adoptées par la Conférence internationale administrative des radiocommunications aéronautiques (CIARA, 1948/1949), soit:

Zones	Bandes comprises entre: (MHz)	Conditions de partage
Entre deux ZLAMP	3 et 6,6 9 et 11,3 13 et 18	Propagation de nuit. Propagation de jour. Séparation en longitude. *Note.* — Il a été admis que les conditions de partage étaient les mêmes pour 6,6 MHz et pour 5,6 MHz.
Entre une ZLAMP et une ZLARN	3 et 5,6 6,6 et 11,3 13 et 18	Propagation de nuit. Propagation de jour. Séparation en longitude.
Entre deux ZLARN	3 et 4,7 5,6 et 11,3 13 et 18	Propagation de nuit. Propagation de jour. Séparation en longitude.

Des courbes supplémmentaires permettent de déterminer les possibilités de répétition pour une utilisation diurne des fréquences comprises dans les bandes 3 MHz, 3,5 MHz et 4,7 MHz.

Les renseignements donnés dans les «Graphiques de portées minimum et maximum à utiliser comme guide pour l'allotissement des fréquences», annexe 1, volume 1 du Rapport de la première session de la CIARA (Génève, 1948), on été utilisés pour la préparation du plan d'allotissement.

5. *Mode d'emploi.*

Prendre l'une des cartes annexées au présent appendice et choisir le calque correspondant à l'ordre de grandeur de fréquences et aux conditions de partage que l'on désire étudier.

Placer de centre du calque (c'est-à-dire l'intersection de l'axe de symétrie et de l'axe horizontal), sur la ligne délimitant la zone ou sur le lieu géographique de l'émetteur. Noter la latitude de ce point et prendre la courbe correspondante.

Pour tout émetteur situé en um point quelconque à l'extérieur de la courbe, la rapport de protection défini au paragraphe 1 ci-dessus sera supérieur à 15 db.

Pour tout émetteur se trouvant en un point situé à l'intérieur de la courbe, la rapport de protection obtenu sera inférieur à 15 db.

L'orientation des courbes est telle qu'elles sont utilisables pour l'hémisphère nord; pour l'hémisphère sud, elles devront être inversées. C'est une précaution qu'il convient de prendre lorqu'il s'agit de suivre les limites des zones et de passer d'un hémisphère à l'autre.

6. *Élements pour le tracé des courbes.*

3,0 MHz, nuit

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 31,5°	E-W 31,5°	N-S 31,5°	E-W 33,6°	N-S 31,5°	E-W 41°	N-S 31,5°	E-W 49°	N-S 31,5°	E-W 64°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180°	31,5° N	180°	51,5° N	160° W	70° N	127° W	70° N	106° W	70° N
	155° W	20° N	160° W	47° N	140° W	60° N	125° W	60° N	115° W	60° N
	148,5° W	00°	150° W	39° N	138° W	50° N	131° W	50° N	128° W	50° N
	155° W	20° S	146° W	30° N	140° W	40° N	138° W	40° N	140° W	40° N
	180°	31,5° S	146° W	20° N	143° W	30° N	150° W	20° N	150° W	35° N
			150° W	07° N	150° W	22° N	160° W	23° N	160° W	32° N
			160° W	05° S	160° W	14° N	167° W	20° N	170° W	29° N
			170° W	10° S	169° W	10° N	180°	18,5° N	180°	28,5° N
			180°	11,5° S	180°	08,5° N				

3,5 MHz, nuit

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 36°	E-W 36°	N-S 36°	E-W 38°	N-S 36°	E-W 47°	N-S 36°	E-W 56°	N-S 36°	E-W 73°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180°	36° N	180°	56° N	140° W	70° N	118° W	70° N	93° W	70° N
	170° W	35° N	170° W	55° N	133° W	60° N	119° W	60° N	100° W	68° N
	159° W	30° N	160° W	53° N	131° W	50° N	124° W	50° N	110° W	58° N
	150° W	21° N	150° W	47° N	133° W	40° N	132° W	40° N	120° W	50° N
	145° W	10° N	144° W	40° N	140° W	27° N	140° W	32° N	130° W	43° N
	144° W	00°	140° W	20° N	150° W	16° N	150° W	24° N	140° W	35° N
	145° W	10° S	145° W	10° N	160° W	08° N	160° W	17° N	150° W	30° N
	150° W	21° S	150° W	00° N	170° W	05° N	170° W	15° N	160° W	27° N
	160° W	30° S	160° W	10° S	180°	04° N	180°	14° N	170° W	25° N
	170° W	35° S	170° W	14° S					180°	24° N
	180°	36° S	180°	16° S						

4,7 MHz, nuit

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 50°	E-W 50°	N-S 50°	E-W 53°	N-S 50°	E-W 65°	N-S 50°	E-W 77°	N-S 50°	E-W 100°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	160° W	47° N	180°	70° N	103° W	70° N	83° W	70° N	50° W	70° N
	147° W	40° N	150° W	66° N	110° W	50° N	94° W	60° N	78° W	60° N
	138° W	30° N	130° W	50° N	115° W	40° N	103° W	50° N	98° W	50° N
	133° W	20° N	126° W	40° N	127° W	20° N	114° W	40° N	112° W	40° N
	131° W	10° N	125° W	30° N	140° W	06° N	124° W	30° N	130° W	28° N
	130° W	00°	127° W	20° N	150° W	02° S	134° W	21° N	140° W	19° N
	131° W	10° S	130° W	07° N	160° W	07° S	140° W	16° N	160° W	12° N
	133° W	20° S	140° W	10° S	170° W	09° S	150° W	07° N	170° W	10,5° N
	138° W	30° S	150° W	20° S	180°	10° S	160° W	05° N	180°	10° N
	147° W	40° S	170° W	29° S			180°	00°		
	160° W	47° S	180°	30° S						
	170° W	48° S								
	180°	50° S								

5,6 et 6,6 MHz, nuit

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 58°	E-W 58°	N-S 58°	E-W 63°	N-S 58°	E-W 76°	N-S 58°	E-W 92°	N-S 58°	E-W 116°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180° 122° W 180°	58° N 00° 58° S	130° W 120° W 118° W 115° W 115° W 117° W 120° W 122° W 130° W 138° W 150° W 180°	70° N 60° N 50° N 40° N 30° N 20° N 10° N 00° 10° S 20° S 30° S 38° S	80° W 92° W 98° W 104° W 111° W 118° W 127° W 134° W 150° W 180°	70° N 60° N 50° N 40° N 30° N 20° N 10° N 00° 10° S 18° S	48° W 73° W 88° W 99° W 110° W 120° W 130° W 146° W 180°	70° N 60° N 50° N 40° N 30° N 20° N 10° N 00° 08° S	08° W 66° W 88° W 104° W 120° W 125° W 143° W 180°	70°N 60°N 50°N 40°N 25°N 20°N 10°N 02°N

3,0 et 3,5 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		60°	
	N-S 6,3°	E-W 6,3°	N-S 6,3°	E-W 6,7°	N-S 6,3°	E-W 8,5°	N-S 6,3°	E-W 12,6°

4,7 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		60°	
	N-S 10,8°	E-W 10,8°	N-S 10,8°	E-W 11,5°	N-S 10,8°	E-W 14°	N-S 10,8°	E-W 21,6°

5,6 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		60°	
	N-S 13,6°	E-W 13,6°	N-S 13,6°	E-W 14,5°	N-S 13,6°	E-W 17,6°	N-S 13,6°	E-W 27,2°

6,6 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		60°	
	N-S 17,2°	E-W 17,2°	N-S 17,2°	E-W 18,3°	N-S 17,2°	E-W 22,4°	N-S 17,2°	E-W 34,4°

Note. — Pour les bandes 3,0 / 3,5 / 4,7 / 5,6 / 6,6 MHz, il n'est pas nécessaire d'indiquer des points intermédiaires pour le tracé des courbes qui correspondent approximativement à une circonférence dans les conditions de propagation diurne.

9,0 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 34,3°	E-W 34,3°	N-S 34,3°	E-W 36,5°	N-S 34,3°	E-W 44,8°	N-S 34,3°	E-W 53,5°	N-S 34,3°	E-W 69°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180° 170° W 160° W 150° W 146° W 150° W 160° W 170° W 180°	34° N 33° N 28° N 17° N 00° 17° S 28° S 33° S 34° S	180° 160° W 150° W 145° W 146° W 147° W 153° W 160° W 170° W 180°	54° N 50° N 42° N 30° N 20° N 10° N 00° 08° S 13° S 14° S	148° W 135° W 133° W 135° W 140° W 150° W 160° W 170° W 180°	70° N 60° N 50° N 40° N 28° N 17° N 11° N 07° N 06° N	122° W 122° W 127° W 134° W 140° W 150° W 160° W 170° W 180°	70° N 60° N 50° N 40° N 34° N 24° N 20° N 17° N 16° N	100° W 111° W 120° W 130° W 140° W 150° W 160° W 170° W 180°	69° N 60° N 53° N 45° N 37° N 32° N 28,5° N 26° N 25° N

10,0 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 49,5°	E-W 49,5°	N-S 49,5°	E-W 53°	N-S 49,5°	E-W 64,5°	N-S 49,5°	E-W 78°	N-S 49,5°	E-W 100°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180°	49,5° N	180°	69,5° N	102° W	70° N	100° W	70° N	50° W	70° N
	170° W	49° N	160° W	68° N	103° W	60° N	90° W	60° N	70° W	66° N
	160° W	46° N	140° W	62° N	109° W	50° N	101° W	50° N	80° W	60° N
	150° W	41° N	130° W	52° N	115,5° W	40° N	110° W	40° N	98° W	50° N
	140° W	32° N	127° W	40° N	120° W	31° N	120° W	30° N	110° W	42° N
	133° W	20° N	127° W	30° N	130° W	17° N	130° W	22° N	120° W	36° N
	131° W	10° N	130° W	11° N	140° W	07° N	140° W	12° N	130° W	30° N
	130,5° W	00°	140° W	08° S	150° W	00°	150° W	07° N	140° W	22° N
	131° W	10° S	150° W	18° S	160° W	06° S	160° W	03° N	150° W	16° N
	133° W	20° S	160° W	25° S	170° W	09° S	170° W	01° N	160° W	13° N
	140° W	32° S	170° W	28° S	180°	09,5° S	180°	00,5° N	170° W	11° N
	150° W	41° S	180°	29,5° S					180°	10,5° N
	160° W	46° S								
	170° W	49° S								
	180°	49,5° S								

11,3 MHz, jour

Latitude — Portée de brouillage sur les axes	00°		20°		40°		50°		60°	
	N-S 54°	E-W 54°	N-S 54°	E-W 58°	N-S 54°	E-W 71°	N-S 54°	E-W 85°	N-S 54°	E-W 109°
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180°	54° N	145° W	70° N	93° W	70° N	64° W	70° N	30° W	70° N
	160° W	52° N	128° W	60° N	98° W	60° N	80° W	62° N	71° W	60° N
	150° W	47° N	123° W	50° N	104° W	50° N	95° W	50° N	90° W	50° N
	140° W	40° N	120° W	40° N	109° W	40° N	110° W	35° N	107° W	40° N
	132° W	30° N	120° W	30° N	120° W	24° N	120° W	26° N	120° W	32° N
	128° W	20° N	122° W	20° N	130° W	12° N	140° W	08° N	140° W	15° N
	127° W	10° N	124° W	10° N	140° W	00°	150° W	03° N	150° W	11° N
	126° W	00°	130° W	04° S	150° W	06° S	160° W	01° S	160° W	08° N
	127° W	10° S	140° W	17° S	160° W	10° S	170° W	03° S	170° W	07° N
	128° W	20° S	150° W	25° S	180°	14° S	180°	04° S	180°	06° N
	132° W	30° S	170° W	33° S						
	140° W	40° S	180°	34° S						
	150° W	47° S								
	160° W	52° S								
	180°	54° S								

C) Puissance rayonée

Sauf indication contraire figurant aux parties II et IV, on suppose que les puissances de crêtes rayonées sont les suivantes:

Classe d'émission	Stations	Puissance de crête rayonnée
A1	Stations terrestres	1 kW
	Stations d'aéronef	50 W
A3 (taux de modulation 100 %)	Stations terrestres	4 kW
	Stations d'aéronef	200 W

PARTIE II

(Remplace par l'appendice 27.)

PARTIE III

Principes techniques et d'exploitation appliqués dans l'allotissement des fréquences pour le service mobile aéronautique (OR)

SECTION I

Bandes de fréquences et voies disponibles

1. *Bandes de frequénces.*

Les bandes de fréquences disponibles pour le service aéronautique (OR) forment trois catégories distinctes:

a) Les bandes attribuées en exclusivité au service mobile aéronatique (OR);
b) Les bandes attribuées en partage spécifiquement au service mobile aéronautique (OR) et à d'autres services;
c) Les bandes attribuées au service mobile dont le service mobile aéronautique (OR) n'est pas spécifiquement exclu.

2. *Fréquences à assigner.*

A) Bandes exclusives:

Pour les bandes attribuées en exclusivité au service mobile aéronautique (OR), les fréquences à assigner sont indiquées à la Partie I.

B) Bandes partagées:

Les voies que l'on propose d'attribuer au service mobile aéronautique (OR) dans les bandes qu'il partage avec d'autres services ont la même largeur que celles des bandes exclusives. Cependant, aucune fréquence de ces bandes n'a été spécifiquement désignée pour ces attributions. Le nombre des voies dont l'attribution est proposé dans ces bandes pour le service mobile aéronautique (OR) a été déterminé en tenant compte notamment de la largeur des bandes et du nombre des services qui les partagent.

C) Voies communes aux services (R) et (OR):

L'usage des voies communes aux services (R) et (OR) et dont les fréquences centrales sont 3023,5 kHz, et 5680 kHz est autorisé dans le monde entier dans les conditions définies au numéro **3** de la section II de la Partie I.

3. *Choix des fréquences.*

A) Bandes exclusives:

Les besoins, y compris les besoins communs à plusiurs régions, ont été satisfaits, dans la limite des bandes disponibles, à l'aide des fréquences des bandes attribuées en exclusivité dans le monde entier au service mobile aéronautique (OR). Dans la Région 1, les besoins excéndentaires ont été satisfaites dans la mesure du possible au moyen des fréquences de la bande 3900-3950 kHz attribuées en exclusivité au service mobile aéronautique (OR) dans cette Région.

B) Bandes partagées:

Le reste des besoins a été satisfait, dans la mesure la plus large possible, à l'aide des fréquences des bandes indiquées aux paragraphes 1, *b*), et 1, *c*), de la présente section est envisagées dans cet ordre.

SECTION II

Adaptation des principes techniques

1. *Fractionnement des voies.*

Pour utiliser les bandes de la façon la plus rationelle, on a consideré qu'il est possible d'aménager, dans une voie prévue pour une émission de classe A.3, ou bien une émission de classe A.3, ou bien deux ou plus de deux émissions A.1, A.3.A, ou encore d'autres types complexes de transmission. Quand une voie est subdivisé, les subdivisions ne doivent pas être utilisées par des administrations différentes. En utilisant les voies supplémentaires ainsi obtenues, on doit veiller à ne pas causer de brouillage nuisible aux usagers des voies adjacentes.

2. *Modification de la classe d'une émission.*

En raison de la nécessité, d'une part d'éviter les brouillages nuisibles, d'autre part d'utiliser de la façon la plus efficace les bandes de fréquences disponibles, la modification de la classe d'une émission est autorisée dans le cas où un tel changement n'exige aucun élargissement de la bande nécessaire.

3. *Allotissement des voies adjacentes (OR).*

On a alloti des voies adjacentes à un pays en ayant exprimé le désir, lorsque les conditions géographiques l'ont permis et chaque fois que cela s'est révélé possible.

4. *Rapports de protection et partages.*

a) Pour les zones où il s'est révélé nécessaire d'accroître le nombre de répetitions des assignations, on a satisfait à l'aide d'une voie allotie à une administration plusieurs demandes formulées par cette administration, même dans le cas où il pouvait en résulter un abaissement du rapport de protection entre les émissions des stations intéressées;

b) Dans les zones où le nombre des demandes dépasse de beaucoup la moyenne, les rapports de protection peuvent être réduits pa accords entre les administrations intéresées;

c) Certaines assignations ont été répétées bien qu'il y ait une forte probabilité de brouillages entre stations relevant d'administrations différentes; on a admis, ce faisant, que toutes les stations en question n'émettraient que par intermittence. En pareil cas, toutes les stations intéressées ont des droits égaux à l'utilisation de la fréquence commune, et aucune station ni aucun groupe de stations ne bénéficie d'aucune priorité sur les autres;

d) Certaines fréquences ont été assignés sous la forme d'assignations dites «secondaires». En pareil cas, une station qui dispose d'une fréquence sous la forme d'une assignation dite «primaire» est protégée par les dispositions suivantes contre les brouillages nuisibles qu'est susceptible de provoquer une station qui dispose de la même fréquence sous la forme d'une assignation secondaire:

La puissance émise par la station qui dispose d'une assignation secondaire doit être inférieure à celle de la station qui dispose de la même fréquence sous la forme d'une assignation primaire;

Une distance au moins égale à la moitié de la distance de répétition requise pour assurer un rapport de protection de 20 décibels doit séparer les stations intéressées.

4. *Limitation de la puissance des stations.*

Les administrations intéressées doivent s'entendre pour réduire pendant la nuit la puissance rayonnée par les stations aéronautiques afin de pouvoir utiliser ces fréquences pendant la nuit.

PARTIE IV

Plan d'allotissement des fréquences pour le service mobile aéronautique (OR) dans les bandes comprises entre 2505 kHz et 23 350 kHz

1. Les abréviations suivantes ont été employées dans le Plan:

a) *Liste alphabétique des abréviations désignant les pays:*

AFS	Union de l'Afrique du Sud.
AGL	Angola.
ALB	Albanie (République populaire d').
ALS	État de l'Alaska, États-Unis d'Amerique.
ARG	République Argentine.
ARS	Arabie Saoudite.
ATN	Antilles néerlandaises.
AUS	Australie (Fédération de l').
AUT	Autriche.
AZR	Açores.
B	Brésil.
BER	Bermudes.
BLR	République Socialiste Soviétique de Biélorussie.
BOL	Bolivie.
BUL	Bulgarie (République populaire de).
CAF	République Centrafricaine.
CAN	Canada.
CAR	Carolines.
CRG	Cambodge.
CHL	Chili.
CHN	Chine.
CLM	Colombie (République de).
CLN	Ceylan.
CME	Cameroun (État du) (sous tutelle de la France).
COG	République du Congo.
CPV	Cap Vert (Îles du).

CTI	République de Côte d'Ivoire.
CTR	Costa Rica.
CUB	Cuba.
CYP	Chypre.
D	Allemagne.
DAH	République du Dahomey.
DNK	Danemark.
DOM	République Dominicaine.
E	Espagne.
EGY	République Arabe Unie (Région égyptienne).
EQA	Equateur.
ETH	Ethiopie.
F	France et Algérie.
FJI	Fidji (Îles).
FNL	Finlande.
G	Royaume-Uni de la Grande-Bretagne et de l'Irlande du Nord.
GAB	République Gabonaise.
GDL	Guadeloupe (Département français de la).
GIB	Gibraltar.
GNP	Guinée portugaise.
GRC	Grèce.
GRL	Groenland.
GTM	Guatemala.
GUB	Guyane britannique.
GUF	Guyane (Département français de la).
HKG	Hongkong.
HND	Honduras (République de).
HOL	Pays-Bas.
HTI	Haïti (République d').
HVO	République de Haute-Volta.
HWA	État d'Hawaï, États-Unis d'Amérique.
I	Italie.
IND	Inde.
INP	Indes portugaises.
INS	Indonésie (République d').
IOB	Indes occidentales britanniques.
IRN	Iran.
IRQ	Iraq.
ISL	Islande.
ISR	État d'Israël.
J	Japon.
JON	Île Johnston.
KEN	Kenya.
LAO	Laos.
LBN	Liban.
LBY	Libye.
MAC	Macau.
MDG	Madagascar (République Malgache).
MDW	Îles Midway.
MEX	Mexique.
MLA	Malaya.
MLI	Fédération du Mali.
MLT	Malte.
MOZ	Mozambique.
MRA	Mariannes.
MRC	Maroc (Royaume du).
MRL	Marshall.
MRT	Martinique (Département français de la).
MTN	République Islamique de Mauritanie.
NCG	Nicaragua.
NCL	Nouvelle-Calédonie et dépendances.
NGN	Nouvelle Guinée néerlandaise.
NGR	République du Niger.
NHB	Nouvelles-Hébrides (Archipel) (Condominium franco-britannique).
NOR	Norvège.

NZL	Nouvelle-Zélande.
OCE	Polynésie française.
PAK	Pakistan.
PAP	Papua (Territoires des).
PHL	Philippines (République des).
PNR	(Panama (République des).
PNZ	Zone du Canal de Panana.
POL	Pologne (République Populaire de).
POR	Portugal.
PRG	Paraguay.
PRU	Pérou.
PTR	Puerto Rico.
REU	Réunion (Département français de la).
RHS	Rhodesia du Sud.
ROU	République Populaire Roumanie.
S	Suède.
SLV	El Salvador (République de).
SMB	Somalie britannique.
SMF	Côte française des Somalis.
SNG	Singapore.
STPS	Tomé et Príncipe.
SUI	Suisse.
SUR	Surinam.
SYR	République Arabe Unie (Région syrienne).
TCD	République du Tchad.
TCH	Tchéscoslovaquie.
TGO	Togo (République du).
TMP	Timor portugais.
TUN	Tunisie.
UKR	République Socialiste Soviétique de l'Ukraine.
URG	Uruguay.
URS	Union des Républiques Socialistes Soviétiques.
URS–AM	Union des Républiques Socialistes Soviétiques — Asie Centrale.
URS–C	Union des Républiques Socialistes Soviétiques — Caucase.
URS–E	Union des Républiques Socialistes Soviétiques — Europe.
URS–SEO	Union des Républiques Socialistes Soviétiques — Sibérie et Extrême-Orient.
USA	Les 48 États contigus des États-Unis d'Amérique (à l'exception des États de l'Alaska et de Hawaï).
VEN	Vénézuela.
VTN	Viêt-Nam.
WAKJ	(Wake (Île).
YUG	Yougoslavie.

b) Autres abréviations:

N = Nord;
E = Est;
S = Sud;
W = Ouest.

Exemple:

«N-46° N» *signifie* «au Nord de 46° Nord»;
«55° W-64° W et N-7° S» *signifie* «entre 55° Ouest et 64° Ouest et au Nord de 7° Sud»;
W = Watts;
kW = Kilowatts.

Exemple:

«CUB (500 W)»*signifie* «Cuba puissance limitée à 500 watts antenne»;
(6) *signifie* «Stations français»;
(7) *signifie* «Stations des États-Unis d'Amerique»;
(81) *signifie* «Allemagne de l'Est»;
■ *signifie* «Réseaux de la Communauté française».

2. Plan des frequences (OR)

A) Bandes exclusives

Région 1 **Band 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
CAF ■ COG ■ CTI ■ DAH ■ EGY F ■ GAB ■ HVO ■ IRQ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR POL SMF (350 W) ■ TCD ■ TUN URS-E URS-SFO (1 kW)	ARS BLR CAF ■ COG ■ CTI ■ DAH ■ EGY F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR SMF ■ TCD ■ TUN URS-AM (500 W) URS-C YUG	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ ISL ISR MDG ■ MLI ■ MTN ■ NGR ■ POR SMF ■ TCD ■ TCH URS-E URS-SEO (1 kW)	ALB AZR CAF ■ CME ■ COG ■ CTI ■ DAH ■ DNK F (excepto Argérie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ MTN ■ POR TCD ■ TGO ■ UKR) URS-SEO (1 kW	AZR CAF ■ COG ■ CTI ■ D DAH ■ E GAB ■ GRC HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ SYR TCD ■ URS-AM URS-E URS-SEO (1 kW)	D ETH POR ROU S SYR URS-AM (1 kW) URS-E
3074	**3081**	**3088**	**3095**	**3102**	**3109**
AGL AZR BUL CPV EGY F (except Algérie) ■ G GIB GNP MOZ POR S STP TUN URS-AM (1 kW) URS-E	ARS AZR CYP D EGY FNL G KEN LBY MLT POR ROU SMB URS-E URS-SEO (1 kW)	AFS D EGY G GRC (250 W) POR SUI (200 W) UKR URS-AM (1 kW) URS-E	ARS (2,5 kW) CYP EGY F (except Algérie) ■ G GIB KEN LBY MLT POL RHS SMB URS-AM (1 kW) URS-C URS-SEO (1 kW)	AFS BLR D (81) EGY ETH G GIB MLT SUI URS-C	AFS D (81) EGY G I MRC (7) S URS-E
3116	**3123**	**3130**	**3137**	**3144**	**3151**
AFS D (81) EGY F (Algérie) ■ G TCH TUN URS-AM (1 kW) URS-C URS-E URS-SEO (1 kW)	EGY G (N) HOL I MARC (7) UKR URS-E URS-SEO N-46° N & W-170° E	EGY E (500 W) GRC HOL URS-E URS-SEO (1 kW)	BUL E (500 W) EGY HOL URS-AM (1 kW) URS-C URS-E URS-SEO (1 kW)	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algérie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN UKR ■ URS-C URS-E URS-SEO (1 kW) YUG	BUL CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algérie) ■ GAB HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN URS-E URS-SEO (1 kW)

Région 2 **Bande 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
ALS ARG B (42° W-51° W & N-9° S) CAN * CLM DOM (250 W) GRL HWA SLV (250 W) USA	ALS ARG (S-43° S) B BER (7) CAN * GDL ■ GRL HWA MRT ■ NCG USA	ARG CAN CLM (S-5° N) CTR (250 W) HTI (250 W) HWA MEX	ALS ARG B (55° W-64° W) & N-7° S) CAN (E-98° W) CUB GTM (250 W) HWA PNR (250 W) USA (W-98° W)	B CAN CHL (N-41° S) (300 W) CHL (S-41° S) GDL ■ HWA MEX MRT ■	ALS ARG (S-34° S) B (12°-21° S & 46°-53° W) BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA JOB (7) PNR (250 W) PNZ PRU (250 W) PTR USA
3074	**3081**	**3088**	**3095**	**3102**	**3109**
ALS ARG B (E-42° W & N-10° S) BER (7) CAN (2) CLM (N-4° N) GRL GTM (250 W) HTI (250 W) USA	ARG (S-43° S) B (10° S-18° S) & E-43° W) CAN CUB GUF ■ HWA PRG (250 W) PRU (250 W) SLV (250 W) URG (250 W) VEN (250 W)	ALS B (1) BER (7) CAN (2) CHL (N-31° S) (300 W) CHL (S-31° S) CUB (Guantanamo) (7) GRL HWA PNZ PTR USA	ARG (S-28° S) B (42° W-57° W & N-9° S) CAN CTR (250 W) DOM (250 W) HWA MEX PRU (250 W)	ALS B BER (7) CAN (2) CHL (N-36° S) (300 W) CHL (S-36° S) GDL ■ GRL HND MRT ■ USA	ALS B (40°-50° W & 9°-17° S) B (S-17° S) (350 W) BER (7) CAN (2) CHL CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA
3116	**3123**	**3130**	**3137**	**3144**	**3151**
B (E-46° & 18°-24° S) B (S-24° S) (350 W) CAN CHL CTR (250 W) DOM (250 W) EQA (250 W) MEX VEN	ALS ARG (S-35° S) B (E-43° W & 10°-18° S) BER (7) BOL. CAN (2) GRL GUB (7) HWA USA	ATN BOL (250 W) CAN CHL (S-41° S) CHL (N-41° S) 300 W) CUB EQA (250 W) GTM (250 W) HWA URG	ALS B (E-46° W & 18°-24° S) B (S-24° S) (350 W) BER (7) CAN (2) CHL DOM (250 W) EQA (250 W) GRL GTM (250 W) HWA PRG (250 W) USA VEN (250 W)	ALS ARG B (E-42° W & N-10° S) BER (7) CAN (2) GRL GUB (7) HWA IOB (7) PNZ PRT USA	ARG, B, BOL } (2) CAN CHL, CLM } (2) DOM (250 W) EQA (250 W) (2) MEX PRG (250 W, PRU (250 W), URG, VEN (250 W) } (2)

(1) Usage nocturne limité entre 7° et 16° Sud et à l'Ouest de 56° Ouest.
(2) Stations d'aéronef seulement.
(3) Le Canada n'utilisera cette fréquence que s'il n'en résulte pas de brouillage aux stations situées dans les États-Unis d'Amérique et travaillant sur la même fréquence.

Région 3 **Bande 3025-3155 kHz**

3032	3039	3046	3053	3060	3067
AUS (500 W) CAR (7) CBG (350 W) CHN (Région 5) (3 kW) IND (350 W) JON LAO (350 W) MDW MRA (7) MRL (7) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PHL (Puerto Princesa) (300 W) VTN (350 W) WAK	AUS (S) (500 W) CBG (250 W) CHN (Région 8) (3 kW) IND (350 W) INS (500 W) LAO (250 W) NCL (250 W) ■ NGN (500 W) NHB (250 W) NZL (1 kW) OCE (250 W) ■ PHL (Aparri) (200 W) VTN (250 W)	AUS (S) (500 W) CBG (250 W) CHN (Région 5) (500 W) FJI (1 kW) INS (500 W) IRN (250 W) LAO (250 W) NCL (250 W) ■ NHB (250 W) NZL (1 kW) OCE (250 W) ■ PAK (250 W) PHL (Mindoro) (200 W) US (Pacific excepté Philippines et Japon (1 kW) VTN (250 W)	AUS (500 W) CAR (7) CHN (Région 6) (3 kW) FJI (1 kW) IND (350 W) INS (500 W) IRN (250 W) JON MDW MRA (7) MRL (7) NZL (1 kW) PHL (Zamboanga) (300 W) VTN (Saigon) (250 W) WAK	AUS (500 W) INS (500 W) JON MDW PHL (Baler) (200 W) VTN (Hanói) (500 W)	AUS (500 W) CAR (7) CBG (350 W) INS (500 W) IRN (350 W) J (1 kW) JON LAO (350 W) MDW MRA (7) MRI (7) (1 kW) PHL (Manila) (7) (1 kW) RYUKYU (7) (1 kW) VTN (350 W) WAK
3074	3081	3088	3095	3102	3109
AUS (5 kW) CAR (7) CHN (Région 7) (3 kW) CLN (2,5 kW) HKG (2,5 kW) JON MDW MLA (2,5 kW) MRA (7) MRL (7) PAK (E) (500 W) PARK (Karachi) (500 W) PHL (Manila) (7) SNG (2,5 kW) WAK	AUS (5 kW) CHN (Région 2) (3 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PHL (Labo) (200 W) SNG (2,5 kW)	AUS (1 kW) CAR (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	AUS (5 kW) CHN (Région 2) (3 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PAK (E) (250 W) PHL (Cebu) (200 W) SNG (2,5 kW)	AUS (500 W) CAR (7) (1 kW) CHN (Région 7) (3 kW) CLN (2,5 kW) HKG (2,5 kW) J (1 kW) JON (1 kW) MDW (1 kW) MLA (2,5 kW) MRA (7) (1 kW) MRL (7) (1 kW) PAK (250 W) PHL (7) (1 kW) SNG (2,5 kW) WAK (1 kW)	AUS (S) (500 W) CAR (7) (1 kW) CHN (Région 3) (3 kW) CHN (7) (1 kW) INS (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 KW) MRL (7) (1 kW) NGN (1kW) PAK (W) (250 W) PHL (7) (1 kW) WAK (1 kW)
3116	3123	3130	3137	3144	3151
AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW) PHL (Cagayan) (400 W) PHL (Misamis) (400 W) SNG (2,5 kW)	AUS (S) (500 W) CAR (7) (1 kW) CHN (Région 1) (3 kW) CHN (7) (1 kW) FJI (1 kW) INS (500 W) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NGN (500 W) NZL (1 kW) PAK (350 W) PHL (7) (1 kW) WAK (1 kW)	AUS (S) (500 W) CHN (Région 4) (3 kW) INS (500 W) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PAK (Karachi) (1,5 kW) PHL (Cebu) (300 W)	AUS (S) (5 kW) CAR (7) CHN (Région 6) (3 kW) INP (100 W) JON MDW MRA (7) MRL (7) PHL (Cebu) (400 W) PHL (7) (1 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (1 kW) CHN (7) (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) PHL (7) (1 kW) WAK (1 kW)	AUS (500 W) CHN (Région 4) (3 kW) NGN (500 W) PHL (Cagayan) (400 W) PHL (Misamis) (440 W)

Région 1 — **Bande 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
AFS ARS CYP EGY G GIB KEN LBY MLT POL SMB URS-C URS-SEO	AFS ARS CYP D EGY G KEN LBY MLT MRC (7) SMB URS-AM URS-E YUG	AGL ALB AZR CME (Douala) (750 W) ■ CPV GNP HOL ISR (250 W) MOZ POR SMF ■ STP TCD (Ft. Lamy) (1 kW) ■ TUN UKR URS-AM URS-E URS-SEO (*) F (Algérie) (300 W) ■ F (S) (300 W) ■ I MDG (300 W) ■	AGL AZR CME (Douala) (750 W) ■ CPV D EGY GNP I MOZ POR SMF ■ STP TCD (Ft. Lamy) (1 kW) ■ URS-C URS-E URS-SEO (*) F (Argérie) (100 W) ■ F (Côte Occ.) (100 W) ■ MDG (100 W) ■	AFS BUL CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ S SMF ■ TCD ■ TCH TUN URS-C URS-E	AFS AUT AZR BLR BUL CAF ■ COG ■ CTI ■ D DAH ■ EGY ETH (500 W) F (ex. Argélie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ NOR POR TCD ■ URS-AM URS-C	CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ EGY F (Algérie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ SUI TCD ■ TGO ■ TUN URS-SEO (*) 1 (S) POR (400 W)

(*) Sur une base secondaire.

Région 2 — **Bande 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
B (E-57° W) CAN CHL (N.-33° S.) (300 W) CHL (S-33° S.) DOM (250 W) EQA (250 W) HWA MEX	ALS B (E-46° W e 3.° S-13° S) (300 W) BER (7) CAN (*) CHL (S-41° S) CUB (Guantananmo) (7) GRL GUB (7) IOB (7) PNZ PRG (250 W) PRU (250 W) PTR URG (100 W) USA	ARG BER (7) CAN (*) CLM GRL HWA USA	ALS (1 kW) ARG BER (7) CAN (*) CUB (Guantanamo) (7) GRL GUB (7) JOB (7) PNZ PTR USA	ALS BER (7) CAN (*) CUB (750 W) GDL ■ GRL GUF ■ HWA) MRT ■ NCG (300 W) PRU (250 W) URG USA (except. E-98° W & S-36° N)	ARG (S-45 S) B BOL (250 W) CAN GDL (300 W) ■ HWA MEX MRT (300 W) ■	BER (7) CAN CHL GRL HND (300 W) HWA PRG (100 W) URG (100 W) USA (except. Florida) USA (Florida (300 W) VEN (250 W)

Région 3 — **Bande 4700-4750 kHz**

4703,5	4710,5	4717,5	4724,5	4731,5	4738,5	4745,5
AUS (S) (500 W) CAR (7) CHN (Région 2) (1 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) INP (100 W) JON MAC (100 W) MDW MLA (2,5 kW) MRA (7) MRL (7) NZL (1 kW) PAK (E & N-W) (400 W) PHL (S) (400 W) SNG (2,5 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (5 kW) CBG (1 kW) CHN (7) (5 kW) FJI (1 kW) IND (350 W) INS (500 W) J (5 kW) JON (5 kW) LAO (1 kW) MDW (5 kW) MRA (7) (5 kW) MRL (7) (4 kW) NZL (1 kW) PHL (7) (5 kW) VTN (1 kW) WAK (5 kW)	AUS (5 kW) CLN (2,5 kW) HKG (2,5 kW) JON MDW MLA (2,5 kW) MRA (7) MRL (7) PAK (E) (400 W) PAK (Karachi) (1,5 kW) PHL (Cebu) (300 W) SNG (2,5 kW) WAK	AUS (S) (except. Brisbane) (500 W) CAR (7) (3 kW) CBG (1 kW) CHN (7) (3 kW) INP (100 W) INS (W-Java) (1 kW) J (3 kW) JON (3 kW) LAO (1 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PAK (400 W) PHL (7) (3 kW) TMP (100 W) VTN (1 kW) WAK (3 kW)	AUS (S) (500 W) CHN (3 kW) IND (except. Sadhiya) (350 W) INS (1 kW) JON MDW MRA (7) MRL (7) NCL (500 W) ■ NGN (1 kW) NHB (500 W) OCE (500 W) ■ WAK	AUS CAR (7) (1 kW) CHN (Régions 4, 5 & 6) (3 kW) FJI IND (S-30° N e W-90° E) (350) W) J (1 kW) JON MDW MLA (2,5 kW) MRA (7) (1 kW) MRL (7) NZL SNG (2,5 kW) WAK	AUS (5 kW) CBG 500 W) FJI (1 kW) IND (350 W) IRN (500 W) JON LAO (500 W) MDW MRA (7) MRL (7) NZL (1 kW) PHL (N) (400 W) VTN (500 W) WAK

Région 1 — **Bande 5680-5730 kHz**

5688	569,5	5703	5710.5	5718	5725,5
AGL ALB AZR BLR CPV D EGY G GNP MOZ POR STP URS-AM (500 W) URS-C (500 W) URS-E (500 W) URS-SEO (500 W)	AFS ARS (W-55° E) (500 W) CAF (S-5° N) (750 W) ■ CME (Douala) (750 W) ■ COG (750 W) ■ CTI (750 W) ■ CYP EGY G GAB (750 W) ■ GIB HVO (W-0°) (750 W) ■ IRQ KEN LBY MDG (N-20° S) (750 W) ■ MLI (W-0°) (750 W) ■ MLT MTN (750 W) SMB TCH URS-E URS-SEO (1 kW)	AZR BLR CAF ■ CME ■ COG ■ CTI ■ DAH ■ E EGY GAB ■ HOL HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ POR (100 W) SMF ■ TCD ■ TGO ■ URS-E URS-SEO (1 kW) YUG (*) F (Oran) (300 W) ■ MRC (6) (300 W)	AFS CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ GRC (100 W) HVO ■ IRQ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR POL REU ■ SMF ■ SYR TCD ■ TGO ■ TUN URS-AM (50 W)	AFS AUT BUL CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM URS-C URS-E URS-SEO (50 W)	AFS CAF (750 W) ■ CME (750 W) ■ COG (/50 W) ■ CTI (750 W) ■ DAH (750 W) ■ EGY GAB (750 W) ■ HVO (750 W) ■ I ISL MDG (N-20° S) (750 W) ■ MLI (750 W) ■ MTN (750 W) ■ NGR (750 W) ■ S TCD (S-12°N) (750 W) ■ UKR URS-C (1 kW) URS-E (*) F (Algérie) (300 W) ■ MCR (6) (300 W) POR (400 W)

(*) Sur une base secondaire.

Région 2 — **Bande 5680-5730 kHz**

5688	5695,5	5703	5710,5	5718	5725,5
ATN (500 W) ARG (S-36° S) CAN EQA (250 W) MEX PRG (250 W)	ALS (1 kW) ARG (S-41° S) BER (7) BOL CAN GRL USA VEN (N-5° N) (250 W)	ARG BOL (250 W) CAN CLM MEX	ALS B (E-55° W) CAN CHL CLM GDL (300 W) ■ GRL MRT (300 W) ■ USA	B CAN CHL (N-41° N) (300 W) CHL (S-41° S) CUB (400 W)	ALS B (except. N-8° S & W-47° W) (350 W) BER (7) CAN CHL CUB (Guantanamo) (7) GRL GUB (7) IOB (7) PNZ PTR URG (100 W) USA

Région 3 — **Bande 5680-5730 kHz**

5688	5695,5	5703	5710.5	5718	5725,5
AUS (500 W) CNH (Régions 4, 5 & 6) (1 kW) IND (S-30° N) (350 W) INS (Java & Sumatra) (1 kW) MRA (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (S) (400 W) WAK (1 kW)	AUS (5 kW) CLN (2,5 kW) FJI (1 kW) HKG (2,5 kW) MLA (2,5 kW) NZL (1 kW) PAK (500 W) SNG (2,5 kW)	AUS (S) (500 W) FJI (1 kW) IND (350 W) INS (500 W) IRN (500 W) MAC (100 W) NZL (1 kW) PHL (Cebu) (400 W) PHL (N) (400 W)	AUS (S) (500 kW) CHN (3 kW) INP (100 W) MLA (2,5 kW) PHL (S) (400 W) SNG (2,5 kW) TMP (100 W)	AUS (5 kW) CAR (7) (1 kW) CBG (500 W) CHN (7) (1 kW) FJI (1 kW) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NZL (1 kW) PAK (Karachi) PHL (7) (1 kW) VTN (500 W) WAK (1 kW)	AUS (1 kW) CAR (7) (1 kW) CBG (550 W) CHN (7) (1 kW) IND (350 W) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (1 kW) VTN (500 W) WAK (1 kW)

Région 1　**Bande 6685-6765 kHz**

6685 (A1)	6687,5 (A1)	6693	6700,5	6718	6715,5
AGL ARS (S-20° N) CPV D (81) GNP MOZ NOR POR STP SUI URS-AM URS-C URS-SEO	AFS ALB AZR EGY FNL G YUG	ARS BUL CYP EGY G GIB KEN LBY MLT SMB URS-SEO	ARS (2,5 kW) CYP D EGY G GIP KEN LBY MLT SMB URS-SEO (1 kW)	AFS CYP EGY G KEN LBY MLT SMB URS-E URS-SEO (1 kW) YUG	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ ISR (250 W) MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS
6723	6730,5	6738	6745,5	6753	6760,5
AFS EGY (1 kW) HOL MRC (7) URS-C (1 kW) URS-E (*) I (100 W)	AGL AZR CPV DNK (300 W) D ETH GNP ISL MOZ POR ROU STP SYR (300 W) URS-AM (500 W)	EGY (1 kW) G MRC (6) TCH URS-C (1 kW)	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY F ■ FNL GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E URS-SEO	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY (500 W) F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E	ARS (S-20° N) BLR CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TGO ■ TUN UKR URS-AM (1 kW) URS-C

(*) Sur une base secondaire.

Région 2　**Bande 6685-6765 kHz**

6685 (A1)	6687,5 (A1)	6693	6700,5	6708	6715,5
B CAN MEX	ALS NCG (300 W) URG (1 kW) USA	ARG CAN GDI ■ GUF ■ MEX MRT ■	ARG BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA JOB (7) PNZ PTR USA	B CAN CUB	B CAN MEX

6723	6730,5	6738	6745,5	6753	6760,5
ALS ARG BER (7) CAN CUB (Guanta-namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	ALS ARG BER (7) CAN CUB (Guanta-namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	ALS BER (7) CHL CLM (100 W) HND HWA URG (100 W) USA	BOL CAN CHL (S-33° S) (100 W) CUB GDL (100 W) ■ GUF (100 W) ■ MRT (100 W) ■	B CAN CHL (S-41° S) (300 W) MEX	ALS ARG ATN BER (7) HWA USA

Région 3 **Bande 6685-6765 kHz**

6685 (A1)	6687,5 (A1)	6693	6700,5	6708	6715,5
AUS (500 W) CBG (500 W) CLN HKG LAO (500 W) MLA SNG VTN (500 W)	AUS (S) (500 W) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (350 W) J (3 kW) JON (3 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (3 KW) WAK (3 kW)	AUS (5 kW) CLN FJI (1 kW) HKG IND (N-25° N & E-75° E) MLA NZL (1 kW) SNG	AUS (5 kW) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW) PAK (400 W) PHL (S) (400 W) SNG (2,5 kW)	AUS (S) (500 W) CLN (250 W) FJI (1 kW) INS (1 kW) MAC (100 W) NGN (1 kW) NZL (1 kW) PAK (1 kW)	AUS (except. Darwin) (500 W) CHN (Régions 4,5 & 6) (1 kW) FJI (1 kW) INS (Java) INP (100 W) NZL (1 kW) PHL (S) (400 W) TMP (100 W)

6723	6730,5	6738	6745,5	6753	6760,5
AUS (except. Pt Moresby) (1 kW) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (500 W) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2,5 kW) MRA (7) (3 kW) MRL (7) (3 kW) NZL (1 kW) PHL (7) (3 kW) SNG (2,5 kW) WAK (3 kW)	AUS (except. Pt Moresby) (5 kW) CAR (7) (3 kW) CHN (7) (3 kW) IND (S-30° N) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2,5 kW) MRA (7) (3 kW) MRL (7) (3 kW) PAP Pt Moresby (500 W) PHL (7) (3 kW) SNG (2,5 kW) WAK (3 kW)	AUS (1 kW) CLN (2,5 kW) CHN (3 kW) MLA (2,5 kW) NCL (1 kW) ■ NHB (1 kW) OCE PAK (Karachi) (400 W) SNG (2,5 kW)	AUS (except. Darwin) (5 kW) CBG (500 W) FJI (1 kW) IND (500 W) IRN (500 W) LAO (500 W) NZL (1 kW) PHL (400 W) VTN (500 W)	AUS (except. Brisbane & Pt Moresby (500 W) CAR (7) (1 kW) CBG (1 kW) CHN (7) (1 kW) IND (except. Sadhiya) (500 W) INS (Java) (500 W) J (1 kW) JON (1 kW) LAO (1 kW) MDW (1 kW) MRA (7) (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (1 kW) ■ NHB (1 kW) NZL (500 kW) OCE (1 kW) ■ PHL (Cebu) (400 W) VTN (1 kW) WAK (1 kW)	AUS (except. Darwin) (500 W) CAR (7) CHN (Régions 4, 5 & 6) (1 kW) INP (100 W) J JON MDW MLA (1 kW) MRA (7) MRL (7) SNG (1kW) TMP (100 W) WAK

Région 1 **Bande 8965-9040 kHz**

8967	8975,5	8984	8992,5	9001
AFS ARS CYP D EGY G GIB KEN LBY MLT SMB	AFS AZR ISR (100 W) MRC (7) (1 kW) URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM	AGL AZR CPV GNP MOZ POL (500 W) POR STP URS-E URS-SEO (50 W)	BLR CAF ■ CME ■ COG ■ EGY GAB ■ HOL MDG ■ NOR REU ■ TCD ■ (*) CTI (300 W) ■ DAH (300 W) ■ F (Oran) (100 W) ■ HVO (300 W) ■ MLI (300 W) ■ MRC (6) (300 W) MTN (300 W) ■ NGR (300 W) ■ TUN (100 W)

9009,5	9018	9026,5	9035
BUL CAF (500 W) ■ CME (500 W) ■ COG (500 W) ■ G GAB (500 W) ■ MDG (500) W) ■ REU (500 W) ■ TCD (500 W) ■ URS-SEO YUG (*) CTI ■ DAH ■ HVO ■ MLI ■ MTN ■ NGR ■	CAF ■ CME ■ COG ■ CIT ■ DAH ■ F ■ GAB HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN UKR	COC (Brazzaville) (400 W) ■ D EGY MLI (Dacar) (400 W) ■ MDG (400 W) ■ REU (400) ■ TCH URS-AM URS-C (*) MRC (6) (Rabat) (300 W)	DNK I MRC (7) POL

(*) Sur une base secondaire.

Région 2 **Bande 8965-9040 kHz**

8967	8975,5	8984	8992,5	9001
B CAN HWA MEX	ARG ATN USA (kW)	ALS ARG BER (7) CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CAN CHL GDL ■ GUF ■ MEX MRT ■	ALS B CUB (300 W) USA

9009,5	9018	9026,5	9035
B CAN MEX VEN (250 W) (*)	ALS BOL CHL (S-41° S) (300 W) CUB HWA	ALS ARG BER (7) CAN (1 kW) CUB (Guantanamo) (7) GRL (750 W) GUB (7) IOB (7) PNZ PTR USA	ALS CAN CHL CLM (300 W) URG (100 W) USA

(*) Stations d'aéronef seulement.

Région 3 **Bande 8965-9040 kHz**

8967	8975,5	8984	8992,5	9001
AUS CLN FJI HKG MDW MLA NZL SNG	AUS CBG CLN LAO VTN	AUS (500 W) CBG LAO MRL (7) VTN WAK	FJI IND PHL NZL	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHK WAK

9009,5	9018	9026,5	9035
FJI INS IRN NGN NZL	AUS (Darwin) (500 W) CHN JON (1 kW) MLA NCL ■ NHB OCE PAK (W) SNG	AUS (500 W) CAR (7) CHN (7) HKG INP J JON MDW MLA MRK (7) MRL (7) PHL SNG WAK	CAR (7) CHN (N) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHL (7) TMP WAK

Région 1 **Bande 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
AGL AZR CPV EGY GNP MOZ NOR POL POR (250 W) STP	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F (Algérie) ■ GAB ■ HVO ■ ISR (100 W) MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ URS	ARS CYP D EGY G GIB KEN LBY MLT SMB	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-SEO	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	D MRC (7) YUG (A3 seulement)

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
AFS URS	CYP (500 W) DNK EGY G GIB LBY MLT URS-AM URS-SEO	ETH (100 W) HOL UKR URS-AM URS-C URS-E URS-SEO	AZR D MRC (7) POR URS-E (500 W)	BUL ROU URS-AM URS-C URS-E
(*)			(*)	(*)
CTI (500 W) ■ DAH (500 W) ■ F (Algérie) (500 W) ■ HVO (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ TUN (500 W) ■			EGY (300 W)	CAF (500 W) ■ COG (500 W) ■ CTI (500 W) ■ DAH (500 W) ■ F (Algérie) (500 W) ■ GAB (500 W) ■ HVO (500 W) ■ MDG (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ REU (500 W) ■ TCD (500 W) ■

(*) Sur une base secondaire.

Région 2　　**Bande 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
ALS ARG ATN CLM USA	CAN (1 kW) CHL MEX	B BER (7) HWA USA	ARG CAN CUB	ALS ARG BER (7) CAN GDL ■ GRL GUF ■ HWA MRT ■ USA	ALS BER (7) CAN CHL CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
ARG BER (1 kW) (7) CAN (1 kW) MEX	B CAN (350 W) MEX (400 W)	B USA	ALS ARG BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	B CAN MEX (400 W)

Région 3　　**Bande 11 175-11 275 kHz**

11 180,5	11 190	11 199,5	11 209	11 218,5	11 228
CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS	AUS CLN HKG MDW MLA SNG	AUS CBG LAO VTN	CBG LAO MDW NCL ■ NHB OCE ■ VTN	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHL (7) WAK

11 237,5	11 247	11 256,5	11 266	11 273 (A1)
AUS (500 W) PHL	AUS CLN HKG MLA SNG	CHN (N-30-N) INS	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	PHL

Région 1 **Bande 13 200-13 260 kHz**

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
ARS CYP D EGY G GIB KEN LBY MLT SMB	D EGY MRC (7) (*) CAF (Bangui) (1 KW) ■ CME (Douala) (1 KW) ■ COG (Brazzaville) (1 kW) ■ MDG (1 kW) ■ MLI (Dacar) (1 kW) ■ REU (1 kW) ■	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F (Algérie) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS (300 W)	AUT CAF ■ CME ■ COG ■ CTI ■ D DAR ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (100 W)	CAF (Bangui) (750 W) ■ CME (Douala) (750 W) COG (Brazzaville) (750 W) MDG (750 W) ■ MLI (Dakar) (1 kW) ■ POL REU (750 W) ■ URS	AGL AZR CPV GNP HOL MOZ NOR POR ROU STP

(*) Sur une base secondaire.

Région 2 **Bande 13 200-13 260 kHz**

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
ALS ARG ATN (300 W) HWA (1 KW) MEX	ALS ARG (300 W) BER (7) CAN CUB (Guantanamo (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B CAN (350 W) CUB (350 W)	ALS ARG (300 W) BER (300 W) (7) CAN (400 W) (*) CUB (Guantanamo (7) GDL ■ GRL (300 W) GUB (7) GUF ■ IOB (7) MRT ■ PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) USA	ARG CAN HWA MEX

Région 3 **Bande 13 200-13 260 kHz**

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
AUS CLN HKG JON (1 kW) MDW (1 kW) MLA SNG	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK WAK	AUS (500 W) CBG (100 W) LAO (100 W) VTN (100 W)	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL WAK	IND JON MDW NGN

Région 1 **Bande 15 010-15 060 kHz**

15 016	15 026	15 036	15 046	15 056
D MRC (7)	AGL AZR CPV GNP MOZ STP URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ REU ■ TCD ■ URS	ETH (250 W) G	AFS MRC (7) NOR
		(*) F (Algérie) (200 W) ■ MRC (6) (200 W)		

(*) Sur une base secondaire.

Région 1 **Bande 15 060-15 100 kHz**

15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (50 W) URS-SEO	AUT ■ CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	DNK POL (500 W) URS	G URS-SEO	HOL

Région 2 **Bande 15 010-15 100 kHz**

15 016	15 026	15 036	15 046	15 056
ALS ARG (S-30° S) (300 W) BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL MEX (N-19° N) (400 W)	B CAN GRL MEX (N-19° N) (300 W)	ALS ARG CUB (300 W)	ALS ARG (300 W) BER (7) USA
15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
BER (7) CHL (300 W) CUB (Guantanamo) (7) GUB (7) IOB (7) PNZ PTR USA	ALS ARG (300 W) USA	B (S-5° S & E-55° W) (300 W) HWA (1 kW) MEX	B) MEX (N-19° N) (300 W)	ALS ARG (300 W) ATN USA

Région 3 **Bande 15 010-15 100 kHz**

15 016	15 026	15 036	15 046	15 056
CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INP MAC TMP		AUS PAK	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK
15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
AUS CBG (50 W) (1) LAO (50 W) (1) VTN (50 W) (1)	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (50 W)	PHL (300 W)	INS (*) CHN (250 W)

(1) Stations d'aéronef seulement.

(*) Sur une base secondaire.

Région 1　　**Bande 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
AGL AZR CPV D GNP I MOZ MRC (7) STP URS (50 W)	ARS CYP D EGY G GIB KEN LBY MLT SMB	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	POL URS	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MRC (7) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	URS

Région 2　　**Bande 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
ALS ARG (300 W) BER (7) CAN GRL HWA (1 kW) USA	ALS B	ALS ARG GDL ■ GUF ■ MRT ■	ARG MEX	ALS BER (7) CAN CHL (300 W) CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) GRL (1 kW) USA (1 kW)

Région 3　　**Bande 17 970-18 030 kHz**

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
INP MAC TMP	AUS CLN HKG MLA PAK SNG	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (400 W)	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS

Région 1 **Bande 3900-3950 kHz**

3904	3911	3918	3925	3932	3939	3946
AFS CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algérie) ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN URS-AM URS-E URS-SEO (1 W) YUG	BLR (500 W) CAF ■ COG ■ CTI ■ DAH ■ EGY ■ F (except. Algérie) ■ G GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ URS-E URS-SEO YUG	AFS ALB EGY F ■ G MRC (6) UKR (500 W) URS-AM URS-E URS-SEO	AZR D EGY F (except. Algérie) ■ G MLT POR URS-E URS-SEO	AFS AUT CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ F (Algérie) ■ G GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN URS-E URS-SEO (*) ROU (W-25° E) (100 W)	D (81) E (500 W) G (N-52° N) GRC (250 W) POL URS-C URS-SEO	AFS F ■ GRC (250 W) MRC (6) NOR POL URS-E URS-SEO

(*) Sur une base secondaire.

B) Bandes partagées (1)

Région 1 **Bande 3155-3200, 3200-3230 & 3800-3900 kHz**

3861	3867	3873	3874	3879	3891	3897
CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	G MLT	CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	AGL CPV F (except. Algérie) ■ GNP MOZ NOR POR STP	G MLT

(1) Les assignations correspondent à celles figurant dans les listes Régionales de l'UIT.

Région 2 **Bande 2505-2850, 3155-3200 & 3200-3950 kHz**

Par accords régionaux

Région 3 **Bande 3155-3200, 3200-3230 & 3900-3950 kHz**

3155-3200
Par accords régionaux

A	B	C	D	E
AUS (5 kW) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■	AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW)	AUS (S) (500 W) INP (100 W) MAC (100 W) PHL (S) (300 W)	AUS (500 W) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■	AUS (500 W) CLN (2,5 kW) HKG (2,5 kW) MLA (2,5 kW)

3155-3200 Par accords régionaux				
A	B	C	D	E
NHB (1 kW) OCE (1 kW) ■ PHL (N) (300 W) VTN (1 kW)	PHL (S) (300 W) SNG (2,5 kW)	TMP (100 W)	NHB (1 kW) OCE (1 kW) ■ PHL (N) (300 W) VTN (1 kW)	PHL (S) (300 W) SNG (2,5 1 W)

3200-3230 Par accords régionaux	3900-3950			
	3920	3923	3930	3937
AUS (500 W) PHL (N) (300 W)	AUS	PHL (S) (300 W)	AUS PHL (S) (300 W)	AUS PHL (N) (300 W)

C) Bandes partagées (fréquences non alloties)

Région 1 **Bande 4750-4850 kHz**

A	B	C	D	E
EGY G MLT ROU (Bucarest) (500 W)	G I MRC (6)	EGY F (Algérie) ■ G YUG	EGY F (except. Algérie) ■ MRC (6)	F ■ MRC (6) S TUN

Région 2 **Bande 4438-4650 kHz**

A	B	C	D	E	F	G
ARG (S-45° S) B CAN MEX	ALS ARG BER (7) CAN CUB (Guanta-namo) (7) GRL GUB (7) HWA IOB (7) PNZ PRT USA	ALS ARG B (N-10° S & E-50° W) CLM USA	B (except. S-Rio Grande) CAN CHL CUB (E-Santa Clara) (500 W) MEX	B CAN CHL (S-35° S) MEX	ALS ARG BER (7) CAN CUB (Guanta-namo) (7) GUB (7) HWA IOB (7) PNZ PTR USA	ALS ARG B (N-15° S) GDL ■ HWA MRT ■ NCG USA

Région 1 **Bande 5430-5480 kHz**

A	B	C
AZR EGY HOL POR YOG	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ ROU (100 W) SMF ■ TCD ■ TGO ■ TUN	G I (S-40° N) (100 W) SUI
(*) F (Algérie) (100 W) ■ F (S & W) (100 W) ■ MRC (6) (100 W) TUN (100 W)		

(*) Sur une base secondaire.

Région 3 **Bande 5430-5480 kHz**

A	B	C
AUS CLN FJI HKG MLA NZI PAK PHI (S) SNG	CBG (500 W) IND (500 W) INS (500 W) LAO (500 W) MAC (100 W) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (200 W) TMP (100 W) VTN (500 W)	AUS (500 W) CAR (7) CHN (1 kW) INP (100 W) J JON MDW MRA (7) MRL (7) PHL (7) WAK

Région 1 **Bande 23 200-23 350 kHz**

A	B	C	D	E
CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	D MRC (7)	F ■	D MRC (7)

Région 2 **Bande 23 200-23 350 kHz**

A	B	C	D	E	F
ARG	ALS ATN HWA SUR	ALS BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	ALS HWA	ALS BER (7) CAN CUB (Guantanamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL HWA

Région 3 **Bande 23 200-23 350 kHz**

A	B	C	D	E	F
CBG LAO VTN	INS JON MDW	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK

APÊNDICE 27 Aer2

Plan d'allotissement de fréquences pour le service mobile aéronautique (R) et renseignements connexes

(Voir l'article 50 du Règlement des radiocommunications)

PARTIE I

Dispositions générales

SECTION I

Définitions

1. Plan d'allotissement de fréquences.

27/1 Plan qui indique les fréquences à utiliser dans une zone, sans préciser les auxquelles ces fréquences peuvet être assignées.

27/2 2. Signification de la terminologie employée dans le présent appendice pour les de méthodes de répartition des fréquences:

Répartition des fréquences à des	En français	En anglais	En espagnol
Services	Attribution (attribuer)	Allocation (to allocate)	Atribución (atribuir)
Zones	Allotissement (allotir)	Allotment (to allot)	Adjudicación (adjudicar)
Stations	Assignation (assigner)	Assignment (to assign)	Asignación (asignar)

27/3 3. *Une ligne aérienne mondiale principale* est une ligne de grande longueur, comprent un ou plusieurs tronçons, dont le caractère est essentiellement international, qui s'étendre plusieurs pays et qui exige des communications à longue distance.

27/4 4. *Une zone de passage des lignes aériennes mondiales principales* (ZLAMP) est un englobant un certain nombre de lignes aériennes mondiales principales qui suivent général un même courant de trafic et qui sont géographiquement assez voisines pour pouvoir être des logiquement à l'aide des mêmes familles de fréquences.

27/5 5. *Les lignes aériennes régionales et nationales* sont toutes les lignes aériennes utilisant le service mobile aéronautique (R) qui n'entrent pas dans la définition des lignes aériennes mondiales principales donnée au numéro **27/3.**

27/6 6. *Une zone des lignes aériennes régionales et nationales* (ZLARN) est une zone englobant un certain nombre de lignes aériennes définies au numéro **27/5.**

27/7 7. *Une zone d'allotissement VOLMET* est une zone dont les limites englobent tous les points où une installation destinée à des diffusion sur ondes décamétriques peut être appelée à émettre à l'aide d'une famillie de fréquences allotie à la zone en question.

27/8 8. *Une zone de réception VOLMET* est une zone à l'intérieur de laquelle les aéronefs doivent pouvoir recevoir les émissions d'une ou plusieurs stations situées dans la zone d'allotissement VOLMET à laquelle elle est associée.

27/8A 8-A. *Une zone mondiale d'allotissement* est une zone à laquelle sont alloties des fréquences permettant l'établissement de communications à grande distance entre une station aéronautique située dans cette zone et un aéronef en service n'importe où dans le monde (1).

27/8A.1 (1) Le type de communications auxquelles se référe le numéro **27/8A** peut faire l'objet d'une réglementation par les administrations.

27/9 9. *Une fanilie de fréquences du service mobile aéronautique (R)* se compose de deux fréquences ou plus choisies dans différentes bandes du service mobile aéronautique (R) et destinées à l'établissement des communications dans la zone d'utilisation (voir les numéros **27/189** à **27/207A**, quelles que soient les heures, entre les stations d'aéronef et les stations aéronautiques correspondantes.

SECTION II

Principes techniques et d'exploitation appliqués pour l'établissement du Plan d'allotissement de fréquences pour le service mobile aéronautique (R)

A) Caractéristiques et utilisation des voies

1. *Espacements entre fréquences.*

27/10 1.1. L'espacement entre fréquences porteuses (fréquences de référence) est de 3 kHz. Cet espacement est suffisant pour des systèmes de communication utilisant les classes d'émission mentionnées aux numéros **27/49** à **27/52** dans les bandes de fréquences comprises entre 2850 kHz et 22 000 kHz attribuées en exclusivité au service mobile aéronautique (R). La fréquence porteuse (fréquence de référence) des voies figurant dans les Plan doit être un multiple entier de 1 kHz.

27/11 1.2. Pour les émissions radiotélephoniques, les fréquences audibles ont pour limites 300 et 2700 Hz; pour les autres classes d'émission autorisées, la largeur de bande occupée ne dépasse pas la limite supérieure des émissions de classe A3J. Toutefois, la spécification de ces limites n'implique aucune restriction quant à leur extension en ce qui concerne les émissions autres que celles de la classe A3J, á condition que les limites relatives aux émissions non désirées soient respectées (voir les numéros **27/66B** et **27/66C**).

27/11A *Note — Pour les types d'émetteur de station d'aéronef et de station aéronautique installés pour la première fois avant le 1er février 1983, les fréquences audibles sont limitées à 3000 Hz.*

27/11B 1.3. En raison des brouillages possibles, une voie donnée ne devraient pas être utilisée dans la même zone d'allotissement pour la radiotéléphonie et la transmission de données.

27/12 1.4. Afin d'éviter les brouillages nuisibles susceptibles de résulter de l'emploi simultané d'une même voie pour des émissions de classes différents, l'utilisation, pour les diverses classes d'émission autres que A3J et A2H, des voies dérivées des fréquences indiquées au numéro **27/16** doit faire l'objet d'arrangements particuliers entre les administrations intéressées et celles dont les services susceptibles d'être défavorablement influencés.

27/13 SUP

27/14 1.5. Pour éviter des brouillages possibles, les voies adjacentes dérivées des fréquences indiquées dans le tableau (numéro **27/16**) n'ont pas, en règle générale, été alloties aux mêmes ZLAMP, ZLARN ou zones VOLMET. Toutefois, pour satisfaire à des besoins particuliers, les administrations intéressées peuvent conclure des arrangements particuliers pour des assignations de voies adjacentes dérivées des fréquences indiquées dans ledit tableau.

27/15 1.6. Les arrangements visés aux numéros **27/12** et **27/14** sont conclus em vertu des dispositions des articles de la Convention internationale des télécommunications et du Règlement des radiocommunications intitulés «Arrangements particuliers» (1).

2. *Fréquences alloties.*

27/16 On trouvera dans le tableau ci-après la liste des fréquences porteuses (fréquences de référence) alloites dans les bandes attribuées en exclusivité au service mobile aéronautique (R), sur la base des espacements entre fréquences spécifiés au numéro **27/10** (2).

---

(1) Note de secrétariat général: L'article pertinent du Règlement des radiocommunications est maintenant l'article 7, intitulé «Accords particuliers».

27/16.1 (2) Pour le calcul de la fréquence assignée par rapport à une fréquence porteuse (fréquence de référence) figurant dans le tableau, voir les numéros **27/12**, **27/72B** et **27/73**.

kHz

2850–3025	4650–4700	6525–6685	10 005–10 100	13 260–13 360
2 851 2 938 2 854 2 941 2 857 2 944 2 860 2 947 2 863 2 950 2 866 2 953 2 869 2 956 2 872 2 959 2 857 2 962 2 878 2 965 2 881 2 968 2 884 2 971 2 887 2 974 2 890 2 977 2 893 2 980 2 896 2 983 2 899 2 986 2 902 2 989 2 905 2 992 2 908 2 995 2 911 2 998 2 914 3 001 2 917 3 004 2 920 3 007 2 923 3 010 2 926 3 013 2 929 3 016 2 932 3 019 2 935 – } 57 voies 3 023 (R) et (OR)	4 651 4 675 4 654 4 678 4 657 4 681 4 660 4 684 4 663 4 687 4 666 4 690 4 669 4 693 4 672 4 696 } 16 voies	6 526 6 607 6 529 6 610 6 532 6 613 6 535 6 616 6 538 6 619 6 541 6 622 6 544 6 625 6 547 6 628 6 550 6 631 6 553 6 634 6 556 6 637 6 559 6 640 6 562 6 643 6 565 6 646 6 558 6 649 6 571 6 652 6 574 6 655 6 577 6 658 6 580 6 661 6 583 6 664 6 586 6 667 6 589 6 670 6 592 6 673 6 595 6 676 6 598 6 679 6 601 6 682 6 604 – } 53 voies	10 006 10 054 10 009 10 057 10 012 10 060 10 015 10 063 10 018 10 066 10 012 10 069 10 024 10 072 10 027 10 075 10 030 10 078 10 033 10 081 10 036 10 084 10 039 10 087 10 042 10 090 10 045 10 093 10 048 10 096 10 051 – } 31 voies	13 261 13 312 13 264 13 315 13 267 13 318 13 270 13 321 13 273 13 324 13 276 13 327 13 279 13 330 13 282 13 333 13 285 13 336 13 288 13 339 13 291 13 342 13 294 13 345 13 297 13 348 13 300 13 351 13 303 13 354 13 306 13 357 13 309 – } 33 voies
3400-3500	5450-5480	8815-8965	11 275-11 400	17 900-17 970
3 401 3 452 3 404 3 455 3 407 3 458 3 410 3 461 3 413 3 464 3 416 3 467 3 419 3 470 3 422 3 473 3 425 3 476 3 428 3 479 3 431 3 482 3 434 3 485 3 437 3 488 3 440 3 491 3 443 3 494 3 446 3 497 3 449 – } 33 voies	Região 2 5 451 5 466 5 454 5 469 5 457 5 472 5 460 5 475 5 463 – } 9 voies	8 816 8 891 8 819 8 894 8 822 8 897 8 825 8 900 8 828 8 903 8 831 8 906 8 834 8 909 8 837 8 912 8 840 8 915 8 843 8 918 8 846 8 921 8 849 8 924 8 852 8 927 8 855 8 930 8 858 8 933 8 861 8 936 8 864 8 939 8 867 8 942 8 870 8 945 8 873 8 948 8 876 8 951 8 879 8 954 8 882 8 957 8 885 8 960 8 888 – } 49 voies	11 276 11 339 11 279 11 342 11 282 11 345 11 285 11 348 11 288 11 351 11 291 11 354 11 294 11 357 11 297 11 360 11 300 11 363 11 303 11 366 11 306 11 369 11 309 11 372 11 312 11 375 11 315 11 378 11 318 11 381 11 321 11 384 11 324 11 387 11 327 11 390 11 330 11 393 11 333 11 396 11 336 – } 41 voies	17 901 17 937 17 904 17 940 17 907 17 943 17 910 17 946 17 913 17 949 17 916 17 952 17 919 17 955 17 922 17 958 17 925 17 961 17 928 17 964 17 931 17 967 17 934 – } 23 voies
	5480-5680			21 924-22 000
	5 481 5 580 5 484 5 583 5 487 5 586 5 490 5 589 5 493 5 592 5 496 5 595 5 499 5 598 5 502 5 601 5 505 5 604 5 508 5 607 5 511 5 610 5 514 5 613 5 517 5 616 5 520 5 619 5 523 5 622 5 526 5 625 5 529 5 628 5 532 5 631 5 535 5 634 5 538 5 637 5 541 5 640 5 544 5 643 5 547 5 646 5 550 5 649 5 553 5 652 5 556 5 655 5 559 5 658 5 562 5 661 5 565 5 664 5 568 5 667 5 571 5 670 5 574 5 673 5 577 5 676 } 66 voies 5 680 (R) et (OR)			21 925 21 964 21 928 21 967 21 931 21 970 21 934 21 973 21 937 21 976 21 940 21 979 21 943 21 982 21 946 21 985 21 949 21 985 21 952 21 991 21 995 21 994 21 958 21 997 21 961 – } 25 voies

27/17 à 27/19 SUP

27/20 4. L'Organisation de l'aviation civile internationale (OACI) assure la coordination internationale des radiocommunications du service mobile aéronautique (R). Cette Organisation devrait être consultée, dans tous les cas appropriées, pour utiliser, en exploitation, les fréquences prévues dans le Plan.

5. *Adaptation de la procédure d'allotissement.*

27/21 Le plan d'allotissement contenu dans de présent appendice n'épuise évidemment pas toutes les possibilités de partage. Aussi, afin de faire face à des besoins particuliers d'exploitation auxquels ce Plan ne satisfait pas d'une autre maniére, les administration peuvent assigner des fréquences des bandes du service mobile aéronautique (R) dans des zones aurtres que celles auxquelles elle sont alloties dans le Plan. Toutefois, l'utilisation des fréquences ainsi assignées ne doir pas diminuer au-dessous de la valeur déterminées en appliquent la procédure prévue pour le service (R) à la section IIB de la partie I du présent appendice, la protection dont elles bénéficient dans les zones où elles sont alloties dans le Plan.

27/22 6. Lorsqu'il est nécessaire de satisfaire les besoins de l'exploitation des lignes aériennes internationales, les administrations peuvent adapter la procédure d'allotissement pour assigner des fréquences du service mobile aéronautique (R); ces assignations font l'objet d'un accord préalable de la part des administrations dont les services peuvent être défavorablement influencés.

27/23 7. On a recours à la coordination décrite au numéro **27/20** lorsqu'il est opportun et souhaitable de le faire pour utiliser rationnellement les fréquences en question, et notamment dans les cas où les procédures spécifiées au numéro **27/22** ne sont pas satisfaisantes.

B) Courbes indiquant les portées de brouillage

27/24 1. *Dispositions générales.*

27/24A 1.1. *Portée utile.*

En raison de certains facteurs (puissance de l'émetteur, affaiblissement de propagation, niveau de bruit, etc.), il existe une limite en ce qui concerne les distances auxquelles on peut établir des communications fiables entre une station aéronautique et une station d'aéronef. Cette distance limite, fondée sur le trajet de propagation le plus défavorable, est appelée «portée utile». On admet souvent que la distance limite est la limite de la zone des lignes aériennes.

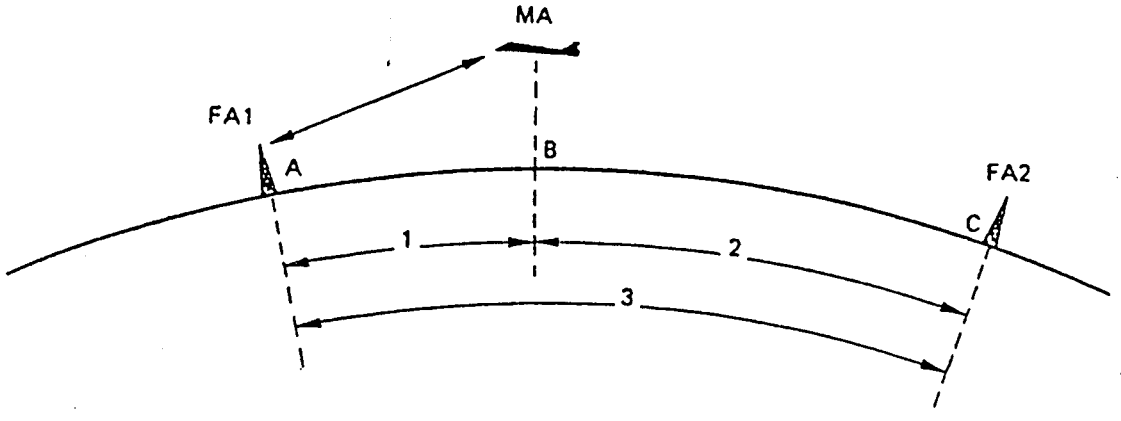
27/24B 1.2. *Portée de brouillage.*

Il s'agit de la distance minimale entre la limite de portée utile de l'émission désirée et la station susceptible de causer des brouillages, qui assure un rapport signal utile/signal brouilleur de 15 dB. Ce rapport de protection est établi entre le signal désiré reçu par une station d'aéronef à la limite de la portée utile et le signal provenant d'une station aéronautique que, émettant sur la même fréquence, est susceptible de causer des brouillages. La portée de brouillage a été calculée pour différentes fréquences indiquées dans les tableaux figurant aux numéros **27/39** à **27/48**, dans des conditions de propagation diurne et nocturne, à des latitudes moyennes, pour une activité solaire moyenne et pour une puissance apparente rayonnée moyenne de 1 kW pour la station aéronautique.

27/24C 1.3. *Distance de répétition.*

Il s'agit de la distance à laquelle on peut partager une fréquence; cette distance équivaut à la somme de la portée utile et de la portée de brouillage.

27/24D 1.4. La figure 1 illustre l'utilisation du concept de la portée de brouilalge lors de la planification des fréquences basée sur lar détermination de la distance de répétition.



FA1 = station aéronautique en communication avec la station d'aéronef MA.
FA2 = station aéronautique en communication avec des stations d'aéronef autres que la station MA.
MA = station d'áeronef en communication avec la station aéronautique FA1.
1 = portée utile AB.
2 = portée de brouillage CB.
3 = distance de répétition AC.

Figure 1 — Portée utile, portée de brouillage, distance de répétition

27/24E 1.5. Les calques utilisés dans le présent appendice indiquent, pour les fréquences mentionnées, la portée de brouillage, définie au numéro **27/24B**, entre une station aéronautique qui cause du brouillage et une station d'aéronef fonctionnant à la limite de sa portée utile. En raison de la variation des conditions de propagation non seulement d'heure en heure pendant les périodes de jour et de nuit, mais également de jour en jour, selon la saison, le niveau d'activité solaire, et le lieu géographique, on peut s'attendre à une variation notable du rapport de protection de 15 dB; par conséquent, une plus grande protection peut être assurée la plupart du temps, spécialement lorsque l'aéronef ne fontionne pas à la limite pas de sa portée utile.

27/24F 1.6. On trouve dans la documentation technique publiée par l'IFRB (par exemple, dans les textes du cycle d'études de l'IFRB sur la gestion des fréquences et l'utilisation du sprectre des fréquences: Document N° 11/76 ou révisions) des renseignements supplémentaires sur la portée utile, la portée de brouillage, la distance de répétition ainsi que sur l'utilisation des calques.

27/25 1.7. Il existe deux types de calques á utiliser respectivement avec les planisphères e projection de Mercator et avec les cartes en projection azimutale à surfaces égales le Lambert pour les zones polaires. Les calques pour cartes en projection de Mercator s'étendent sur les régions comprises entre 60° de latitude nord et 60° de latitude sud. Les calques pour cartes en projection de Lambert s'étendent sur les régions situées au nord de 30° N et au sud de 30° S. Les cartes en projection de Lambert recouvrent les cartes en projection de Mercator entre les parallèles 30° N et 60° N et les parallèles 30° S et 60° S. Ces recouvrements servent à assurer la continuité entre les calques des deux systèmes.

2. *Types de cartes utilisées.*

27/26 Les calques mentionnés aux numéros **27/24E** et **27/25** ne peuvent être utilisés que sur un planisphère ou une carte polaire dont la projection et l'échelle sont identiques à celles indiquées sur chacun des calques. Ils ne doivent donc pas être utilisés sur des cartes qui ne seraient pas conformes à ces définitions. Les planisphères et les cartes polaires à utiliser avec le présente appendice sur lesquels figurent les limites des ZLAMP, celles des ZLARN et celles des zones VOLMET, sont établis à l'échelle qui permet d'utiliser les calques directement. Les zones d'aurore sont représentéss sir les cartes polaires.

3. *Changement d'échelle ou de système de projection.*

27/27 3.1. Si l'on désire utiliser d'autres cartes avec une échelle ou une projection différente, il est nécessaire de dessiner, à partir des coordonnées qui figurent dans les tableaux ci-après, de nouvelles courbes pour tenir compte du changement d'échelle ou de projection.

27/28 3.2. En desinnant les nouvelles courbes, le point d'intersection de l'axe vertical des symètrie, c'est-à-dire un méridien, et de l'axe perpendiculaire représentant un parallèle, doit être à la laitude 00° pour la courbe 00°, 20° N pour la courbe 20°, 40° N, pourla courbe 40°, etc.

27/29 3.3. Les coordonnées géographiques qui apparaissent dans les tableaux qui figurent aux numéros **27/39** à **27/48** sont données par rapport au méridien 180° pris comme axe de symétrie pour la construction des courbes.

4. *Conditions de partage entre les zones.*

4.1. *Bandes comprises entre 3 MHz et 11,3 Mhz..*

27/30 4.1.1. Les calques sont établis dans les conditions de partage suivantes:

Zones	Bandes comprises entre (MHz)	Conditions de partage
Entre deux ZLAMP ou deux zones VOLMET ou entre une ZLAMP et une zone VOLMET.	3 et 6,6 9 et 11,3	Propagation nocturne. Propagation diurne. *Note.* — Il est adminis que les conditions de partage sont les mêmes pour 6,6 MHz et pour 5,6 MHz.
Entre une ZLAMP ou une zone VOLMET et une ZLARN.	3 e 5,6 6,6 e 11,3	Propagation nocturne. Propagation diurne.
Entre deux ZLARN	3 e 4,7 5,6 e 11,3	Propagation nocturne. Propagation diurne.

27/31 4.1.2. Des courbes supplémentaires permettent de déterminer les possibilités de répétition des fréquences des bandes des 3 MHz, 3,5 MHz et 4,7 MHz, lorsqu'elles sont utilisées de jour.

4.2. *Bandes comprises entre 13 MHz et 22 MHz.*

27/31A 4.2.1. Le Plan d'allotissement révisé pour les bandes des 13 MHz, 18 MHz et 22 MHz est uniquement fondé sur la protection pendant le jour. Il en résulte les possibilités de partage suivantes:

27/31B 4.2.2. Le facteur de répétition est au moins égal à 3, pour la bande des 13 MHz et égal à 4 pour les bandes des 18 MHz et 22 MHz. Il est à noter que l'on pourrait réduire la séparation en longitude, pour permettre une répétition de 4 (à 13 MHz) et de 6 (à 18 MHz et 22 MHz) compte tenu des conditions d'exploitation et des circonstances locales;

27/31C 4.2.3. Le partage se fait en fonction des emplacements probables des stations aéronautiques et non en fonction des limites de zones.

5. Mode d'emploi des calques pour les bandes comprises entre 3 MHz et 11,3 MHz.

27/32 5.1. Prendre l'une des cartes des ZLAMP, des ZLARN ou des zones VOLMET à utiliser avec le présent appendice et choisir le calque correspondant à l'ordre de grandeur de la fréquence et aux conditions de partage que l'on désire étudier.

27/33 5.2. Les cartes et calques en projection de Lambert sont à utiliser pour les zones polaires situées au nord de 60° N et au sud de 60° S; les cartes et calques en projection de Mercator sont à utiliser entre 60° N et 60° S.

27/34 5.3. Placer le centre du calque (c'est-à-dire l'intersection de l'axe de symétrie et de l'axe horizontal) sur la ligne qui délimite la zone (utiliser la ligne qui délimite la zone de réception dans le cas VOLMET), au point de cette ligne qui est le plus rapproché de l'émetteur susceptible de causer des brouillages, ou sur l'emplacement de l'émetteur susceptible de causer des brouillages. Noter la latitude du point choisi et utiliser la courbe de portée de brouillage correspondant à cette latitude.

27/35 5.4. Pour tout émetteur situé en un point quelconque à l'extérieur de la courbe, le rapport de protection défini au numéro **27/24B** sera supérieur à 15 dB.

27/36 5.5. Pour tout émetteur situé en un point à l'intérieur de la courbe, le rapport de protection obtenu sera inférieur à 15 dB. Cependent, si l'émetteur est situé à l'intérieur de la courbe et si le trajet de propagation traverse une zone d'aurore, il est admis que l'affaiblessiment du signal á l'intérieur de cette zone conduit à un rapport de protection supérieur à 15 dB.

27/37 5.6. L'orientation des calques en projection de Mercator est telle qu'ils sont utilisables pour l'hémisphere nord; pour l'hémisphère sud, ils doivent être renversés. C'est une précaution qu'il convient de prendre lorsqu'il s'agit de suivre les limites de zones qui passent d'un hémisphere à l'autre.

27/38 SUP

27/39 **3,0 et MH, 3,5 MHz, jour — Eléments pour le tracé des courbes de brouillage à 700 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	6,3	180,0	16,3	180,0	26,3	180,0	36,3	180,0	46,3
	178,9	6,2	178,9	16,2	178,8	26,2	178,6	36,2	178,4	46,2
	177,8	5,9	177,8	15,9	177,6	25,9	177,3	35,9	176,9	45,9
	176,8	5,5	176,7	15,4	176,5	25,4	176,1	35,4	175,5	45,4
	175,9	4,8	175,8	14,8	175,5	24,8	175,1	34,7	174,3	44,7
	175,2	4,0	175,0	14,0	174,7	24,0	174,2	33,9	173,3	43,9
	174,5	3,1	174,4	13,1	174,1	23,0	173,5	33,0	172,5	42,9
	174,1	2,2	173,9	12,1	173,6	22,0	173,0	32,0	172,0	41,9
	173,8	1,1	173,7	11,0	173,4	21,0	172,8	30,9	171,8	40,8
	173,7	0,0	173,6	9,9	173,3	19,9	172,7	29,8	171,8	39,7
	173,8	- 1,1	173,7	8,8	173,4	18,8	172,9	28,7	172,0	38,6
	174,1	- 2,2	174,0	7,8	173,8	17,7	173,3	27,7	172,5	37,6
	174,5	- 3,1	174,5	6,8	174,3	16,8	173,9	26,7	173,2	36,6
	175,2	- 4,0	175,2	5,9	175,0	15,9	174,6	25,8	174,1	35,8
	175,9	- 4,8	175,9	5,2	175,8	15,1	175,5	25,1	175,1	35,1
	176,8	- 5,5	176,8	4,5	176,8	14,5	176,5	24,5	176,2	34,5
	177,8	- 5,9	177,8	4,1	177,8	14,1	177,6	24,1	177,4	34,0
	178,9	- 6,2	178,9	3,8	178,9	13,8	178,8	23,8	178,7	33,8
	180,0	- 6,3	180,0	3,7	180,0	13,7	180,0	23,7	180,0	33,7

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	56,3	180,0	66,3	180,0	76,3	180,3	86,3	Toutes longitudes	83,7
	178,0	56,2	177,3	66,2	175,4	76,2	163,9	86,1		83,7
	176,2	55,9	174,7	65,8	171,2	75,8	152,2	85,4		83,7
	174,5	55,3	172,5	65,3	167,7	75,1	145,2	84,5		83,7
	173,0	54,6	170,6	64,5	164,9	74,3	141,9	83,4		83,7
	171,8	53,8	169,1	63,6	162,9	73,4	140,8	82,4		83,7
	171,0	52,8	168,1	62,7	161,8	72,3	141,3	81,3		83,7
	170,4	51,8	167,1	61,6	161,3	71,2	142,8	80,2		83,7
	170,2	50,7	167,3	60,5	161,5	70,1	144,9	79,2		83,7
	170,3	49,6	167,5	59,4	162,1	69,1	147,6	78,2		83,7
	170,6	48,5	168,1	58,3	163,2	68,0	150,5	77,3		83,7
	171,2	47,5	169,0	57,4	164,6	67,1	153,8	76,5		83,7
	172,1	46,6	170,1	56,4	166,4	66,2	157,3	75,8		83,7
	173,1	45,7	171,4	55,6	168,3	65,5	160,8	75,2		83,7
	174,3	45,0	172,9	55,0	170,4	64,9	164,6	74,6		83,7
	175,6	44,5	174,6	54,4	172,7	64,4	168,4	74,2		83,7
	177,0	44,0	176,3	54,0	175,1	64,0	172,2	73,9		83,7
	178,5	43,8	178,2	53,8	177,5	63,8	176,1	73,8		83,7
	180,0	43,7	180,0	53,7	180,0	63,7	180,0	73,7		83,7

27/40

3,0 MHz, nuit — Eléments pour le tracé des courbes de brouillage à 3500 km

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	31,5	180,0	41,5	180,0	51,5	180,3	61,5	180,0	71,5
	173,9	31,0	173,1	40,9	171,7	50,8	169,3	60,7	164,3	70,4
	168,2	29,4	166,7	39,2	164,2	48,9	160,1	58,4	152,1	67,5
	163,0	26,9	161,1	36,4	158,0	45,8	153,0	54,9	144,2	63,5
	158,5	23,6	156,4	32,8	153,2	41,9	148,0	50,6	139,7	58,7
	154,9	19,6	152,9	28,6	149,8	37,4	144,9	45,8	137,5	53,6
	152,0	15,1	150,3	23,9	147,6	32,5	143,3	40,7	137,0	48,4
	150,1	10,3	148,7	18,9	146,4	27,4	142,9	35,5	137,6	43,2
	148,9	5,2	148,0	13,7	146,3	22,1	143,4	30,3	139,1	38,1
	148,5	0,0	148,1	8,5	146,9	17,0	144,7	25,2	141,3	33,2
	148,9	- 5,2	149,0	3,4	148,3	11,9	146,7	20,9	144,1	28,6
	150,1	- 10,3	150,6	- 1,6	150,3	7,1	149,3	15,8	147,4	24,3
	152,0	- 15,1	152,9	- 6,3	153,1	2,6	152,5	11,5	151,1	20,4
	154,9	- 19,6	156,0	- 10,5	156,4	- 1,4	156,2	7,8	155,3	16,9
	158,5	- 23,6	159,7	- 14,2	160,3	- 4,8	160,3	4,6	159,8	14,0
	163,0	- 26,9	164,1	- 17,3	164,7	- 7,7	164,8	2,0	164,5	11,6
	168,2	- 29,4	169,1	- 19,6	169,9	- 9,8	169,7	0,1	169,5	9,9
	173,9	- 31,0	174,4	- 21,0	174,7	- 11,1	174,8	- 1,1	174,7	8,9
	180,0	- 31,5	180,0	- 21,5	180,0	- 11,5	180,0	- 1,5	180,0	8,5

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	81,5	0	88,5	0	78,5	0	68,5	Toutes longitudes	58,5
	149,5	79,7	78,0	84,7	25,3	77,7	14,2	68,3		58,5
	133,9	75,6	90,4	79,7	46,5	75,7	28,0	67,7		58,5
	127,6	70,7	97,5	74,7	62,9	72,9	41,3	66,7		58,5
	125,7	65,6	103,3	69,8	75,9	69,7	53,8	65,4		58,5
	126,0	60,3	108,7	65,0	86,6	66,4	65,5	63,9		58,5
	127,6	55,2	113,9	60,3	95,8	62,9	76,4	62,3		58,5
	129,9	50,2	118,9	55,9	104,1	59,6	86,7	60,5		58,5
	132,9	45,4	124,1	51,6	111,9	56,3	96,5	58,8		58,5
	136,4	40,8	129,2	47,6	119,2	53,2	105,8	57,1		58,5
	140,2	36,5	134,5	43,9	126,2	50,4	114,8	55,5		58,5
	144,4	32,6	139,8	40,5	133,1	47,7	123,4	54,0		58,5
	148,8	29,0	145,3	37,4	139,9	45,4	131,9	52,6		58,5
	153,6	25,9	150,8	34,8	146,6	43,3	140,1	51,4		58,5
	158,5	23,3	156,5	32,6	153,3	41,6	148,2	50,4		58,5
	163,7	21,2	162,3	30,8	160,0	40,3	156,2	49,6		58,5
	169,1	19,7	168,1	29,5	166,6	39,3	164,2	49,0		58,5
	174,5	18,8	174,1	28,8	173,3	38,7	172,1	48,6		58,5
	180,0	18,5	180,0	28,5	180,0	38,5	180,8	48,5		58,5

27/41

3,5 MHz, nuit — Eléments pour le traçé des courbes de brouillage à 4000 km

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordennées pour le tracé des courbes.	180,0	36,0	180,0	46,0	180,0	56,0	180,0	66,0	180,0	76,0
	172,8	35,4	171,7	45,3	169,7	55,1	166,1	64,9	157,6	74,5
	166,0	33,5	164,0	43,2	160,6	52,7	154,7	62,0	142,8	70,6
	160,0	30,6	157,5	39,9	153,4	49,0	146,6	57,7	134,9	65,5
	155,0	26,8	152,3	35,7	148,1	44,4	141,5	52,6	131,2	59,9
	150,9	22,2	148,4	30,8	144,5	39,2	138,7	47,0	129,9	54,0
	147,8	17,1	145,7	25,5	142,3	33,6	137,4	41,2	130,2	48,2
	145,7	11,6	144,1	19,8	141,4	27,7	137,4	35,4	131,6	42,4
	144,4	5,9	143,4	13,9	141,4	21,9	138,3	29,5	133,8	36,7
	144,0	0,0	143,6	8,1	142,3	16,1	140,0	23,9	136,5	31,3
	144,4	- 5,9	144,6	2,3	143,9	10,4	142,4	18,4	139,8	26,2
	145,7	- 11,6	146,4	- 3,3	146,3	5,0	145,4	13,3	143,6	21,5
	147,8	- 17,1	149,0	- 8,6	149,4	0,0	149,0	8,6	147,8	17,2
	150,9	- 22,2	152,4	- 13,4	153,1	- 4,5	153,2	4,4	152,4	13,3
	155,0	- 26,8	156,6	- 17,6	157,5	- 8,4	157,8	0,8	157,4	10,1
	160,0	- 30,6	161,6	- 21,2	162,5	- 11,6	162,9	- 2,1	162,8	7,5
	166,0	- 33,5	167,3	- 23,8	168,0	- 14,0	168,4	- 4,2	168,3	5,6
	172,8	- 35,4	173,5	- 25,4	173,9	- 15,5	174,1	- 5,6	174,1	4,4
	180,0	- 36,0	180,0	- 26,0	180,0	- 16,0	180,0	- 6,0	180,0	4,0

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordennées pour le tracé des courbes.	180,0	86,0	0	84,0	0	74,0	0	64,0	Toutes longitudes	54,0
	126,9	82,7	46,5	81,9	20,9	73,4	13,4	63,8		54,0
	115,7	77,1	69,8	77,6	39,7	71,6	26,5	63,2		54,0
	113,9	71,3	83,0	72,8	55,5	69,1	39,2	62,3		54,0
	114,9	65,4	92,2	67,8	68,8	66,1	51,3	61,0		54,0
	117,1	59,6	99,7	62,8	80,1	62,8	62,8	59,6		54,0
	120,1	54,0	106,4	57,9	90,1	59,4	73,7	58,0		54,0
	123,5	48,5	112,6	53,2	99,0	56,0	84,1	56,3		54,0
	127,4	43,3	118,6	48,7	107,3	52,7	93,9	54,5		54,0
	131,5	38,3	124,5	44,5	115,2	49,5	103,4	52,8		54,0
	135,9	33,7	130,4	40,5	122,8	46,5	112,6	51,2		54,0
	140,7	29,4	136,3	36,9	130,1	43,7	121,5	49,6		54,0
	145,7	25,5	142,3	33,6	137,4	41,3	130,2	48,2		54,0
	150,9	22,1	148,4	30,8	144,5	39,1	138,7	47,0		54,0
	156,4	19,3	154,6	28,4	151,6	37,3	147,1	45,9		54,0
	162,1	17,0	160,8	26,5	158,7	35,9	155,4	45,1		54,0
	168,0	15,3	167,2	25,1	165,8	34,8	163,6	44,5		54,0
	174,0	14,3	173,6	24,3	172,9	34,2	171,8	44,1		54,0
	180,0	14,0	180,0	24,0	180,0	34,0	180,0	44,0		54,0

27/42

4,7 MHz, jour — Eléments pour le tracé des courbes de brouillage à 1200 km

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	10,8	180,0	20,8	180,0	30,8	180,0	40,8	180,0	50,8
	178,1	10,6	178,0	20,6	177,8	30,6	177,5	40,6	177,1	50,6
	176,3	10,1	176,1	20,1	175,8	30,1	175,2	40,1	174,3	50,0
	174,6	9,3	174,3	19,3	173,8	29,2	173,1	39,2	171,8	49,1
	173,0	8,3	172,7	18,2	172,2	28,1	171,2	38,0	169,7	47,8
	171,7	6,9	171,4	16,8	170,3	26,7	169,7	36,5	168,0	46,4
	170,6	5,4	170,3	15,2	169,7	25,1	168,6	34,9	166,8	44,7
	169,8	3,7	169,6	13,5	168,9	23,3	167,9	33,1	166,1	42,9
	169,4	1,9	169,1	11,7	168,6	21,5	167,5	31,3	165,8	41,0
	169,2	0,0	169,0	9,8	168,5	19,6	167,6	29,4	166,0	39,2
	169,4	− 1,9	169,3	8,0	168,8	17,8	168,0	27,6	166,6	37,3
	169,8	− 3,7	169,8	6,2	169,4	16,0	168,7	25,8	167,5	35,6
	170,6	− 5,4	170,6	4,5	170,4	14,4	169,8	24,2	168,7	34,0
	171,7	− 6,9	171,7	3,0	171,5	12,9	171,0	22,8	170,2	32,6
	173,0	− 8,3	173,1	1,7	172,9	11,6	172,6	21,5	171,9	31,4
	174,6	− 9,3	174,6	0,6	174,5	10,6	174,3	20,5	173,8	30,5
	176,3	− 10,1	176,3	− 0,2	176,3	9,8	176,1	19,8	175,8	29,8
	178,1	− 10,6	178,1	− 0,6	178,1	9,4	178,0	19,3	177,9	29,3
	180,0	− 10,8	180,0	− 0,8	180,0	9,2	180,0	19,2	180,0	29,2

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	60,8	180,0	70,8	180,0	80,8	0	89,2	Toutes longitudes	79,2
	176,2	60,6	174,4	70,6	168,7	80,5	71,1	88,0		79,2
	172,6	60,0	169,3	69,8	159,4	79,5	87,5	86,3		79,2
	169,5	59,0	165,0	68,7	152,9	78,1	96,6	84,6		79,2
	167,0	57,6	161,8	67,3	149,1	76,4	103,6	82,9		79,2
	165,1	56,1	159,6	65,6	147,2	74,6	109,9	81,2		79,2
	163,8	54,4	158,4	63,8	146,8	72,8	115,8	79,6		79,2
	163,2	52,5	158,0	62,0	147,4	70,9	121,4	78,1		79,2
	163,1	50,7	158,3	60,1	148,9	69,1	126,9	76,7		79,2
	163,6	48,8	159,1	58,3	150,8	67,4	132,3	75,3		79,2
	164,3	47,0	160,4	56,6	153,3	65,8	137,7	74,1		79,2
	165,5	45,3	162,1	54,9	156,0	64,3	143,0	73,0		79,2
	167,0	43,8	164,2	53,5	159,1	63,0	148,3	72,0		79,2
	168,3	42,5	166,4	52,2	162,3	61,9	153,6	71,2		79,2
	170,3	41,3	168,9	51,2	165,7	60,9	158,9	70,5		79,2
	172,9	40,4	171,6	50,3	169,1	60,2	164,2	69,9		79,2
	175,8	39,7	174,3	49,7	172,7	59,6	169,4	69,5		79,2
	177,6	39,3	177,1	49,3	176,3	59,3	174,7	69,3		79,2
	180,0	39,2	180,0	49,2	180,0	59,2	180,0	69,2		79,2

27/43 **4,7 MHz, nuite, et 10,0 MHz, jour — Eléments pour le tracé des courbes de brouillage à 5500 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	49,5	180,0	59,5	180,0	69,5	180,0	79,5	178,7	89,5
	168,5	48,5	165,5	58,2	159,6	67,8	144,9	76,7	97,0	82,4
	158,2	45,6	153,2	54,7	144,6	63,3	128,3	70,7	98,4	74,8
	149,7	41,2	144,1	49,6	135,4	57,2	121,5	63,5	101,0	67,2
	143,0	35,6	137,8	43,3	130,1	50,3	119,0	56,0	104,1	59,7
	138,1	29,3	133,6	36,5	127,3	43,0	118,6	48,4	107,5	52,4
	134,6	22,3	131,1	29,2	126,1	35,4	119,5	40,8	111,0	45,1
	132,3	15,1	129,8	21,6	126,1	27,8	121,2	33,4	114,8	38,1
	130,9	7,6	129,5	14,1	127,0	20,3	123,5	26,0	118,9	31,2
	130,5	0,0	130,1	6,5	128,7	12,8	126,5	18,9	123,2	24,7
	130,9	− 7,6	131,5	− 1,0	131,2	5,6	130,0	12,1	127,9	18,4
	132,3	− 15,1	133,8	− 8,2	134,4	− 1,3	134,1	5,7	132,9	12,6
	134,6	− 22,3	137,0	− 15,2	138,3	− 7,8	138,8	− 0,3	138,4	7,3
	138,1	− 29,3	141,2	− 21,6	143,2	− 13,7	144,2	− 5,7	144,3	2,5
	143,0	− 35,6	146,6	− 27,4	148,9	− 19,0	150,2	− 10,4	150,7	− 1,6
	149,7	− 41,2	153,2	− 32,4	155,5	− 23,4	156,9	− 14,2	157,6	− 5,0
	158,2	− 45,6	161,2	− 36,2	163,1	− 26,7	164,2	− 17,1	164,8	− 7,5
	168,5	− 48,5	170,3	− 38,7	171,3	− 28,8	172,0	− 18,9	172,3	− 9,0
	180,0	− 49,5	180,0	− 39,5	180,0	− 29,5	180,0	− 19,5	180,0	− 9,5

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	0	80,5	0	70,5	0	60,5	0	50,5	Toutes longitudes	40,5
	40,2	78,2	22,2	69,5	15,3	50,0	11,9	50,3		40,5
	63,5	73,1	41,5	66,9	30,1	58,7	23,8	49,8		40,5
	77,1	67,0	57,1	63,1	43,8	56,7	35,4	48,9		40,5
	86,6	60,7	69,8	58,6	56,4	54,0	46,7	47,8		40,5
	94,2	54,3	80,4	53,8	67,8	51,0	57,7	46,6		40,5
	100,8	47,9	89,6	48,8	78,4	47,8	68,3	44,9		40,5
	107,0	41,7	97,9	43,8	88,2	44,4	78,8	43,2		40,5
	112,9	35,6	105,7	38,9	97,5	41,0	88,7	41,5		40,5
	118,8	29,8	113,1	34,2	106,3	37,6	98,4	39,8		40,5
	124,7	24,4	120,4	29,8	114,8	34,4	108,0	38,1		40,5
	130,8	19,3	127,6	25,6	123,1	31,4	117,3	36,5		40,5
	137,1	14,7	134,8	21,9	131,9	28,7	126,5	35,0		40,5
	143,7	10,6	142,1	18,5	139,5	26,3	135,6	33,7		40,5
	150,5	7,1	149,5	15,7	147,6	24,3	144,5	32,6		40,5
	157,6	4,3	157,0	13,5	155,7	22,6	153,5	31,7		40,5
	164,9	2,2	164,6	11,8	163,8	21,5	162,3	31,0		40,5
	172,4	0,9	172,3	10,8	171,9	20,7	171,2	30,6		40,5
	180,0	0,5	180,0	10,5	180,0	20,5	180,0	30,5		40,5

27/44 **5,6 MHz, jour — Eléments pour le tracé des courbes de bouillage à 1500 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	13,5	180,0	23,5	180,0	33,5	180,0	43,5	180,0	53,5
	177,6	13,3	177,5	23,3	172,2	33,3	176,8	43,3	176,1	53,2
	175,3	12,7	175,0	22,6	174,6	32,6	173,8	42,5	172,5	52,5
	173,2	11,7	172,8	21,6	172,1	31,5	171,0	41,4	169,3	51,3
	171,2	10,3	170,8	20,2	170,0	30,0	168,7	39,9	166,6	49,6
	169,6	8,6	169,1	18,5	168,3	28,3	166,9	38,0	164,6	47,7
	168,3	6,7	167,8	16,5	167,0	26,2	165,5	36,0	163,2	45,6
	167,3	4,6	166,9	14,3	166,1	24,1	164,7	33,7	162,4	43,3
	166,7	2,3	166,4	12,1	165,7	21,8	164,4	31,4	162,3	41,0
	166,5	0,0	166,3	9,7	165,7	19,4	164,5	29,1	162,6	38,7
	166,7	— 2,3	166,6	7,4	166,1	17,1	165,1	26,8	163,4	36,4
	167,3	— 4,6	167,3	5,2	166,9	14,9	166,0	24,6	164,6	34,3
	168,3	— 6,7	168,3	3,1	168,0	12,9	167,3	22,6	166,1	32,4
	169,6	— 8,6	169,7	1,2	169,5	11,0	169,0	20,9	168,0	30,7
	171,2	— 10,3	171,4	— 0,4	171,2	9,5	170,8	19,3	170,1	29,2
	173,2	— 11,7	173,3	— 1,7	173,2	8,2	172,9	18,1	172,4	28,0
	175,3	— 12,7	175,4	— 2,7	175,4	7,3	175,2	17,2	174,8	27,2
	177,6	— 13,3	177,7	— 3,3	177,7	6,7	177,6	16,7	177,4	26,7
	180,0	— 13,5	180,0	— 3,5	180,0	6,5	180,0	16,5	180,0	26,5

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	63,5	180,0	73,5	180,0	83,5	0	86,5	Toutes longitudes	76,5
	174,8	63,2	172,0	73,1	160,8	82,9	35,2	86,0		76,5
	170,1	62,4	164,9	72,1	147,7	81,4	59,4	84,7		76,5
	166,1	61,0	159,4	70,6	140,7	79,4	75,5	83,1		76,5
	162,9	59,3	155,6	68,7	137,6	77,1	87,2	81,4		76,5
	160,7	57,3	153,3	66,5	137,0	74,8	96,7	79,6		76,5
	159,3	55,1	152,3	64,2	137,8	72,5	104,9	77,9		76,5
	158,7	52,8	152,3	61,9	139,6	70,2	112,4	76,3		76,5
	158,8	50,4	153,0	59,6	142,0	68,1	119,3	74,7		76,5
	159,5	48,1	154,4	57,4	144,9	66,0	125,9	73,3		76,5
	160,7	46,0	156,2	55,3	148,2	64,1	132,2	71,9		76,5
	162,3	43,9	158,4	53,3	151,7	62,4	138,4	70,7		76,5
	164,2	42,1	161,0	51,6	155,4	60,9	144,5	69,6		76,5
	166,4	40,4	163,8	50,1	159,3	59,6	150,6	68,7		76,5
	168,9	39,0	166,8	48,8	163,3	58,5	156,5	67,9		76,5
	171,5	37,9	170,0	47,8	167,4	57,6	162,4	67,3		76,5
	174,3	37,1	173,3	47,1	171,6	57,0	168,3	66,9		76,5
	177,1	36,7	176,6	46,6	175,8	56,6	174,1	66,6		76,5
	180,0	36,5	180,0	46,5	180,0	56,5	180,0	66,5		76,5

27/45 **5,6 MHz e 6,6 MHz, nuite — Eléments pour le tracé des courbes de brouillage à 6500 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	58,5	180,0	68,5	180,0	78,5	180,0	88,5	0	81,5
	164,2	57,1	158,1	66,6	144,0	75,4	102,4	81,3	46,7	78,3
	150,8	53,2	142,2	61,6	126,6	68,7	100,1	72,8	68,5	71,7
	140,8	47,6	132,2	54,9	119,2	60,8	101,1	64,3	80,1	64,4
	133,6	40,8	126,2	47,2	116,0	52,4	102,9	55,8	88,0	56,7
	128,7	33,2	122,7	39,1	114,9	43,9	105,3	47,4	94,2	49,1
	125,3	25,2	120,8	30,7	115,1	35,4	108,0	39,1	99,7	41,5
	123,1	17,0	120,1	22,2	116,0	26,9	110,9	30,9	104,9	34,0
	121,9	8,5	120,2	13,7	117,7	18,5	114,3	22,9	110,0	26,7
	121,5	0,0	121,1	5,2	119,9	10,3	118,0	15,1	115,1	19,6
	121,9	− 8,5	122,8	− 3,2	122,8	2,3	122,1	7,6	120,5	12,9
	123,1	− 17,0	125,2	− 11,3	126,4	− 5,5	126,8	0,5	126,3	6,5
	125,3	− 25,2	128,6	−19,2	130,8	−12,8	132,0	− 6,2	132,4	0,5
	128,7	− 33,2	133,0	− 26,7	136,1	− 19,7	138,0	− 12,3	139,0	− 4,8
	133,6	− 40,8	138,9	− 33,5	142,5	− 25,8	144,9	− 17,7	146,2	− 9,5
	140,8	− 47,6	146,4	− 39,5	150,2	− 31,0	152,6	− 22,2	154,0	− 13,3
	150,8	− 53,2	156,0	− 44,3	159,1	− 35,0	161,1	− 25,6	162,3	− 16,1
	164,2	−57,1	167,4	− 47,4	169,2	−37,6	170,4	− 27,8	171,0	− 17,9
	180,0	− 58,5	180,0	− 48,5	180,0	− 38,5	180,0	− 28,5	180,0	− 18,5

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	0	71,5	0	61,5	0	51,5	0	41,5	Toutes longitudes	31,5
	25,7	70,1	17,6	60,7	13,6	51,1	11,4	41,3		31,5
	46,4	66,2	34,0	58,6	26,9	49,9	22,7	40,8		31,5
	61,7	61,0	43,4	55,3	39,6	48,0	33,8	40,0		31,5
	73,3	55,1	61,0	51,2	51,6	45,6	44,8	38,9		31,5
	82,7	48,8	71,9	46,6	62,8	42,7	55,5	37,6		31,5
	90,7	42,4	81,7	41,7	73,8	39,6	66,0	36,1		31,5
	98,0	36,0	90,6	36,7	83,2	36,2	76,2	34,4		31,5
	104,8	29,7	99,0	31,8	92,7	32,8	86,2	32,7		31,5
	111,6	23,6	107,0	26,9	101,8	29,4	96,1	31,0		31,5
	115,1	17,8	114,9	22,2	110,7	26,1	105,7	29,3		31,5
	124,9	12,3	122,7	17,9	119,5	23,0	115,3	27,6		31,5
	131,8	7,3	130,5	13,8	128,1	20,2	124,7	26,1		31,5
	139,2	2,7	138,4	10,3	136,7	17,7	134,0	24,9		31,5
	146,8	— 1,1	146,5	7,2	145,3	15,5	143,3	23,6		31,5
	154,7	— 4,3	154,7	4,8	154,0	13,8	152,5	22,7		31,5
	162,9	— 6,6	163,0	3,0	162,6	12,5	161,7	22,1		31,5
	171,4	— 8,0	171,5	1,9	171,3	11,8	170,8	21,6		31,5
	180,0	— 8,5	180,0	1,5	180,0	11,5	180,0	21,5		31,5

27/46

6,6 MHz, jour — Eléments pour la tracé des courbes de brouillage à 1900 km

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	17,1	180,0	27,1	180,0	37,1	180,0	47,1	180,0	57,1
	179,9	16,8	176,7	26,8	176,3	36,8	175,7	46,8	174,7	56,7
	174,0	16,0	173,6	26,0	172,9	35,9	171,7	45,8	169,7	55,7
	171,3	14,8	170,7	24,6	169,7	34,5	168,1	44,3	165,5	54,0
	168,8	13,0	168,2	22,8	167,0	32,6	165,2	42,3	162,2	51,9
	166,7	10,9	166,1	20,6	164,9	30,3	162,9	39,9	159,8	49,4
	165,1	8,5	164,5	18,1	163,3	27,7	161,8	37,2	158,2	46,6
	163,9	5,8	163,3	15,4	162,3	24,9	160,4	34,4	157,5	43,7
	163,1	2,9	162,7	12,5	161,8	22,0	160,2	31,5	157,5	40,8
	162,9	0,0	162,7	9,6	161,9	19,1	160,4	28,5	158,1	37,9
	163,1	— 2,9	163,1	6,6	162,4	16,2	161,3	25,7	159,3	35,1
	163,9	— 2,8	163,9	3,8	163,5	13,4	162,5	23,0	160,9	32,5
	165,1	— 8,5	165,2	1,2	165,0	10,9	164,2	20,5	162,9	30,1
	166,7	— 10,9	167,0	— 1,2	166,8	8,6	166,3	18,3	165,2	28,0
	168,8	— 13,0	169,1	— 3,2	169,0	6,6	168,6	16,4	167,8	26,2
	171,3	— 14,8	171,5	— 4,9	171,2	5,0	171,2	14,9	170,7	24,8
	174,0	— 16,0	174,2	— 6,1	174,1	3,9	174,1	13,8	173,7	23,7
	176,9	— 16,8	177,1	— 6,8	177,1	3,1	177,0	13,1	176,8	23,1
	180,0	— 17,1	180,0	— 7,1	180,0	2,9	180,0	12,9	180,0	22,9

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	67,1	180,0	77,1	180,0	87,1	0	82,9	Toutes longitudes	72,9
	172,6	66,7	167,3	76,5	137,0	85,7	23,2	82,5		72,9
	166,0	65,5	157,1	75,0	123,8	83,1	43,5	81,6		72,9
	160,7	63,6	150,3	72,8	120,8	80,1	60,0	80,2		72,9
	156,8	61,3	146,2	70,1	121,4	77,2	73,5	78,6		72,9
	154,4	58,6	144,4	67,3	123,5	74,3	84,9	76,9		72,9
	153,1	55,8	144,0	64,3	126,5	71,5	94,8	75,2		72,9
	152,8	52,8	144,7	61,4	130,1	68,8	103,6	73,5		72,9
	153,3	49,9	146,3	58,6	133,9	66,3	111,8	71,8		72,9
	154,4	47,1	148,4	55,9	138,0	63,9	119,4	70,3		72,9
	156,1	44,4	151,0	53,3	142,3	61,7	126,8	68,8		72,9
	158,2	41,9	153,9	51,0	146,7	59,7	133,8	67,5		72,9
	160,7	39,6	157,2	49,0	151,3	58,0	140,7	66,3		72,9
	163,5	37,6	160,7	47,2	155,9	56,5	147,4	65,3		72,9
	166,5	36,0	164,3	45,7	160,7	55,2	154,0	64,4		72,9
	169,7	34,6	168,1	44,5	165,4	54,2	160,6	63,8		72,9
	173,1	33,7	172,0	43,6	170,3	53,5	167,1	63,3		72,9
	176,5	33,1	176,0	43,1	175,1	53,0	173,5	63,0		72,9
	180,0	32,9	180,0	42,9	180,0	52,9	180,0	62,9		72,9

27/47

9,0 MHz, jour — Eléments pour le tracé des courbes de brouillage à 3800 km

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	34,2	180,0	44,2	180,0	54,2	180,0	64,2	180,0	74,2
	173,3	33,6	172,3	43,5	170,6	53,4	167,5	63,2	160,6	72,9
	166,9	31,9	165,1	41,6	162,1	51,2	157,0	60,6	146,8	69,4
	161,2	29,1	158,9	38,5	155,3	47,8	149,3	56,6	138,8	64,8
	156,4	25,5	154,0	34,6	150,2	43,4	144,2	51,9	134,6	59,5
	152,5	21,2	150,2	30,0	146,6	38,5	141,2	46,6	133,0	53,9
	149,5	16,3	147,6	24,9	144,4	33,2	139,8	41,1	132,9	48,3
	147,4	11,1	145,9	19,4	143,4	27,6	139,6	35,5	134,0	42,8
	146,2	5,6	145,2	13,9	143,3	22,0	140,3	29,9	135,9	37,3
	145,8	0,0	145,4	8,3	144,1	16,4	141,9	24,4	138,4	32,1
	146,2	- 5,6	146,3	2,7	145,7	11,0	144,1	19,2	141,5	27,2
	147,4	- 11,1	148,1	- 2,6	147,9	5,9	147,0	14,3	145,1	22,6
	149,5	- 16,3	150,6	- 7,7	150,9	1,1	150,4	9,8	149,1	18,4
	152,5	- 21,2	153,9	- 12,3	154,5	- 3,2	154,4	5,8	153,6	14,8
	156,4	- 25,5	157,9	- 16,3	158,7	- 7,0	158,8	2,3	158,4	11,6
	161,2	- 29,1	162,6	- 19,6	163,4	- 10,1	163,7	- 0,5	163,5	9,1
	166,9	- 31,9	168,0	- 22,1	168,7	- 12,3	168,9	- 2,5	168,8	7,3
	173,3	- 33,6	173,9	- 23,7	174,2	- 13,7	174,4	- 3,8	174,4	6,2
	180,0	- 34,2	180,0	- 24,2	180,0	- 14,2	180,0	- 4,2	180,0	5,8

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	84,2	0	85,8	0	75,8	0	65,8	Toutes longitudes	55,8
	137,8	81,6	56,0	83,2	22,4	75,1	13,7	65,6		55,8
	123,5	76,7	77,1	78,6	42,0	73,3	27,0	65,0		55,8
	119,5	71,2	88,4	73,7	58,2	70,7	39,9	64,0		55,8
	119,2	65,6	96,4	68,7	71,4	67,6	52,2	62,8		55,8
	120,6	60,0	103,2	63,8	82,5	64,3	63,8	61,3		55,8
	123,0	54,5	109,3	59,0	92,2	60,8	74,7	59,7		55,8
	126,0	49,2	115,1	54,3	101,0	57,5	85,1	58,0		55,8
	129,5	44,1	120,7	49,9	109,1	54,2	94,9	56,2		55,8
	133,4	39,3	126,3	45,7	116,7	51,0	104,3	54,5		55,8
	137,6	34,8	132,0	41,9	124,1	48,1	113,4	52,9		55,8
	142,1	30,7	137,7	38,3	131,3	45,4	122,2	51,4		55,8
	146,9	26,9	143,5	35,2	138,3	42,9	130,8	50,0		55,8
	152,0	23,7	149,3	32,4	145,3	40,8	139,2	48,7		55,8
	157,2	20,9	155,3	30,1	152,3	39,0	147,5	47,7		55,8
	162,7	18,7	161,4	28,2	159,2	37,6	155,7	46,9		55,8
	168,4	17,1	167,6	26,9	166,1	36,6	163,8	46,3		55,8
	174,2	16,1	173,3	26,1	173,1	36,0	171,9	45,9		55,8
	180,0	15,8	180,0	25,8	180,0	35,8	180,0	45,8		55,8

27/48 **11,3 MHz, jour — Eléments pour le tracé des courbes de brouillage à 6000 km**

Latitude	0°		10°		20°		30°		40°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	180,0	54,0	180,0	64,0	180,0	74,0	180,0	84,0	0	86,0
	166,6	52,8	162,3	62,5	153,3	71,8	128,2	79,7	66,2	81,2
	154,8	49,5	148,2	58,3	136,6	66,3	115,0	72,2	82,1	73,8
	145,5	44,5	138,5	52,4	127,7	59,3	111,4	64,2	90,0	66,1
	138,5	38,3	132,2	45,4	123,2	51,6	111,0	58,2	95,7	58,5
	133,5	31,3	128,2	37,9	121,1	43,6	111,9	48,1	100,6	50,9
	130,0	23,9	126,0	30,0	120,6	35,5	113,6	40,1	105,2	43,4
	127,7	16,1	124,9	22,0	121,1	27,5	116,0	32,2	109,7	36,1
	126,4	8,1	124,8	13,9	122,3	19,5	118,8	24,6	114,3	29,0
	126,0	0,0	125,6	5,9	124,3	11,6	122,2	17,1	119,1	22,2
	126,4	− 8,1	127,1	− 2,1	127,0	4,0	126,0	9,9	124,2	15,7
	127,7	− 16,1	129,5	− 9,8	130,4	− 3,4	130,4	3,1	129,6	9,5
	130,0	− 23,9	132,8	− 17,2	134,6	− 10,3	135,4	− 3,2	135,4	3,9
	133,5	− 31,3	137,2	− 24,2	139,7	− 16,7	141,1	− 9,0	141,7	− 1,2
	138,5	− 38,3	142,9	− 30,5	145,8	− 22,4	147,6	− 14,1	148,5	− 5,6
	145,5	− 44,5	150,0	− 36,0	152,9	− 27,2	154,8	− 18,2	155,6	− 9,1
	154,8	− 49,5	158,7	− 40,3	161,2	− 30,9	162,7	− 21,4	163,6	− 11,8
	166,6	− 52,8	163,9	− 43,0	170,3	− 33,2	171,2	− 23,3	171,7	− 13,4
	180,0	− 54,0	180,0	− 44,0	180,0	− 34,0	180,0	− 24,0	180,0	− 14,0

Latitude	50°		60°		70°		80°		90°	
	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude
Coordonnées pour le tracé des courbes.	0	76,0	0	66,0	0	56,0	0	46,0	Toutes longitudes	36,0
	31,1	74,2	19,5	65,1	14,4	55,6	11,6	45,8		36,0
	53,5	69,9	37,2	62,8	28,3	54,3	23,2	45,3		36,0
	68,6	64,2	52,3	59,2	41,5	52,4	34,5	44,5		36,0
	79,4	58,1	65,0	55,0	53,7	49,8	45,7	43,4		36,0
	88,1	51,7	75,8	50,3	65,1	46,9	56,5	42,0		36,0
	95,5	45,3	85,4	45,3	75,7	43,7	67,1	40,5		36,0
	102,3	38,9	84,1	40,3	85,6	40,3	77,4	38,3		36,0
	108,7	32,7	102,2	35,4	95,0	36,9	87,4	37,1		36,0
	115,0	26,3	110,0	30,6	104,0	33,5	97,2	35,4		36,0
	121,4	21,1	117,5	26,0	112,7	30,3	106,8	33,7		36,0
	127,8	15,8	125,1	21,8	121,2	27,2	116,2	32,1		36,0
	134,5	11,0	132,6	17,9	129,7	24,5	125,5	30,6		36,0
	141,4	6,7	140,2	14,4	138,1	22,0	134,7	29,2		36,0
	148,6	3,0	148,0	11,5	146,4	19,9	143,9	28,1		36,0
	156,1	− 0,0	155,8	9,1	154,8	18,2	152,9	27,2		36,0
	163,9	− 2,2	163,8	7,4	163,2	17,0	162,0	26,5		36,0
	171,0	− 3,5	171,9	6,4	171,6	16,3	171,0	26,1		36,0
	180,0	− 4,0	180,0	6,0	180,0	16,0	180,0	26,0		36,0

C) Classes d'émission et puissance

1. *Classes d'émission.*

27/49 Dans le service mobile aéronautique (R), il est permis d'utiliser les émissions suivantes, à condition de respecter les dispositions spéciales applicables à chaque cas et à condition de ne pas causer de brouillages nuisibles aux autres utilisateurs de la voie concernée.

27/50 1.1 *Téléphonie — modulation d'amplitude:*

Double bande latérale ..... (1) A3
Bande latérale unique, onde porteuse complète ..... (1) A3H
Bande latérale unique, onde porteuse supprimée A3J

1.2. *Télégraphie (y compris transmissions automatiques de données).*

27/51 1.2.1. *Modulation d'amplitude:*

Télégraphie sans modulation par une fréquence audible (manipulation par tout ou rien) (2) A1
Télégraphie par manipulation par tout ou rien d'une ou plusieurs fréquences audibles de modulation ou manipulation par tout ou rien de l'émission modulée, y compris l'appel sélectif, bande latérale unique, porteuse complète A2H
Télégraphie harmonique multivoie, bande latérale unique, onde porteuse supprimée A7J
Autres émissions telles que la transmission automatique de données, bande latérale unique, porteuse supprimée A9J

27/52 1.2.2. *Modulation de fréquence:*

Télégraphie par manipulation par déplacement de fréquence sans modulation par une fréquence audible, l'une des deux fréquences étant émise à un instant donné .... (2) F1

27/53 SUP

2. *Puissance.*

27/54 2.1. Sauf indication contraire figurant à la partie II du présente appendice, les puissances de crête fournies à la ligne d'alimentation de l'antenne ne dépassent pas les valeurs maximales indiquées dans le tableau ci-dessous; il est admis que les puissances apparentes rayonnées de crête correspondantes sont égales aux deux tiers de ces valeurs.

Classe d'émission	Stations	Puissance de crête maximale
A2H, A3J, A7J, A9J	Stations aéronautiques	6 kW
A3 (*a*), A3H (*a*)	Stations d'aéronef	400 W
(Taux de modulation 100 %)		
Autres émissions telles que A1, F1	Stations aéronautiques	1,5 kW
	Stations d'aéronef	100 W

(*a*) Les émissions des classes A3 et A3H doivent être utilisées seulement sur 3023 kHz et 5680 kHz, ainsi que dans les cas prévus au paragraphe 5 de la Résolution N° Aer 2-3

27/55 2.2. Il est admis que la puissance de crête maximale spécifiée dans le tableau ci-dessus pour les stations aéronautiques produira la puissance apparente rayonnée moyenne de 1 kW adoptée pour le tracé des courbes qui indiquent les portées de brouillage.

27/56 2.3. Afin d'assurer des communications de qualité satisfaisante avec les aéronefs, les stations aéronautiques qui desservente les ZLAMP, les zones VOLMET et les zones mondiales d'allotissement peuvent utiliser des puissances plus élevées que les puissances maximales spécifiées au numéro **27/54**, sauf dans le cas des fréquences 3023 kHz et 5680 kHz, que sont soumises aux dispositions spéciales des numéros

(1) Les émissions A3 et A3H sont à utiliser uniquement sur 3023 kHz et 5680 kHz ainsi que dans les cas prévus au paragraphe 5 de la Résolution N° Aer2-3.

(2) Les classes d'émission A1 et F1 sont permises à condition qu'elles ne causent pas de brouillages nuisibles aux émissions des classes A2H, A3J, A7J et A9J. Par ailleurs, les émissions des classes A1 et F1 doivent être conformes aux dispositions des numéros **27/65** à **27/66C** et il faut prendre soin de placer ces émissions au centre ou au voisinage du centre de la voie. Toutefois, une fréquence audible modulante est permise avec des émetteurs à bande latérale unique si la porteuse est supprimée conformément aux dispositions du numéro **27/63**.

27/208 à **27/214**. S'il en est ainsi, l'administration qui exerce sa juridiction sur la station aéronautique intéressée prend note des dispositions du número **694** du Réglement des radiocommunications et fait en sorte dans chaque cas:

27/57 *a*) Lorsque des brouillages nuisibles sont possibles, qu'une coordination soit effectuée avec les administrations intéressées;

27/58 *b*) Qu'aucun brouillage nuisible ne soit causé aux stations qui utilisent des fréquences conformément aux dispositons pertinentes du plan d'allotissement;

27/59 *c*) Que, dans les autres ZLAMP, ZLARN ou zones VOLMET auxquelles la ou les mêmes fréquences sont alloties, les rapports de protection spécifiés pour ces zones soient maintenus;

27/60 *d*) Que les caractéristiques de directivité de l'antenne soint telles queile rayonnement soit réduit au minimum dans les directions ou il n'est pas nécessaire et notamment vers celles des autres ZLAMP, ZLARN ou zones VOLMET auxquelles la ou les mêmes fréquences sont alloties;

27/61 *e*) Que, conformément aux dispositons du Règlement des radiocommunications, les détails complets concernant chaque assignation soient notifiés à l'IFRB y compris les caractéristiques de l'antenne d'émission.

27/62 2.4. Il est admis que la puissance des émetteurs d'aéronef peut, en pratique, dépasser les limites spécifiées au número **27/54,** mais l'utilisation d'une puissance plus élevée (qui normalement ne devrait pas dépasser une valeur de crête de 600 W) ne doit pas causer de brouillage nuisible aux stations qui utilisent des fréquences conformément aux principes techniques sur lesquels le Plan d'allotissement est fondé.

D) Limites des niveaux de puissance des émissions non désirées

1. *Dispositions d'ordre technique relatives à l'utilisation d'émissions à bande latérale unique.*

27/63 1.1. *Définition du niveau de l'onde porteuse:*

Onde porteuse	Niveau N (dB) de l'onde porteuse par tapport à la puissance de crête
Onde porteuse complète (par exemple A2H) ...	$0 \geq N \geq -6$
Onde porteuse supprimée (par exemple A3J) ..	Stations d'aéronef $N \leq -26$ Stations aéronautiques $N \leq -40$

27/64 SUP

2. *Tolérance applicable aux niveaux des émissions en dehors de la largeur de bande nécessaire.*

27/65 2.1. Dans le cas d'une émission à bande latérale unique, la puissance moyenne fournie sur une fréquence quelconque à la ligne d'alimentation de l'antenne d'une station aéronautique ou d'une station d'aéronef est inférieure à la puissance moyenne (P_m) de l'émetteur, de la quantité indiquée dans le tableau figurant au numéro **27/66.**

27/66 2.2. Por les types d'emetteur de station d'aéronef et pour les émetteurs de station aéronautique installés avant le 1er février 1983:

Ecart Δ par rapport à la fréquence assignée (kHz)	Affaiblissement minimum par rapport à la puissance moyenne (P_m) (dB)
$2 \leq \Delta < 6$	25
$6 \leq \Delta < 10$	35
$10 \leq \Delta$	Stations d'aéronef: 40 Stations aéronautiques: $43 + 10 \log_{10} (P_m)$ (watts)

27/66A *Note.* — Tous les émetteurs mis en service pour la première fois après le 1er février 1983 devront être conformes aux spécifications du numéro **27/66C.**

27/66B 2.3. Dans le cas d'une émission à bande latérale unique, la puissance de crête (P_p) fournie sur une fréquence quelconque à la ligne d'alimentation de l'antenne d'une station aéronautique ou d'une station d'aéronef est inférieure à la puissance de crête (P_p) de l'émetteur, de la quantité indiquée dans le tableau figurant au numéro **27/66C.**

27/66C 2.4. Pour les émetteurs de station d'aéronef installés aprés le 1er février 1983 et pour les émetteurs de station aéronautique utilisés après le 1er février 1983:

Ecart Δ par rapport à la fréquence assignée (kHz)	Affaiblissement minimum par rapport à la puissance moyenne (P_m) (dB)
$1,5 \leq \Delta < 4,5$	30
$4,5 \leq \Delta < 7,5$	38
$7,5 \leq \Delta$	Stations d'aéronef: 43 Stations aéronautiques: (*a*)

(*a*) Pour les puissances d'émission inférieures ou égales à 50 watts: $43 + 10 \log_{10} (P_p)$ (watts). Pour les puissances d'émission supérieures à 50 watts, l'affaiblissement doit être d'au moins 60 dB.

27/67 à 27/71 SUP

E) Autres dispositions d'ordre technique

1. *Fréquences assignées.*

27/72 1.1. Pour une station qui fait des émissions à bande latérale unique, à l'exception de la classe d'émission A2H, la fréquence assignée doit être supérieure de 1400 Hz à la fréquence porteuse (fréquence de référence).

27/72A 1.2. Pour les stations aéronautiques équipées de systémes d'appel sélectif, la classe d'émission A2H doit être indiquée dans la colonne «Renseignements supplémantaires» de la fiche de notification (voir l'appendice 1 au Règlement des radiocommunications).

27/72B 1.3. Pour les classes d'émission A1 et F1, la fréquence assignée est choisie conformément aux dispositions du renvoi relatif aux numéros **27/51** et **27/52.**

27/73 1.4. La fréquence assignée à une station qui utilise des émissions à double bande latérale (A3) doit être la fréquence porteuse (fréquence de référence).

PARTIE II

Plan d'allotissement de fréquences pour le service mobile aéronautique (R) dans ses bandes exclusives entre 1850 KHz et 22 000 kHz

SECTION I

Description des limites des zones et subdivisions de zones

27/74 1. Les descriptions des limites données ci-après concernent les zones auxquelles des fréquences ont été alloties conformément au Plan d'allotissement des fréquences établi par la Conférence.

27/75 2. Ces zones sont également représentées graphiquement sur les cartes à utiliser avec le présent appendice. S'il existe des différences entre une zone telle qu'elle est représentée sur les cartes et telle qu'elle est décrite ci-après, c'est la description qui fait foi.

27/76 3. La mention du nom d'un pays ou d'une zone géographique dans les descriptions ou sur les cartes, ainsi que le tracé de frontières sur les cartes n'impliquent, de la part de l'UIT, aucune prise de position quant au statut politique de ce pays ou de cette zone géographique, ni aucune reconnaissance officielle de ces frontières.

27/77 4. Dans la description des limites des zones de passage des lignes aériennes mondiales principales (ZLAMP), toute ligne qui joint deux points et qui n'est pas autrement définie est un arc de grand cercle.

27/78 Dans la discription des limites des zones des lignes aériennes régiolanes et nationales (ZLARN) et des subdivisions de ces zones, toute ligne qui joint deux points et qui n'est pas autrement définie est une droite sur une carte en projection de Mercator.

27/79 Dans la description des limites des zones VOLMET, toute ligne qui joint deux points est un arc de grand cercle.

ARTICLE 1

Description des limites des zones de passage des lignes aériennes mondiales principales (ZLAMP)

27/80 *Zone de passage des lignes aériennes mondiales principales — CARAIBES:*

(ZLAMP-CAR)

Du point 20° N, 120° W, par les points 35° N, 120° W, 35° N, 85° W, 43° N, 74° W, 40° N, 60° W, 00° 48° W, 00° 80° W, jusqu'au point 20° N, 120° W.

27/81 SUP

27/82 *Zone de passage des lignes aériennes mondiales principales — CENTRE EST PACIFIQUE:*

(ZLAMP-CEP)

Du point 50° N 122° W, par les points 38° N 120° W, 15° N 110° W, 20° S 145° W, 20° S 152° W, 30° N 165° W, jusqu'au point 50° N 122° W.

27/83 *Zone de passage des lignes aériennes mondiales principales — CENTRE OUEST PACIFIQUE:*

(ZLAMP-CWP)

Du point 40° N 117° E, par les points 25° N 155° W, 17° N 155° W, 00° 165° W, 00° 170° E, 12° S 136° E, 09° N 115° E, 23° N 114° E, jusqu'au point 40° N 117° E.

27/84 *Zone de passage des lignes aériennes mondiales principales — EUROPE:*

(ZLAMP-EUR)

Du point 33° N 12° W, par les points 54° N 12° W, 70° N 00°, 74° N 40 E, 74° N 52° E, 60° N 52° E, 40° N 36° E, 29° N 35° 30′ E, 32° N 13° E, jusqu'au point 33° N 12° W.

27/85 SUP

27/85A *Zone de passage des lignes aériennes mondiales principales — OCÉAN INDIEN:*

(ZLAMP-INO)

Du Pôle Sud, par les points 30° S 26° E, 20° N 35° E, 30° N 60° E, 30° N 90° E, 30° S 120° E, 40° S 160° E, jusqu'au Pôle Sud.

27/86 *Zone de passage des lignes aériennes mondiales principales — MOYEN ORIENT:*

(ZLAMP-MID)

Du point 51° N 30° E, par les points 57° N 37° E, 50° N 80° E, 44° N 94° E, 08° N 76° E, 11° 45′N 42° E, 30° N 30° E, jusqu'au point 51° N 30° E.

27/87 *Zone de passage des lignes aériennes mondiales principales — NORD ATLANTIQUE:*

(ZLAMP-NAT)

Du Pôle Nord, par les points 60° N 135° W, 49° N 120° W, 49° N 74° W, 39° N 78° W, 18° N 66° W, 05° N 55° W, 16° N 26° W, 32° N 08° W, 44° N 02° E, 60° N 20° E, jusqu'au Pôle Nord.

27/87A *Zone de passage des lignes aériennes mondiales principales — NORD CENTRE ASIE:*

(ZLAMP-NCA)

Du Pôle Nord, par les points 75° N 10° E, 60° N 25° E, 30° N 25° E, 30° N 73° E, 37° N 73° E, 49° N 85° E, 42° N 97° E, 42° N 110° E, 45° N 113° E, 46° 30′N 120° E, 49° N 116° E, 54° N 123° E, 45° N 133° E, 40° N 124° E, 30° N 124° E, 25° N 135° E, 65° N 170° W, jusqu'au Pôle Nord.

27/88 à 27/93 SUP

27/94 *Zone de passage des lignes aériennes mondiales principales — NORD PACIFIQUE.*

(ZLAMP-NP)

Du Pôle Nord, par les points 60° N 135° W, 47° N 118° W, 30° N 165° W, 30° N 115° E, 41° N 116° E, 55° N 135° E, jusqu'au Pôle Nord.

27/95 *Zone de passage des lignes aériennes mondiales principales — AFRIQUE:*

(ZLAMP-AFI)

Du point 40° N 35° W, par les points 37° N 03° W, 37° N 44° E, la frontière entre la République d'Iraq et l'Iran, les points 29° N 48° E, 26° N 56° E, 20° N 62° E, 22° S 60° E, 35° S 30° E, 35° S 16° E, 05° N 03° W, 05° N 35° W, jusqu'au point 40° N 35° W.

27/96 SUP

27/97 SUP

27/98 *Zone de passage des lignes aériennes mondiales principales — SUD ATLANTIQUE:*

(ZLAMP-SAT)

Du Pôle Sud, par les points 30° S 75° W, 19° S 53° W, 00° 60° W, 20° N 60° W, 25° N 25° W, 41° N 15° W, 41° N 03° W, 15° N 03° W, 20° S 32° E, jusqu'au Pôle Sud.

27/99 SUP

27/100 *Zone de passage des lignes aériennes mondiales principales — SUD AMÉRIQUE:*

(ZLAMP-SAM)

Du Pôle Sud, par les points 15° N 125° W, 15° N 60° W, 10° N 60° W, 05° S 30° W, 36° S 52° W, jusqu'au Pôle Sud.

27/101 SUP

27/100 *Zone de passage des lignes aériennes mondiales principales — SUB-EST ASIATIQUE:*

(ZLAMP-SEA)

Du point 26° N 130° E, par les points 00° 130° E, 00° 135° E, 12° S 145° E, 12° S 160° E, 25° S 155° E, 40° S 150° E, 35° S 115° E, 18° N 62° E, 26° N 65° E, jusqu'au point 26° N 130° E.

27/103 *Zone de passage des lignes aériennes mondiales principales — SUD PACIFIQUE:*

(ZLAMP-SP)

Du Pôle Sud, par les points 38° S 145° E, 00° 167° E, 00° 175° W, 22° N 158° W, 22° N 156° W, 00° 120° W, jusqu'au Pôle Sud.

27/103A *Zone de passage des lignes aériennes mondiales principales — ASIE DE L'EST:*

(ZLAMP-EA)

Du point 55° N 124° E, par les points 37° N 145° E, 26° N 130° E, 00° 130° E, 00° 80° E, 18° N 62° E, 37° N 67° E, 55° N 80° E, jusqu'au point 55° N 124° E.

ARTICLE 2

Description des limites des zones et subdivisions de zones des lignes aériennes régionales et nationales (ZLARN)

27/104 *Zone des lignes aériennes régionales et nationales — 1:*

(ZLARN-1)

Cette zone est délimitée par une ligne qui, partant du Pôle Nord, suit le méridien 15° W, passe par les points 72° N 15° W, 40° N 50° W, 30° N 39° W, 30° N 10° W, 31° N 10° W et 31° N 10° E; elle a ensuite le tracé suivant: frontière Libye-Tunisie jusqu'à la Méditerranée, côtes de la Libye et de la République Arabe d'Egypte jusqu'à Alexandrie; elle se dirige ensuite vers le Caire et, de là, vers l'est, le long du paralléle du Caire, jusqu'à l'intersection avec le méridien 40° E, puis vers le nord le long de ce méridien jusqu'à la rive du sud de la mer Noire, et le long de le côte turque vers l'ouest jusqu'à l'intersection avec le méridien 30° E; elle suit ce méridien jusqu'à la frontière Roumanie-URSS, puis les frontières de l'URSS avec la Roumanie, la Hongrie, la République Socialiste Tchécoslovaque, la Pologne, la côte soviétique de la Baltique jusqu'à la frontière entre la Finlande et l'URSS et entre la Norvège et l'URSS. De là, elle passe par le point 70° N 32° E et suit le méridien 32° E jusqu'au Pôle Nord.

27/105 *Subdivision de zone 1A:*

Cette subdivision est délimitée par une ligne qui, partant du point 65° N 26° W, passe par les points 40° N 50° W, 40° N 20° W, 60° N 20° W, 60° N 26° W, pour revenir à son point de départ 65° N 26° W.

27/106 *Subdivision de zone 1B:*

Cette subdivision est délimitée par une ligne qui, partant du Pôle Nord et suivant le méridien 15° W, passe par les points 72° N 15° W, 65° N 26° W, 60° N 26° W, 60° N 20° W, 50° N 20° W et 50° N 10° W, puis se dirige vers l'est en passant par les eaux territoriales entre les îles Anglo-Normandes et la côte française qu'elle rejoint au méridien 03° W, pour longer la côte dans la direction nord-est, puis la frontière de la France avec la Belgique, le Luxembourg et la République fédérale d'Allemagne, puis la frontière Suisse-République fédérale d'Allemagne et République fédérale d'Allemagne-Austrich. Elle longe ensuite la frontière entre la République Socialiste Tchécoslovaque et la République fédérale d'Allemagne, puis la frontière entre la République fédérale d'Allemagne et la République Démocratique Allemande, en direction de la mer Baltique, puis se dirige vers l'ouest en longeant la côte de la République fédérale d'Allemagne jusqu'à la frontière entre la République fédérale d'Allemagne et le Danemark. Elle longe ensuite cette frontière jusqu'à la mer du Nord et de là, le long du parallèle 55° N, gagne le point 55° N 04° E et passe ensuite par les points 56° N 03° E, 59° N 02° E et 62° N 01° E, pour rejoindre le Pôle Nord en longeant le méridien 01° E.

27/107 *Subdivision de zone 1C:*

Cette subdivision est délimitée par une ligne qui, partant du Pôle Nord, longe le méridien 01° E jusqu'au point 62° N 01° E et passe ensuite par les points 59° N 02° E, 56° N 03° E, 55° N 04° E, pour longer ensuite le parallèle 55° N en direction de l'est, puis la frontière séparant le Danemark de la République fédérale d'Allemagne, jusqu'à la mer Baltique. Elle suit alors la côte de la République fédérale d'Allemagne sur la mer Baltique jusqu'à la frontière entre la République fédérale d'Allemagne et la Repúblique Démocratique Allemande; puis elle longe cette frontière, les frontières occidentales de la République Socialiste Tchécoslovaque et de l'Autriche, la frontière Suisse-Austriche, la frontière Liechtenstein-Autriche, puis de nouveau la frontière Suisse-Autriche, pour se diriger ensuite vers l'est en longeant les frontières méridionales de l'Autrich et de la Hongrie; de là, elle suit la frontière entre la Hongrie et la Roumanie, puis la frontière de l'URSS avec la Hongrie, la République Socialiste Tchécoslovaque et la Pologne jusqu'à la côte de la mer Baltique. Ensuite elle longe la côte soviétique de la mer Baltique, suit les frontières entre la Finlande et l'URSS et entre la Norvége et l'URSS, passe par le point 70° N 32° E, pour enfin rejoindre le Pôle Nord en longeant le méridien 32° E.

27/108 *Subdivision de zone 1D:*

Cette subdivision est délimitée par une ligne partant du point de rencontre des frontières de l'URSS, de la Hongrie et de la Roumanie pour se diriger vers l'ouest et longer les frontières méridionales de la Hongrie et de l'Autrich jusqu'à la frontière de la Suisse avec l'Italie; elle longe ensuite la frontière France-Italie jusqu'à la mer Mériderranée et, de là, passe par les points 43° N 10° E, 41° N 10° E et 41° N 07° E; de là, elle suit le méridien 07° E jusqu'à la côte de l'Afrique du Nord, puis longe cette côte en passant par Tunis, Tripoli et Benghazi jusqu'à la frontière de la Libye avec la République Arabe d'Egypte. Elle continue ensuite le long de la côte vers Alexandrie, se dirige vers le Caire, puis suit le parallèle du Caire jusqu'à son point d'intersection avec le méridien 40° E, se dirige ensuite vers le nord en suivant le méridien 40° E jusqu'à l'intersection avec la frontière séparant la République Arabe Syrienne de la République d'Iraq et suivant cette frontièrre jusqu'à la frontière turque. Puis, elle suit la frontière séparant la Turquie de la République d'Iraq, de l'Iran et de l'URSS jusqu'à la côte de la mer Noire. De là, elle continue le long de la côte turque de la mer Noire pour atteindre le méridien 30° E et le suivre jusqu'à la frontière de la Roumanie avec l'URSS, longeant ensuite cette frontière jusqu'à point de rencontre des frontières de l'URSS, de la Hongrie et de la Roumanie.

27/109 *Subdivision de zone 1E:*

(ZLARN-2)

Cette subdivision est délimitée par une ligne qui, partant du point 50° N 20° W, passe par les points 40° N 20° W, 40° N 50° W, 30° N 39° W, 30° N 10° W, 31° N 10° W et 31° N 10° E; elle longe ensuite la frontière de la Libye avec la Tunisie jusqu'à la Méditerranée et de là, elle longe la côte tunisienne jusqu'à son point d'intersection avec le méridien 10° E, qu'elle suit jusqu'au point 43° N 10° E. Elle longe ensuite les frontières franco-italienne et italo-suisse, puis les frontières séparant l'Austriche de la Suisse, du Liechtenstein, puis à nouveau de la Suisse. Elle longe ensuite la frontière séparant la Suisse de la République fédérale d'Allemagne, puis les frontières séparant la France de la République fédérale d'Allemagne, du Luxembourg et de la Belgique, jusqu'à la côte de la Manche, et de là, partant vers l'ouest, traverse les eaux territoriales entre les îles Anglo-Normandes et la côte française pour atteindre le point 50° N 10° W et revenir à son point de départ 50° N 20° W.

27/110 *Zone des lignes aériennes régionales et nationales — 2:*

(ZLARN-2)

Cette zone est délimitée par une ligne qui, partant du Pôpe Nord, passe par le point 70° N 32° E, pour longer ensuite la frontière entre la Norvège et l'URSS et entre la Finlande et l'URSS jusqu'à la côte de la mer Baltique, suivre ensuite les eaux territoriales soviétiques le long de la côte de la mer Baltique, jusqu'à la frontière séparant l'URSS de la Pologne, puis longer la frontière séparant l'URSS des pays suivants: Pologne, République Socialiste Tchécoslovaque, Hongrie et Roumanie jusqu'au point d'intersection de la côte de la mer Noire avec le méridien 30° E; elle suit ce méridien jusqu'à la côte turque de la mer Noire, longe cette côte jusqu'à l'intersection des frontières de la Turquie et de l'URSS et, de là, longe leur frontière commune et la frontière Iran-URSS jusqu'à la mer Caspienne, puis la côte iranienne de cette mer. De là, elle suit la frontière méridionale de l'URSS jusqu'au point de rencontre des frontières de la Mongolie, de la République Populaire de Chine et de l'URSS à environ 49° N 88° E, pour suivre ensuite le méridien 88° E jusqu'au parallèle 55° N et longer ce parallèle jusqu'à 60° E, puis rejoindre le Pôle Nord en suivant le méridien 60° E.

27/111 *Subdivision de zone 2A:*

Cette subdivision est délimitée par une ligne qui, partant du Pôle Nord, suit le méridien 32° E jusqu'au point 70° N 32° E pour suivre ensuite la frontière entre la Norvège et l'URSS et entre la Finlande et l'URSS jusqu'à la côte de la mer Baltique, puis longer les eaux territoriales soviétiques de la mer Baltique jusqu'au point 55° N 20° E; de là, passer par Moscou et, par le point 55° N 60° E, rejoindre le Pôle Nord en suivant le méridien 60° E.

27/112 *Subdivision de zone 2B:*

Cette subdivision est délimitée par une ligne qui, partant du point 55° N 88° E, passe par les points 55° N 60° E, 47° N 53° E pour suivre ensuite la côte orientale de la mer Caspienne jusqu'à la côte de l'Iran et, de là, se diriger vers l'est en suivant la frontière méridionale de l'URSS jusqu'au point de rencontre des frontières de la Mongolie, de la République Populaire de Chine et de l'URSS à environ 49° N 88° E, et longer ensuite le méridien 88° E pour revenir à son point de départ 55° N 88° E.

27/113 *Subdivision de zone 2C:*

Cette subdivision est délimitée par une ligne qui, partant du point 55° N 60° E, va jusqu'à Moscou et, de là, jusqu'au point 55° N 20° E, pour se diriger ensuite vers le sud en suivant la frontière séparant l'URSS de la Pologne, puis la frontière entre l'URSS et les pays suivants: Pologne, République Socialiste Tchécoslovaque, Hongrie et Roumanie, jusqu'à la côte de la mer Noire à son point d'intersection avec le méridien 30° E. Cette ligne suit alors le méridien 30° E jusqu'à la côte turque de la mer Noire et longe ensuite cette côte jusqu'à son intersection avec la frontière entre la Turquie et l'URSS; de là, elle longe leur frontière commune et la frontière Iran-URSS jusqu'à la mer Caspienne, puis suit la côte méridionale de la mer Caspienne et se dirige ensuite vers le nord en suivant la côte orientale de cette mer et, passant par le point 47° N 53° E, revient à son point de départ 55° N 60° E.

27/114 *Zone des lignes aériennes régionales et nationales — 3:*

(ZLARN-3)

Cette zone est délimitée par une ligne qui, partant du Pôle Nord, suit le méridien 60° E jusqu'au point 55° N 60° E pour longer ensuite le parallèle 55° N jusqu'à son point d'intersection avec le méridien 88° E et de là suivre ce méridien jusqu'au point de rencontre des frontières de la Mongolie, de la République Populaire de Chine et de l'URSS à environ 49° N 88° E, puis longer la frontière Mongolie-République Populaire de Chine et URSS-République Populaire de Chine jusqu'à la côte. Elle passe alors entre les eaux territoriales soviétiques et japonaises et, par les points 43° N 147° E, 50° N 164° E et 65° N 170° W, rejoint le Pôle Nord en suivant le méridien 170° W.

27/115 *Subdivision de zone 3A:*

Cette subdivision est délimitée par une ligne qui, partant du Pôle Nord, suit le méridien 60° E jusqu'au point 55° N 60° E en longeant le parallèle 55° N jusqu'à son point d'intersection avec le méridien 88° E; de là, elle passe par les points 60° N 88° E et 60° N 110° E et rejoint le Pôle Nord en suivant le méridien 110° E.

27/116 *Subdivision de zone 3B:*

Cette subdivision est délimitée par une ligne qui, partant du Pôle Nord, suit le méridien 110° E et passe ensuite par les points 60° N 110° E, 60° N 147° E, 43° N 147° E, 50° N 164° E et 65° N 170° W et rejoint le Pôle Nord en suivant le méridien 170° W.

27/117 *Subdivision de zone 3C:*

Cette subdivision est délimitée par une ligne qui, partant du point 60° N 88° E, rejoint le point de recontre des frontières entre la Mongolie, la République Populaire de Chine et l'URSS, à environ 49° E, pour suivre la frontière Mongolie-République Populaire de Chine et la frontière URSS-République Populaire de Chine jusqu'à la côte. Elle passe ensuite entre les eaux territoriales soviétiques et japonaises, passe par les points 43° N 147° E, 60° N 147° E, et rejoint son point de départ 60° N 88° E.

27/118 *Zone des lignes aériennes régionales et nationales — 4:*

(ZLARN-4)

Cette zone est délimitée par une ligne qui, partant du point 30° N 39° W, passe par les points suivantes: 10° N 20° W, 05° S 20° W, 05° S 12° E, longe la frontière séparant la République Populaire du Congo de la République Populaire d'Angola, puis suit la frontière septentrionale de la République du Zaire, longe celle de la République Populaire du Congo, de l'Empire Centrafricain et du Soudan, et de là se dirige vers le nord le long de la frontière occidentale du Soudan; à partir de là, cette ligne suit la frontière occidentale de la République Arabe d'Egypte, continue vers le nord jusqu'à la Méditerranée et longe les côtes méditerranéenne et atlantique de l'Afrique du Nord jusqu'au point situé à 30° N 10° W. De là, elle suit le parallèle 30° N en direction de l'ouest pour revenir à son point de départ 30° N 39° W.

27/119 *Subdivision de zone 4A:*

Cette subdivision est délimitée par une ligne qui, partant du point 30° N 39° W, passe par le point 21° N 31° W, puis par Gao et Zinder. De cette ville, longe la frontière septentrionale du Nigeria jusqu'à un point situé à l'ouest de N'Djamena; elle longe alors de parallèle de N'Djamena jusqu'au point 12° N 22° E. Elle se dirige ensuite vers le nord en suivant la frontière occidentale du Soudan et la frontière occidentale de la République Arabe d'Egypte jusqu'à la Méditerranée, pour longer ensuite les côtes méditerranéenne et atlantique de l'Afrique du Nord jusqu'au point 30° N 10° W et, de là, suivre le parallèle 30° N jusqu'à son point de départ 30° N 39° W.

27/120 *Subdivision de zone 4B:*

Cette subdivision est délimitée par une ligne qui, partant du point 21° N 31° W, passe par les points 10° N 20° W, 05° S 20° W et 05° S 12° E et, de là, longe la frontière méridionale de la République Populaire du Congo, de l'Empire Centrafricain, jusqu'au point de recontre des frontières de la République du Zaire, du Soudan et de l'Empire Centrafricain. De là, elle longe la frontière occidentale du Soudan jusqu'au point 12° N 22° E, pour longer ensuite le parallèle de N'Djamena jusqu'à la frontiére du Nigeria. De là, elle se dirige vers l'ouest en suivant cette frontière jusqu'au point 13°12' N 10°45' E, passe par Zinder et Gao, et revient à son point de départ 21° N 31° W.

27/121 *Zone des lignes aériennes régionales et nationales — 5:*

(ZLARN-5)

Cette zone est délimitée par une ligne qui, partant du point 41° N 40° E, passe par le point 37° N 40° E, pour longer ensuite la frontière séparant la Turquie de la République Arabe Syrienne jusqu'à la côte méditerranéenne et, de là, arriver au point où la frontière commune de la Libye et de la République Arabe d'Egypte rejoint la côte de l'Afrique du Nord, Chypre restant en dehors de la zone. Elle se dirige ensuite vers le Sud, en suivant la frontière occidentale de la République Arabe d'Egypte et du Soudan jusqu'à la frontière du Kenya. De là, elle se dirige vers l'est en longeant la frontière nord du Kenya, et, en direction du sud, elle suit la frontière séparant le Kenya de la Somalie pour rejoindre la côte orientale de l'Afrique au point 02° S 41° E. Elle continue en passant par les points 02° S 73° E et 37° N 73° E, longe en direction de l'est la frontière entre la République d'Afghanistan et le Pakistan; de là, en direction de l'ouest, elle suit la frontière méridionale de l'URSS jusqu'à la mer Caspienne. Elle longe ensuite la frontière nord de l'Iran et de la Turquie jusqu'à son point de départ 41° N 40° E.

27/122 *Subdivision de zone 5A:*

Cette subdivision est délimitée par une ligne qui, partant du point 37° N 40° E, suit la frontière séparant la Turquie de la République Arabe Syrienne jusqu'à la côte méditerranéenne et, de là, gagne le point

d'intersection de la frontière égypto-libyenne et de la côte de l'Afrique du Nord, sans passer par Chypre. Elle se dirige ensuite vers le sud, longe la frontière occidentale de la République Arabe d'Egypte et suit, vers l'est, la frontière commune à la République Arabe d'Egypte et au Soudan pour atteindre le point 24° N 37° E. Elle continue en passant par les points 11°45' N 42° E, 11°45' N 55° E, 20° N 52° E, 26° N 52° E, et longe les frontières séparant l'Iran de la République d'Iraq et la République d'Iraq de la Turquie, pour revenir à son point de départ 37° N 40° E.

27/123 *Subdivision de zone 5B:*

Cette subdivision est délimitée par une ligne qui, partant du point 41° N 40° E, passe par le point 37° N 40° E puis, se dirigeant vers l'est, longe la frontière séparant la Turquie de la République Arabe Syrienne et de la République d'Iraq, et la frontière séparant la République d'Iraq et l'Iran jusqu'au point 30° N 49° E, et de là coupe le golfe Persique en son milieu en passant par 26° N 52° E et 24° N 60° E, Bombay et 37° N 73° E, pour longer ensuite, en direction de l'est, la frontière séparant la République d'Afghanistan du Pakistan et, en direction de l'ouest, la frontière méridionale de l'URSS jusqu'à la mer Caspienne. De là, elle suit la frontière nord de l'Iran et de la Turquie jusqu'à 41° N 40° E.

27/124 *Subdivision de zone 5C:*

Cette subdivision est délimitée par une ligne qui, partant du point 26° N 52° E, passe par les points 13° N 52° E, 13° N 54° E, 02° S 54° E, 02° S 73° E Bombay, 24° N 60° E et, de là, coup le golfe Persique en son milieu et rejoint le point 26° N 52° E.

27/125 *Subdivision de zone 5D:*

Cette subdivision est délimitée par une ligne qui, partant du point de rencontre des frontières de la République Arabe d'Egypte, de la Libye et du Soudan, suit, en direction du sud la frontière occidentale du Soudan jusqu'à la frontière du Kenya, longe ensuite la frontière nord du Kenya, pour se diriger vers le sud en suivant la frontière séparant le Kenya de la Somalie jusqu'à la côte orientale de l'Afrique, en un point situé à 02° S 42° E, puis passe par les points 02° S 54° E, 13° N 54° E, 13° N 52° E, 12° N 44° E et, de là, se dirige vers le nord-ouest, coupant la mer Rouge en son milieu jusqu'au point 24° N 37° E. De là, elle longe la frontière méridionale de la République Arabe d'Egypte pour revenir à son point de départ.

27/126 *Zone des lignes aériennes régionales et nationales — 6:*

(ZLARN-6)

Cette zone est délimitée par une ligne qui, partant approximativement du point 49° 88° E, longe la frontière séparant la Chine et l'URSS, l'Afghanistan et le Pakistan, l'Iran et le Pakistan jusqu'au point 23° N 61° E et, de là, rejoint Bombay, puis longe le méridien 73° E passe par les points 02° S 73° E, 02° S 92° E, 10° S 92° E, 10° S 141° E, 00° 141° E, 00° 160° E, 03° 30' N 160° E, 03° 30 N 170° W, 10° N 170° W, 50° N 164° E, 43° N 147° E. De là, elle passe, en direction de l'ouest, entre les eaux territoriales japonaises et soviétiques, elle suit les frontières nord et septentrionale de la Chine, pour rejoindre son point de départ, approximativement 49° N 88° E.

27/127 *Subdivision de zone 6A:*

Cette subdivision est délimitée par une ligne qui, partant du point 37° N 75° E, longe la frontière séparant le Pakistan de la République d'Afghanistan, l'Iran du Pakistan jusqu'au point 23° N 61° E et, de là, continue jusqu'á Bombay, puis jusqu'au point 24° N 80° E et, de là, jusqu'à Calcultta. Elle longe ensuite da côte du Bangladesh et de la Birmanie jusqu'à la frontière séparant la Birmanie de la Thaïlande puis le long de cette frontière et de celle séparant la Birmanie de la Repúblique Démocratique Populaire Lao pour remonter le long de la frontière séparant la République Populaire de Chine de la Birmanie. De là elle se dirige vers l'ouest en longeant la frontière méridionale de la République Populaire de Chine pour rejoindre son point de départ 37° N 75° E.

27/128 *Subdivison de zone 6B:*

Cette subdivison est délimitée par une ligne qui, partant du point 39° 49' 41" N 124° 10' 06" E, passe par les points 39° 31' 51" N 124° 06' 31" E, 39° N 124° E et atteint le point 32° 30' N 124° E. Entre le point 32° 30' N 124° E et le point 25° N 123° E, la limite de cette subdivison n'est pas définie. Du point 25° N 123° E, la ligne passe par les points 21° N 121° 30' E, 20° N 120° E, 20° N 176° W, 50° N 164° E et 43° N 147° E, puis se dirige vers l'ouest en passant entre les eaux territoriales japonaises et soviétiques,

et longe ensuite la frontière séparant la République Populaire Démocratique de Corée de l'URSS, puis la frontière séparant la République Populaire de Chine de la République Populaire Démocratique de Corée, pour revenir à son point de depart 39° 49' 41" N 124° 10' 06" E.

27/129 *Subdivison de zone 6C:*

Cette subdivison de zone est délimitée par une ligne qui, partant du point 20° N 130° E, passe par les points 04° N 130° E, 04° N 118° E, et de là longe les frontières méridionales de Sabah et de Sarawak jusqu'à la côte puis elle se dirige vers le sud en suivant la côte occidentale de Bornéo jusqu'à méridien 110° E qu'elle longe jusqu'à point 10° S 110° E. De là, elle passe par les points 10° S 141° E, 00° 141° E, 00° 160° E, 03° 30' N 160° E, 03° 30' N 170° W, 10° N 170° W, 20° N 176° W et, de ce dernier point , rejoint le point 20° N 130° E.

27/130 *Subdivison de zone 6D:*

Cette subdivison est délimitée par une ligne qui, partant du point de rencontre des frontières de la République Populaire de Chine, de l'Inde et de la Birmanie, se dirige vers le sud en longeant les frontières séparant la Birmanie de l'Inde et la Birmanie du Bangladesh, atteint le golfe du Bengale; de là, elle longe la côte de Birmanie jusqu'à son point le plus méridional. Elle se dirige ensuite vers l'île de Weh (au large de la côte septentrionale de Sumatra) et de là passe par les points 02° S 92° E, 10° S 92° E jusqu'au point 10° S 110° E; de là, elle se dirige vers l'est jusqu'au point 10° S 141° E et remonte vers le nord jusqu'au point 00° 141° E, passe par le point 04° N 130° E et les points 20° N 130° E et 20° N 113° E. Puis, elle se dirige vers le sud en contournant l'île de Haïnan; elle longe ensuite la frontière separant la République Populaire de Chine du Viet Nam, puis les frontières separant la République Populaire de Chine de la République Démocratique Populaire Lao et la République Populaire de Chine de la Birmanie pour revenir à son point de départ au point de rencontre des frontières de la République Populaire de Chine, de l'Inde et de la Birmanie.

27/131 *Subdivison de zone 6E:*

Cette subdivison est délimitée par une ligne qui, partant du point 20° N 73° E, passe par les points 02° S 73° E, 02° S 92° E, puis par l'île de Weh (au large de la côte septentrionale de Sumatra), jusqu'au point 10° N 97° E, de là, elle longe de la côte de Birmanie, du Bangladesh et de l'Inde, et atteint Calcutta pour continuer ensuite, par le point 24° N 80° E, jusqu'à son point de départ 20° N 73° E.

27/132 *Subdivison de zone 6F:*

Cette subdivison est délimitée par une ligne qui, partant du point 25° N 123° E, passe par les points 21° N 121° 30' E, 20° N 120° E, 20° N 113° E, puis contourne par le sud l'île de Haïnan, puis longe les frontières entre a République Populaire de Chine et le Viet Nam, la République Démocratique Populaire Lao et la Birmanie jusqu'au point de rencontre des frontières de la République Populaire de Chine, de l'Inde et de la Birmanie; elle se dirige ensuite vers le sud le long des frontières séparant la Birmanie de l'Inde et du Bangladesh jusqu'au golfe du Bengale. Elle longe ensuite la côte de la Birmanie jusqu'à son point le plus méridional, puis se dirige vers l'île de Weh (au large de la côte septentrionale de Sumatra). Elle passe ensuite par les points 02° S 92° E, 10° S 92° E et 10° S 110° E, puis se dirige vers le nord en suivant le méridien 110° E; elle longe ensuite la limite de la subdivison 6C jusqu'aux 20° N 130° E, 43° N 147° E; elle se dirige vers l'ouest entre les eaux territorials du Japon et de l'URSS et suit ça frontière séparant la République Démocratique Populaire de Corée de l'URSS, puis la frontière séparant la République Populaire de Chine de la République Démocratique Populaire de Corée jusqu'aux points 39° 49' 41" N 124° 10' 06" E, 39° 31' 51" N 124° 06' 31" E, 39° N 124°E, puis jusqu'au point 32° 30' N 124° E.

Entre les points 32° 30° N 124° E et 25° N 123° E, la limite de cette subdivison n'est pas définie.

27/132A *Subdivison de zone 6G:*

Cette subdivison est délimitée par une ligne qui, partant du point 32°30' N 124° E se dirige vers le nord jusqu'au point 39° N 124° E, passe par le point 39° 31' 51" N 124° 06' 31" E puis atteint le point 39° 49' 41" N 124° 10' 06" E sur la frontière séparant la République Populaire de Chine et la République Populaire Démocratique de Corée. Elle longe ensuite la frontière de la République Populaire de Chine jusqu'au point de recontre des frontières de l'Inde et de la Birmanie. De là, elle se dirige vers le sud en longeant les frontières séparant l'Inde de la Birmanie et le Bangladesh de la Birmanie, jusqu'au golfe de Bengale. Elle longe ensuite la côte de Birmanie jusqu'à son point le plus méridional, se dirige vers l'île de Weh (au large de la côte septentrionale de Sumatra), pour continuer ensuite par les points 02° S 92° E et 10° S 92° E,

jusqu'au point 10° S 110° E. Puis elle se dirige vers l'est jusqu'au point 10° S 141° E, ensuite vers le nord jusqu'au point 00° 141° E et passe par les points 04° N 130° E, 20° N 130° E et 20° N 120° 40' E. De là, elle se dirige vers le nord jusqu'aux points 21° N 121° 30' E et 25° N 123° E.

Entre les points 25° N 123° E et 32° 30' N 124° E, la limite de cette subdivison de zone n'est pas définie.

Dans les régions où les subdivisons 6D, 6F et 6G sont communes, les fréquences alloties à la subdivison de zone 6G doivent être utilisées uniquement par les stations aéronautiques de la République Populaire de Chine; les fréquences alloties aux subdivisons de zone 6D et 6F doivent être utilisées uniquement par les stations aéronautiques des administrations des autres pays situés dans les régions communes. Dans ces régions communes également, l'utilisation opérationnelle par la République Populaire de Chine des fréquences alloties à la subdivision 6G doit être limitée à la zone définie par une ligne qui, partant du point 21° 32' 52" N 108° E, passe par le points 20° N 108° E, 20° N 107° E, 18° N 107° E, 18° N 108° E, 15° N 110° E, 10° N 110° E, 06° N 108° E, 03° 30' N 112° E, 04° N 113° E, 08° N 116° E, 10° N 118° E, 14° N 119° E, 18° N 119° E jusqu'au point 20° N 120° 40' E, et de là, longe la limite de la subdivison de zone 6D jusqu'au point 21° 32' 52' N 108° E.

27/133 *Zone des lignes áeriennes régionales et nationales — 7:*

(ZLARN-7)

Cette zone est délimitée par une ligne qui, partant du Pôle Sud, suit le méridien 20° W jusqu'au point 05° S 20° W; elle suit la parallèle 05° jusqu'au point 05° S 12° E, longe ensuite la frontière séparant la République Populaire du Congo de la République Populaire d'Angola, la frontière septentrionale de la République du Zaïre, la frontière séparant l'Ougande du Soudan, et la frontière séparant la Kenya des pays suivants: Soudan, Ethiopie et Somalie. Elle passe ensuite par les points 02° S 42° E, 02° S 60° E et sur le méridien 60° E jusqu'au point 11° S 60° E; elle rejoint enfin le Pôle Sud en passant par les points 11° S 65° E, 40° S 65° E et 40° S 60° E.

27/134 *Subdivison de zone 7A:*

Cette subdivison est délimitée par une ligne qui, partant du Pôle Sud, suit le méridien 20° W et passe ensuite par 05° S 20° W, 05° S 10° E, 40° S 10° E, 40° S 60° E et rejoint le Pôle Sud en suivant le méridien 60° E.

27/135 *Subdivison de zone 7B:*

Cette subdivison est délimitée par une ligne qui, partant du point 05° S 10° E, passe par le point 05° S 12° E pour longer la frontière séparant la République Populaire du Congo de la République Populaire d'Angola, puis la frontière septentrionale de la République du Zaïre jusqu'au point de rencontre des frontières de l'Ouganda, de la République du Zaïre et du Soudan. De là, elle suite les frontières orientales de la République du Zaïre, de la République Rwandaise, de la République du Burundi, puis à nouveau de la République du Zaïre. Elle longe ensuite les frontières méridionales de la République du Zaïre et de la République Populaire d'Angola jusqu'à la côte de l'Atlantique Sud, pase par le point 17° S 10° E et revient à son point de départ 05° S 10° E.

27/136 *Subdivision de zone 7C:*

Cette subdivision est délimitée par une ligne qui, partant du point de rencontre des frontières de l'Ouganda, de la République du Zaïre et du Sodan suit la frontière occidentale de l'Ouganda et de la Tanzanie et longe ensuite la frontière méridionale de la Tanzanie jusqu'à la côte. De là, elle passe par les points 11° S 41° E, 11° S 60° E, 02° S 60° E, 02° S 41° E jusqu'a la côte orientale de l'Afrique, puis se dirige vers le nord suivant les frontières orientale et septentrional du Kenya, puis la frontière septentrionale de l'Ouganda et rejoint le point de rencontre des frontières de la République du Zaïre, du Soudan et de, l'Ouganda.

27/137 *Subdivision de zone 7D:*

Cette subdivison est délimitée par une ligne qui, partant de la frontière séparant la Tanzanie du Mozambique sur le lac Nyassa, se dirige vers le sud en suivant sur toute sa longuer la frontière occidentale du Mozambique jusqu'à la côte orientale de l'Afrique; elle passe ensuite par les points 27° S 33° E, 40° S 33° E, 40° S 65° E, 11° S 65° E, 11° S 41° E pour longer la frontière septentrionale du Mozambique jusqu'au lac Nyassa.

27/138 *Subdivision de zone 7E:*

Cette subdivison est délimitée par une ligne qui, partant du point 17° S 10° E, passe par les points 40° S 10° E, 40° S 33° E, 27° S 33° E puis longe sur toute sa longueur la frontière occidentale du Mozambique, puis la partie de la frontière occidentale de la Tanzanie allant jusqu'à la pointe nord du lac Nyassa. De là, elle suit la frontière séparant le Malawi de la Tanzanie et celle qui sépara la Zambie de la Tanzanie, pour longer ensuite les frontières séparant la République du Zaïre de la Zambie, la République Populaire d'Angola de la Zambie, et la République Populaire d'Angola de la Namibie jusqu'à la côte, pour revenir à son point de départ 17° S 10° E.

27/138A *Subdivision de zone 7F:*

Cette subdivison est délimitée par une ligne qui, partant du point 05° S 10° E, passe par le point 05° S 12° E et longe la frontière séparant la République Populaire du Congo et la République Populaire d'Angola, jusqu'à point de rencontre des frontières de la République Populaire du Congo, de la République Populaire d'Angola et de la République du Zaire; de là, elle suit la frontière séparant la République Populaire d'Angola et la République du Zaïre jusqu'à la côte Atlantique qu'elle longe jusqu'au fleuve Zaïre; elle longe ensuite les frontières nord, est et sud de la République Populaire d'Angola jusqu'à la côte de l'Atlantique Sud, passe par le point 17° S 10° E et revient à son point de départ 05° S 10° E.

27/139 *Zone des lignes aériennes régionales et nationales — 8:*

(ZLARN-8)

Cette zone est délimitée par une ligne qui, partant du Pôle Sud, suit, le méridien 60° E jusqu'au point 40° S 60° E et passe ensuite par les points 40° S 65° E, 11° S 65° E, 11° S 60° E, 02° S 60° E, 02° S 92° E, 10° S 92° E, 10° S 110° E pour rejoindre le Pôle Sud en suivant le méridien 110° E.

27/140 SUP

27/141 *Zone des lignes aériennes régionales et nationales — 9:*

(ZLARN-9)

Cette zone est délimitée par une ligne qui, partant du Pôle Sud, suit le méridien 160° E jusqu'au point 27° S 160° E; de là ele passe par les points 19° S 153° E, 10° S 145° E, 10° S 141° E, 00° 141° E, 00° 160° E, 03° 30' N 160° E, 03° 30' N 120° W, pour rejoindre le Pôle Sud en suivant le méridien 120° W.

27/142 SUP

27/143 *Subdivision de zone 9B:*

La ligne délimitant cette subdivision est définie par les points 00° 141° E, 10° S 141° E, 10° S 145° E, 27° S 160° E, 27° S 157° W, 03° 30' N 157° W, 03° 30' N 160° E, 00° 160° E, 00° 141° E.

27/144 *Subdivision de zone 9C:*

La ligne délimitant cette subdivision part du Pôle Sud, suit le méridien 170° W jusqu'à 03° 30' N, passe par le point 03° 30' N 120° W et rejoint le Pôle Sud en suivant le méridien 120° W.

27/145 *Subdivision de zone 9D:*

La ligne délimitant cette subdivision part du Pôle Sud, suit le méridien 160° E jusqu'au point 27° S 160° E, passe par le point 27° S 170° W et rejoint le Pôle Sud en suivant le méridien 170° W.

27/145A *Zone des lignes aériennes régionales et nationales — 10:*

(ZLARN-10)

Cette zone est délimitée par une ligne qui, partant du point 50° N 164° E, passe par le point 66° N 169° W, puis longe le méridien 169° W jusqu'au Pôle Nord. Elle passe ensuite par les points 82° N 30° E, 82° N

00°, 73° N 00°, 73° N 15° W, puis longe le méridien 15° W jusqu'au point 72° N 15° W. Elle passe ensuite par les points 40° N 50° W, 40° N 65° W, 44° 30' N 73° W, 41° N 81° W, 41° N 88° W,48° N 91° W, 48° N 127° W, 50° N 130° W, pour se diriger ensuite versa l'ouest et revenir à son point de départ 50° N 164°E.

27/146 *Subdivision de zone 10A:*

Cette subdivison est délimitée par une ligne qui, partant du point 50° N 164° E, passe par le point 66° N 169° W; de là, elle suit le méridien 169° W jusqu'au Pôle Nord, passe par le point 50° N 130° W et revenir ensuite vers l'ouest jusqu'à son point de départ 50° N 164° E.

27/147 *Subdivision de zone 10B:*

La ligne délimitant cette zone part du point 57° N 140° W, passe au Pôle Nord, puis par les points 48° N 91° W, 48° N 127° W, 57° N 139° W, et revient à son point de départ 57° N 140° W.

27/148 *Subdivision de zone 10C:*

La ligne délimitant cette subdivision est définie par les points 57° N 140° W, 60° N 140° W, 60° N 91° W, 48° N 91° W, 48° N 127° W, 57° N 139° W, 57° N 140° W.

27/149 *Subdivision de zone 10D:*

La ligne délimitant cette subdivision part du point 48° N 98° W, puis passe par le Pôle Nord et par les points 69° N 45° W, 61° N 70° W, 45° N 72° W, 41° N 81° W, 41° N 88° W, 48° N 91° W, 48° N 98° W.

27/150 *Subdivision de zone 10E:*

La ligne délimitant cette subdivision passe par les points 45° N 74° W, 61° W 72° W 69° N 47° W, puis par le Pôle Nord et par les points 72° N 15° W, 40° N 50° W, 40° N 65° W, pour revenir à son point de départ 45° N 74° W.

27/150A *Subdivision de zone 10F:*

La ligne délimitant cette subdivision part du Pôle Nord et passe par les points 82° N 30° E, 82° N 00°, 73° N 00°, 73° N 20° W, 70° N 20° W, 63° 30' N 39° W, 58° 30' N 43° W, 58° 30' N 50° W, 63° 30' N 55° 44' W, 65° 30' N 58° 39' W, 74° N 68° 18' W, 76° N 76° W, 78° N 75° W, 82° N 60° W, et revient à son de départ au Pôle Nord.

27/150B *Zone des lignes aériennes régionales et nationales — 11:*

(ZLARN-11)

Cette zone est délimitée par une ligne qui, partant du point 29° N 180°, passe par les points 50° N 164° E, 50° N 127° W, pour longer ensuite la frontière séparant les États-Unis d'Amérique du Canada jusqu'au point 46° N 67° W; elle passe ensuite par les points 40° N 65° W, 40° N 50° W, 25° N 35° W, 25° N 98° W, 33° N 119° W, 33° N 153° W, 29° N 153° W, pour revenir à son point de départ 29° N 180°.

27/151 *Subdivision de zone 11A:*

La ligne délimitant cette subdivision pat du point 29° N 180°, puis passe par les points 50° N 164° E, 50° N 130° W, 33° N 130° W, 33° N 153° W, 29° N 153° W, pour revenir à son point de départ 29° N 180°.

27/152 *Subdivision de zone 11B:*

Cette subdivison est délimitée par une ligne qui, partant du point 50° N 130° W, passe par les points 33° N 130° W, 33° N 119° W, 25° N 98° W, 25° N 65° W, 40° N 65° W, 46° N 67° W. De là, elle suit la frontière entre les États-Unis d'Amérique et le Canada, passant pat le point 50° N 127° W, pour revenir à son point de départ 50° N 130° W.

27/152A *Subdivision de zone 11C:*

Cette divison est délimitée par une ligne qui, partant du point 25° N 65°W, passe par les points 40° N 65° W, 40° N 50° W, 25° N 35° W, pour revenir à son point de départ 25° N 65° W.

27/152B *Zone des lignes aériennes régionales et nationales — 12:*

(ZLARN-12)

Cette zone est délimitée par une ligne qui, partant du point 03° 30' N 170° W, passe par le point 10° N 170° W, pour longer ensuite la ligne séparant les Régions 2 et 3 de l'UIT jusqu'au point 29° N 180°; elle passe ensuite par les points 29° N 153° W, 33° N 153° W, 33° N 120° W, 35° N 120° W, 32° N 104° W, 25° N 91° W, 26° N 91° W, 26° N 79° W, 27° N 79° W, 27° N 76° 30' W, 25° N 70° W, 25° N 35° W, pour longer ensuite la ligne séparant les Régions 1 et 2 de l'UIT, jusqu'au point 00° 20° W. De là, elle passe par les points 00° 44° W, 04° 24' N 50° 39' W pour longer ensuite les frontières séparant le Brésil du Département français de la Guyane, du Surinam, de la Guyane, du Venezuela, de la Colombie, jusqu'au point de rencontre des frontières du Brésil, du Pérou et de la Colombie; elle longe ensuite les frontières séparant le Pérou de la Colombie et de l'Equateur, jusqu'au point 04° S 93° W. De là, elle passe par les points 05° S 93° W, 05° S 120° W, 03° 30' N 120° W, pour revenir à son de départ 03° 30' N 170° W.

27/153 *Subdivision de zone 12A:*

La ligne délimitant cette subdivision part du point 03° 30' N 170° W, passe par le point 10° N 170° W, puis longe la ligne séparant les Régions 2 et 3 de l'UIT jusqu'au point 29° N 180°; elle passe par les points 29° N 153° W, 03° 30' N 153° W, pour revenir à son point de départ 03° 30' N 170° W.

27/154 *Subdivision de zone 12B:*

La ligne délimitant cette subdivision part du point 03° 30' N 153° W, suit la méridien 153° W jusqu'au point 33° N 153° W et passe par les points 33° N 120° W, 17° N 115° W, 14° N 93° W, 02° N 86° W, 02° N 93° W, 05° S 93° W, 05° S 120° W, 03° 30' N 120° W, pour revenir à son point de départ 03° 30' N 153° W.

27/155 *Subdivision de zone 12C*

La ligne délimitant cette subdivision part du point 33° N 120° W, passe par les points 35° N 120° W, 32° N 104° W, 25° N 91° W, 23° N 83° W, 22° N 83° W, 13° N 90° W, 16° N 116° W, pour revenir à son point de départ 33° N 120° W.

27/156 *Subdivision de zone 12D:*

Cette subdivision est délimitée par une ligne qui, partant du point 20° N 91° W, passe par les points 26° N 91° W, 26° N 79° W, 27° N 76° 30' W, 26° N 73° W, 17° N 58° W, 10° N 58° W, puis par les villes de Panama et de Colon, les îles du Cygne et la ville de Belize, pour revenir à son point de départ 20° N 91° W.

27/157 *Subdivision de zone 12E:*

La ligne délimitant cette subdivision part du point 15° N 95° W et passe par les points 23° N 92° W, 23° N 85 W, 19° N 85° W, 09° N 77° W, 02° N 79° W, puis par le point 01° N 75° W, elle longe la frontière orientale et méridionale de l'Equateur jusqu'au point 04° S 81° W, de là, passe par les points 02° N 81° W, 02° N 86° W et 14° N 93° W, pour revenir à son point de départ au point 15° N 95° W.

27/158 *Subdivison de zone 12F:*

Cette subdivison est délimitée par une ligne qui, partant du point 02° N 79° W, passe par le point 08° N 83° W, longe la frontière séparant Panama de Costa Rica, passe par les points 10° N 83° W, 13° N 83° W, 13° N 70° W, 08° N 70° W, 06° N 67° W, 01° N 66° W, longe la frontière séparant le Brésil de la Colombie jusqu'au point 04° S 70° W et, de là, suit la frontière séparant la Colombie du Pérou puis la frontière séparant la Colombie de l'Equateur, pour revenir á son point de départ 02° N 79° W.

27/159 *Subdivison de zone 12G:*

Cette subdivison de zone est délimitée par une ligne qui, partant du point 07° N 73° W, passe par les points 14° N 73° W, 14° N 58° W, 01°31' N 58° W; elle longe ensuite les frontiéres du Brésil avec la Guyane, le Venezuela, la Colombie, passe par les points 01°57' N 68° W, 05° N 69° W, pour revenir à son point de départ 07° N 73° W.

27/160 *Subdivison de zone 12H:*

Cette subdivison est délimitée par une ligne qui, partant du point 05° N 70° W, passe par les points 08°45' N 60° W, 08° N 58°W, 08° N 49° W, 04°10' N 51°36' W; elle longe ensuite les frontières séparant le Brésil du Département français de la Guyane, du Surinam, de la Guyane, du Venezuela et de la Colombie, jusqu'au point de rencontre des frontières du Brésil, de la Colombie et du Pérou, pour revenir à son point de départ 05° N 70° W.

27/161 *Subdivison de zone 12I:*

La ligne délimitant cette subdivision part du point 25° N 70° W, passe par le point 25° N 35° W, puis longe la ligne séparant les Régions 1 et 2 de l'UIT, jusqu'au point 00° 20° W; elle passe ensuite par les points 00° 44° W, 08° N 54° W, 08° N 58° W, 17° N 58° W, pour revenir à son point de départ 25° N 70° W.

27/161A *Subdivison de zone 12J:*

Cette subdivison est délimitée par une ligne qui, partant du point 04° S 93° W, passe par les points 02° N 93° W, 02' N 79° W, longe da frontière séparant l'Équateur de la Colombie jusqu'au point de rencontre des frontières de la Colombie, du Pérou et de l'Equateur, longe la frontière séparant le Pérou de l'Equateur, pour revenir à son point de départ 04° S 93° W.

27/161B *Zone des lignes aériennes régionales et nationales — 13:*

(ZLARN-13)

Cette zone est délimitée par une ligne qui, partant du Pôle Sud, suit le méridien 120° W jusqu'au point 05° S 120° W; de là, elle suit le parallèle 05° S jusqu'au point 05° S 93° W, passe par le point 04° S 82° W et suit les frontières mèridionales de l'Equateur, de la Colombie, du Venezuela, de la Guyane, du Surinam et du Département français de la Guyane, jusqu'au point 04° 24' N 50° 39' W. Elle passe ensuite par les point 04° 24' N 47° W, 00° 32° W, 00° 20° W, pour rejoindre le Pôle Sud en suivant le méridien 20° W.

27/162 *Subdivison de zone 13A:*

La ligne délimitant cette subdivision part du point 05° S 120° W, passe par les points 05° S 93° W, 04° S 82° W, 19° S 81° W, 57° S 81° W, 57° S 90° W, puis par le Pôle Sud, pour revenir à son point de départ 05° S 120° W.

27/163 *Subdivison de zone 13B:*

La ligne délimitant cette subdivision part du point 29° S 111° W, passe par les points 24° S 111° W, 24° S 104° W, 29° S 104° W, pour revenir à son point de départ 29° S 111° W.

27/164 *Subdivision de zone 13C:*

Cette subdivision est délimitée par une ligne qui, partant du point 15° S 47° W, passe par les points 20° S 44° W, 23° 19' S 42° W, 25° S 45° W, 22° 30' S 50° 39' W, 19° 52' S 58° W, puis longe les frontières du Brésil ave le Paraguay, la Bolivie, le Pérou, la Colombie, le Venezuela, la Guyane, le Surinam et le Département français de la Guyane. Elle passe ensuit par les points 04° 24' N 50° 39' W, 04° 24' N 47° W, pour revenir à son point de départ 15° S 47° W.

27/165 *Subdivision de zone 13D:*

Cette subdivison est délimitée par une ligne qui, partant du point 11° S 69° 30' W, longe la frontière entre la Bolivie et le Brésil, passe par le point 20° 10' S 58° W, longe ensuite la frontière entre la Bolivie et le Paraguay jusqu'au point 22° 30' S 62° 30' W, puis longe la frontière entre la Bolivie et l'Argentine et passe par le point 23° S 67° W; elle longe la frontière entre la Bolivie et le Chili, passe par le point 16° 30' S 69° 30' W, longe la frontière entre la Bolivie et le Pérou, pour revenir à son point de départ 11° S 69° 30' W.

27/165A *Subdivision de zone 13M:*

Cette subdivison est délimitée par une ligne qui, partant du point 19° S 81° W, passe par les points 04° S 82° W, 03° S 80° W, puis longe la frontière entre le Pérou et l'Equateur et entre le Pérou et la Colombie jusqu'au point 11° S 69° 30' W; elle longe ensuite la frontière entre le Pérou et la Bolovie jusqu'au point 17° 30' S 69° 30' W, pùis la frontière entre le Pérou et le Chili, pour revenir à son point de départ 19° S 81° W.

27/165B *Subdivision de zone 13N:*

Cette subdivison est délimitée par une ligne qui, partant du point 22° 30' S 62° 30' W, longe la frontière entre le Paraguay et la Bolivie jusqu'au point 20° 10' S 58° W; elle longe ensuite la frontière entre le Paraguay et le Brésil jusqu'au point 25° 50' S 54° 30' W, puis la frontière entre le Paraguay et l'Argentine, pour revenir à son point de départ 22° 30' S 62° 30' W.

27/166 *Subdivision de zone 13E:*

La ligne délimitant cette subdivision part du point 32° S 81° W, passe par le point 19° S 81° W, rejoint le point d'intersection de la côte avec la frontière séparant le Chili du Pérou, puis longe les frontières séparant le Chili du Pérou, de la Bolivie et de l'Argentine jusqu'au parallèle 32° S, pour revenir à son point de départ 32° S 81° W.

27/167 *Subdivision de zone 13F:*

La ligne délimitant cette subdivision part du point 57° S 81° W, passe par le point 32° S 81° W, jusqu'au croisement du parallèle 32° S avec la frontière entre le Chili et l'Argentine, puis par les points 52° S 67° W, 57° S 67° W, 57° S 40° W et par le Pôle Sud pour revenir à son point de départ 57° S 81° W.

27/168 *Subdivision de zone 13G:*

La ligne délimitant cette subdivision part du point 36° S 55° W, passe par le point d'intersection du parallèle 32° S avec la frontière entre l'Argentine et le Chili, se dirige vers le nord en suivant la frontière séparant l'Argentine de la Bolivie, du Paraguay, du Brésil et de l'Uruguay, pour revenir à son point de départ 36° S 55° W.

27/169 *Subdivision de zone 13H:*

La ligne délimitant cette subdivision part du point 57° S 90° W, passe par les points 57° S 70° W, 52° S 70° W, puis longe la frontière entre le Chili et l'Argentine jusqu'a son croisement avec le parallèle 32° S, passe par les points 36° S 55° W, 57° S 55° W, 57° S 25° W et par le Pôle Sud pour revenir à son point de départ 57° S 90° W.

27/170 *Subdivision de zone 13I:*

La ligne délimitant cette subdivision part du point 40° S 50° W, passe par le point 36° S 55° W, longe la frontière séparant l'Uruguay de l'Argentine et du Brésil, passe par le point 35° S 45° W, pour revenir à son point de départ 40° S 50° W.

27/171 *Subdivision de zone 13J:*

Cette subdivision est délimitée par une ligne qui, partant du point 15° S 47° W, passe par les points 20° S 44° W, 23° 19' S 42° W, 29° S 40° W, 35° S 45° W, puis longe les frontières du Brésil avec l'Uruguay, l'Argentine, le Paraguay et la Bolivie jusqu'au point 19°52' S 58° W. Elle passe ensuite par le point 18° S 57° 37' W, pour revenir à son point de départ 15° S 47° W.

27/172 *Subdivision de zone 13K:*

Cette subdivision est délimitée par une ligne qui, partant du point 22° 30' S 50° 39' W, passe par les points 25° S 45° W, 29° S 40° W, 20° S 32° W, 00° 32° W, 04° 24' N 47° W, 04° 24' N 50° 39' W, pour revenir à son point de départ 22° 30' S 50° 39' W.

27/173 *Subdivision de zone 13L:*

La ligne délimitant cette subdivision part du point 00° 32° W, passe par le point 00° 20° W, le Pôle Sud, les points 57° S 55° W, 36° S 55° W, 40° S 50° W, 20° S 32° W, pour revenir à son point de départ 00° 32° W.

27/173A *Zone des lignes aériennes régionales et nationales — 14:*

(ZLARN-14)

Cette zone est délimitée par une ligne qui, partant du Pôle Sud, suit le méridien 110° E jusqu'au point point 10° S 110° E; de là, elle passe par les points 10° S 145° E, 19° S 153° E, 27° S 160° E, pour rejoindre le Pôle Sud en suivant le méridien 160° E.

27/173B *Subdivision de zone 14A:*

Cette subdivison est délimitée cette subdivision part du Pôle Sud, suit le méridien 110° E jusqu'au point 19° S 110° E; de là, elle passe par les points 19° S 118° E, 24° S 120° E, 24° S 131° E, pour rejoindre le Pôle Sud en suivant le méridien 131° E.

27/173C *Subdivision de zone 14B:*

Cette subdivison est délimitée par une ligne qui, partant du point 19° S 110° E, passe par les points 10° S 110° E, 10° S 131° E, 24° S 131° E, 24° S 120° E, 19° S 118° E, pour revenir à son point de départ 19° S 110° E.

27/173D *Subdivision de zone 14C*

Cette subdivision est délimitée par une ligne qui, partant du point 24° S 131° E, passe par les points 10° S 131° E, 10° S 139° E, 24° S 139° E, pour revenir à son point de départ 24° S 131° E.

27/173E *Subdivision de zone 14D:*

La ligne délimitant cette subdivision part du Pôle Sud, suit le méridien 131° E jusqu'au point 24° S 131° E; de là, elle passe par les points 24° S 139° E, 27° S 139° E, 27° S 142° E, 34° S 142° E, 34° S 139° E, pour rejoindre le Pôle Sud en suivant le méridien 139° E.

27/173F *Subdivision de zone 14E:*

Cette subdivision est délimitée par une ligne qui part du point 24° S 139° E, suit le méridien 139° E jusqu'au point 10° S 139° E, passe para les points 10° S 145° E, 19° S 153° E, pour rejoindre son point de départ 24° S 139° E.

27/173G *Subdivision de zone 14F:*

Cette subdivision est délimitée par une ligne qui part du point 27° S 139° E, suit le méridien 139° E jusqu'au point 24° S 139° E, passe par les points 19° S 153° E, 27° S 160° E, pour rejoindre son point de départ 27° S 139° E.

27/173H *Subdivision de zone 14G:*

La ligne délimitant cette subdivision part du Pôle Sud, suit le méridien 139° E jusqu'au point 34° S 139° E, passe par les points 34° S 142° E, 27° S 142° E, 27° S 160° E et rejoint le Pôle Sud en suivant le méridien 160° E.

ARTICLE 3

Descreption des limites des zones d'allotissement et des zones de réception VOLMET

Zone VOLMET — AFRIQUE-OCÉAN INDIEN:

(AFI-MET)

27/174 La *zone d'allotissement AFI-MET* est délimitée par une ligne qui, partant du point 29° N 20° W, passe par les points 37° N 03° W, 37° N 36° E, 30° N 35° E, 10° N 52° E, 22° S 60° E, 35° S 35° E, 35° S 15° E, 08° S 15° W, 12° N 20° W, pour rejoindre de point 29° N 20° W.

27/175 La *zone de réception AFI-MET* est délimitée par une ligne qui, partant du point 37° N 03° W, passe par les points 37° N 36° E, 30° N 35° E, 10° N 52° E, 10° N 100° E, le Pôle Sud, les points 29° N 40° W, 29° N 20° W, pour rejoindre le point 37° N 03° W.

Zone VOLMET — ATLANTIQUE NORD:

(NAT-MET)

27/176 La *zone d'allotissement NAT-MET* est délimitée par une ligne qui, partant du point 41° N 78° W, passe par les points 51° N 55° W, 24° N 50° W, 24° N 74° W, pour rejoindre le point 41° N 78° W.

27/177 La *zone de réception NAT-MET* est délimitée par une ligne qui, partant du point 24° N 97° W, passe par les points 24° N 85° W, 75° N 85° W, 75° N 20° W, 00° 20° W, 00° 95° W, pour rejoindre le point 24° N 97° W.

Zone VOLMET — EUROPE:

(EUR-MET)

27/178 La *zone d'allotissement EUR-MET* est délimitée par une ligne qui, partant du point 33° N 12° W, passe par les points 54° N 12° W, 70° N 00°, 74° N 40° E, 40° N 36° E, 29° N 35° 30' E, 32° N 13° E, pour rejoindre de point 33° N 12° W.

27/179 La *zone de réception EUR-MET* est délimitée par une ligne qui, partant du point 15° N 20° W, passe par les points 40° N 50° W, 75° N 50° W, 75° N 45° E, 15° N 45° E, pour rejoindre de point 15° N 20° W.

Zone VOLMET — MOYEN-ORIENT:

(MID-MET)

27/180 La *zone d'allotissement MID-MET* est délimitée par une ligne qui, partant du point 50° N 80° E, passe par les points 29° N 80° E, 27° N 85° E, 16° N 78° E, 22° N 56° E, 16° N 42° E, 30° N 30° E, 51° N 30° E, 57° N 37° E, pour rejoindre le point 50° N 80° E.

27/181 La *zone de réception MID-MET* est délimitée par une ligne qui, partant du point 50° N 80° E, passe par les points 50° N 90° E, 35° N 90° E, 27° N 85° E, 16° N 78° E, 22° N 56° E, 16° N 42° E, 30° N 30° E, 51° N 30° E, 57° N 37° E, pour rejoindre le point 50° N 80° E.

Zone VOLMET — NORD CENTRE ASIE:

(NCA-MET)

27/181A La *zone d'allotissement NCA-MET* est délimitée par une ligne qui, partant du point 76° N 32° E, passe par les points 80° N 90° E, 75° N 168° W, 66° N 168° W, 48° N 160° E, 42° N 135° E, 50° N 130° E, 50° N 90° E, 35° N 70° E, 45° N 30° E, 60° N 20° E, pour rejoindre le point 76° N 32° E.

27/181B La *zone de réception NCA-MET* est délimitée par une ligne qui, partant du Pôle Nord, passe para les points 40° N 168° W, 30° N 140° E, 35° N 70° E, 30° N 20° E, pour rejoindre le Pôle Nord.

Zone VOLMET — PACIFIQUE:

(PAC-MET)

27/182 La *zone d'allotissement PAC-MET* est délimitée par une ligne qui, partant du point 52° N 132° E, passe par les points 63° N 149° W, 38° N 120° W, 50° S 120° W, 50° S 145° E, 28° S 145° E, 03° S 129° E, 22° N 112° E, pour rejoindre le point 52° N 132° E.

27/183 La *zone de réception PAC-MET* est délimitée par une ligne qui, partant du point 60° N 100° E, passe para les points 75°-N 160° W, 75° N 110° W, 65° S 110° W, 65° S 145° E, 28° S 145° E, 03° S 129° E, 05° N 80° E, 40° N 80° E, pour rejoindre le point 60° N 100° E.

Zone VOLMET — SUD-EST ASIATIQUE:

(SEA-MET)

27/184 La *zone d'allotissement SEA-MET* est délimitée par une ligne qui, partant du point 55° N 75° E, passe par les points 55° N 135° E, 45° N 135° E, 35° N 130° E, 10° N 130° E, 10° S 155° E, 35° S 155° E, 35° S 116° E, 08° N 75° E, 26° N 65° E, pour rejoindre de point 55° N 75° E.

27/185 La *zone de réception SEA-MET* est délimitée par une ligne qui, partant du point 55° N 50° E, passe par les points 55° N 180°, 50° S 180°, 50° S 70° E, 08° N 70° E, 08° N 50° E, pour rejoindre le point 55° N 50° E.

Zone VOLMET — CARAÏBES:

(CAR-MET)

27/185A La *zone d'allotissement CAR-MET* est délimitée par une ligne qui, partant du point 30° N 110° W, passe par les points 30° N 75° W, 00° 50° W, suit l'Équateur jusqu'au point 00° 80° W, pour rejoindre le point 30° N 110° W.

27/185B La *zone de réception CAR-MET* est délimitée par une ligne qui, partant du point 40° N 120° W, passe par les points 40° N 20° W, 25° S 20° W, 25° S 120° W, pour rejoindre le point 40° N 120° W.

Zone VOLMET — SUD AMÉRIQUE:

(SAM-MET)

27/185C La *zone d'allotissement SAM-MET* est délimitée par une ligne qui, partant du point 15° N 83° W, passe par les points 15° N 60° W, 05° S 35° W, 55° S 60° W, 55° S 83° W, pour rejoindre le point 15° N 83° W.

27/185D La *zone de réception SAM-MET* est délimitée par une ligne qui, partant du point 30° N 120° W, passe par le point 30° N 00°, le Pôle Sud, pour rejoindre le point 30° N 120° W.

ARTICLE 4

Zones mondiales d'allotissement

27/185E *Zone mondiale I:*

Les limites de cette zone d'allotissement correspondent à celles de l'ensemble des ZLARN 1, 2 et 3.

27/185F *Zone mondiale II:*

Les limites de cette zone d'allotissement correspondent à celles de l'ensemble des ZLARN 10, 11, 12A, 12B, 12C et 12D.

27/185G *Zone mondiale III:*

Les limites de cette zone d'allotissement correspondent à celles de l'ensemble des ZLARN 6, 8, 9 et 14.

27/185H *Zone mondiale IV:*

Les limites de cette zone d'allotissement correspondent à celles de l'ensemble des ZLARN 12E à 12J et la ZLARN 13.

27/185I *Zone mondiale V:*

Les limites de cette zone d'allotissement correspondent à celles de l'ensemble des ZLARN 4, 5 et 7.

SECTION II

Allotissement des fréquences dans le service mobile aéronautique (R)

ARTICLE 1

27/186 Plan d'allossement de fréquences par zones

Notes:

27/187 *a)* Le signe * indique une restriction dans l'emploi de la fréquence considérée, dont la signification est donnée dans la colonne 3 du Plan d'allotissement de fréquences par ordre numérique (numéros **27/195** à **27/207 A)**.

27/188 *b)* La liste suivant ne comprend pas les fréquences communes dans le monde entier aux services mobiles aéronautiques (R) et (OR), 3023 kHz et 5680 kHz. L'allotissement de ces fréquences est indique à l'article 2.

27/189

Zones Areas Zonas	Bandes de fréquences/Frequency bands/Bandas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
AFI 2 878	2 851 3 425 3467	3 419	4 657	 5 652 5 658	5 493 6 574 6 673	6 559 8 903	8 894	 11 330	11 300 13 288 13 294	13 273	17 961
CAR	2 887	3 455		 5 520	5 520 6 586	6 577 8 918	8 846	 11 396	11 387	13 297	17 907
CEP	2 869	3 413	4 657	 5 574	5 547	6 673	8 843	10 057	11 282	13 300	17 904
CWP	2 998	3 455	4 666	 5 661	5 652 6 562	6 532	8 903	10 081	11 384	13 300	17 904
EA3 016	3 485 3 491			5 655 5 670	6 571	8 897	10 042	11 396	13 297 13 303 13 309	17 907	
EUR		3 479			5 661	6 598		10 084		13 288	17 961
INO		3 476			5 634		8 879			13 306	17 961
MID 2 992	2 944 3 473	3 467	4 669	 5 667	5 658 6 631	6 625 8 951	8 918	10 018	11 375 13 312	13 288	17 961
NAT 2 899 2 962 2 971 3 016	2 872	3 476	4 675	 5 616 5 649	5 598 6 628	6 622 8 831 8 864 8 879 8 891	8 825	 11 309 11 336	11 279 13 306	13 291	17 946
NCA	3 004 3 019		4 678		5 646 5 664	6 592		10 096		13 303 13 315	17 958
NP 2 932					5 628	6 655 6 661		10 048	11 330	13 300	17 904
SAM	2 944	3 479	4 669		5 526	6 649	8 855	10 024 10 096	11 360	13 297	17 907
SAT	2 854 2 935	3 452			5 565	6 535	8 861		11 291	13 315 13 357	17 955
SEA		3 470 3 485			5 649 5 655	6 556	8 942	10 066	11 396	13 309 13 318	17 907
SP		3 467			5 559 5 643		8 867	10 084	11 327	13 300	17 904
1						6 556		10 021	11 363		
1B	(*) 2 860 (*) 2 881 2 890	(*) 3 458 (*) 3 473 (*) 3 488			5 484 5 568	6 550 6 595		10 066			
1C	2 977 2 983	3 464 3 470	4 666		5 577 5 595	6 544	8 840		11 366		
1D	2 974 2 980 2 989	3 410 3 416 3 446	4 651		5 622 5 628 5 637	6 604 6 610	8 828	10 060	11 384		
1E	2 965	3 491			5 583	6 667		10 036			

Zones Areas Zonas	Bandes de fréquences/Frequency bands/Bandas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
2	2 938 2 950		4 696		5 556	6 583 6 601	8 846 8 855 8 888	10 015 10 045	11 297 11 360 11 390	13 321 13 357	17 964
2A	(*) 2 851 2 863 2 869 2 875 2 881 (*) 2 887 2 896 2 917 2 926 2 932 2 941	(*) 3 416 3 422 3 434 3 440 3 455	(*) 4 657 4 672 4 690		5 481 5 490 5 496 5 502 5 523 5 547 5 559 5 604	6 526 6 532 6 547 6 553 6 559 6 565 6 574 6 673	(*) 8 822 8 876 8 909 8 939	10 048 10 054	11 276 11 285 11 294		
2B	2 857 2 869 2 875 2 881 (*) 2 887 2 896 2 902 2 908 2 914 2 920 2 929	3 401 3 407 (*) 3 416 3 422 3 428 3 449	4 660 4 672 4 681 4 690 4 693		5 490 5 496 5 502 5 508 5 520 5 526 5 550 5 574 5 595 5 607 5 613 5 619	6 526 6 532 6 562 6 568 6 577 6 655 6 661 6 667	8 819 8 834 8 864	10 009 10 024	11 279 11 333 11 339		
2C	2 857 2 863 2 866 2 884 2 893 2 902 2 908 2 914 2 920 2 926 2 932	3 401 3 407 3 428 3 434 3 440 3 449 3 455	(*) 4 657 4 660 4 681 4 693		5 481 5 487 5 508 5 514 5 520 5 526 5 550 5 562 5 574 5 586 5 604	6 535 6 541 6 547 6 553 6 562 6 568 6 577 6 586	8 819 8 834 8 882 8 939	10 009 10 024 10 054	11 276 11 333 11 372		
3	2 893 2 935		4 693		5 556	6 583 6 589	8 846 8 954	10 087	11 318 11 336 11 360	13 267 13 321	17 952
3A	2 854 2 860 2 869 2 875 2 881 (*) 2 887 2 896 2 905 (*) 2 911 (*) 2 923 2 959	3 404 (*) 3 416 3 422 (*) 3 431 3 443 3 452	4 672 4 684 4 690		5 484 5 490 5 496 5 502 5 511 5 517 5 568 5 580 5 601 5 625	6 529 6 532 6 538 6 544 6 550 6 556 6 607 6 613 6 619 6 649	8 837 8 861 8 900 8 942	10 045 10 057	11 309 11 324 11 330		
3B	2 851 2 854 2 872 2 878 (*) 2 884 2 902 2 908 2 914 (*) 2 968	3 401 3 407 3 413 3 419 3 425 (*) 3 431 (*) 3 437 3 443	4 657 4 681		5 493 5 499 5 505 5 514 5 520 5 526 5 550 5 562 5 580 5 601	6 529 6 538 6 544 6 559 6 568 6 577 6 595 6 625 6 631	8 822 8 852 8 861 8 879 8 957	10 024 10 039	11 285 11 291 11 327 11 372		
3C	2 851 2 860 (*) 2 866	3 404 3 410 3 419	4 684		5 484 5 514 5 562	6 550 6 556 6 595	8 837 8 852 8 894	10 039	11 291 11 303 11 324		

Zones Areas Zonas	Bandes de fréquences/Frequency bands/Bandas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
3C	2 878 2 905 2 950 2 974 2 980 2 986	3 425 3 452			5 568 5 586 5 637 5 643	6 658 6 664 6 670	8 915		11 378		
4						6 565	8 873			13 300	17 904
4A	(*) 2 926 2 953	3 437 3 491	(*) 4 672		5 547 5 559	6 526 6 532 6 616	8 816 8 837 8 858	10 039 10 081	11 282 11 318		
4B	2 866 2 893	3 443			5 481 5 574 5 604	6 553 6 577 6 598		10 063	11 324		
5							8 870 8 885	10 012	11 312 11 327	13 354	17 949 17 967
5A	2 986	3 452			5 577 5 583	6 544 6 664	8 822 8 915		11 288		
5B	2 911 2 968	3 431 3 488			5 511 5 568 5 625	6 550 6 595	8 912	10 093			
5C	2 905	3 452			5 583	6 544	8 822				
5D	2 899 2 971	3 482			5 526 5 550	6 535 6 547	8 843	10 048			
6							8 840		11 381	13 291	17 943
6A	2 872 2 923 2 947 3 001	3 479	(*) 4 657 4 675		5 484 5 580 5 601	6 607 6 613 6 658	8 891 8 906 8 948	10 006 10 051 (*) 10 081	11 321 11 357		
6B	2 857 2 920	3 479 3 488			5 502 5 595 5 625	6 607 6 613 6 619	8 864 8 885	10 021 10 093	11 339 11 366		17 955
6C	2 881 2 956	3 473	4 651		5 550 5 580	6 544 6 631	8 834 8 918	10 015			
6D	2 866 2 884	3 416			5 490 5 520 5 568 5 574 5 631	6 550 6 568 6 577 6 595	8 882 8 957		11 309 11 372		
6E	2 854 2 872 2 917 3 001	3 443	(*) 4 657 4 675		5 514 5 526 5 550	6 583 6 655 6 661	(*) 8 861 8 906 8 909	10 036 10 051 10 084	11 357 11 363		
6F	2 926 2 941	3 434 3 440			5 496 5 508	6 526 6 667	8 864 8 939	10 060	11 279 11 366		
6G	(*) 2 869 (*) 2 875 2 890 (*) 2 896 2 899 (*) 2 902 (*) 2 911 (*) 2 917	(*) 3 413 (*) 3 422 (*) 3 431 3 437 3 446 (*) 3 449 3 464 3 482	(*) 4 651 (*) 4 663 (*) 4 669 (*) 4 672 (*) 4 690 (*) 4 696		5 481 5 487 (*) 5 493 (*) 5 499 (*) 5 505 (*) 5 511 (*) 5 517 5 523	6 529 6 535 6 541 6 547 6 553 6 559 6 565 6 574	8 816 8 825 8 831 8 843 8 858 8 867 (*) 8 870 8 873	(*) 11 018 (*) 10 054 (*) 10 063	(*) 11 276 (*) 11 282 11 288 (*) 11 294 (*) 11 300 11 306 11 315 11 369	13 270 13 276	17 913

Zones Areas Zonas	Bandes de fréquences/Frequency bandes/Bandas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
	(*) 2 938 2 953 2 962 (*) 2968 2 971 2 977 2 983 2 989 2 995				5 547 5 553 5 559 5 565 5 571 5 577 5 583 5 592 5 598 5 604 5 610 5 616 5 622 (*) 5 628 (*) 5 634 (*) 5 640	6 580 6 586 6 598 6 604 6 610 6 616 6 622 6 628 6 634 6 649 6 652 6 673 6 682	(*) 8 888 (*) 8 912 8 960				
7					5 508	6 586	8 888		11 285	13 354	
7B	2 863 2 965	3 455			5 577 5 583	6 652	8 906	10 009			
7C	2 950	3 407			5 592	6 568 6 604	8 834	10 081	11 294		
7D	2 998				5 481			10 096			
7E	2 887	3 485			5 520	6 580 6 628	8 864		11 306		
7F	2 956	3 461			5 547 5 568	6 622	8 846 8 960				
9			4 696		5 583	6 553	8 846 8 852	10 018	11 339		
9B	2 860 2 905 (*) 2 929	(*) 3 401 3 419 3 425 (*) 3 476	4 660		5 484 5 508 5 523 5 565	6 538 6 547 6 598 6 622	8 819 8 837 8 861 8 906	10 009 10 024 10 039	11 393		
9C	2 851	3 404 3 461	4 675		5 481	6 580	8 873	10 042	11 279 11 312		
9D	3 016	3 404			5 592	6 535	8 873		11 312		
10			4 696	5 454	5 604	6 553	8 819 8 834	10 006 10 012	11 333 11 390	13 285	17 910
10A	2 866 2 875 2 911 2 944 2 956 2 992	3 449 3 470		5 472 5 475	5 484 5 490 5 496 5 565 5 631	6 535 6 580 6 604	8 855 8 876	10 066	11 357 11 363 11 375		
10B	2 854 2 860	3 404 3 467 3 488	4 651 4 666 4 681 4 690 4 693	5 460 5 466	5 553 5 568 5 583	6 547 6 574 6 598	8 837 8 903 8 939				
10C	2 926 2 965	3 491	4 660 4 669	5 457	5 481 5 487 5 502 5 562 5 595	6 541 6 556 6 568	8 867				
10D	2 893 2 935	3 419 3 425 3 458	4 666 4 669 4 678	5 472 5 475	5 484 5 490 5 496 5 586 5 625	6 535 6 544 6 562	8 858 8 900				

Zones Areas Zonas	Bandes de fréquences/Frequency bands/Bandas de frequências (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
10E	2 869 2 944 2 992	3 446 3 473	4 651 4 666 4 684	5 460	5 481 5 559 5 577	6 547 6 598	8 843 8 954		11 276		
10F	2 950		4 663	5 451	5 256	6 673	8 945	10 042			
11B	2 851 2 878 3 004 3 019	3 410 3 428 3 434 3 443	4 672	5 451 5 463 5 469	5 508 5 514 5 523 5 571	6 538 6 550 6 559 6 565	8 822 8 885 8 912	10 045 10 093	11 288 11 306	13 312	17 964
12		3 440			5 568			10 054			17 901
12A	2 950				5 604						
12C	2 920 2 980	3 401 3 464	4 693	5 460	5 484 5 490 5 496 5 502 5 589 5 613	6 535 6 571 6 592 6 622 6 628	8 816 8 948 8 957	10 021 10 039	11 324		
12D		3 407			5 562	6 673	8 876	10 015			
12E	2 860 2 956 2 998	3 461 3 488	4 681	5 454 5 475	5 481 5 487 5 583 5 595 5 604	6 547 6 553 6 598	8 852 8 873	10 063 10 090	11 381 11 393		
12F	2 893 2 956 2 965 2 998	3 461 3 488		5 451 5 475	5 508 5 556 5 583 5 604	6 532 6 553	8 873 8 894	10 090	11 297		
12G	2 875 2 956 2 998	3 461 3 488			5 484 5 523 5 559 5 646	6 526 6 616					
12H	2 956 2 998	3 461 3 488		5 451	5 583						
12J	2 860 2 902 2 926 2 965	3 419			5 481 5 496 5 619	6 535 6 547	8 954		11 381 11 384		
13										13 318	17 913
13A								10 048			17 967
13B								10 048			17 967
13C	2 863 2 869 2 992	3 413 3 458 3 473			5 490 5 514 5 553 5 571 5 577	6 541 6 556 6 562 6 568 6 580	8 819 8 834 8 843 8 939	10 042	11 327 11 375	13 309	
13D	2 914 2 983	3 425 3 467	4 660	5 460	5 562	6 622 6 628 6 673	8 867 8 912 8 957	10 084	11 318		
13E	2 851	3 491	4 651 4 663		5 481 5 583 5 604	6 533 6 577	8 858		11 303		17 967
13F	2 851 2 956 2 998	3 446 3 476	4 651 4 663	5 454	5 481 5 583 5 604	6 547 6 553	8 831 8 858 8 864	10 081	11 321 11 330		17 967

Zones Areas Zonas	Bandes de fréquences/Frequency bands/Bandas de frequência (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
13G	2 872 2 971 3 016	3 434 3 470	(*) 4 675	5 469 5 475	5 574	6 586 6 613	8 822 8 885 8 900	10 006 10 021 10 036	11 369		
13H	2 899 2 965	3 455 3 485	4 657	5 463 5 472	5 484 5 547	6 598	8 825 8 906	10 036 10 045	11 282 11 300	13 267	
13I	2 860 2 878 2 887	3 419	4 678 4 693	5 451 5 466	5 496 5 523	6 574	8 873	10 051			
13J	2 857 2 863 2 878 2 890 2 920	3 410 3 428 3 458	4 684 4 696	5 451 5 454	5 559 5 568 5 577	6 550 6 559 6 580	8 816 8 843	10 012 10 018 10 042	11 276		
13K	2 863 2 932 3 004 3 019	3 401 3 458 3 464	4 663 4 672	5 463	5 481 5 547 5 577 5 604	6 547 6 553 6 580	8 843 8 849 8 945	10 009 10 018 10 042 10 060	11 339 11 366	13 309	
13M	2 908 2 977	3 437 3 449	4 660 4 690	5 463	5 502	6 574 6 628	8 837 8 867 8 903	10 066	11 378		
13N	2 986	3 443		5 457	5 508	6 604	8 828	10 093			
14	2 851 2 878	3 446 3 461 3 479			5 526 5 604	6 580 6 628	8 822 8 855 8 870	10 045 10 087	11 360	13 264	17 946
14A	2 950	3 413	(*) 4 678			6 547 6 553	8 816 8 894				
14B		3 488	(*) 4 684			6 535 6 604 6 673	8 900 8 954				
14C	2 887	3 452	(*) 4 684			6 541 6 586	8 885 8 912				
14D	2 950	3 407	(*) 4 693		5 481	6 559 6 574	8 843 8 858				
14E		3 413				6 565 6 616	8 891 8 945				
14F		3 488				6 526 6 610	8 825 8 831				
14G	2 869 2 944		(*) 4 678		5 481 5 550 5 580		8 876 8 957				
VAFI	2 860	3 404			5 499	6 538	8 852	10 057		13 261	
VCAR	2 950				5 580				11 315		
VEUR	2 998	3 413			5 640	6 580	8 957		11 378	13 264	
VMID	2 956				5 589		8 945		11 393		
VNAT	2 905	3 485			5 592	6 604	8 870	10 051		13 270 13 276	
VNCA		3 461	4 663		5 676			10 090		13 279	

Zones Areas Zonas	Bands de fréquences/Frequency bands/Bandas de frequência (MHz)										
	3	3,5	4,7	5,4 (Reg. 2)	5,6	6,6	9	10	11,3	13,3	18
	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz	kHz
VPAC	2 863					6 679	8 828			13 282	
VSMA	2 881				5 601			10 087		13 279	
VSEA	2 965	3 458			5 673	6 676	8 849		11 387	13 285	
W I	3 010	4 654 4 687		5 529 5 532 5 535 5 541	6 637 6 643	8 921 8 924 8 930 8 936	10 027 10 030 10 069 10 072 10 078	11 345 11 351	13 324 13 327 13 333 13 336 13 342 13 345 13 351	17 916 17 922 17 931	21 940 21 946 21 952 21 958 21 967 21 973 21 979 21 988 21 997
W II	3 007 3 013	3 494 3 497	4 654 4 687	5 529 5 538 5 544	6 637 6 640 6 646	8 927 8 933 8 936	10 027 10 033 10 075	11 342 11 348 11 354	13 330 13 339 13 348	17 919 17 925 17 934 17 940	21 964 21 985
W III	3 007		4 687		6 637	8 921 8 930	10 072 10 078	11 342 11 351	13 324 13 333 13 327 13 351	17 916 17 922 17 929 17 934 17 940	21 949 21 970
W IV	3 010			5 535 5 541	6 643	8 924	10 030 10 069	11 345	13 327 13 336 13 345	17 919 17 928 17 937	21 955 21 976 21 991
W V	3 013			5 532 5 538 5 544	6 640 6 646	8 927 8 933	10 033 10 075	11 348 11 354	13 330 13 339 13 348	17 925 17 931 17 937	21 943 21 961 21 982 21 994

(*) Voir numéro 27/187.

ARTICLE 2

Plan d'allotissement de fréquences (par ordre numérique)

Notes générales

27/192 1. *Classes des stations* — FA:

Classes d'émission: voir les numéros **27/49** à **27/52.**

Puissance: à moins d'indications contraires dans le Plan, la valeur des puissances des stations aéronautiques et des stations d'aéronef est celle qui figure aux numéros **27/54** à **27/62.**

Horaire: H24, à moins d'indications contraires.

27/193 2. Une fréquence allotie avec la mention «utilisation diurne» peut être utilisée pendant la période s'étendent de une heure après le lever du soleil jusqu'à une heure avant son coucher.

27/194 3. Une «voie commune» est une voie allotie en commun à deux zones ou plus sans tenir compte des conditions de brouillage réciproque; son emploi fait l'objet d'un accord entre les administrations intéressées.

27/194A 4. A l'exception des fréquences porteuses (fréquences de référence) 3023 kHz et 5680 kHz, les fréquences utilisables dans le monde entier et spécifiées dans les tableaux figurant au numéro **27/189** et aux numéros **27/195** à **27/207A** sont réservées aux assignations faites par les administrations à des stations desservant un ou plusieurs exploitants d'aéronefs, selon les droits conférés par l'administration intéressée. Ces assignations ont pour objet l'établissement de communications entre une station aéronautique appropriée et une station d'aéronef, quel que soit le point du monde où elle se trouve, afin de contrôler la régularité du vol et de veiller à la sécurité de l'aéronef. Les fréquences utilisables dans le monde entier ne doivent pas être assignées par les administrations pour les ZLAMP, ZLARN ou zones VOLMET. Lorsqu'une zone d'exploitation est entièrement comprise dans les limites de ZLARN ou de subdivision de ZLARN, les fréquences à utiliser sont les fréquences allotiès aux ZLARN et aux subdivisions de ZLARN.

27/195

Bande/*band*/banda 2850-3025 kHz **3 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
2 851	M AFI R 2A 3B 9C 11B 13E 13F 14	CC 3B 3C CC 13E 13F C001/2A
2 854	M SAT R 3A 3B 6E 10B	CC 3A 3B
2 857	R 2B 2C 6B 13J	CC 2B 2C
2 860	R 1B 3A 3C 9B 10B 12E 12J 13I V VAFI	CC 3A 3C CC 12E 12J C001/1B
2 863	R 2A 2C 7B 13C 13J 13H V VPAC	CC 2A 2C CC 13C 13J 13K
2 866	R 2C 3C 4B 6D 10A	C001/3C
2 869	M CEP R 2A 2B 3A 6G 10E 13C 14G	CC 2A 2B 3A C009/6G
2 872	M NAT R 3B 6A 6E 13G	CC 6A 6E
2 875	R 2A 2B 3A 6G 10A 12G	CC 2A 2B 3A C009/6G
2 878	M AFI R 3B 3C 11B 13I 13J 14	CC 3B 3C CC 13I 13J
2 881	R 1B 2A 2B 3A 6C V VSAM	CC 2A 2B 3A C001/1B
2 884	R 2C 3B 6D	C001/3B
2 887	M CAR R 2A 2B 3A 7E 13I 14C	CC 2A 2B 3A C001/2A 2B 3A
2 890	R 1B 6G 13J	
2 893	R 2C 3 4B 10D 12F	CC 2C 3
2 896	R 2A 2B 3A 6G	CC 2A 2B 3A C009/6G
2 899	M NAT R 5D 6G 13H	
2 902	R 2B 2C 3B 6G 12J	CC 2B 2C 3B C009/6G
2 905	R 3A 3C 5C 9B V VNAT	CC 3A 3C
2 908	R 2B 2C 3B 13M	CC 2B 2C 3B
2 911	R 3A 5B 6G 10A	C001/3A C010/6G
2 914	R 2B 2C 3B 13D	CC 2B 2C 3B
2 917	R 2A 6E 6G	C010/6G
2 920	R 2B 2C 6B 12C 13J	CC 2B 2C

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
2 923	R 3A 6A	C001/3A
2 926	R 2A 2C 4A 6F 10C 12J	CC 2A 2C C001/4A
2 929	R 2B 9B	C001/9B
2 932	M NP R 2A 2C 13K	CC 2A 2C
2 935	M SAT R 3 10D	
2 938	R 2 6G	C009/6G
2 941	R 2A 6F	
2 944	M MID SAM R 10A 10E 14G	
2 947	R 6A	
2 950	R 2 3C 7C 10F 12A 14A 14D V VCAR	CC 2 3C CC 14A 14D
2 953	R 4A 6G	
2 956	R 6C 7F 10A 12E 12F 12G 12H 13F V VMID	CC 12E 12F 12G 12H
2 959	R 3A	
2 962	M NAT R 6G	
2 965	R 1E 7B 10C 12F 12J 13H V VSEA	CC 12F 12J
2 968	R 3B 5B 6G	C001/3B C009/6G
2 971	M NAT R 5D 6G 13G	
2 974	R 1D 3C	
2 977	R 1C 6G 13M	
2 980	R 1D 3C 12C	
2 983	R 1C 6G 13D	
2 986	R 3C 5A 13N	
2 989	R 1D 6G	
2 992	M MID R 10A 10E 13C	
2 995	R 6G	

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
2 998	M CWP R 7D 12E 12F 12G 12H 13F V VEUR	CC 12E 12F 12G 12H
3 001	R 6A 6E	CC 6A 6E
3 004	M NCA R 11B 13K	
3 007	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
3 010	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
3 013	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
3 016	M EA NAT R 9D 13G	
3 019	M NCA R 11B 13K	

27/196

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
3 023	W MONDIALE WORLDWIDE MUNDIAL (R) et/*and*/y (OR)	Voir partie II, section II, article 3. See. part II, section II, article 3. Véase parte II, sección II, artículo 3.

27/197

Bande/*band*/banda 3400-3500 kHz **3,5 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
3 401	R 2B 2C 3B 9B 12C 13K	CC 2B 2C 3B C001/9B
3 404	R 3A 3C 9C 9D 10B V VAFI	CC 3A 3C CC 9C 9D
3 407	R 2B 2C 3B 7C 12D 14D	CC 2B 2C 3B
3 410	R 1D 3C 11B 13J	
3 413	M CEP R 3B 6G 13C 14A 14E V VEUR	CC 14A 14E C009/6G
3 416	R 1D 2A 2B 3A 6D	CC 2A 2B 3A C001/2A 2B 3A
3 419	M AFI R 3B 3C 9B 10D 12J 13I	CC 3B 3C
3 422	R 2A 2B 3A 6G	CC 2A 2B 3A C001/6G C004/6G

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
3 425	M AFI R 3B 3C 9B 10D 13D	CC 3B 3C
3 428	R 2B 2C 11B 13J	CC 2B 2C
3 431	R 3A 3B 5B 6G	CC 3A 3B C001/3A 3B C009/6G
3 434	R 2A 2C 6F 11B 13G	CC 2A 2C
3 437	R 3B 4A 6G 13M	C001/3B
3 440	R 2A 2C 6F 12	CC 2A 2C
3 443	R 3A 3B 4B 6E 11B 13N	CC 3A 3B
3 446	R 1D 6G 10E 13F 14	
3 449	R 2B 2C 6G 10A 13M	CC 2B 2C C001/6G C004/6G
3 452	M SAT R 3A 3C 5A 5C 14C	CC 3A 3C CC 5A 5C
3 455	M CAR CWP R 2A 2C 7B 13H	CC 2A 2C
3 458	R 1B 10D 13C 13J 13K V VSEA	CC 13C 13J 13K C001/1B
3 461	R 7F 9C 12E 12F 12G 12H 14 V VNCA	CC 12E 12F 12G 12H
3 464	R 1C 6G 12C 13K	
3 467	M AFI MID SP R 10B 13D	CC AFI MID
3 470	M SEA R 1C 10A 13G	
3 473	M MID R 1B 6C 10E 13C	C001/1B
3 476	M INO NAT R 9B 13F	C001/9B
3 479	M EUR SAM R 6A 6B 14	
3 482	R 5D 6G	
3 485	M EA SEA R 7E 13H V VNAT	CC EA SEA
3 488	R 1B 5B 6B 10B 12E 12F 12G 12H 14B 14F	CC 12E 12F 12G 12H CC 14B 14F C001/1B
3 491	M EA R 1E 4A 10C 13E	CC 1E 4A
3 494	W MONDIALE WORLDWIDE MUNDIAL	C100/II

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
3 497	W MONDIALE WORLDWIDE MUNDIAL	C100/II

27/198

Bande/*band*/banda 4650-4700 kHz **4,7 MHz**

Fréquence kHz *Frequence kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
4 651	R 1D 6C 6G 10B 10E 13E 13F	CC 13E 13F C001/6G
4 654	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
4 657	M AFI CEP R 2A 2C 3B 6A 6E 13H	CC 2A 2C C001/2A 2C CC 6A 6E C001/6A 6E
4 660	R 2B 2C 9B 10C 13D 13M	CC 2B 2C CC 13D 13M
4 663	R 6G 10F 13E 13F 13K V VNCA	CC 13E 13F 13K C001/6G
4 666	M CWP R 1C 10B 10D 10E	CC 10B 10D 10E
4 669	M MID SAM R 6G 10C 10D	CC 10C 10D C001/6G
4 672	R 2A 2B 3A 4A 6G 11B 13K	CC 2A 2B 3A COO1/4A C001/6G
4 675	M NAT R 6A 6E 9C 13G	CC 6A 6E C001/13G
4 678	M NCA R 10D 13I 14A 14G	CC 14A 14G C001/14A 14G
4 681	R 2B 2C 3B 10B 12E	CC 2B 2C 3B
4 684	R 3A 3C 10E 13J 14B 14C	CC 3A 3C CC 14B 14C C001/14B 14C
4 687	W MONDIALE WORLDWIDE MUNDIAL	C100/I II III
4 690	R 2A 2B 3A 6G 10B 13M	CC 2A 2B 3A C001/6G
4 693	R 2B 2C 3 10B 12C 13I 14D	CC 2B 2C 3 C001/14D
4 696	R 2 6G 9 10 13J	COO1/6G

27/199 Bande/*band*/banda 5450-5480 kHz (Reg. 2) **5,4 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 451	R 10F 11B 12F 12H 13I 13J	CC 12F 12H CC 13I 13J
5 454	R 10 12E 13F 13J	
5 457	R 10C 13N	
5 460	R 10B 10E 12C 13D	
5 463	R 11B 13H 13K 13M	
5 466	R 10B 13I	
5 469	R 11B 13G	
5 472	R 10A 10D 13H	
5 475	R 10A 10D 12E 12F 13G	CC 12E 12F

27/200 Bande/*band*/Banda 5480-5680 kHz **5,6 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 481	R 2A 2C 4B 6G 7D 9C 10C 12E 12J 13E 13F 13K 14D 14G	CC 2A 2C CC 10C 10E CC 12E 12J CC 13E 13F CC 14D 14G
5 484	R 1B 3A 3C 6A 9B 10A 10D 12C 12G 13H	CC 3A 3C
5 487	R 2C 6G 10C 12E	
5 490	R 2A 2B 3A 6D 10A 10D 12C 13C	CC 2A 2B 3A
5 493	M AFI R 3B 6G	C002/6G
5 496	R 2A 2B 3A 6F 10A 10D 12C 12J 13I	CC 2A 2B 3A
5 499	R 3B 6G V VAFI	C002/6G
5 502	R 2A 2B 3A 6B 10C 12C 13M	CC 2A 2B 3A
5 505	R 3B 6G	C003/6G
5 508	R 2B 2C 6F 7 9B 11B 12F 13N	CC 2B 2C
5 511	R 3A 5B 6G	C002/6G
5 514	R 2C 3B 3C 6E 11B 13C	CC 3B 3C
5 517	R 3A 6G	C002/6G

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 520	M CAR R 2B 2C 3B 6D 7E	CC 2B 2C 3B
5 523	R 2A 6G 9B 11B 12G 13I	
5 526	M SAM R 2B 2C 3B 5D 6E 10F 14	CC 2B 2C 3B
5 529	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
5 532	W MONDIALE WORLDWIDE MUNDIAL	C100/I V
5 535	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
5 538	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
5 541	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
5 544	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
5 547	M CEP R 2A 4A 6G 7F 13H 13K	
5 550	M CAR R 2B 2C 3B 5D 6C 6E 14G	CC 2B 2C 3B
5 553	R 6G 10B 13C	
5 556	R 2 3 12F	CC 2 3
5 559	M SP R 2A 4A 6G 10E 12G 13J	
5 562	R 2C 3B 3C 10C 12D 13D	CC 3B 3C
5 565	M SAT R 6G 9B 10A	
5 568	R 1B 3A 3C 5B 6D 7F 10B 12 13J	CC 3A 3C
5 571	R 6G 11B 13C	
5 574	M CEP R 2B 2C 4B 6D 13G	CC 2B 2C
5 577	R 1C 5A 6G 7B 10E 13C 13J 13K	CC 13C 13J 13K
5 580	R 3A 3B 6A 6C 14G V VCAR	CC 3A 3B
5 583	R 1E 5A 5C 6G 7B 9 10B 12E 12F 12H 13E 13F	CC 5A 5C CC 12E 12F 12H CC 13E 13F
5 586	R 2C 3C 10D	
5 589	R 12C V VMID	
5 592	R 6G 7C 9D V VNAT	
5 595	R 1C 2B 6B 10C 12E	
5 598	M NAT R 6G	

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 601	R 3A 3B 6A V VSAM	CC 3A 3B
5 604	R 2A 2C 4B 6G 10 12A 12E 12F 13E 13F 13K 14	CC 2A 2C CC 12E 12F CC 13E 13F
5 607	R 2B	
5 610	R 6G	
5 613	R 2B 12C	
5 616	M NAT R 6G	
5 619	R 2B 12J	
5 622	R 1D 6G	
5 625	R 3A 5B 6B 10D	
5 628	M NP R 1D 6G	C003/6G
5 631	R 6D 10A	
5 634	M INO R 6G	C002/6G
5 637	R 1D 3C	
5 640	R 6G V VEUR	C002/6G
5 643	M SP R 3C	
5 646	M NCA R 12G	
5 649	M NAT SEA	
5 652	M AFI CWP	
5 655	M EA SEA	CC EA SEA
5 658	M AFI MID	CC AFI MID
5 661	M CWP EUR	
5 664	M NCA	
5 667	M MID	
5 670	M EA	
5 673	V VSEA	
5 676	V VNCA	

27/201

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 680	W MONDIALE WORLDWIDE MUNDIAL (R) et/*and*/y (OR)	Voir partie II, section II, article 3. Sec. part II, section II, article 3. Véase parte II, sección II, artículo 3.

27/202

Bande/*band*/banda 6525-6685 kHz **6,6 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
5 626	R 2A 2B 3A 4A 6F 12G 14F	CC 2A 2B 3A
6 529	R 3B 6G	
6 532	M CWP R 2A 2B 3A 4A 12F	CC 2A 2B 3A
6 535	M SAT R 2C 5D 6G 9D 10A 10D 12C 12J 14B	
6 538	R 3A 3B 9B 11B V VAFI	CC 3A 3B
6 541	R 2C 6G 10C 13C 14C	
6 544	R 1C 3A 3B 5A 5C 6C 10D	CC 3A 3B CC 5A 5C
6 547	R 2A 2C 5D 6G 9B 10B 10E 12E 12J 13F 13K 14A	CC 2A 2C CC 12E 12J
6 550	R 1B 3A 3C 5B 6D 11B 13J	CC 3A 3C
6 553	R 2A 2C 4B 6G 9 10 12E 12F 13E 13F 13K 14A	CC 2A 2C CC 12E 12F CC 13E 13F
6 556	M SEA R 1 3A 3C 10C 13C	CC 3A 3C
6 559	M AFI R 2A 3B 6G 11B 13J 14D	
6 562	M CWP R 2B 2C 10D 13C	CC 2B 2C
6 565	R 2A 4 6G 11B 14E	
6 568	R 2B 2C 3B 6D 7C 10C 13C	CC 2B 2C 3B
6 571	M EA R 12C	
6 574	M AFI R 2A 6G 10B 13I 13M 14D	
6 577	M CAR R 2B 2C 3B 4B 6D 13E	CC 2B 2C 3B

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
6 580	R 6G 7E 9C 10A 13C 13J 13K 14 V VEUR	CC 13C 13J 13K
6 583	R 2 3 6E	CC 2 3
6 586	M CAR R 2C 6G 7 13G 14C	
6 589	R 3	
6 592	M NCA R 12C	
6 595	R 1B 3B 3C 5B 6D	CC 3B 3C
6 598	M EUR R 4B 6G 9B 10B 10E 12E 13H	
6 601	R 2	
6 604	R 1D 6G 7C 10A 13N 14B V VNAT	
6 607	R 3A 6A 6B	
6 610	R 1D 6G 14F	
6 613	R 3A 6A 6B 13G	
6 616	R 4A 6G 12G 14E	
6 619	R 3A 6B	
6 622	M NAT R 6G 7F 9B 12C 13D	
6 625	M MID R 3B	
6 628	M NAT R 6G 7E 12C 13D 13M 14	CC 13D 13M
6 631	M MID R 3B 6C	
6 634	R 6G	
6 637	W MONDIALE WORLDWIDE MUNDIAL	C100/I II III
6 640	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
6 643	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
6 646	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
6 649	M SAM R 3A 6G	
6 652	R 6G 7B	
6 655	M NP R 2B 6E	
6 658	R 3C 6A	

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
6 661	M NP R 2B 6E	
6 664	R 3C 5A	
6 667	R 1E 2B 6F	
6 670	R 3C	
6 673	M AFI CEP R 2A 6G 10F 12D 13D 14B	
6 676	V VSEA	
6 679	V VPAC	
6 682	R 6G	

27/203

Bande/*band*/8815-8965 kHz **9 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
8 816	R 4A 6G 12C 13J 14A	
8 819	R 2B 2C 9B 10 13C	CC 2B 2C
8 822	R 2A 2B 5A 5C 11B 13G 14	CC 5A 5C C005/2A
8 825	M NAT R 6G 13H 14F	
8 828	R 1D 13N V VPAC	
8 831	M NAT R 6G 13F 14F	
8 834	R 2B 2C 6C 7C 10 13C	CC 2B 2C
8 837	R 3A 3C 4A 9B 10B 13M	CC 3A 3C
8 840	R 1C 6	
8 843	M CEP R 5D 6G 10E 13C 13J 13K 14D	CC 13C 13J 13K
8 846	M CAR R 2 3 7F 9	CC 2 3
8 849	R 13K V VSEA	
8 852	R 3B 3C 9 12E V VAFI	CC 3B 3C
8 855	M SAM R 2 10A 14	
8 858	R 4A 6G 10D 13E 13F 14D	CC 13E 13F

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
8 861	M SAT R 3A 3B 6E 9B	CC 3A 3B C011/6E
8 864	M NAT R 2B 6B 6F 7E 13F	CC 6B 6F
8 867	M SP R 6G 10C 13D 13M	CC 13D 13M
8 870	R 5 6G 14 V VNAT	C004/6G
8 873	R 4 6G 9C 9D 12E 12F 13I	CC 9C 9D CC 12E 12F
8 876	R 2A 10A 12D 14G	
8 879	M INO NAT R 3B	
8 862	R 2C 6D	
8 885	R 5 6B 11B 13G 14C	
8 888	R 2 6G 7	C009/6G
8 891	M NAT R 6A 14E	
8 894	M AFI R 3C 12F 14A	
8 897	M EA	
8 900	R 3A 10D 13G 14B	
8 903	M AFI CWP R 10B 13M	
8 906	M NAT R 6A 6E 7B 9B 13H	CC 6A 6E
8 909	R 2A 6E	
8 912	R 5B 6G 11B 13D 14C	C004/6G
8 915	R 3C 5A	
8 918	M CAR MID R 6C	
8 921	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
8 924	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
8 927	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
8 930	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
8 933	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
8 936	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
8 939	R 2A 2C 6F 10F 13C	CC 2A 2C
8 942	M SEA R 3A	

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
8 945	R 10F 13K 14E V VMID	
8 948	R 6A 12C	
8 951	M MID	
8 954	R 3 10E 12J 14B	
8 957	R 3B 6D 12C 13D 14G V VEUR	
8 960	R 6G 7F	

27/204

Bande/band/banda 10 005-10 100 kHz **10 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
10 006	R 6A 10 13G	
10 009	R 2B 2C 7B 9B 13K	CC 2B 2C
10 012	R 5 10 13J	
10 015	R 2 6C 12D	
10 018	M MID R 6G 9 13J 13K	CC 13J 13K C003/6G
10 021	R 1 6B 12C 13G	
10 024	M SAM R 2B 2C 3B 9B	CC 2B 2C 3B
10 027	W MONDIALE WORLDWIDE MUNDIAL	C100/I II
10 030	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
10 033	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
10 036	R 1E 6E 13G 13H	CC 13G 13H
10 039	R 3B 3C 4A 9B 12C	CC 3B 3C
10 042	M EA R 9C 10F 13C 13J 13K	CC 13C 13J 13K
10 045	R 2 3A 11B 13H 14	CC 2 3A
10 048	M NP R 2A 5D 13A 12B	CC 13A 13B
10 051	R 6A 6E 131 V VNAT	CC 6A 6E
10 054	R 2A 2C 6G 12	CC 2A 2C C004/6G
10 057	M CEP R 3A V VAFI	

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
10 060	R 1D 6F 13K	
10 063	R 4B 6G 12E	C004/6G
10 066	M SEA R 1B 10A 13M	
10 069	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
10 072	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
10 075	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
10 078	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
10 081	M CWP R 4A 6A 7C 13F	C006/6A
10 084	M EUR SP R 6E 13D	
10 087	R 3 14 V VSAM	
10 090	R 12E 12F V VNCA	CC 12E 12F
10 093	R 5B 6B 11B 13N	
10 096	M NCA SAM R 7D	

27/205

Bande/band/banda 11 275-11 400 kHz **11,3 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
11 276	R 2A 2C 6G 10E 13J	CC 2A 2C C002/6G
11 279	M NAT R 2B 6F 9C	
11 282	M CEP R 4A 6G 13H	C003/6G
11 285	R 2A 3B 7	CC 2A 3B
11 288	R 5A 6G 11B	
11 291	M SAT R 3B 3C	CC 3B 3C
11 294	R 2A 6G 7C	C002/6G
11 297	R 2 12F	
11 300	M AFI R 6G 13H	C002/6G

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
11 303	R 3C 13E	
11 306	R 6G 7E 11B	
11 309	M NAT R 3A 6D	
11 312	R 5 9C 9D	CC 9C 9D
11 315	R 6G V VCAR	
11 318	R 3 4A 13D	
11 321	R 6A 13F	
11 324	R 3A 3C 4B 12C	CC 3A 3C
11 327	M SP R 3B 5 13C	
11 330	M AFI NP R 3A 13F	
11 333	R 2B 2C 10	CC 2B 2C
11 336	M NAT R 3	
11 339	R 2B 6B 9 13K	
11 342	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
11 345	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
11 348	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
11 351	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
11 354	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
11 357	R 6A 6E 10A	CC 6A 6E
11 360	M SAM R 2 3 14	CC 2 3
11 363	R 1 6E 10A	
11 366	R 1C 6B 6F 13K	CC 6B 6F
11 369	R 6G 13G	
11 372	R 2C 3B 6D	
11 375	M MID R 10A 13C	
11 378	R 3C 13M V VEUR	
11 381	R 6 12E 12J	CC 12E 12J

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
11 384	M CWP R 1D 12J	
11 387	M CAR V VSEA	
11 390	R 2 10	
11 393	R 9B 12E V VMID	
11 396	M CAR EA SEA	CC EA SEA

27/206

Bande/band/banda 13 260-13 360 kHz **13,3 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
13 261	V VAFI	
13 264	R 14 V VEUR	
13 267	R 3 13H	
13 270	R 6G V VNAT	
13 273	M AFI	
13 276	R 6G V VNAT	
13 279	V VNCA VSAM	
13 282	V VPAC	
13 285	R 10 V VSEA	
13 288	M AFI EUR MID	CC AFI EUR MID
13 291	M NAT R 6	
13 294	M AFI	
13 297	M CAR EA SAM	CC CAR SAM
13 300	M CEP CWP NP SP R 4	CC CEP CWP NP SP
13 303	M EA NCA	CC EA NCA
13 306	M INO NAT	
13 309	M EA SEA R 13C 13K	CC EA SEA CC 13C 13K

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
13 312	M MID R 11B	
13 315	M NCA SAT	
13 318	M SEA R 13	
13 321	R 2 3	CC 2 3
13 324	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 327	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
13 330	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 333	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 336	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
13 339	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 342	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 345	W MONDIALE WORLDWIDE MUNDIAL	C100/I IV
13 348	W MONDIALE WORLDWIDE MUNDIAL	C100/II V
13 351	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
13 354	R 5 7	CC 5 7
13 357	M SAT R 2	

27/207

Bande/band/banda 17 900-17 970 kHz **18 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
17 901	R 12	
17 904	M CEP CWP NP SP R 4	CC CEP CWP NP SP
17 907	M CAR EA SAM SEA	CC CAR SAM CC EA SEA
17 910	R 10	
17 913	R 6G 13	
17 916	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
17 919	W MONDIALE WORLDWIDE MUNDIAL	C100/II IV

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
17 922	W MONDIALE WORLDWIDE MUNDIAL	C100/I III
17 925	W MONDIALE WORLDWIDE MUNDIAL	C100/II IV
17 928	W MONDIALE WORLDWIDE MUNDIAL	C100/III IV
17 931	W MONDIALE WORLDWIDE MUNDIAL	C100/I V
17 934	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
17 937	W MONDIALE WORLDWIDE MUNDIAL	C100/IV V
17 940	W MONDIALE WORLDWIDE MUNDIAL	C100/II III
17 943	R 6	
17 946	M NAT R 14	
17 949	R 5	
17 952	R 3	
17 955	M SAT R 6B	
17 958	M NCA	
17 961	M AFI EUR INO MID	CC AFI EUR INO MID
17 964	R 2 11B	
17 967	R 5 13A 13B 13E 13F	CC 13A 13B 13E 13F

27/207A

Bande/band/banda 21 924-22 000 kHz **22 MHz**

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
21 940	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 943	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 946	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 949	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 952	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 955	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 958	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 961	W MONDIALE WORLDWIDE MUNDIAL	C100/V

Fréquence kHz *Frequency kHz* Frecuencia kHz 1	Zone d'emploi autorisé *Authorized area of use* Zona de uso autorizado 2	Observations *Remarks* Observaciones 3
21 964	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 967	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 970	W MONDIALE WORLDWIDE MUNDIAL	C100/III
21 973	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 976	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 979	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 982	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 985	W MONDIALE WORLDWIDE MUNDIAL	C100/II
21 988	W MONDIALE WORLDWIDE MUNDIAL	C100/I
21 991	W MONDIALE WORLDWIDE MUNDIAL	C100/IV
21 994	W MONDIALE WORLDWIDE MUNDIAL	C100/V
21 997	W MONDIALE WORLDWIDE MUNDIAL	C100/I

Explication des symboles et abréviations

Colonne 2 M = ZLAMP.
R = ZLARN.
V = VOLMET.
W = mondiale.

Colonne 3 CC = voie commune à.
C001/... Dans la zone indiquée après la barre oblique, utilisation diurne.
C002/6G Dans la zone 6G, utilisation seulement à l'est de 95° E.
C003/6G Dans la zone 6G, utilisation seulement à l'ouest de 95° E.
C004/6G Utilisation limitée à l'est de 110° E.
C005/2A Utilisation limitée au nord de 60° N.
C006/6A Utilisation limiteé à l'est de 75° E.
C007/ Pas utilisé.
C008/ Pas utilisé.
C009/6G Dans la zone 6G utilisation seulement à l'est de 110° E et au sud de 25° N.
C010/6G Dans la zone CG utilisation seulement à l'est de 118° E et au nord de 40° N.
C011/6E Dans la zone 6E, utilisation limitée au sud de 20° N.
C100/... La zone d'allotissement pour utilisation mondiale est indiquée à la suite du symbole.
En ce qui concerne la procédure pour l'assignation des fréquences, voir le numéro **27/194A.**

Explation of symbols and abbreviations

Colomn 2 M = MWARA.
R = RDARA.
V = VOLMET.
W = worldwide.

Colomn 3 CC = common channel to.
C001/... Restricted do daytime only, in the area indicated after the slant stroke.
C002/6G In area 6G, operation is resctricted to east of 95° E.
C003/6G In area 6G, operation is resctricted to west of 95° E.
C004/6G Use limited to east of 110° E.
C005/2A Use limited to north of 60° N.
C006/6A Use limited to east of 75° E.
C007 Not used.
C008 Not used.

C009/6G In area 6G, use limited to east of 110° E and south of 25° N.
C010/6G In area 6G, use limited to east of 118° E and north of 40° N.
C011/6E In area 6E, use is limited to south of 20° N.
C100/... Worldwide Allotment Area is indicated after the symbol. For assignment procedure see No **27/194A**.

Explicación de los símbolos y abreviaturas

Colomna 2 M = ZRMP.
R = ZRRN.
V = VOLMET.
W = mundial.
Colomna 3 CC = canal común a.
C001/... En la zona indicada después del trazo oblicuo, utilización diurna.
C002/6G En la zona 6G, el funcinamiento está limitado al este de 95° E.
C003/6G En la zona 6G, el funcionamiento está limitado al oeste de 95° E.
C004/6G Uso limitado al este de 110° E.
C005/2A Uso limitado al norte de 60° N.
C006/6A Uso limitado al este de 75° E.
C007 No ha sido utilizado.
C008 No ha sido utilizado.
C009/6G En la zona 6G, el funcionamiento está limitado al este de 110° E y al sur de 25° N.
C010/6G En la zona 6G, el funcionamiento está limitado al est de 118.° E y al norte de 40° N.
C011/6E En la zona 6E, uso limitado al sur de 20° N.
C100/... Se indica la zona de ajudicación para utilización mundial después del símbolo. En lo que se refiere al procedimiento para la asignación de las frecuencias véase el numéro **27/194A**.

ARTICLE 3

Fréquences pour utilisation commune

27/208 1. Les fréquences porteuses (fréquences de réference) 3023 kHz et 5680 kHz sont destinées à l'utilisation commune dans le monde entier.

27/209 2. L'utilisation de ces fréquences dans le monde entier esta autorisée:

2.1. Dans les stations d'aéronef, pour:

a) Les contrôles d'approche et d'aérodrome;
b) Les communications avec les stations aéronautiques iorsque les autres fréquences de ces stations sont indisponibles ou inconnues;

2.2. Dans les stations aéronautiques, pour les contrôles d'approche et d'aérodrome avec les réserves suivantes:

a) Avec une puisssance moyenne limitée à une valeur au plus égale à 20 watts dans le circuit d'antenne;
b) Dans chaque cas, on doit étudier tout spécialment le type d'antenne à utiliser pour éviter les brouillages nuisibles;
c) La puissance des stations aéronautiques qui utilisent ces fréquences dans les conditions ci-dessus augmentée jusqu'à la valeur nécessaire pour satisfaire certains besoins d'exploitation, sous réserve de coordination entre les administrations directement intéressés et celles dont les services peuvent être défavorablement influencés.

27/210 3. Nonobstant les disposition qui précèdent, la fréquence 5680 kHz peut également être utilisé dans les stations aéronautiques pour les communications avec des stations d'aéronef lorsque les autres fréquences des stations aéronautiques sont indisponibles ou inconnues. Cette utilisation est cependant limitée à des zones et soumise à des conditions telles qu'il ne puisse en résulter aucun brouillage nuisible aux autres communications autorisées du service mobile aéronautique.

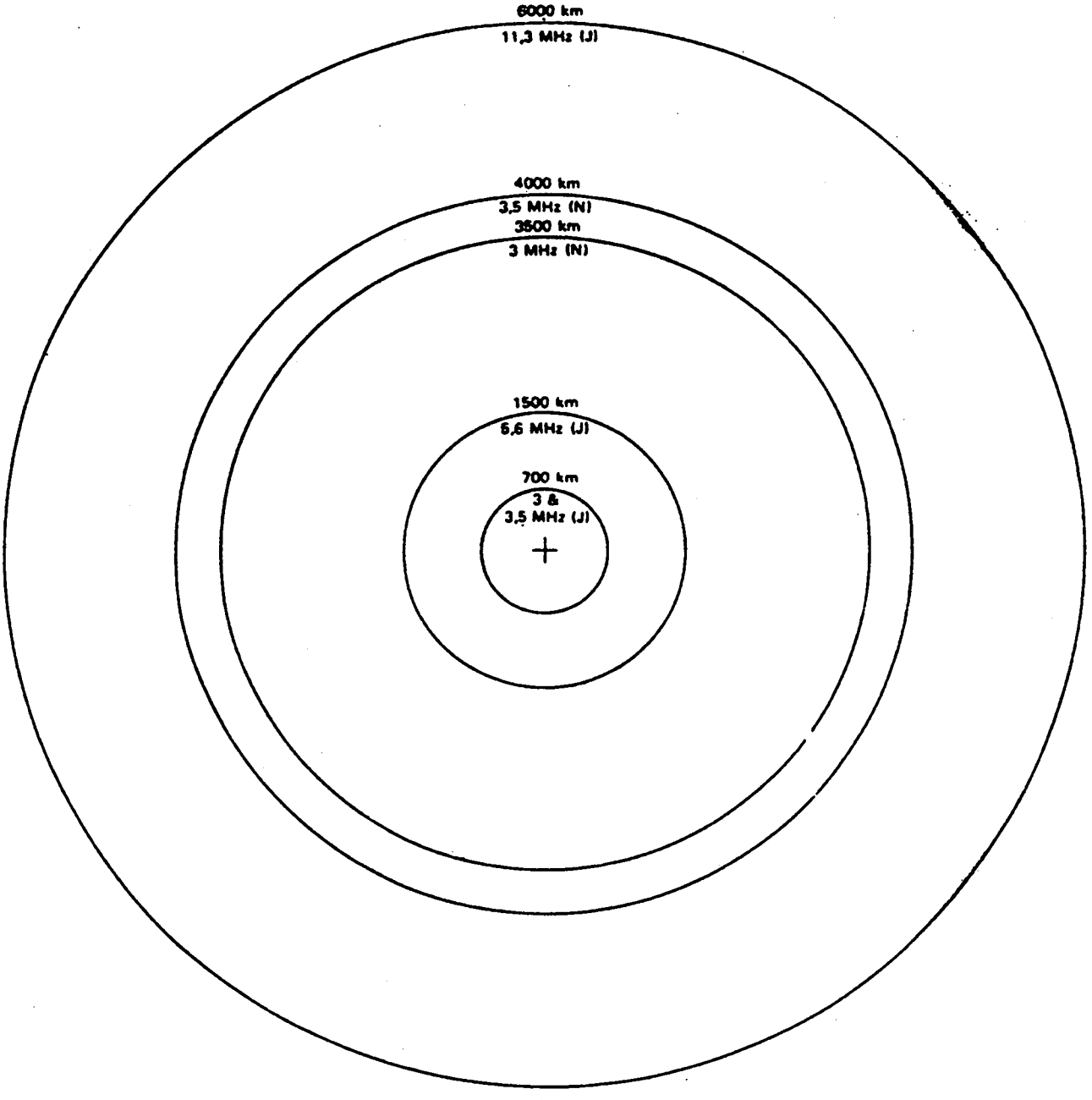
27/211 4. Des détails supplémentaires concernant l'utilisation de ces voies pour les fins susmentionnées peuvent être recommandés par les réunions de l'OACI.

27/212 5. Les fréquences 3023 kHz et 5680 kHz peuvent également être utilisées par des stations d'autres services mobiles qui participent à des opérations de recherche et de sauvetage coordonées, aériennes et de surface, ainsi que pour des communications entre ces satations et les stations terrestres participantes. Les stations aéronautiques sont autorisées á utiliser ces fréquences pour établir des communications avec de telles stations.

27/213 6. Ces voies peuvent être utilisées pour les émissions de classe A1 ou A3, conformément à des accords particuliers. Elles ne doivent pas être subdivisées.

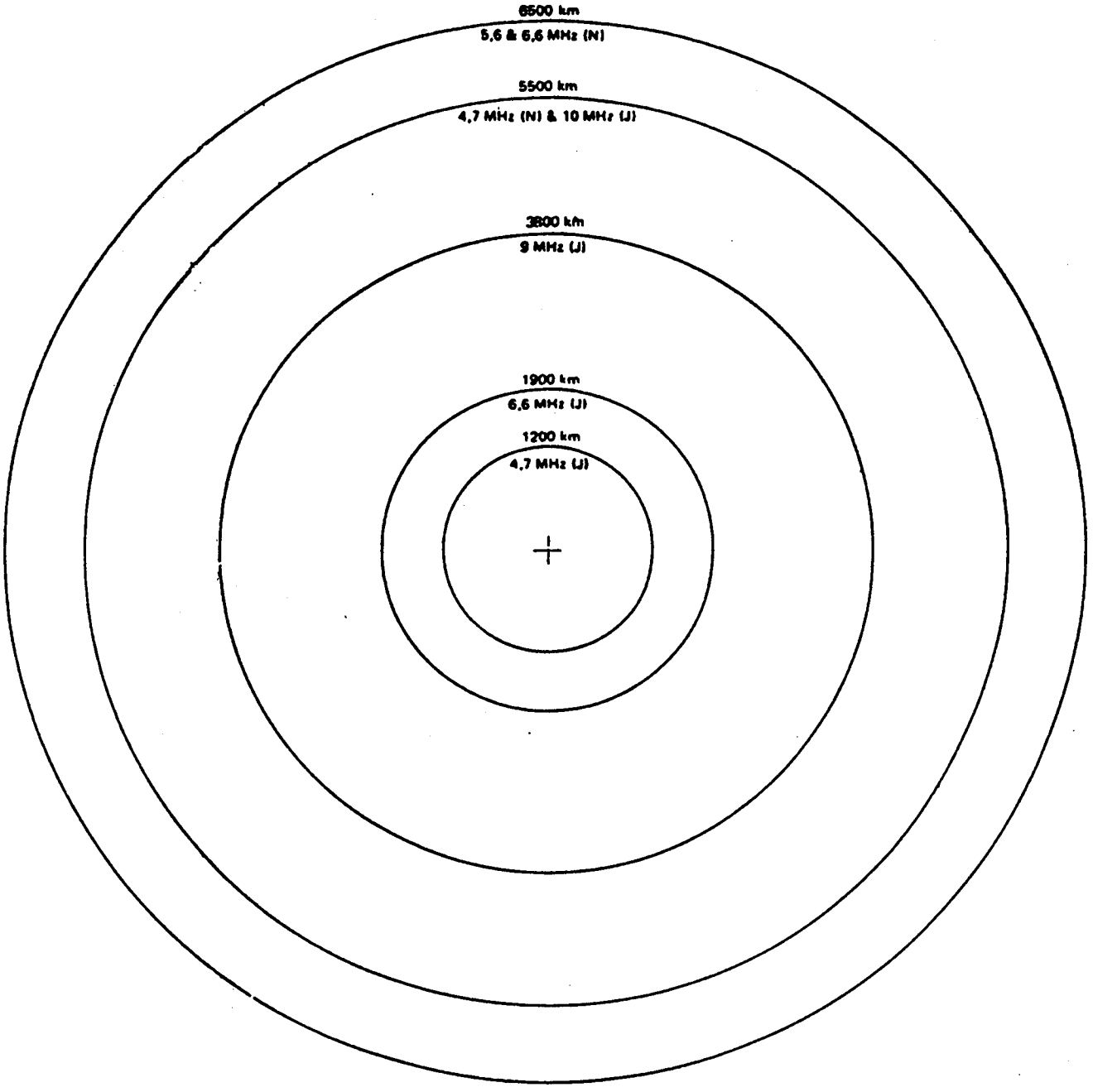
27/214 7. Toutes les stations qui participent directement à des opérations de recherche et de sauvetage coordonnées et qui utilisent les fréquences 3023 kHz et 5680 kHz doivent émettre uniquement dans la bande latérale supérieure, à l'exception des cas prévus au numéro **27/50**.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT — COURBES INDIQUANT LES PORTEES DE BROUILLAGE
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION — INTERFERENCE RANGE CONTOURS
PROYECCIÓN ACIMUTAL EQUIVALENT DE LAMBERT — CURVAS DE ALCANCES DE INTERFERÊNCIA

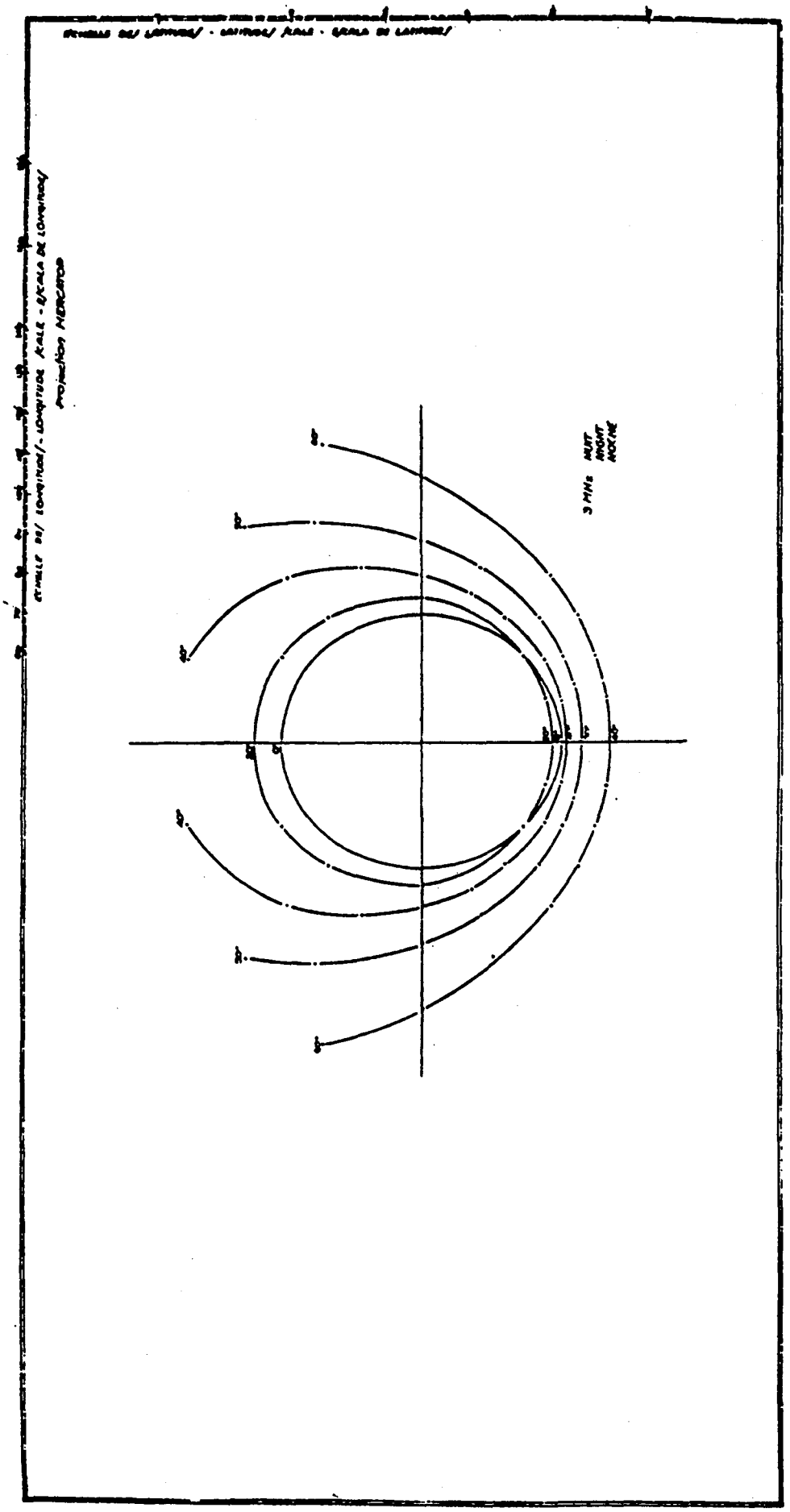


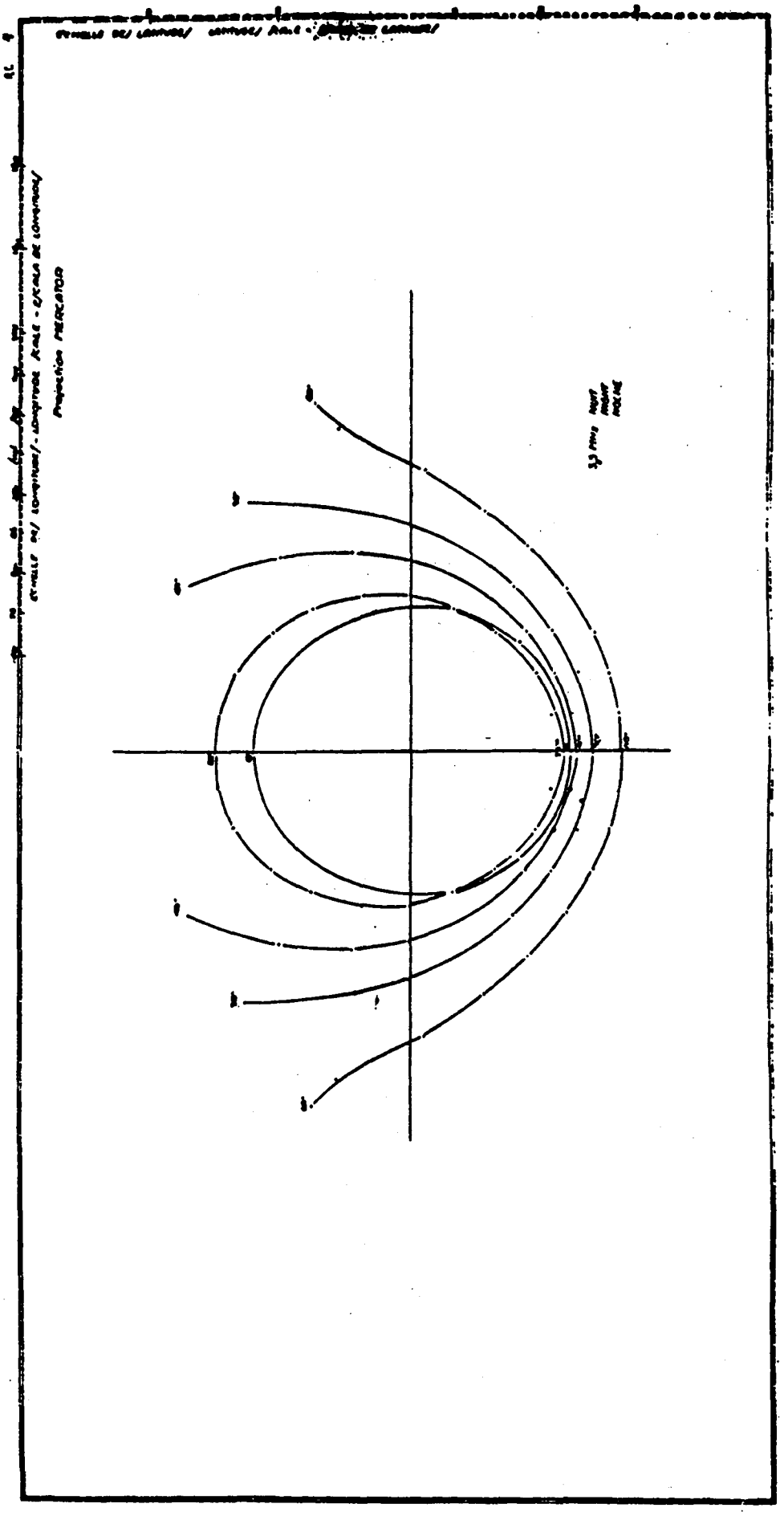
3 & 3,5 MHZ	JOUR DAY DIA	700 km	3,5 MHZ	NUIT NIGHT NOCHE	4000 km
5,6 MHz	JOUR DAY DIA	1500 km	11,3 MHz	JOUR DAY DIA	6000 km
3 MHz	NUIT NIGHT NOCHE	3500 km			

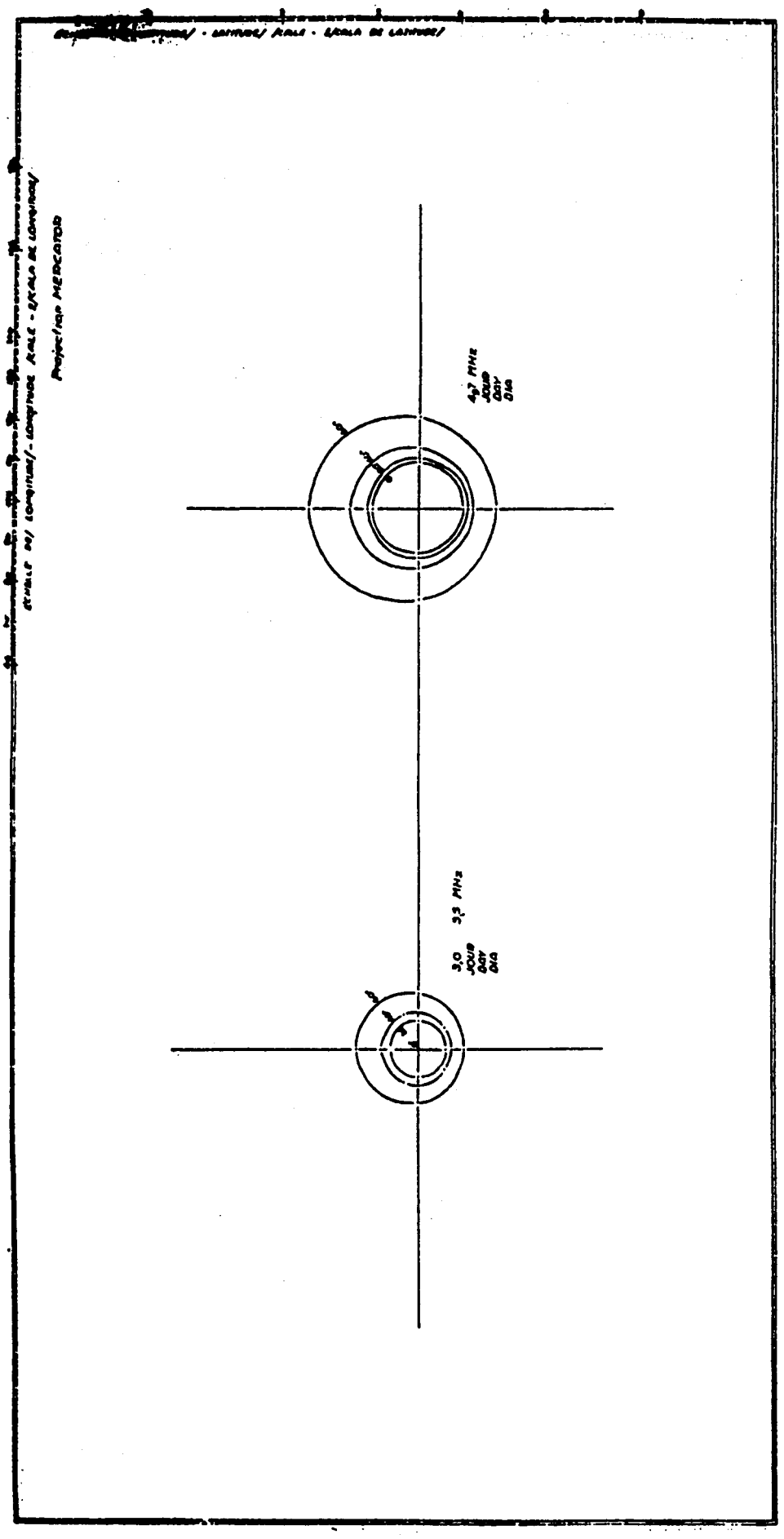
PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT — COURBES INDIQUANT LES PORTEES DE BROUILLAGE
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION — INTERFERENCE RANGE CONTOURS
PROYECCIÓN ACIMUTAL EQUIVALENT DE LAMBERT — CURVAS DE ALCANCES DE INTERFERÊNCIA

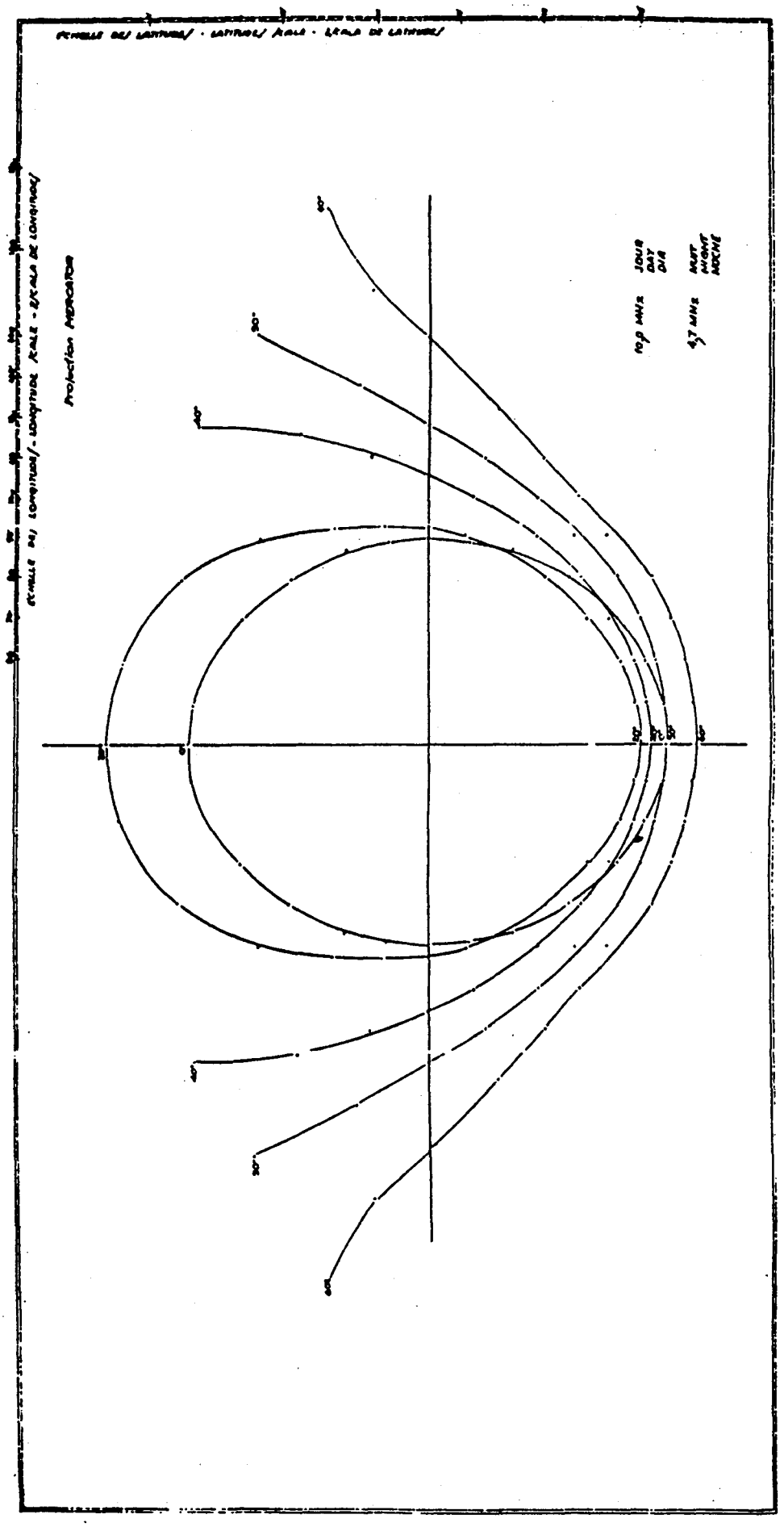


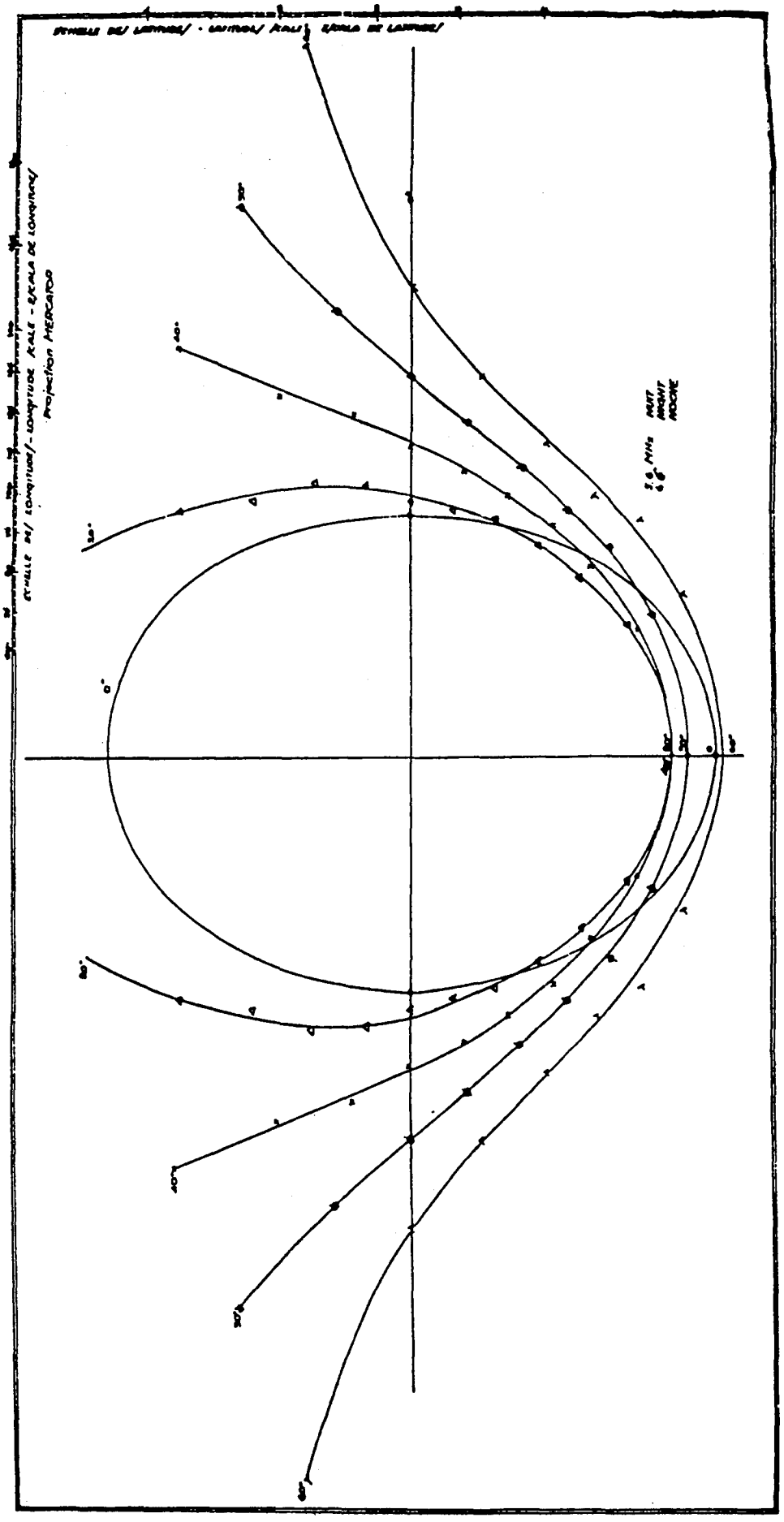
4,7 MHz	JOUR DAY DIA	1200 km	10 MHz	JOUR DAY DIA	5500 km
6,6 MHz	JOUR DAY DIA	1900 km	4,7 MHz	NUIT NIGHT NOCHE	6500 km
9,0 MHz	JOUR DAY DIA	3800 km	5,6 & 6,6 MHz	NUIT NIGHT NOCHE	6500 km

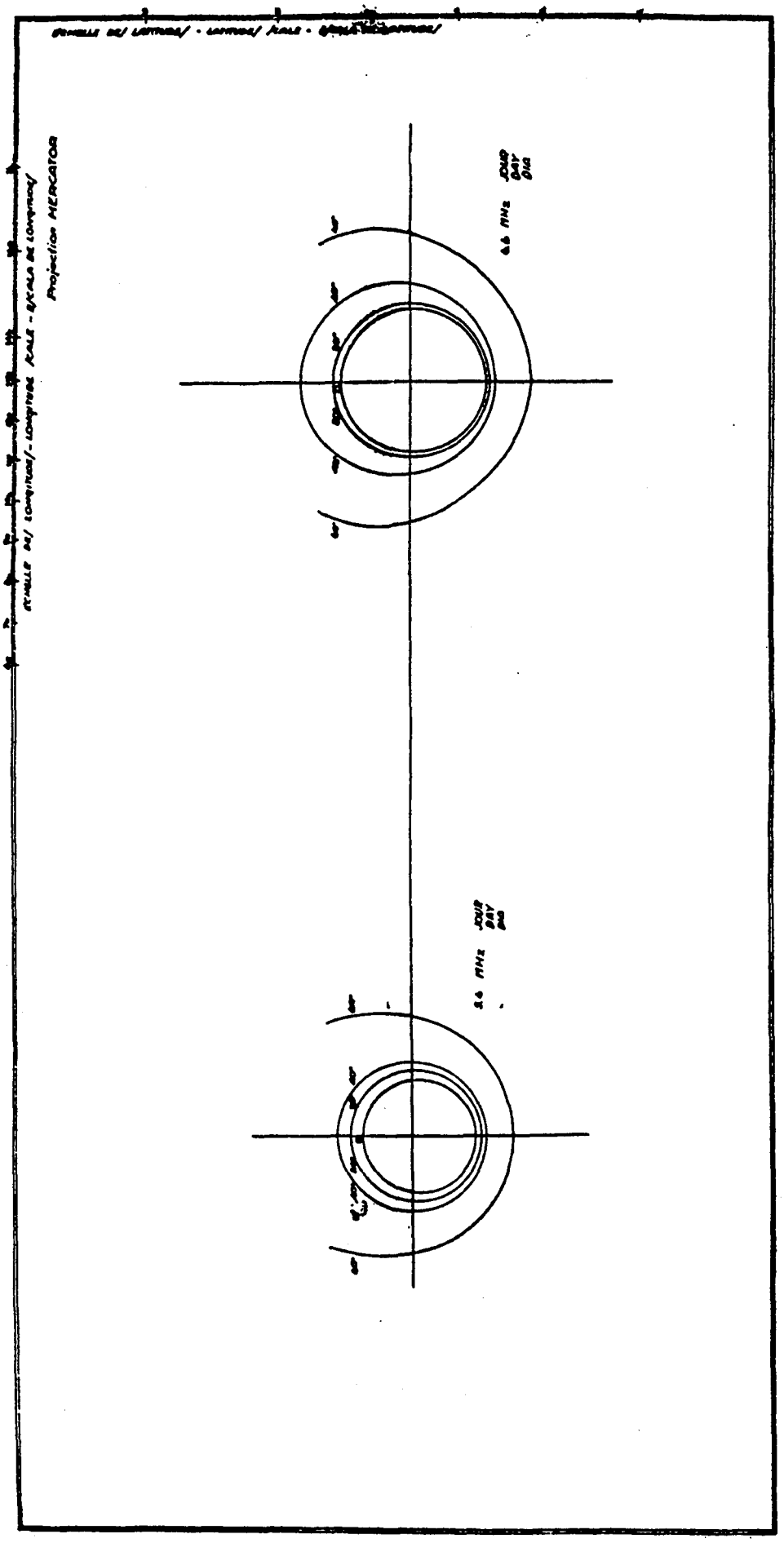

3 MNs
HUIT
MUNT
NOINE

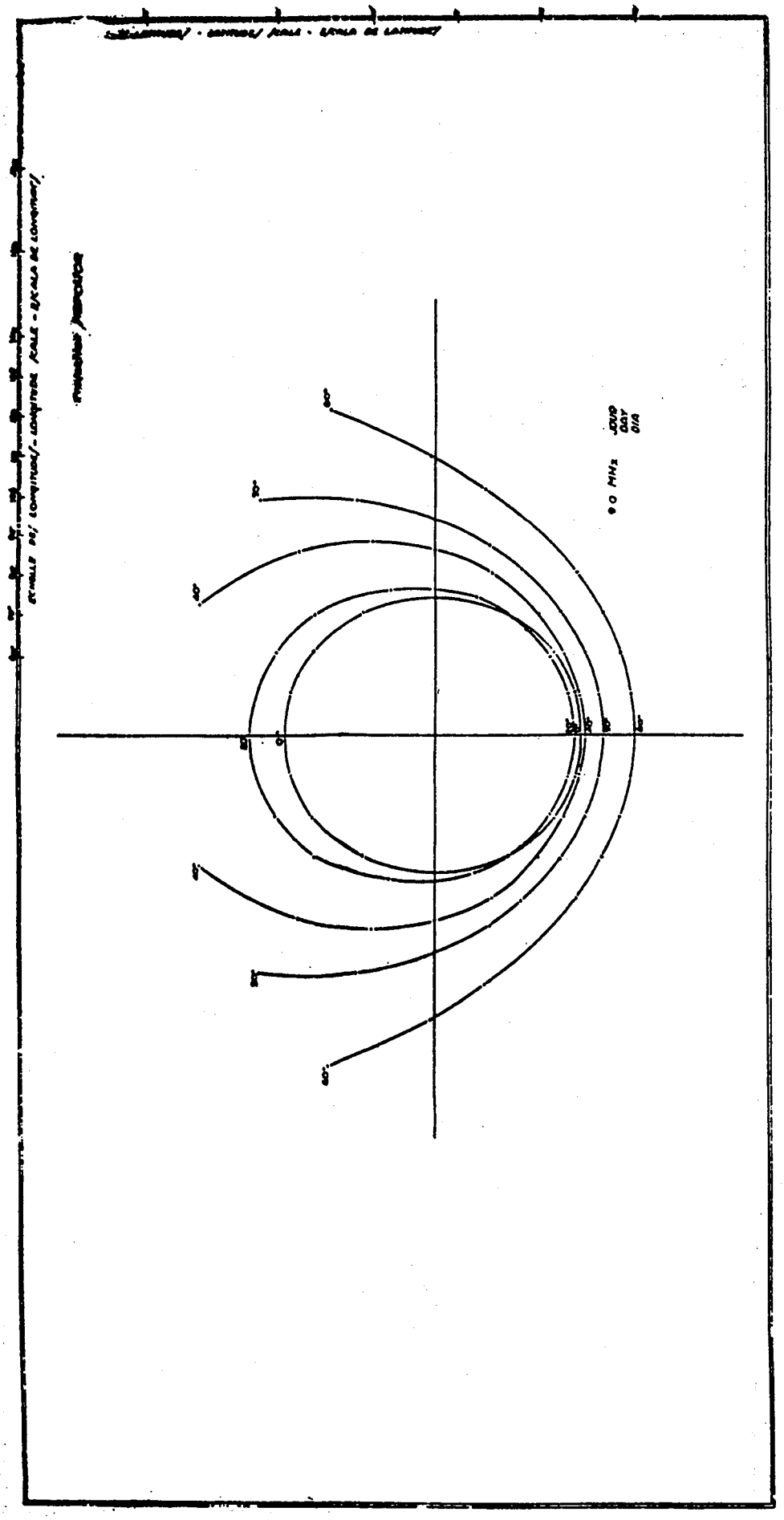


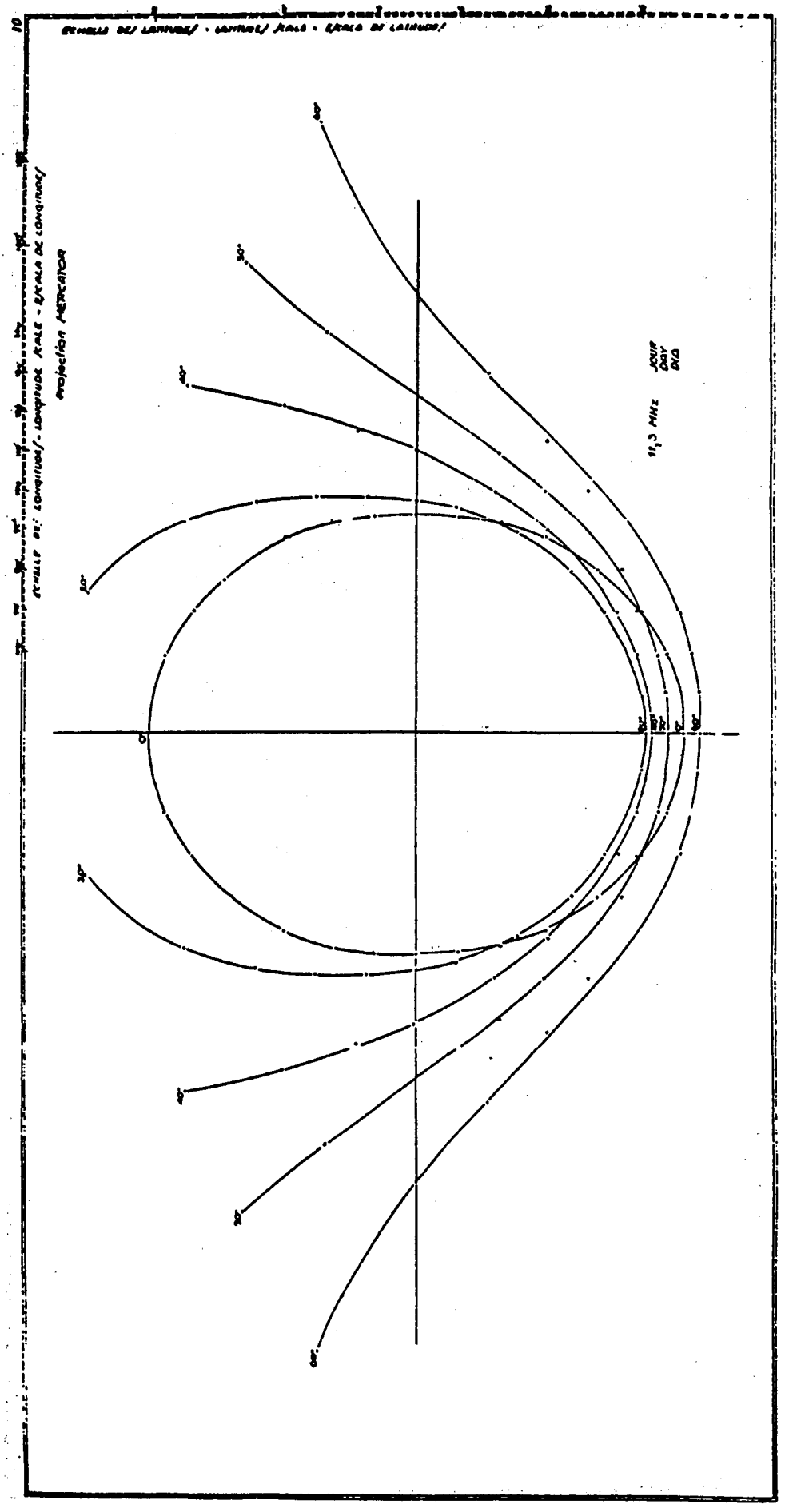

4.7 MHz
JOUR
JOUR
DIA
3.3 MHz
3.0
JOUR
JOUR
DIA

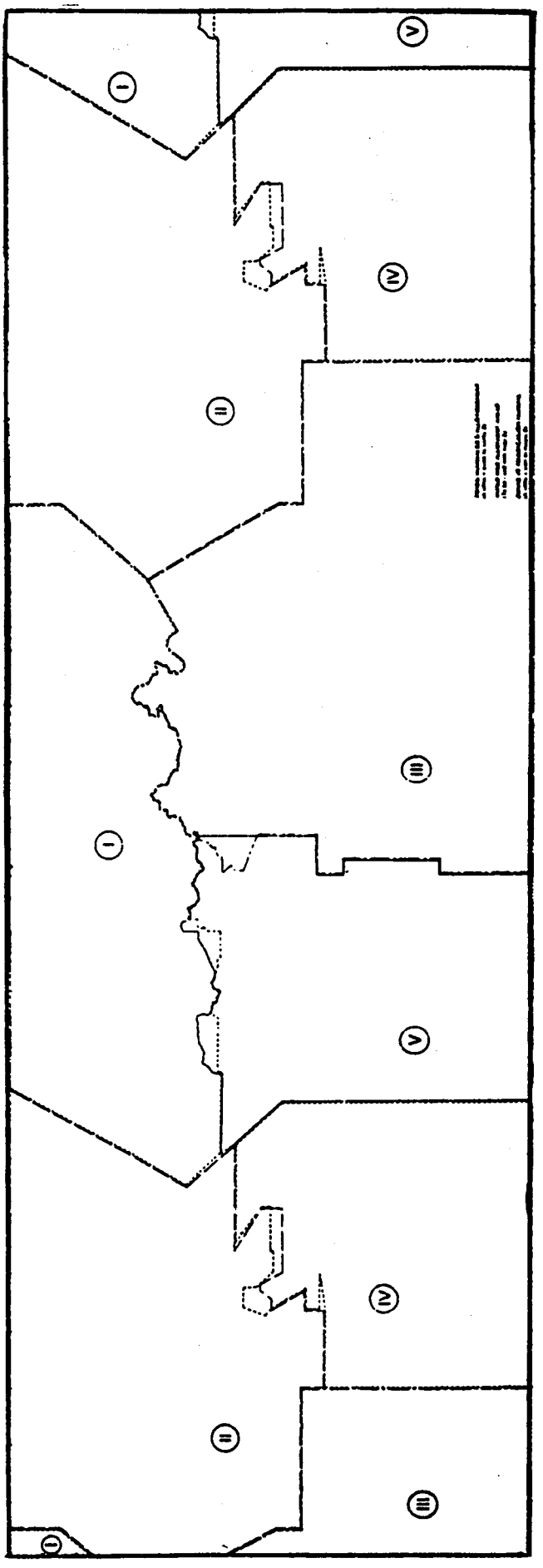

Projection Azimutale
10,0 MHz
JOUR
DAY
DIA
4,7 MHz
NUIT
NIGHT
NOCHE

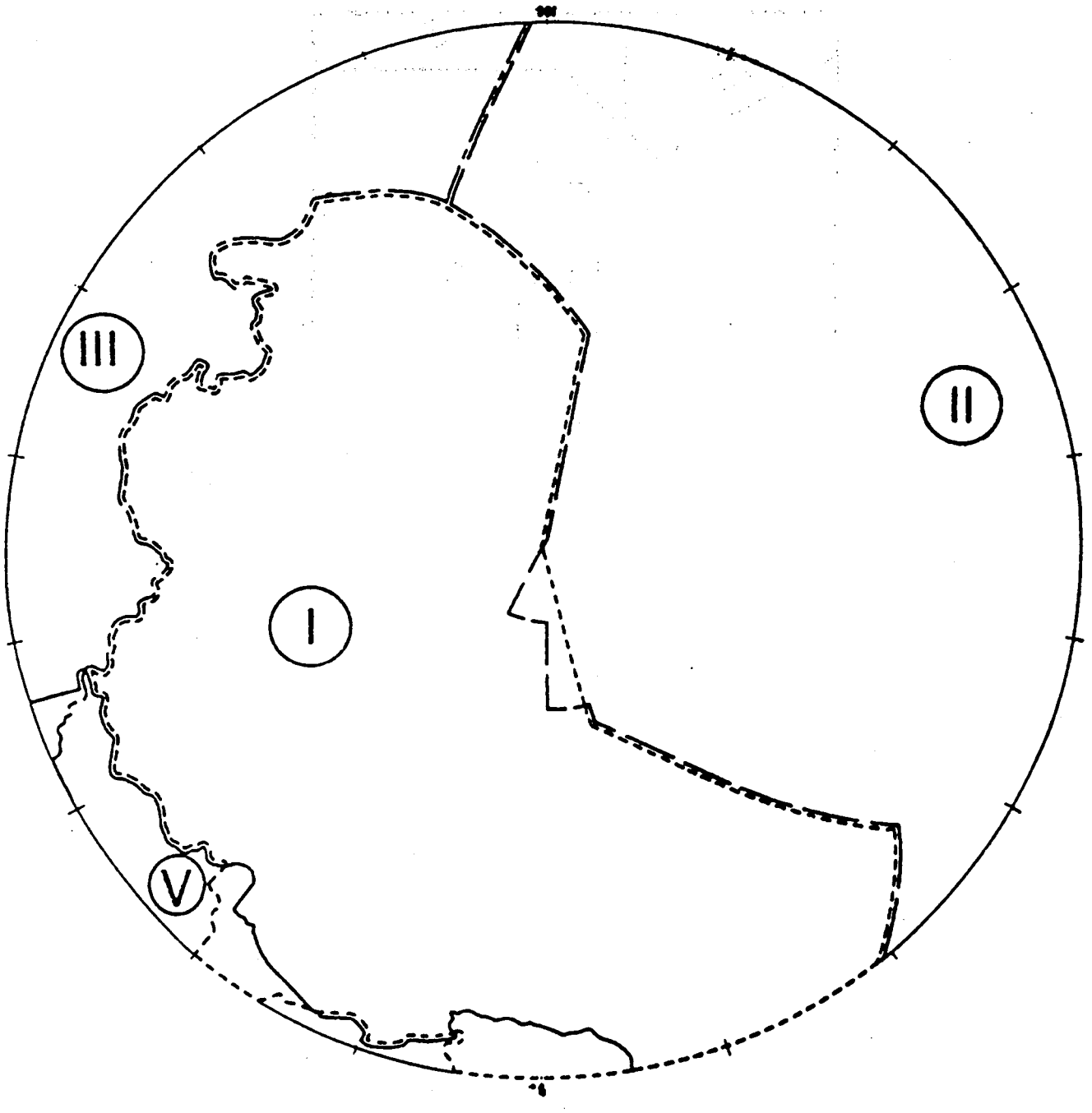

ÉCHELLE DES LATITUDES / ESCALA DE LATITUDES
ÉCHELLE DES LONGITUDES / ESCALA DE LONGITUDES
Projection MERCATOR
NUIT
NIGHT
NOCHE



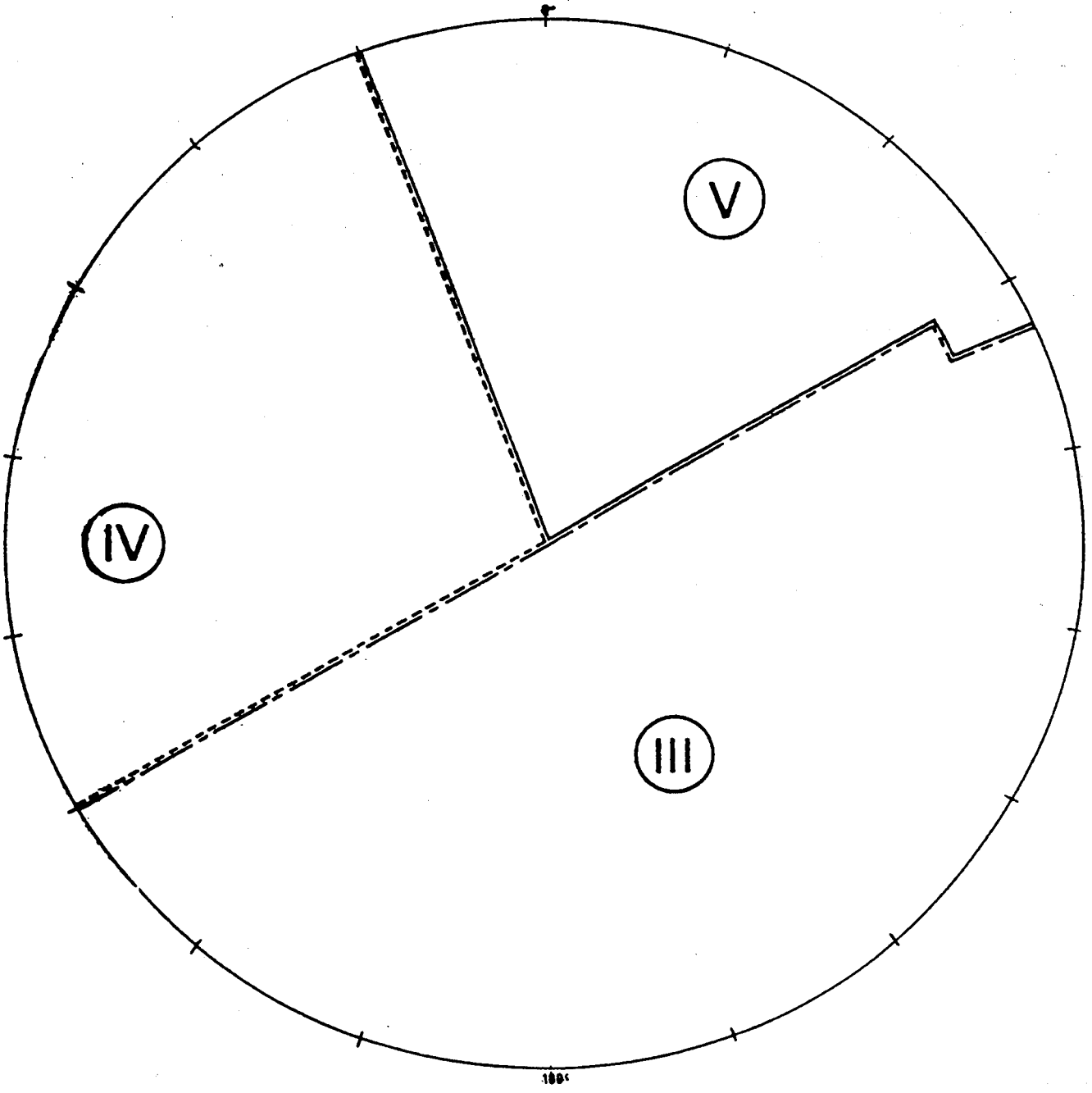



ÉCHELLE DES LATITUDES / LATITUDE SCALE / ESCALA DE LATITUDES
ÉCHELLE DES LONGITUDES / LONGITUDE SCALE / ESCALA DE LONGITUDES
Projection MERCATOR
JOUR
DAY
DIA
11,3 MHz
0
30°
40°
50°
60°
70°
80°

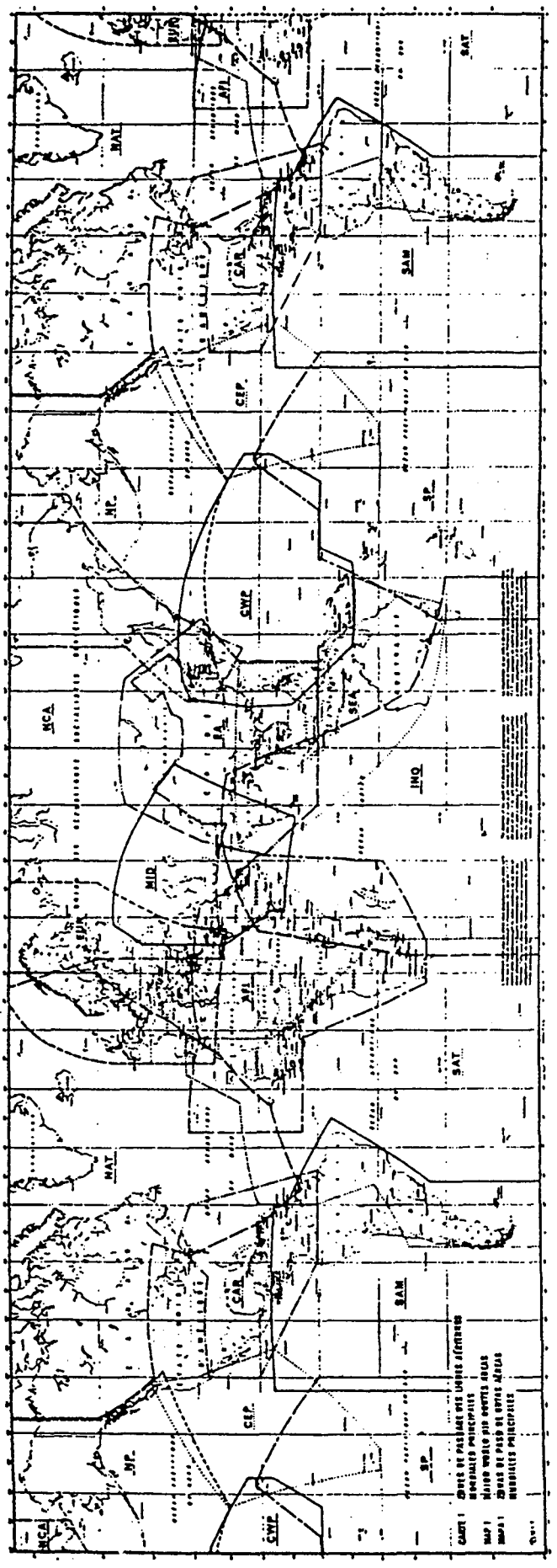


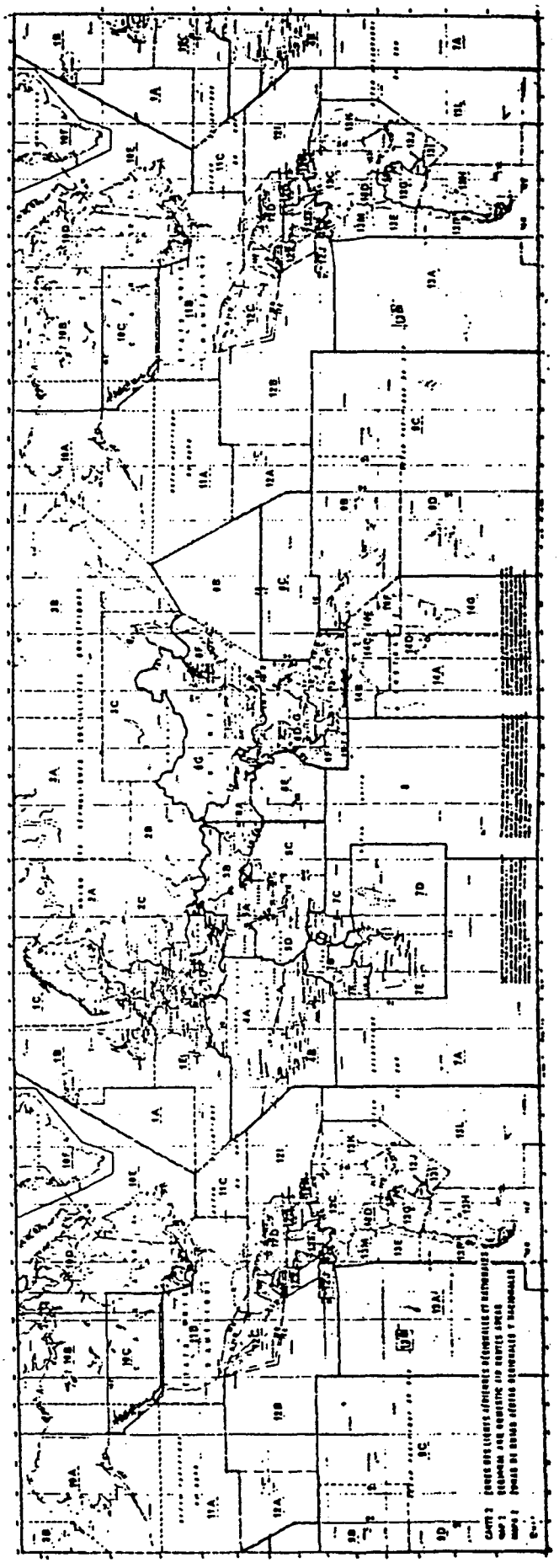


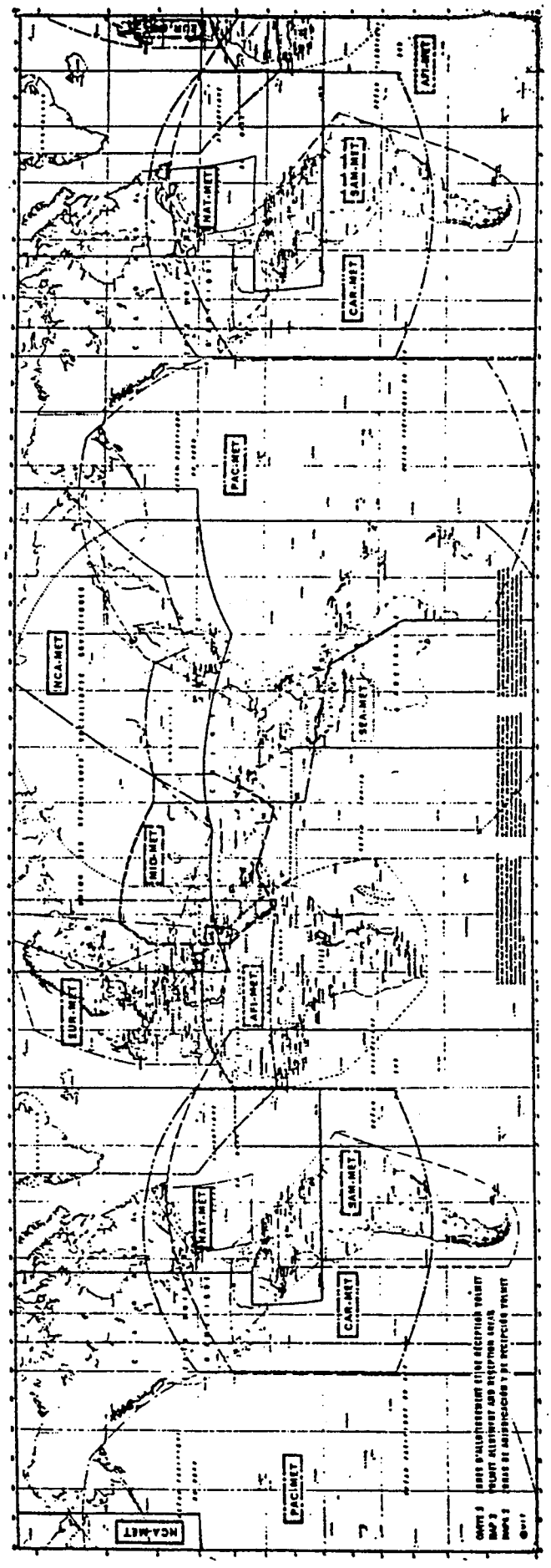
ZONES MONDIALES D'ALLOTISSEMENT
(A utiliser avec la carte 5)
WORKD-WIDE ALLOTMENT AREAS
(To be used witt map 5)
ZONAS DE ADJUDICACIÓN MUNDIAL
(A utilisar con el mapa 5)



ZONES MONDIALES D'ALLOTISSEMENT
(A utiliser avec la carte 7)
WORKD-WIDE ALLOTMENT AREAS
(To be used witt map 7)
ZONAS DE ADJUDICACIÓN MUNDIAL
(A utilisar con el mapa 7)

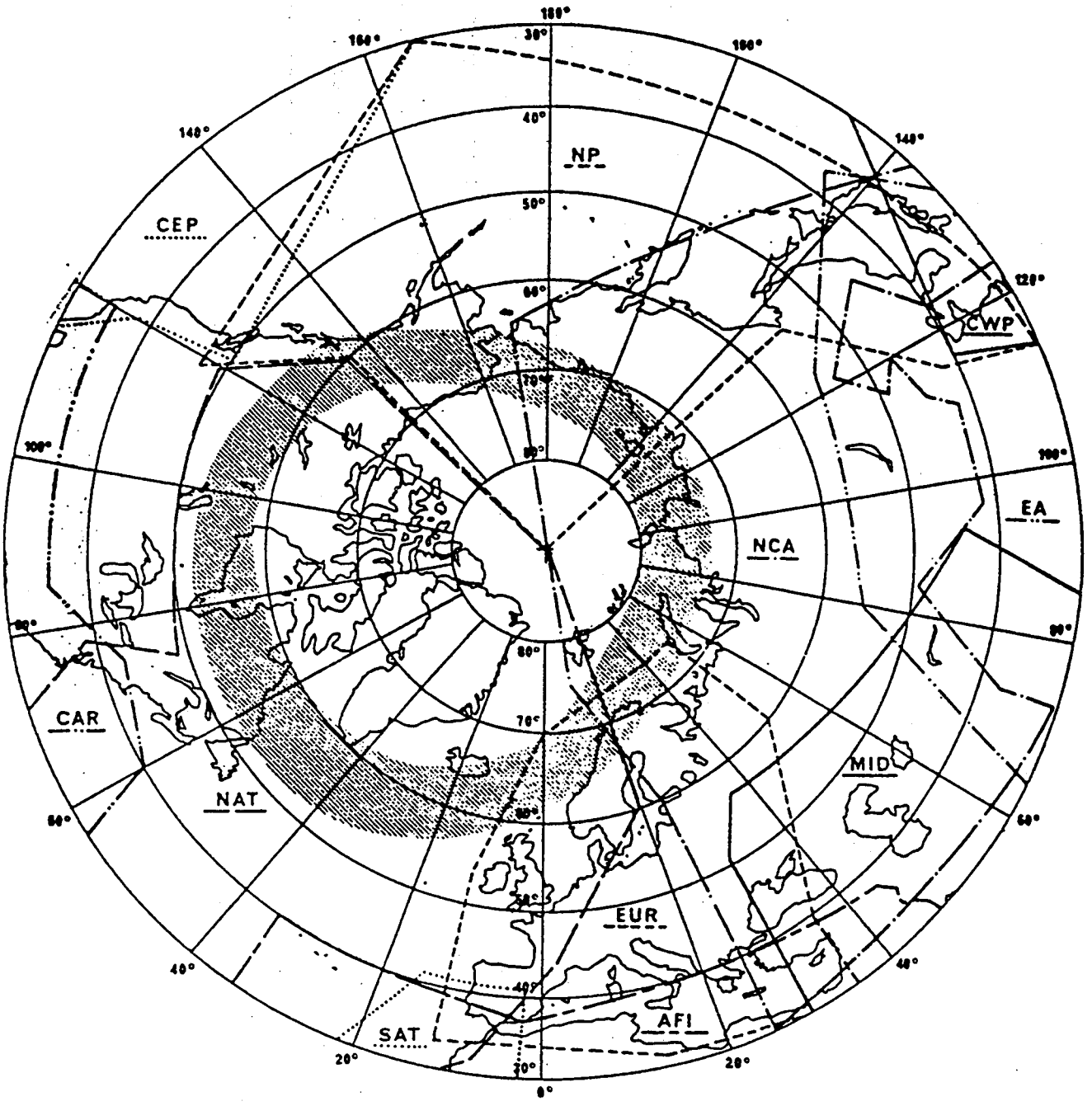





AFI-MET
SAM-MET
NAT-MET
CAR-MET
PAC-MET
NCA-MET
SEA-MET
NIO-MET
EUR-MET
AFI-MET
SAM-MET
NAT-MET
CAR-MET
PACIMET
NCA-MET

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 4 ZONES DE PASSAGE DES LIGNES AÉRIENNES MONDIALES PRINCIPALES

MAP 4 MAJOR WORLD AIR ROUTE AREAS

MAPA 4 ZONAS DE PASO DE RUTAS AÉREAS MUNDIALES PRINCIPALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

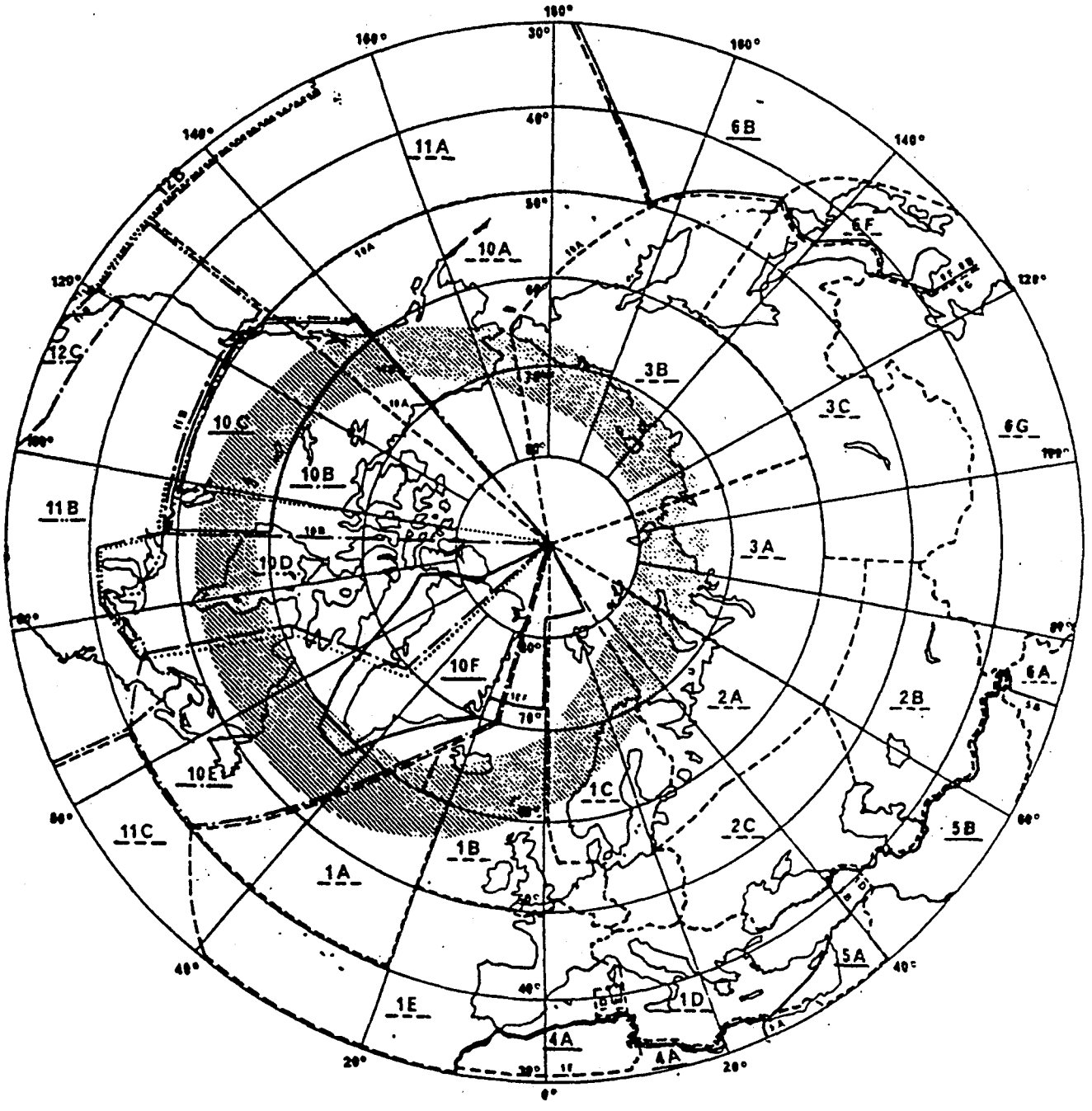
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 5 — ZONES DES LIGNES AÉRIENNES RÉGIONALES ET NATIONALES

MAP 5 — *REGIONAL AND DOMESTIC AIR ROUTE AREAS*

MAPA 5 — ZONAS DE RUTAS AÉREAS REGIONALES Y NACIONALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

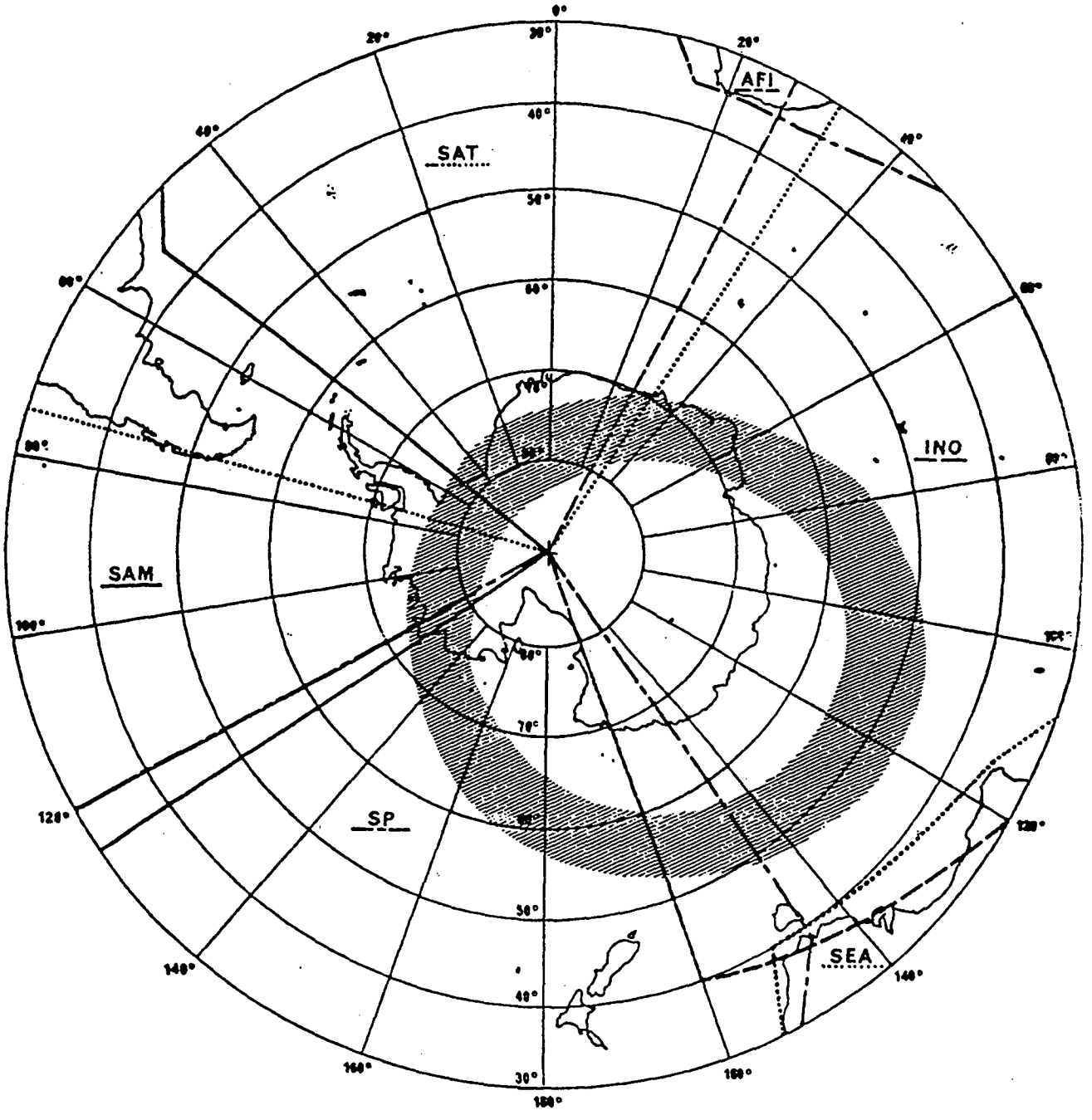
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronáuticas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 6 ZONES DE PASSAGE DES LIGNES AÉRIENNES MUNDIALS PRINCIPALES

MAP 6 *MAJOR WORLD AIR ROUTE AREAS*

MAPA 6 ZONAS DE PASO DE RUTAS AÉREAS MUNDIALES PRINCIPALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

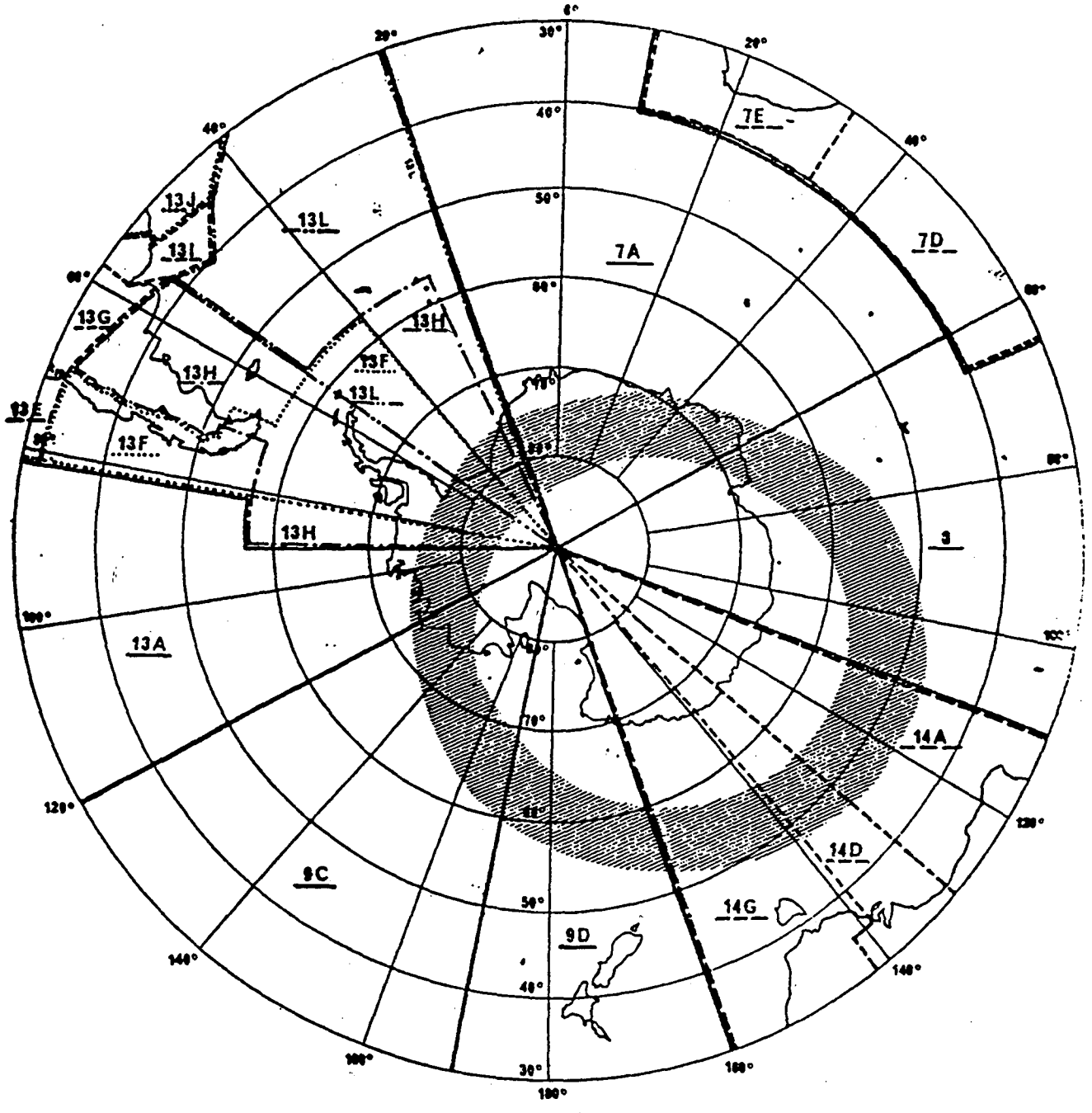
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 7 ZONES DE LIGNES AÉRIENNES RÉGIONALES ET NATIONALES

MAP 7 *REGIONAL AND DOMESTIC AIR ROUTE AREAS*

MAPA 7 ZONAS DE RUTAS AÉREAS RÉGIONALES Y NACIONALES

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°
Escala válida para latitudes > 60°

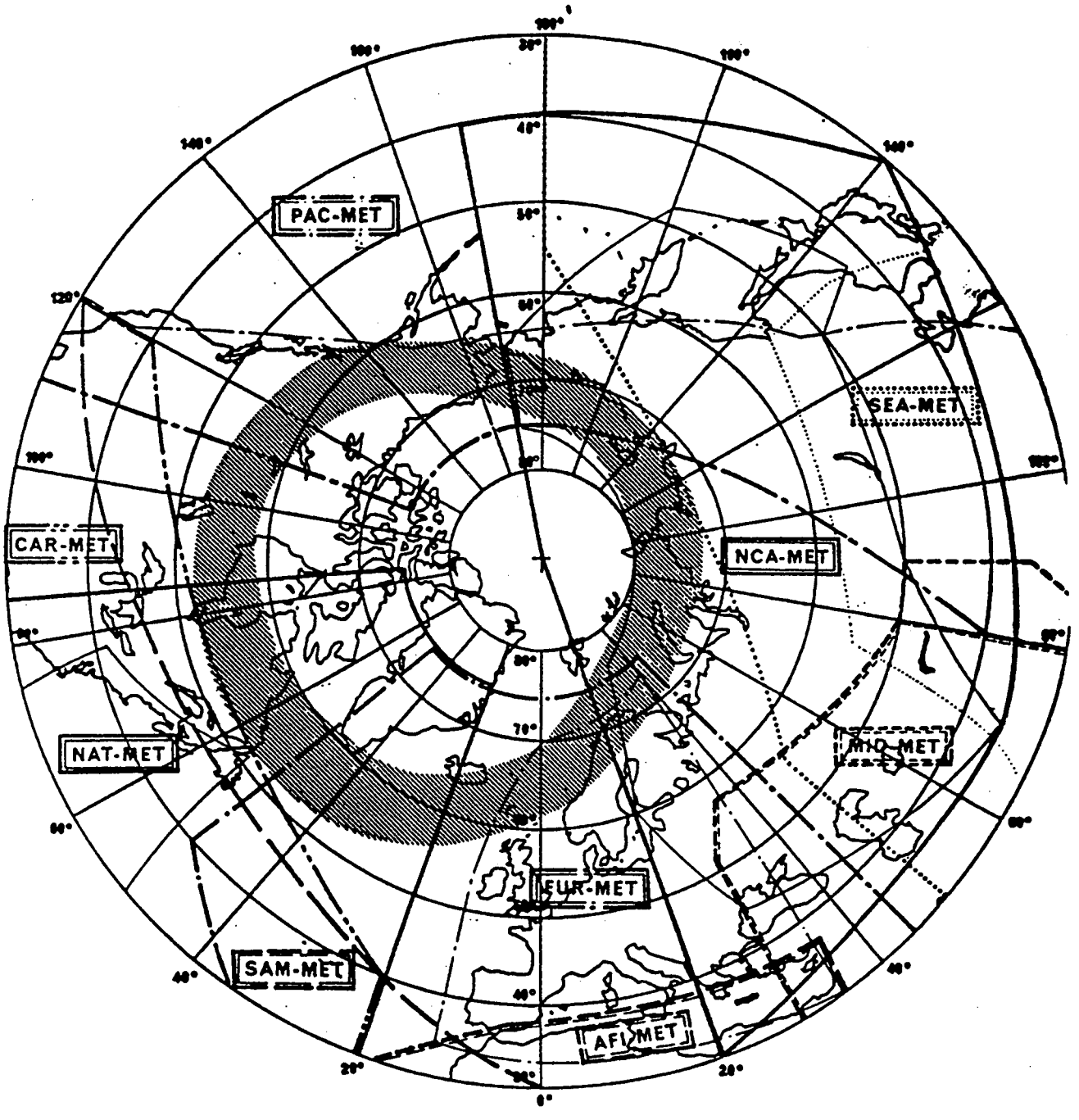
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE NORD — NORTH POLE — POLO NORTE



CARTE 8 ZONES D'ALLOTISSEMENT ET DE RÉCEPTION VOLMET

MAP 8 VOLMET ALLOTMENT AND RECEPTION AREAS

MAPA 8 ZONAS DE ADJUDICACIÓN Y DE RECEPCIÓN VOLMET

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°

Escala válida para latitudes > 60°

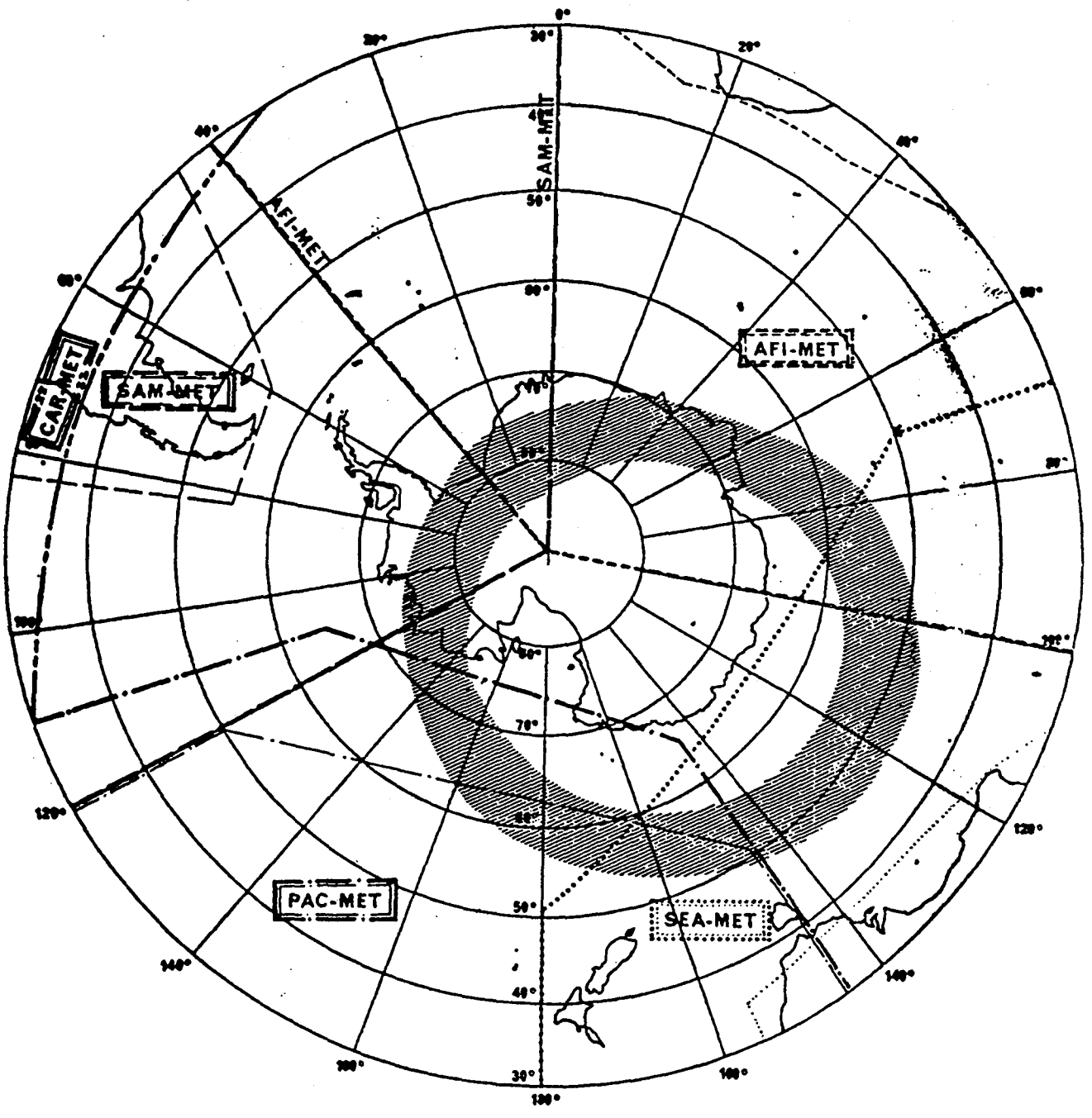
0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mapa unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

PROJECTION AZIMUTALE EQUIVALENTE DE LAMBERT
LAMBERT AZIMUTHAL EQUAL AREA PROJECTION
PROYECCIÓN ACIMUTAL EQUIVALENTE DE LAMBERT

POLE SUD — SOUTH POLE — POLO SUR



CARTE 9 ZONES D'ALLOTISSEMENT ET DE RÉCEPTION VOLMET

MAP 9 VOLMET ALLOTMENT AND RECEPTION AREAS

MAPA 9 ZONAS DE ADJUDICACIÓN Y DE RECEPCIÓN VOLMET

Echelle valable pour les latitudes > 60°
Scale valid for latitudes > 60°

Escala válida para latitudes > 60°

0 1000 2000 3000 4000 km

Cette carte donne les limites des zones aéronautiques uniquement pour les besoins des radiocommunications du service mobili aéronautique (R).
The map delineates the aeronautical areas only for the purpose of radicommunications in the aeronautical mobile (R) service.
Los limites de las zonas aeronátuicas se representan en el mape unicamente a los afectos de las radiocommunicaciones del servicio móvil aeronáutico (R).

© U.I.T.

INDEX ANALYTIQUE

Résolutions et recommandations

Cet index analytique comprend deux parties:

PARTIE A — Résolutions;
PARTIE B — Recommandations.

Chaque partie contient deux sections:

Section I — liste des résolutions et recommandations dans l'ordre numérique avec indication des sujets (mots-clés) répertoriés dans la section II. Les sujets principaux figurant en majuscules sont les titres sous lesquels on trouvera les textes explicatifs des résolutions ou recommandations. Ceux qui figurent en minuscules renvoient à un ou plusieurs sujets principaux;
Section II — liste des résolutions/recommandations groupées par sujet (mots-clés), dans l'ordre alphabétique.

PARTIE A

Résolutions

SECTION I

Sujets de l'index analytique (mots-clés)

Résolution N° 1 — Notification des assignations de fréquence:

Gestion des fréquences;
Règlement des radiocommunications.

Résolution N° 2 — Orbite des satellites geostationnaires. Services spatiaux:

Fichier de référence international des fréquences (FRIF);
Union Internationale des Télécommunications (IFRB).

Résolution N° 3 — Orbite des satellites geostationnaires:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB).

Résolution N° 4 — Orbite des satellites geostationnaires:

Conférences administratives;
Fichier de référence internationale des fréquences (FRIF);
Règlement des radiocommunications.
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 5 — Propagation — cooperation technique:

Organisations internationales (UAPT, UPAT, URTNA);
Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration, secrétaire général).

Résolution N° 6 — Règlement des radiocommunications:

Gestion des fréquences;
Union Internationale des Télécommunications (IFRB, secrétaire général).

Résolution N° 7 — Gestion des fréquences — cooperation technique:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conférence de plénipotentiaires, conseil d'administration, IFRB, secrétaire général).

Résolution N° 8 — Attribution des bandes de fréquence — service fixe:

Règlement des Radiocommunications;
Service mobiles;
Union Internationale des Télécommunications (IFRB).

Résolution N° 9 — Service fixe:

Fichier de référence international des fréquences (FRIF);
Union Internationale des Télécommunications (IFRB).

Résolution N° 10 — Operations/organisations de secours:

Attribution de bandes de fréquence.

Résolution N° 11 — Navires et aeronefs non parties a un conflit arme:

Organisations internationales (OACI, OMCI);
Service mobile aéronautique (R);
Service mobile maritime;
Union Internationale des Télécommunications (conférences administratives, conseil d'administration, secrétaire général).

Résolution N° 12 — Identification des stations:

Règlement des radiocommunications;
Union Internationale des Télécommunications (conférences administratives, secrétaire général).
Secrétaire général.

Résolution N° 13 — Identification des stations:

Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Résolution N° 14 — Cooperation technique:

Organisations internationales (ONU);
Union Internationale des Télécommunications (conférences administratives, conseil d'administration, secrétaire général).

Résolution N° 15 — Services statiaux — cooperation technique:

Union Internationale des Télécommunications (conférences administratives, conseil d'administration).

Résolution N° 16 — Cooperation technique:

Organisations internationales (ONU);
Union Internationale des Télécommunications (CCIR, CCITT, conférences administratives, conseil d'administration, secrétaire général).

Résolution N° 17 — Conferences administratives:

Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB, secrétaire général).

Résolution N° 30 — Fichier de référence international des fréquences (FRIF):

Union Internationale des Télécommunications (IFRB).

Résolution N° 31 — Service de radiodiffusion par satellite — service fixe par satellite:

Fichier de référence international des fréquences (FRIF);
Règlement des Radiocommunications;
Services de Terre;
Services mobiles;
Union Internationale des Télécommunications (CCIR).

Résolution N° 32 — Services spatiaux:

Fichier de référence international des fréquences (FRIF);
Services de Terre;
Services mobiles;
Union Internationale des Télécommunications (IFRB).

Résolution N° 33 — Service de radiodiffusion par satellite:

Fichier de référence international des fréquences (FRIF);
Règlement des Radiocommunications;
Services de Terre;
Services spatiaux;
Union Internationale des Télécommunications (IFRB).

Résolution N° 34 — Service de radiodiffusion par satellite:

Règlement des Radiocommunications;
Services de Terre;
Services spatiaux;
Union Internationale des Télécommunications (CCIR).

Résolution N° 35 — Gestion des fréquences:

Règlement des Radiocommunications;
Union Internationale des Télécommunications (CCIR, IFRB).

Résolution N° 36 — Emissions — Fichier de référence international des fréquences (FRIF):

Gestion des fréquences;
Union Internationale des Télécommunications (IFRB).

Résolution N° 37 — Gestion des fréquences — cooperation technique:

Union Internationale des Télécommunications (conseil d'administration, secrétaire général);
Utilisation des techniques informatiques.

Résolution N° 38 — Service fixe:

Service mobiles;
Services de radiorepérage;
Union Internationale des Télécommunications (conférences administratives, IFRB);

Résolution N° 60 — Propagation:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration, secrétaire général);

Résolution N° 61 — Division du monde — propagation:

Union Internationale des Télécommunications (CCIR).

Résolution N° 62 — Ionosphere.

Résolution N° 63 — Equipement:

Conférences administratives;
Organisations internationales (CEI, CISPR);
Union Internationale des Télécommunications (CCIR, conférence administratives).

Résolution N° 64 — Equipement:

Union Internationale des Télécommunications (CCIR, CCITT).

Résolution N° 65 — Règlement des radiocommunications:

Union Internationale des Télécommunications (CCIR, secrétaire général).

Résolution N° 66 — Division du monde — attribution de bandes de fréquences:

Union Internationale des Télécommunications (CCIR, conseil d'administration).

Résolution N° 67 — Equipement:

Résolution N° 68 — Conferences administratives — terminologie:

Règlement des radiocommunications;
Union Internationale des Télécommunications (CCIR, CCITT, conférence administratives, conférences de plénipotentiaires, secrétaire général).

Résolution N° 100 — Service fixe par satellite:

Fichier de référence international des fréquences (FRIF);
Service de radiodiffusion par satellite;
Union Internationale des Télécommunications (IFRB).

Résolution N° 101 — Service fixe par satellite:

Conférences administratives;
Liaisons de connexion;
Service de radiodiffusion par satellite;
Union Internationale des Télécommunications (CCIR, conseil d'administration).

Résolution N° 102 — Service fixe par satellite:

Liaisons de connexion;
Service de radiodiffusion par satellite;
Union Internationale des Télécommunications (IFRB).

Résolution N° 103 — Service fixe:

Coopération technique;
Règlement des Radiocommunications;
Union Internationale des Télécommunications (IFRB).

Résolution N° 200 — Détresse et sécurité:

Organisations internationales (OMCI);
Service mobile maritime;
Services mobiles;
Union Internationale des Télécommunications (CCIR, conférences administratives, secrétaire général).

Résolution N° 201 — Correspondance publique:

Service mobile maritime;
Services mobiles;
Union Internationale des Télécommunications (CCITT, conférences administratives).

Résolution N° 202 — Services mobiles:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB).

Résolution N° 300 — Service mobile maritime:

Conférences administratives;
Fichier de référence international des fréquences (FRIF);
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 301 — Service mobile maritime:

Fichier de référence international des fréquences (FRIF);
Conférences administratives;
Union Internationale des Télécommunications (IFRB).

Résolution N° 302 — Service mobile maritime:

Fichier de référence international des fréquences (FRIF);
Océanographie;
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 303 — Service mobile maritime:

Fréquences navire-navire;
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 304 — Service mobile maritime:

Disposition des voies;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 305 — Détresse et sécurité:

Conférences administratives;
Organisations internationales (OMCI);
Service mobile maritime;
Services mobiles;
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Résolution N° 306 — Service mobile maritime:

Emissions;
Techniques de la bande latérale unique;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 307 — Service mobile maritime:

Emissions;
Techniques de la bande latérale unique;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 308 — Service mobile maritime:

Disposition des voies;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 309 — Détresse et sécurité — service mobile maritime:

Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 310 — Service mobile maritime:

Conférences administratives;
Organisations internationales (OMCI);
Union Internationale des Télécommunications (CCIR, conférences administratives, secrétaire général).

Résolution N° 311 — Service mobile maritime:

Union Internationale des Télécommunications (CCIR, conférences administratives, secrétaire général).

Résolution N° 312 — Service mobile maritime:

Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Résolution N° 313 — Identification des stations:

Service mobile maritime;
Service mobile maritime par satellite;
Union Internationale des Télécommunications (CCIR, CCITT, conférences administratives, secrétaire général).

Résolution N° 314 — Service mobile maritime:

Conférences administratives;
Océanographie;
Organisations internationales (COI, OMM);
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 315 — Service mobile maritime:

Correspondance publique;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 316 — Cooperation technique:

Organisations internationales (CNUCED, OMCI, PNUD);
Service mobile maritime;
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Résolution N° 400 — Service mobile aeronautique (R):

Fichier de référence international des fréquences (FRIF);
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 401 — Service mobile aeronautique (R):

Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 402 — Service mobile aeronautique (R):

Emissions;
Règlement des Radiocommunications;
Techniques de la bande latérale unique;
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 403 — Service mobile aeronautique (R) — service mobile aeronautique (OR):

Recherche et sauvetage;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 404 — Service mobile aeronautique (R):

Fichier de référence international des fréquences (FRIF);
Union Internationale des Télécommunications (conférences administratives, IFRB, secrétaire général).

Résolution N° 405 — Service mobile aeronautique (R):

Union Internationale des Télécommunications (conférences administratives).

Résolution N° 405 — Service mobile aeronautique (R):

Union Internationale des Télécommunications (conférences administratives).

Résolution N° 406 — Service mobile aeronautique (R) — service mobile aeronautique par satellite:

Diffusion de renseignements météorologiques;
Union Internationale des Télécommunications (conférences administratives).

Résolution N° 407 — Service mobile aeronautique (R):

Détresse et sécurité (contrôle des émissions);
Union Internationale des Télécommunications (conférences administratives, IFRB).

Résolution N° 500 — Service de radiodiffusion:

Organisations internationales (OACI);
Règlement des Radiocommunications;
Union Internationale des Télécommunications (IFRB, secrétaire général).

Résolution N° 501 — Service de radiodiffusion:

Union Internationale des Télécommunications (IFRB).

Résolution N° 502 — Service de radiodiffusion par satellite:

Règlement des Radiocommunications;
Union Internationale des Télécommunications (IFRB, secrétaire général).

Résolution N° 503 — Service de radiodiffusion par satellite:

Fichier de référence international des fréquences (FRIF);
Règlement des Radiocommunications;
Service fixe par satellite;
Services spatiaux;
Union Internationale des Télécommunications (IFRB).

Résolution N° 504 — Service de radiodiffusion par satellite:

Conférences administratives;
Règlement des Radiocommunications;

Résolution N° 505 — Service de radiodiffusion par satellite:

Conférences administratives;
Union Internationale des Télécommunications (CCIR).

Résolution N° 506 — Service de radiodiffusion par satellite — Orbite des satelites geostationnaires:

Services spatiaux;

Résolution N° 507 — Service de radiodiffusion par satellite:

Conférences administratives;
Règlement des Radiocommunications;
Union Internationale des Télécommunications (conseil d'administration, IFRB).

Résolution N° 508 — Service de radiodiffusion:

Conférences administratives;
Règlement des Radiocommunications;
Techniques de la bande latérale unique;
Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB).

Résolution N° 509 — Service de radiodiffusion:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB).

Résolution N° 510 — Services de radiodiffusion:

Conférences administratives;
Union Internationale des Télécommunications (CCIR, conseil d'administration).

Résolution N° 600 — Services de radiorepérage:

Conférences administratives;
Organisations internationales (OACI, OMCI);
Service mobile aéronautique (R);
Service mobile maritime;
Union Internationale des Télécommunications (CCIR, conseil d'administration, secrétaire général).

Résolution Nº 601 — Radiobalises de localisation des sinistres:

Organisations internationales (OACI);
Recherche et sauvetage;
Service mobile aéronautique (R);
Service mobile maritime;
Union Internationale des Télécommunications (CCIR, conférences administratives).

Résolution Nº 640 — Service d'amateur:

Catastrophe naturelle;
Secours.

Résolution Nº 641 — Service d'amateur — service de radiodiffusion.

Résolution Nº 642 — Service d'amateur par satellite:

Union Internationale des Télécommunications (IFRB).

Résolution Nº 700 — Service de radiodiffusion par satellite — service fixe par satellite:

Conférences administratives;
Règlement des Radiocommunications;
Union Internationale des Télécommunications (CCIR).

Résolution Nº 701 — Service de radiodiffusion par satellite — service fixe par satellite:

Conférences administratives;
Liaisons de connexion;
Union Internationale des Télécommunications (CCIR, conseil d'administration, IFRB, secrétaire général).

Résolution Nº 702 — Service de radiodiffusion par satellite — service fixe — services mobiles:

Union Internationale des Télécommunications (CCIR, secrétaire général).

Résolution Nº 703 — Services spatiaux:

Services de Terre;
Union Internationale des Télécommunications (CCIR, IFRB, secrétaire général).

Section II

Attribution de bandes de fréquences:

Elimination des services fixe et mobile de certaines bandes de fréquences comprises entre 4000 kHz et 27 000 kHz et procédure de transition pour le choix et l'approbation d'assignations de remplacement (Résolution Nº 8).
Révision de la division du monde en régions aux fins de l'attribution de bandes de fréquences (Résolution Nº 66).

Communications en cas de catastrophe naturelle:

Voir *Service d'amateur* (Résolution Nº 640).

Conférences administratives:

Conférence de plénipotentiaires, mesures à prendre par (Résolutions Nºs 7 et 68).
Détermination de la structure des comissions qui pourront être établies en fonction de l'ordre du jour (Résolution Nº 17).
Autres Résolutions concernant les conférences:

Voir *Détresse et sécurié* (Résolution Nº 305).
Voir *Equipement* (Résolution Nº 63).
Voir *Orbite des satellites géostationnaires* (Résolutions Nºs 3 et 4).
Voir *Propagation* (Résolution Nº 60).
Voir *Service de radiodiffusion* (Résolutions Nºs 508, 509, 510 et 702).
Voir *Service de radiodiffusion par satellite* (Résolutions Nºs 504, 505, 507, 700 et 701).
Voir *Service fixe par satellite* (Résolution Nº 101).
Voir *Service mobile maritime* (Résolutions Nºs 300, 301, 310 et 314).
Voir *Service de radiorepérage* (Résolution Nº 600).
Voir *Services mobiles* (Résolution Nº 202).

Cooperation et assistance technique:

Assistance dans le domaine des radiocommunications spatiales (Résolution Nº 15).
Assistance en matière d'utilisation des techniques informatiques pour la gestion du spectre radioélectrique (Résolution Nº 37).
Coopération dans le domaine des télécommunications maritimes (Résolution Nº 316).
Études de propagation en régions tropicales (Résolution Nº 5).
Mise en oeuvre d'une gestion nationale des fréquences radioélectriques (Résolution Nº 7).
Rôle des télécommunications dans le développement rural intégré (Résolution Nº 16).
Transfert de technologie dans le domaine des télécommunications (Résolution Nº 14).
Voir aussi *Service fixe* (Résolution nº 103).

Correspondance publique:

Dispositions d'exploitation à la taxation et à la comptabilité de la correspondance publique dans le service mobile (Résolution nº 201).
Voir aussi *Service mobile maritime* (Résolution Nº 315).

Détresse et sécurité:

Contrôle des émissions:

Utilisation non autorisée des fréquences des bandes attribuées au service mobile maritime (Résolution Nº 309).
Voir aussi *Service mobile aéronautique* (R) (Résolution Nº 407).

Utilisation des classes d'émission R3E et J3E (*a*):

Sur la fréquence porteuse 2182 kHz (Résolution Nº 200).
Sur les fréquences porteuses 4125 kHz et 6215,5 kHz (Résolution Nº 305).

Voir aussi *Service mobile aéronautique* (R) (Résolution Nº 403).

Diffusion de renseignements météorologiques:

Voir *Service mobile aéronautique* (R) (Résolution Nº 406).

Dispositions des voies:

Voir *Service mobile maritime* (Résolutions Nºs 304 et 308).

Division du monde:

En zones climatiques pour le calcul des caractéristiques de propagation (Résolution Nº 61).
Révisions de la division du monde en régions aux fins d'attribution des bandes de fréquences (Résolution Nº 66).

Émissions:

Établissement par l'IFRB d'une documentation explicative au sujet de l'application de la nouvelle méthode de désignation des émissions (Résolution Nº 36).
Voir aussi *Service mobile aéronautique* (R) (Résolution Nº 402).
Voir aussi *Service mobile maritime* (Résolutions Nºs 306 et 307).

Equipement:

ISM:

Protection des services de radiocommunication contre les brouillages causés par les appareils ISM (Résolution Nº 63).

Radioélectriques:

Perfectionnement de la conception des (Résolution Nº 67).
Protection contre le foudre des (Résolution Nº 64).

Fichier de référence international des fréquences (FRIP):

Etablissement par l'IFRB d'une documentation explicative sur la nouvelle méthode de désignation des émissions (Résolution Nº 36).
Révision d'inscriptions à la demande de conférences antérieures (Résolution Nº 30).
Voir aussi *Orbite des satellites géostationnaires* (Résolutions Nºs 2 et 4).
Voir aussi *Service de radiodiffusion par satellite* (Résolutions Nºs 31, 33 et 503).
Voir aussi *Service fixe* (Résolution Nº 9).
Voir aussi *Service fixe par satellite* (Résolution Nº 100).
Voir aussi *Service mobile aéronautique (R)* (Résolutions Nºs 400, 401 et 404).
Voir aussi *Service mobile maritime* (Résolutions Nºs 300, 301 et 302).
Voir aussi *Service spatiaux* (Résolution Nº 32).

Fréquences navire-navire:

Voir *Service mobile maritime* (Résolution Nº 303).

Gestion des fréquences:

Assistance relative à l'utilisation des techniques informatiques pour la (Résolution Nº 37).
Mise en œuvre d'une gestion nationale des fréquences radioélectriques (Résolution Nº 7).
Procédure à suivre pour mettre fin à un désaccord au sujet des Normes techniques ou des Règles de procédure de l'IFRB (Résolution Nº 35).
Voir aussi *Coopération technique* (Résolution Nº 7).
Voir aussi *Émissions* (Résolution Nº 36).
Voir aussi *Notification des assignations des fréquence* (Résolution Nº 1).
Voir aussi *Règlement des radicommunications* (Résolution Nº 6).

Identification des stations:

Indicatifs d'appel:

Nouvelles Règles de formation des (Résolution Nº 12).
Possibilité de former de nouvelles séries d'indicatifs d'appel (Résolution Nº 13).

Introduction d'un nouveau système d'identification des stations du service mobile maritime et du service mobile maritime par satellite (identités dans le service mobile maritime) (Résolution Nº 313).
Voir aussi *Service mobile maritime* (Résolution Nº 311).

Liaison de connexion:

Voir *Service fixe par satellite* (Résolutions Nºs 101, 102 et 701).

(*a*) Précédemment A3A et A3J.

Navires et aéronefs non parties a un conflit arme:

Utilisation des radiocommunications pour la sécurité, l'identification et la localisation des (Résolution N° 11).

Notification des assignations de fréquence (généralites):

A faire par l'administration du pays sur le territoire duquel la station est située (Résolution N° 1).

Oceanographie:

Voir aussi *Service mobile maritime* (Résolutions N°s 302 et 314).

Operations organisations de secours:

Assignations de fréquence pour les (Résolution N° 10).
Voir aussi *Service d'amateur* (Résolution N° 640).

Orbite des satellites géostationnaires:

Durée de validité des assignations de fréquences aux stations spatiales utilisant l'—— (Résolution N° 4).
Utilisation de l'——, à exclusion de toute autre orbite, par les stations spatiales fonctionnant dans les bandes de fréquences de 12 GHz attribuées au service de radiodiffusion par satellite (Résolution N° 506).
Utilisation de l'—— et planification des service spatiaux utilisant cette orbite (Résolution N° 3).
Utilisation equitable par tous les pays, avec égalité de droits, de l'—— et des bandes de fréquences attribuées aux services de radiocommunication spatiale (Résolution N° 2).

Organisations internationales:

Résolutions présentant un intérêt pour les organisations suivantes:

Commission électrotechnique internationale (CEI):

Voir *Equipement* (Résolution N° 63).

Comission océanographique intergouvernementale (COI):

Voir *Service mobile maritime* (Résolution N° 314).

Comité international spécial des perturbations radioélectriques (CISPR):

Voir *Equipement* (Résolution N° 63).

Conférence des Nations Unies pour le commerce et le développement (CNUCED):

Voir *Coopération technique* (Résolution N° 316).

Organisation de l'aviation civile internationale (OACI):

Voir *Navires et aéronefs non parties à un conflit armé* (Résolution N° 11).
Voir *Radiobalises de localisation des sinistres* (Résolution N° 601).
Voir *Service de radiodiffusion* (Résolution N° 500).
Voir *Service de radiorepérage* (Résolution N° 600).

Organisation des Nations Unies (ONU):

Voir *Coopération technique* (Résolutions N°s 14 et 16).

Organisation intergouvernementale consultative de la navigation maritime (OMCI):

Voir *Coopération technique* (Résolution N° 316).
Voir *Détresse et sécurité* (Résolutions N°s 200 et 305).
Voir *Navires et aéronefs non parties à un conflit armé* (Résolution N° 11).
Voir *Radiobalises de localisation des sinistres* (Résolution N° 601).
Voir *Service mobile maritime* (Résolution N° 310).
Voir *Service de radiorepérage* (Résolution N° 600).

Organisation météorologique mondiale (OMM):

Voir *Service mobile maritime* (Résolution N° 314).

Organisations régionales:

Union Africaine des Postes et Télécommunications(UAPT), Union des Radiodiffusion et Télévision Nationales d'Afrique (URTNA), Union Panafricaine des Télécommunications (UAPT) et autres:

Voir *Cooperátion technique* (Résolution N° 5).

Programme des Nations Unies pour le développement (PNUD):

Voir *Coopération technique* (Résolution N° 316)

Propagation:

Coopération technique avec les pays en développement dans le domaine des études de propagation en régions tropicales (Résolution N° 5).
Divison du monde en zones climatiques pour le calcul des caractéristiques de propagation (Résolution N° 61).
Renseignements sur la propagation des ondes radioélectriques utilisés pour déterminer la zone de coordination (Résolution N° 60).

Radiobalises de localisation des sinistres:

Les radiobalises de localisation des sinistres qui fonctionnent sur la fréquence 121,5 MHz ou sur la fréquence 243 MHz, ou sur ces deux fréquences, doivent êre conformes aux Normes et aux Avis de l'OACI et du CCIR (Résolution N° 601).

Recherche et sauvetage:

Voir *Radiobalises de localisation des sinistres* (Résolution Nº 601).
Voir *Services mobiles aéronautiques (R) et (OR)* (Résolution Nº 403).

Recherche ionosphérique:

Utilisation expérimentale des ondes radioélectriques par les satellites de recherche ionosphérique (Résolution Nº 62).

Règlement des Radiocommunications:

Identification des dispositions conteant une référence à des Avis du CCIR (Résolution Nº 65).
Manuel destiné à expliquer et à illustrer les procédures du chapitre IV du Réglement des Radiocommunications (Résolution Nº 6).
Voir aussi *Attribution des bandes de fréquences* (Résolution Nº 8).
Voir aussi *Gestion des fréquences* (Résolution Nº 35).
Voir aussi *Identification des stations* (Résolution Nº 12).
Voir aussi *Notification des assignations de fréquence* (Résolution Nº 1).
Voir aussi *Orbite des satellites géostationnaires* (Résolution Nº 4).
Voir aussi *Service de radiodiffusion* (Résolutions Nºs 500 et 508).
Voir aussi *Service de radiodiffusion par satellite* (Résolutions Nºs 31, 33, 34, 502, 503, 504 et 507).
Voir aussi *Service fixe* (Résolution Nº 700).
Voir aussi *Service mobile aéronautique (R)* (Résolutions Nºs 402 et 403).
Voir aussi *Terminologie* (Résolution Nº 68).

Service d'amateur:

Interdiction aux stations de radiodiffusion d'émettre sur des fréquences de la bande 700-7100 kHz réservée au service d'amateur (Résolution Nº 641).
Utilisation des bandes attribuées au service d'amateur aux fins de communications internationales en cas de catastrophes naturelles (Résolution Nº 640).

Service d'amateur par satellite:

Communication à l'IFRB des informations à la mise en service des stations terriennes du service d'amateur par satellite (Résolution Nº 642).

Service de radiodiffusion:

Convocation de conférences:

Définition des critères de partage pour l'utilisation des bandes des ondes métriques e décimétriques attribuées aux service fixe, de radiodiffusion et mobile dans la Région 3 (Résolution Nº 702).
Planification de la radiodiffusion sonore dans la bande 87,5-108 MHz pour la Région 1 et certains pays concernés de la Région 3 (Résolution Nº 510).
Planification des bandes d'ondes décamétriques (Résolution Nº 508).
Réexamen et révision des dispositions des Actes finals de Conférence africaine de radiodiffusion sur ondes métriques et décimétriques (Génève, 1963) (Résolution Nº 509).

Examen par l'IFRB des fiches de notification concernant les stations du service de radiodiffusion de la Région 2 travaillant dans la bande 535-1605 kHz (Résolution Nº 501).
Interdiction d'utiliser la bande 700-7100 khz réservée au service d'amateur (Résolution Nº 641).
Modification des fréquences porteuses des stations de radiodiffusion à ondes kilométriques dans la Région 1 (Résolution Nº 500).

Service de radiodiffusion par satellite:

Convocation de conférences:

Etablissement d'accords et de plans associés (Résolution Nº 507).
Planification dans la bande des 12 GHz et les liaisons de connexion associées, dans la Région 2 (Résolution Nº 701).

Procédures à appliquer avant l'entrée en vigur des accords et des plans:

Application de certaines dispositions des Actes finals de la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) pour tenir compte des modifications aportées par la CAMR-1959 au Tableau d'attribution des bandes de fréquences pour la Région 2, dans la bande 1,7-12,7 GHz (Résolution Nº 31).
Coodination, notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence aux stations de la Région 2 (Résolution Nº 503).
Etablissement de services de radiodiffusion par satellite dans la bande 12,5-12,75 GHz et partage avec les services spatiaux et de Terre dans la Région 1, 2 et 3 (Résolution Nº 34).
Expériences et études relatives au service de radiodiffusion par satellite (radiodiffusion sonore) dans la gamme de fréquences de 0,5 GHz à 2 GHz (Résolution Nº 505).
Mise en service de stations spatiales du service de radiodiffusion par satellite; procédures de coordination entre les stations spatiales de ce service et les stations de terre et les systèmes spatiaux relevant d'autres administrations; notification, examen et inscription dans le FRIP des assignations aux stations spatiales du service de radiodiffusion par satellite (Résolution Nº 33).
Procédures intérimaires à appliquer jusqu'à l'insertion en annexe au Réglement des radiocommunications du plan et des dispositions adoptées par la Conférence administrative mondiale des radiocommunications pour la radiodiffusion par satellite (Génève, 1977) (Résolution Nº 502).
Procédure intérimaire relative à la bande 11,7-12,2 GHz dans la Région 2 (Résolution Nº 504).
Partage entre le service fixe par satellite dans les Régions 1 et 3 et le service de radiodiffusion par satellite dans la Région 2, dans la bande 12,2-12,7 GHz (Résolution Nº 700).

Utilisation de l'orbite des satellites géostationnaires, à l'exclusion de toute autre orbite, par les stations spatiales fonctionnant dans les bandes de fréquences de 12 GHz attribuées au service de radiodiffusion par satellite (Résolution Nº 506).
Voir aussi *Service fixe par satellite* (Résolutions Nºs 100, 101 et 102).

Service fixe:

Assistance aux pays en développement pour assurer l'accès de leurs service fixes aux bandes des ondes décamétriques (Résolution Nº 103).
Convocation de conférences pour définir des critères de partage pour l'utilisation des bandes des ondes métriques et décimétriques attribuées au service fixe (et aux services de radiodiffusion et mobile) dans la Région 3 (Résolution Nº 702).
Réassignation des fréquences aux stations des services fixe et mobile fonctionnant dans certaines bandes attribuées aux services de radiolocalisation et d'amateur dans la Région 1 (Résolution Nº 38).
Retrait des service fixe et mobile de certaines bandes comprises entre 4000 kHz et 27 500 kHz et procédure de transition relative au choix et à l'approbation des assignations de remplacement (Résolution Nº 8).
Révision des inscriptions dans le FRIP dans les bandes attribuées au service fixe entre 3000 kHz et 27 500 kHz (Résolution Nº 9).
Voir aussi *Service fixe par satellite* (Résolution Nº 31).

Service fixe par satellite:

Application de certaines dispositions des Actes finals de la Conférence mondiale pour la radiodiffusion par satellite, 1977, pour tenir compte des modifications apportés par la CAMR-79 au Tableau d'attribution des bandes de fréquences pour la Région 2, dans la bande 11,7-12,7 GHZ (Résolution Nº 31).
Conclusion d'accords et établissement des plans associés pour des liaisons de connexion aux stations du service de radiodiffusion par satellite fonctionnant dans la bande des 12 GHz (Résolution Nº 101).
Convocation d'une conférence chargée d'établir un plan pour le service de radiodiffusion par satellite dans la bande des 12 GHz et des liaisons de connexion associés dans la Région 2 (Résolution Nº 701).
Coordination des caractéristiques techniques des liaisons de connexion aux stations spatiales du service de radiodiffusion par satellite de la bande 11,7-12,5 GHz (Région 1) et 11,7-12,2 GHz (Région 3) pour la période de transition (Résolution Nº 102).
Coodination, notification et inscription dans le FRIP des assignations á des stations du service fixe par satellite, à l'égard des stations du service de radiodiffusion par satellite dans la Région 2 (Résolution Nº 100).
Partage entre le service fixe par satellite dans les Régions 1 et 3 le service de radiodiffusion par satellite dans la Région 2, dans la bande 12,2-12,7 GHz (Résolution Nº 700).
Voir aussi *Service de radiodiffusion par satellite* (Résolution Nº 503).

Service mobile aéronautique (OR):

Utilisation des fréquences 3023 kHz et 5680 kHz:

En commun par les services mobiles aéronautiques (R) et (OR) (Résolution Nº 403).

Service mobile aéronautique par satellite:

Bandes de fréquences supérieures aux bandes d'ondes décamétriques:

Utilisation pour les communications et la diffusion de renseignements météorologiques dans le service mobile aéronautique (R) et service aéronautique par satellite (Résolution Nº 406).

Service mobile aéronautique (R):

Bandes de fréquences attribués en exclusivité au service mobile aéronautique (R) entre 2850 kHz et 22 000 kHz:

Traitement des fiches de notification concernant les assignations de fréquences (Résolution Nº 400).
Mise en œuvre du Plan d'allotissemnt de fréquences de l'Appendice 27 Aer2 (Résolution Nº 401).
Mise en œuvre du nouvel arrangement apllicable à ces bandes de passage de l'exploitation en DBL à l'exploitation en BLU (Résolution Nº 402).

Bandes de fréquences attribuées en exclusivité au service mobile aéronautique (R) entre 21 924 kHz et 22 000 kHz:

Mise en œuvre de la nouvelle disposition (addition à l'appendice 27 Aer2) (Résolution Nº 404).

Bandes de fréquences supérieures aux bandes d'ondes décamétriques:

Utilisation pour les communications et la diffusion de renseignements météorologiques dans le service mobile aéronautique (R) et le service mobile aéronautique par satellite (Résolution Nº 406).

Utilisation des fréquences 3023 kHz et 5680 kHz:

En commun par les services mobile aéronautique (R) et (OR) (Résolution Nº 403).

Utilisation (emploi amélioré) des fréquences du service mobile aéronautique (R) (Résolution Nº 405).
Utilisation non autorisée par d'autres services des fréquences des bandes attribuées au service mobile aéronautique (R) (Résolution Nº 407).
Voir aussi *Navires et aéronefs non parties à un conflit arrné* (Résolution Nº 11).
Voir aussi *Radiobalises de localisation des sinistres* (Résolution Nº 601).
Voir aussi Services de radiorepérage (Résolution Nº 600).

Service mobile maritime:

Emploi de la technique de la BLU dans les bandes du service radiotéléphonique comprises entre 1605 kHz et 4000 kHz (Résolution Nº 306).
Espacement des fréquences dans la bande 156-174 MHz (Résolution Nº 308).
Établissement d'un système mondial coordonné pour le rassemblement des données concernant l'océanographie (Résolution Nº 314).
Fréquences à prévoir en vue de l'établissement et de la mise en ocuvre future de systèmes de télémesure, de télécomande et d'échange de données pour les mouvements des navires (Résolution Nº 310).
Fréquences navire-navire dans les bandes comprises entre 1605 kHz et 3600 kHz dans le Région 1, réexamen des zones d'utilisation des (Résolution Nº 303).
Identités dans le service mobile maritime — Voir *Identification des stations* (Résolution Nº 313).
Introduction de nouvelles procédures d'appel en télégraphie Morse A1A à ondes décamétriques et plan de répartition des voies associé (Résolution Nº 312).
Introduction d'un système d'appel sélectif numérique (Résolution Nº 311).
Mise en œuvre de la nouvelle disposition des voies utilisées pour la télégraphie Morse de classe A1A dans les bandes comprises entre 4000 kHz et 27 500 kHz (Résolution Nº 304).

Notification des fréquences non appariées utilisées par les stations de navire pour les systèmes à bande étroite de télégraphie à impression directe et de transmission de données (Résolution Nº 301).
Passage à la technique de la BLU des stations radiotéléphoniques dans les bandes comprises entre 1605 kHz et 4000 kHz (Résolution Nº 307).
Suppression éventuelle des taxes de station mobile pour la correspondance publique, date recommandée pour la (Résolution Nº 315).
Traitement par l'IFRB des fiches de notification d'assignation de fréquence aux stations océanographiques (Résolution Nº 301).
Utilisation et notification des fréquences appariées réservées aux systèmes à bande étroite de télégraphie à impression directe et de transmission de données fonctionnant dans les bandes d'ondes décamétriques (Résolution Nº 300).
Utilisation non autorisée des fréquences des bandes attribuées au service mobile maritime (Résolution Nº 309).
Voir aussi *Correspondance publique* (Résolution Nº 201).
Voir aussi *Détresse et sécurité* (Résolutions Nºs 200 et 305).
Voir aussi *Navires et aéronefs non parties à un conflit armé* (Résolution Nº 11).
Voir aussi *Radiobalises de localisation des sinistres* (Résolution Nº 601).
Voir aussi *Service mobile maritime* (Résolution Nº 316).
Voir aussi *Service radiocrepérage* (Résolution Nº 600).
Voir aussi *Services mobiles* (Résolution Nº 202).

Service mobile maritime par satellite:

Identités du service mobile maritime — Voir *Identification des stations* (Résolution Nº 313).
Voir aussi *Correspondance publique* (Résolution Nº 20).

Service de radiorepérage:

Utilisation pour le service de radionavigation, de certaines bandes de fréquences des ondes décamétriques et centimétriques (Résolution Nº 600).
Voir aussi *Service fixe* (Résolution Nº 38).

Service de Terre:

Voir *Service de radiodiffusion par satellite* (Résolutions Nºs 33 et 34).
Voir *Service fixe par satellite* (Résolution Nº 31).
Voir *Service spatiaux* (Résolutions Nºs 32 et 703).

Service mobiles:

Convocation de conférences chargées de définir des critères de partage pour l'utilisation des bandes des ondes métriques et décimétriques attribuées aux services fixe, de radiodiffusion et mobile dans la Région 3 (Résolution Nº 702).
Convocation d'une Conférence administrative mondiale des radiocommunications pour les services mobiles (Résolution Nº 202).
Réassignation des fréquences aux stations des services fixe et mobile fonctionnant dans certaines bandes attribuées aux services de radiolocalisation et d'amateur dans la Région 1 (Résolution Nº 38).
Voir aussi *Correspondance publique* (Résolution Nº 201).
Voir aussi *Détresse et sécurité* (Résolutions Nºs 200 et 305).
Voir aussi *Services de radiodiffusion par satellite* (Résolution Nº 31).
Voir aussi *Service fixe* (Résolution Nº 8).

Services spatiaux:

Coopération internationale et assistance technique (Résolution Nº 15).
Méthodes de calcul et critères de brouillage en ce qui concerne le partage des bandes de fréquences entre services de radiocommunication spatiale et services de radiocommunication de Terre ou entre services de radiocommunication spatiale (Résolution Nº 703).
Utilisation des assignations de fréquence aux stations de radiocommunication de Terre et de radiocommunication spatiale dans les bandes 11,7-12,2 GHz dans la Région 3 et 11,7-12,5 GHz dans la Région 1 (Résolution Nº 32).
Utilisation équitable par tous les pays, avec égalité de droits, des bandes de fréquences attribuées aux services de radiocommunication spatiale (Résolution Nº 2).
Voir aussi *Service de radiodiffusion par satellite* (Résolutions Nºs 33, 34, 503 et 506).

Technique de la bande laterale unique (BLU):

Voir *Service de radiodiffusion* (Résolution Nº 508).
Voir *Service mobile aéronautique (R)* (Résolution Nº 402).
Voir *Service mobile amaritime* (Résolutions Nºs 306 et 307).

Terminologie:

Nouvelle définition de certains termes contenus dans l'Annexe 2 à la Convention et applicables au Règlement des Radiocommunications (Résolution Nº 68).

Union international des telecommunications:

Exigeant consultatif international des radiocommunications (CCIR);

Comité consultatif international des radiocommunications (CCIR):

Voir *Conférences administratives* (Résolution Nº 17).
Voir *Coopération technique* (Résolution Nº 16).
Voir *Détresse et sécurité* (Résolution Nº 200).
Voir *Division du monde* (Résolutions Nºs 61 et 66).
Voir *Equipement* (Résolutions Nºs 63 et 64).
Voir *Gestion des fréquences* (Résolutions Nº 7 et 35).
Voir *Identification des stations* (Résolution Nº 313).
Voir *Propagation* (Résolutions Nºs 5 et 60).
Voir *Orbite des satellites géostationnaires* (Résolution Nº 3).
Voir *Règlement des Radiocommunications* (Résolution Nº 65).
Voir *Service de radiodiffusion* (Résolutions Nº 508, 509, 510 et 702).
Voir *Service de radiodiffusion par satellite* (Résolutions Nºs 31, 34, 505, 700 et 701).
Voir *Service fixe par satellite* (Résolution Nº 101).

Voir *Service mobile maritime* (Résolutions N^{os} 310 et 311).
Voir *Service de radiorepérage* (Résolution N° 600).
Voir *Service mobiles* (Résolution N° 202).
Voir *Services spatiaux* (Résolution N° 703).
Voir *Terminologie* (Résolution N° 68).

Comité consultatif international télégraphique et téléphonique (CCITT):

Voir *Coopération technique* (Résolution N° 16).
Voir *Correspondance publique* (Résolution N° 201).
Voir *Equipement* (Résolution N° 64).
Voir *Identification des stations* (Résolution N° 313).
Voir *Terminologie* (Résolution N° 68).

Comité international D'enregistrement des fréquences (IFRB):

Voir *Conférences administratives* (Résolution N° 17).
Voir *Emissions* (Résolution N° 36).
Voir *Fichier de référence international ees fréquences (FRIF)* (Résolution N° 30).
Voir *Gestion des fréquences* (Résolutions N^{os} 7 et 35).
Voir *Orbite des satellites géostationnaires* (Résolutions N^{os} 2, 3 et 4).
Voir *Règlement des Radiocommunications* (Résolution N° 6).
Voir *Service aéronautique mobile (R)* (Résolutions N^{os} 400, 401, 402, 404 et 407).
Voir *Service d'amateur par satellite* (Résolution N° 642).
Voir *Service de radiodiffusion* (Résolutions N^{os} 500, 501, 508 et 509).
Voir *Service de radiodiffusion par satellite* (Résolutions N^{os} 33, 502, 503, 507 et 701).
Voir *Service fixe* (Résolutions N^{os} 8, 9, 38 et 103).
Voir *Service fixe par satellite* (Résolutions N^{os} 100 et 102).
Voir *Service mobile maritime* (Résolutions N^{os} 300, 301, 302, 303, 309 et 314).
Voir *Service mobile* (Résolution N° 202).
Voir *Service spatiaux* (Résolution N^{os} 32 et 703).

Conférences administratives:

Voir *Détresse et sécurité* (Résolution N° 305).
Voir *Equipement* (Résolution N° 63).
Voir *Orbite des satellites géostationnaires* (Résolution N° 4).
Voir *Propagation* (Résolution N° 60).
Voir *Service de radiodiffusion* (Résolutions N^{os} 2, 3 et 4).
Voir *Service de radiodiffusion par satellite* (Résolutions N^{os} 2, 3 et 4).
Voir *Service mobile maritime* (Résolutions N^{os} 300, 310 et 314).
Voir *Service de radiorepérage* (Résolution N° 600).
Voir *Terminologie* (Résolution N° 68).

En outre, les Résolutions suivantes se rapportent d'une manière ou d'une autre aux futures conférences:

Voir aussi *Coopération technique* (Résolutions N^{os} 14, 16 et 316).
Voir aussi *Correspondance publique* (Résolution N° 201).
Voir aussi *Détresse et sécurité* (Résolutions N^{os} 200 et 309).
Voir aussi *Identification des stations* (Résolutions N^{os} 12, 13 et 313).
Voir aussi *Navires et aéronefs non parties à un conflit armé* (Résolution N° 11).
Voir aussi *Propagation* (Résolution N° 5).
Voir aussi *Radiobalises de localisation des sinistres* (Résolution N° 601).
Voir aussi *Service fixe* (Résolution N° 38).
Voir aussi *Service mobile aéronautique* (R) (Résolutions N^{os} 400, 401, 402, 403, 404, 405, 406 et 407).
Voir aussi *Service mobile maritime* (Résolutions N^{os} 302, 303, 304, 306, 307, 308, 311, 312 et 315).
Voir aussi *Services spatiaux* (Résolution N° 15).

Conférence de Plénipotentiaires:

Voir *Coopération technique* (Résolution N° 7).
Voir *Terminologie* (Résolution N° 68).

Conseil d'administration:

Voir *Conférences administratives* (Résolution N° 17).
Voir *Coopération technique* (Résolutions N^{os} 5, 14, 15 et 16).
Voir *Division du monde* (Résolution N° 66).
Voir *Gestion des fréquences* (Résolutions N^{os} 7 et 37).
Voir *Navires et aéronefs non parties à un conflit armé* (Résolution N° 11).
Voir *Orbite des satellites géostationnaires* (Résolution N° 3).
Voir *Propagation* (Résolution N° 60).
Voir *Service de radiodiffusion* (Résolutions N^{os} 508, 509, 510 et 702).
Voir *Service de radiodiffusion par radiosatellite* (Résolutions N^{os} 507 et 701).
Voir *Service fixe par satellite* (Résolution N° 101).
Voir *Services de radiorepérage* (Résolution N° 600).
Voir *Services mobiles* (Résolution N° 202).

Secrétaire général:

Voir *Conférences administratives* (Résolution N° 17).
Voir *Coopération technique* (Résolutions N^{os} 5, 14, 16 et 316).
Voir *Détresse et sécurité* (Résolutions N^{os} 200 et 305).
Voir *Gestion des fréquences* (Résolutions N^{os} 7 et 37).

Voir *Identification des stations* (Résolutions Nos 12, 13 et 313).
Voir *Navires et aéronefs non parties à un conflit armé* (Résolution Nº 11).
Voir *Propagation* (Résolution Nº 60).
Voir *Règlement des Radiocommunications* (Résolutions Nos 6 et 65).
Voir *Service de radiodiffusion* (Résolutions Nos 502 et 701).
Voir *Service de radiodiffusion par satellite* (Résolutions Nos 500 et 508).
Voir *Service mobile aéronautique* (R) (Résolution Nº 404).
Voir *Service mobile maritime* (Résolutions Nos 310, 311 et 312).
Voir *Services de radiorepérage* (Résolution Nº 600).
Voir *Services spatiaux* (Résolution Nº 703).
Voir *Terminologie* (Résolution Nº 68).

Utilisation des techniques informatiques:

Voir *Gestion des fréquences* (Résolution Nº 37).

PARTIE B

Recommandations

SECTION I

Sujets de l'Index analytique (mots clés)

Recommandation Nº 1 — Communications en cas de catastrophes — services spatiaux:

Opérations de secours;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 2 — Conferences administratives — services spatiaux:

Fichier de référence international des fréquences (FRIF);
Règlement des Radiocommunications;
Union Internationale des Télécommunications (conseil d'administration).

Recommandation Nº 3 — Transmission d'energie electrique:

Organisation internationale (ONU);
Union Internationale des Télécommunications (CCIR, sécretaire général).

Recommandation Nº 4 — Reseaux de radiocommunication (4000-27 500 kHz):

Gestion des fréquences.

Recommandation Nº 5 — Gestion des fréquences:

Coopération et asssistance techniques.

Recommandation Nº 6 — Coopération et assistance techniques:

Union Internationale des Télécommunications (IFRB).

Recommandation Nº 7 — Service mobile aéronautique (R) — service mobile maritime:

Licences.

Recommandation Nº 8 — Indentification des stations:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 9 — service de radiodiffusion — service mobile aéronautique (R) — service mobile maritime:

Union Internationale des Télécommunications (sécretaire général).

Recommandation Nº 10 — Conferences administratives:

Union Internationale des Télécommunications (sécretaire général).

Recommandation Nº 11 — Conferences administratives — Règlement des Radiocommunications:

Recommandation Nº 12 — Conferences administratives — Union Internationale des Télécommunications (conférences de plénipotentiaires):

Liaisons de connexion;
Orbite des satellites géostationnaires;
Service de radiodiffusion par satellite;
Service fixe;
Services de radiorepérage;
Services mobiles;
Services spatiaux;
Union Internationale des Télécommunications (conseil d'administration).

Recommandation Nº 13 — Règlement des Radiocommunications — Union Internationale des Télécommunications (conseil d'administration):

Union Internationale des Télécommunications (conférences administratives).

Recommandation Nº 30 — Controle des émissions:

Organisations internationales (ONU);
Union Internationale des Télécommunications (CCIR, IFRB).

Recommandation Nº 31 — Application des techniques informatiques — Gestion des fréquences:

Union Internationale des Télécommunications (CCIR, IFRB, secrétaire général).

Recommandation Nº 60 — Normes techniques:

Union Internationales des Télécommunications (CCIR, IFRB).

Recommandation Nº 61 — Normes techniques:

Gestion des fréquences;
Union Internationale des Télécommunications (CCIR, IFRB).

Recommandation Nº 62 — Émissions:

Union Internationale des Télécommunications (CCIR, IFRB).

Recommandation Nº 63 — Largeurs de bande:

Union Internationale des Télécommunications (CCIR, IFRB).

Recommandation Nº 64 — Gestion des fréquences:

Normes techniques;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 65 — Gestion des fréquences:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 66 — Émissions:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 67 — Terminologie:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 68 — Propagation:

Normes techniques;
Organisations internationales (Union radioscientifique internationales);
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 69 — Equipement:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 70 — Equipement:

Normes techniques;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 71 — Equipement.
Recommandation Nº 72 — Terminologie:

Union Internationale des Télécommunications (CCIR, CCITT, conférences administratives, secrétaire général).

Recommandation Nº 73 — Terminologie:

Règlement des Radiocommunications;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 74 — Unites SI.
Recommandation Nº 100 — Diffusion Tropospherique:

Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration).

Recommandation Nº 101 — Liaisons de connexion — service de radiodiffusion par satellite — service fixe par satellite:

Services spatiaux;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 102 — Faisceaux hertziens:

Service fixe par satellite;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 103 — Service fixe par satellite.
Recommandation Nº 200 — Détresse et sécurité:

Organisations internationales (OMCI);
Service mobile maritime;
Services mobiles;
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Recommandation Nº 201 — Détresse et sécurité:

Organisations internationales (OMCI);
Service mobile maritime;
Service mobile maritime par satellite;
Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation N° 202 — Détresse et sécurité:

Règlement des Radiocommunications;
Union Internationale des Télécommunications (conférences administratives).

Recommandation N° 203 — Détresse et sécurité — service mobile maritime:

Organisations internationales (OMCI);
Règlement des Radiocommunications;
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Recommandation N° 204 — Règlement des Radiocommunications — service mobile aéronautique (R) — service mobile maritime — services mobiles:

Organisations internationales (OACI, OMCI);
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Recommandation N° 300 — Service mobile maritime — services mobiles:

Organisations internationales (OMCI);
Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration, secrétaire général).

Recommandation N° 301 — Service mobile maritime — services mobiles:

Organisations internationales (OMCI);
Union Internationale des Télécommunications (CCIR conférences administratives, conseil d'administration, secrétaire général).

Recommandation N° 302 — Service mobile maritime:

Gestion des fréquences;
Union Internationale des Télécommunications (CCIR).

Recommandation N° 303 — Détresse et sécurité:

Service mobile maritime.

Recommandation N° 304 — Service mobile maritime:

Union Internationale des Télécommunications (secrétaire général).

Recommandation N° 305 — Règlement des Radiocommunications — service mobile maritime:

Union Internationale des Télécommunications (conférences administratives).

Recommandation N° 306 — Détresse et sécurité — service mobile maritime.
Recommandation N° 307 — Détresse et sécurité — service mobile maritime:

Union Internationale des Télécommunications (conférences administratives, CCIR).

Recommandation N° 308 — Service mobile maritime:

Union Internationale des Télécommunications (conférences administratives).

Recommandation N° 309 — Détresse et sécurité — service mobile maritime:

Organisations internationales (OMCI);
Union Internationale des Télécommunications (conférences administratives, secrétaire général).

Recommandation N° 310 — Service mobile maritime:

Organisations internationales (OMCI);
Union Internationale des Télécommunications (CCIR, CCITT, conférences administratives, secretaire général).

Recommandation N° 311 — Détresse et sécurité — Service mobile maritime.
Recommandation N° 312 — Service mobile maritime:

Union Internationale des Télécommunications (CCIR, CCITT).

Recommandation N° 313 — Service mobile maritime par satellite:

Union Internationale des Télécommunications (conférences administratives).

Recommandation N° 400 — Service mobile aeronautique (R):

Organisations internationales (OACI);
Union Internationale des Télécommunications (IFRB, secrétaire général).

Recommandation N° 401— Service mobile aeronautique (R).
Recommandation N°. 402 — Service mobile aeronautique (R):

Gestion des fréquences;
Organisations internationales (OACI);
Union Internationale des Télécommunications (IFRB, secrétaire général).

Recommandation N° 403 — Service mobile aeronautique (R):

Organisations internationales (OACI);
Union Internationale des Télécommunications (IFRB).

Recommandation N° 404 — Service mobile aeronautique (R):

Gestion des fréquences;
Union Internationale des Télécommunications (IFRB).

Recommandation Nº 405 — Service mobile aeronautique par satellite (R):

Organisations internationales (OACI);
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 406 — Service mobile aeronautique (OR):

Règlement des Radiocommunications;
Union Internationale des Télécommunications (conférences administratives, conseil d'administration).

Recommandation Nº 407 — Service mobile aeronautique (R):

Règlement des Radiocommunications;
Union Internationale des Télécommunications (conférences administratives).

Recommandation Nº 500 — Conférences administratives — service de radiodiffusion:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 501 — Conférences administratives — service de radiodiffusion:

Techniques de la bande latérale unique;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 502 — Service de radiodiffusion:

Organisations internationales (ONU, ONUDI, UNESCO);
Union Internationale des Télécommunications (CCIR, secrétaire général).

Recommandation Nº 503 — Service de radiodiffusion:

Union Internationale des Télécommunications (CCIR)

Recommandation Nº 504 — Service de radiodiffusion:

Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration).

Recommandation Nº 505 — Service de radiodiffusion par satellite:

Propagation;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 507 — Service de radiodiffusion par satellite:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 508 — Service de radiodiffusion par satellite:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 600 — Service de radioreperage:

Organisations internationales (OACI, OMCI).

Recommandation Nº 601 — Service de radioreperage:

Organisations internationales (OACI).

Recommandation Nº 602 — Service de radioreperage:

Organisations internationales (AISM, OMCI);
Union Internationale des Télécommunications (CCIR, conférences administratives, conseil d'administration, secrétaire général).

Recommandation Nº 603 — Service de radiorepérage.
Recommandation Nº 604— Detresse et securite — radiobalises de localisation des sinistres:

Organisations internationales (AISM, OMCI);
Service mobile aéronautique (R);
Service mobile maritime;
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 605 — Services de radioreperage:

Organisations internationales (OMCI);
Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation Nº 620 — Meteorologie:

Organisations internationales (OMM).

Recommandation Nº 700 — Services spatiaux.
Recommandation Nº 701 — Service de radioastronomie:

Union Internationale des Télécommunications (conférences administratives).

Recommandation Nº 702— Emissions:

Union Internationale des Télécommunications (conférences administratives).

Recommandation Nº 703 — Services de radioreperage — services mobiles:

Service fixe.

Recommandation Nº 704 — Service de radiodiffusion — services de radioreperage:

Gestion des fréquences;
Organisations internationales (OACI);
Union Internationale des Télécommunications (CCIR).

Recommandation Nº 705 — Service de radiodiffusion — services de radiodiffusion par satellite:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 706 — Service fixe — service fixe par satellite — services mobiles — services spatiaux:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 707 — Service inter-satellites — service de radioreperage:

Règlement des Radiocommunications;
Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation Nº 708 — Service de Terre — Services spatiaux:

Union Internationale des Télécommunications (CCIR).

Recommandation Nº 709 — Service inter-satellites — service mobile aeronautique (R):

Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation Nº 710 — Service inter-satellites — service de radioreperage:

Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation Nº 711 — Services spatiaux:

Gestion des fréquences;
Règlement des Radiocommunications;
Union Internationale des Télécommunications (CCIR, conférences administratives).

Recommandation Nº 712 — Service de radiodiffusion par satellite :

Union Internationale des Télécommunications (CCIR).

SECTION II

Aplication des techniques informatiques:

Manuel sur l'application des techniques informatiques à la gestion du spectre radioélectrique (Recommandation Nº 31).

Communications en cas de catastrophes:

Utilisation de systèmes de radiocommunications spatiales en cas de catastrophes naturelles, etc. (Recommandation Nº 1).

Conferences administratives:

Convocation de futures conférences administratives des radiocommunications traitant de services déterminés (Recommandation Nº 12).
Elaboration de la documentation technique nécessaire pour la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques (Recommandation Nº 500).
Étude de la technique de la bande latérale unique pour la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques (Recommandation Nº 501).
Examen, par les conférences administratives mondiales des radiocommunications, de l'état d'occupation du spectre des fréquences dans le domaine des radiocommunications spatiales (Recommandation Nº 2).
Numérotation figurant dans la marge du Règlement des Radiocommunications (Recommandation Nº 11).
Présentation des propositions de modification aux textes du Règlement des Radiocommunications (Recommandation Nº 10).
Autres Recommandations concernant les conférences:

Voir *Détresse et sécurité* (Recommandations Nºs 200 et 201).
Voir *Diffusion troposphérique* (Recommandation Nº 100).
Voir *Emissions* (Recommandation Nº 702).
Voir *Règlement des Radiocommunications* (Recommandations Nºs 13 et 234).
Voir *Service de radioastronomie* (Recommandation Nº 701).
Voir*Service de radiodiffusion* (Recommandation Nº 504).
Voir *Service intersatellites* (Recommandations Nºs 707, 709 et 710).
Voir *Service mobile aéronautique (OR)* (Recommandation Nº 406).
Voir *Service mobile aéronautique (R)* (Recommandation Nº 407).
Voir Service mobile maritime (Recommandations Nºs 203, 300, 301, 305, 308, 309 et 310).
Voir *Service mobile maritime par satellite* (Recommandation Nº 313).
Voir *Services de radiorepérage* (Recommandations Nºs 602 et 605).
Voir *Services de Terre* (Recommandation Nº 711).
Voir *Terminologie* (Recommandation Nº 72).

Contrôle des emissions:

Contrôle international des émissions (Recommandation Nº 30).

Cooperation et assistance techniques:

Besoins pratiques des pays qui ont besoin d'assistance spéciale (Recommandation Nº 6).
Voir *Gestion des fréquences* (Recommandation Nº 5).

Detresse et sécurité:

Date d'entrée en vigueur de la bande de garde de 10 kHz pour la fréquence 500 kHz dans le service mobile (détresse et appel) (Recommandation Nº 200).
Désignation d'une fréquence dans les bandes 435-495 kHz ou 505-526,5 kHz pour l'émission par les stations côtières des bulletins météorologiques et des avis aux navigateurs, au moyen de la télégraphie à impression directe à bande étroite (Recommandation Nº 309).
Fréquence réservée aux besoins de la sécurité dans les bandes du service mobile maritime comprises entre 1605 kHz et 3800 kHz (Recommandation Nº 307).
Protection contre les brouillages préjudiciables des fréquences de détresse et de sécurité (Recommandation Nº 202).
Signal à fréquence acoustique consécutif au signal d'alarme radiotéléphonique émis par les stations côtières (Recommandation Nº 311).
Trafic de détresse, d'urgence et de sécurité (Recommandation Nº 201).
Utilisation de fréquences supplémentaires en plus de la fréquence porteuse 2182 kHz aux fins de détresse et de sécurité (Recommandation Nº 303).
Utilisation future de la bande 2170-2194 kHz (Recommandation Nº 203).
Utilisation future et caractéristiques des radiobalises de localisation des sinistres (Recommandation Nº 604).
Veille sur la fréquence 156,8 MHz par les stations côtières aux fins de détresse (Recommandation Nº 306).

Diffusion troposphérique:

Bandes de fréquences préférentielles pour les systèmes qui utilisent la propagation par diffusion troposphérique (Recommandation Nº 100).

Emissions:

Rayonnements non essentiels

Dans le service de radiodiffusion par satellite (Recommandation Nº 507).
Études sur les niveaux maximaux tolérés de rayonnements non essentiels (Recommandation Nº 66).

Recherche d'émissions intentionnelles d'origine extraterrestre (Recommandation Nº 702).
Supplément aux caractéristiques additionnelles de classification des émissions — appendice 6 (Recommandation Nº 62).

Equipement:

Étude des caractéristiques techniques de l' —— (Recommandation Nº 70).
Normalisation des caractéristiques techniques et d'exploitation des matériels radioélectriques (Recommandation Nº 71).
Tolérances de fréquence des émetteurs (Recommandation Nº 69).

Faisceaux hertziens:

Méthodes de modulation pour les faisceaux hertziens du point de vue du partage des bandes de fréquence avec les systèmes du service fixe par satellite (Recommandation Nº 102).

Fichier de référence international des fréquences (FRIR):

Voir *Services spatiaux* (Recommandation Nº 2).

Gestion des fréquences:

Manuel sur l'application des techniques informatiques à la gestion du sprectre radioélectrique (Recommandation Nº 31).
Moyens à mettre en oeuvre pour réduire l'encombrement de la bande 3-30 MHz (Recommandation Nº 5).
Partage du sprectre et utilisation des bandes de fréquences (Recommandation Nº 65).
Rapports de protection et champs minimaux nécessaires (Recommandation Nº 64).
Voir *Normes techniques* (Recommandation Nº 61).
Voir *Réseaux de radiocommunication (4000-27 500 kHz)* (Recommandation Nº 4).
Voir *Service de radiodiffusion* (Recommandation Nº 704).
Voir *Service mobile aéronautique (R)* (Recommandations Nºs 402 et 404).
Voir *Service mobile maritime* (Recommandation Nº 302).
Voir *Services spatiaux* (Recommandation Nº 711).

Identification des stations:

Identification automatique des stations (Recommandation Nº 8).

Largeurs de bande:

Calcul des largeurs de bande (Recommandation Nº 63).

Liaisons de connexion:

Liaisons de connexion dans le service de radiodiffusion par satellite (Recommandation Nº 101).
Voir aussi *Conférences administratives* (Recommandation Nº 12).

Licences:

Voir *Service mobile aéronautique (R)* (Recommandation Nº 7).
Voir *Service mobile maritime* (Recommandation Nº 7).

Meteorologie:

Service des auxiliaires de la météorologie (Recommandation Nº 620).

Normes techniques:

Normes techniques de l'IFRB (Recommandation Nº 60).
Normes techniques nécessaires à l'évaluation des brouillages préjudiciables dans les bandes de fréquences supérieures à 28 MHz (Recommandation Nº 61).
Voir *Equipement* (Recommandation Nº 70).

Voir *Gestion des fréquences* (Recommandation N° 64).
Voir *Propagation* (Recommandation N° 68).

Operations de secours:

Voir *Communication en cas de catastrophes* (Recommandation N° 1).

Orbite des satellites géostationnaires:

Voir *Conférences administratives* (Recommandation N° 12).

Organisations internationales:

Recommandations présentant un intérêt pour les organisations suivantes:

Association internationale de signalisation maritime (AISM):

Voir *Services de radiorepérage* (Recommandation N° 602).

Organisation des Nations Unies (ONU):

Voir *Contrôle des émissions* (Recommandation N° 30).
Voir *Equipement* (Recommandation N° 502).
Voir *Service de radiodiffusion* (Recommandation N° 502).
Voir *Transmission d'énergie électrique* (Recommandation N° 3).

Organisation des Nations Unies pour le développement industriel (ONUDI):

Voir *Equipement* (Recommandation N° 502).
Voir *Service de radiodiffusion* (Recommandation N° 502).

Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO):

Voir *Service de radiodiffusion* (Recommandation N° 502).

Organisation intergouvernamentale consultative de la navigation maritime (OMCI):

Voir *Détresse et sécurité* (Recommandations N°s 200, 201 et 203).
Voir *Radiobalises de localisation des sinistres* (Recommandation N° 604).
Voir *Règlement des Radiocommunications* (Recommandation N° 204).
Voir *Service mobile maritime* (Recommandations N°s 300, 301, 309 et 310).
Voir *Services de radiorepérage* (Recommandations N°s 600, 602 et 605).

Organisations internationales de l'aviation civile (OACI):

Voir *Radiobalises de localisation des sinistres* (Recommandation N° 604).
Voir *Règlement des radiocommunications* (Recommandation N° 204).
Voir *Service mobile aéronautique par satellite* (Recommandation N° 405).
Voir *Service mobile aéronautique (R)* (Recommandations N°s 400, 402 et 403).
Voir *Services de radiorepérage* (Recommandations N°s 600, 601 et 704).

Organisation météorologique mondiale (OMM):

Voir *Météorologie* (Recommandation N° 620).

Union internationale radioscientifique:

Voir *Propagation* (Recommandation N° 68).

Propagation:

Études et prévisions de la propagation et des bruits radioélectriques (Recommandation N° 68).
Voir aussi *Service de radiodiffusion par satellite* (Recommandation N° 505).

Radiobalises de localisation des sinistres:

Utilisation future et caractéristique des radiobalises de localisation des sinistres (Recommandation N° 604).

Règlement des radiocommunications:

Applications des chapitres NX, NXI et NXII du remaniement du Règlement des Radiocommunications (Recommandation N° 204).
Conférence administrative mondiale des radiocommunications pour une révision générale ou partielle de Règlement des Radiocommunications (Recommandation N° 13).
Numérotation figurant dans la marge du Règlement des Radiocommunications (Recommandation N° 11).
Utilisation des voies 15 et 17 de l'appendice 18 par les stations de communications de bord (Recommandation N° 305).
Voir *Détresse et sécurité* (Recommandations N°s 202 et 203).
Voir *Service mobile aéronautique (OR)* (Recommandation N° 406).
Voir *Service mobile aéronautique (R)* (Recommandation N° 407).
Voir *Services de radiorepérage* (Recommandation N° 707).
Voir *Services spatiaux* (Recommandations N°s 2 et 711).
Voir *Terminologie* (Recommandation N° 73).

Reseaux de radiocommunication (4000-27 500 kHz):

Amélioration du groupement des liaisons des réseaux nationaux et internationaux de radiocommunications fonctionnant dans les bandes comprises entre 400 kHz et 27 500 khz (Recommandation N° 4).

Service de radioastronomie:

Utilisation de la bande de fréquences 1330-1400 MHz par le service de radioastronomie (Recommandation N° 701).

Service de radiodiffusion:

Compatibilité entre le service de radiodiffusion dans la bande 100-108 MHz et le service de radionavegation aéronautique dans la bande 108-117,975 MHz (Recommandation N° 704).

Critères à appliquer au partage des fréquences entre le Service de radiodiffusion par satellite et le service de radiodiffusion de Terre dans la bande 620-790 MHz (Recommandation N° 705).
Elaboration de la documentation technique pour la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques (Recommandation N° 500).
Étude de la technique de la bande latérale unique pour la Conférence administrative mondiale des radiocommunications pour la radiodiffusion à ondes décamétriques (Recommandation N° 501).
Mesures à prendre pour empêcher le fonctionnement de stations de radiodiffusion à bord de navires ou d'aéronefs hors des limites des territoires nationaux (Recommandation N° 9).
Plan de radiodiffusion dans la bande 1605-1705 kHz dans la Région 2 (Recommandation N° 504).
Radiodiffusion en ondes décamétriques (Recommandation N° 503).
Spécifications des récepteurs de télévision à prix modique (Recommandation N° 502).

Service de radiodiffusion par satellite:

Antennes d'émission (Recommandation N° 508).
Critères à appliquer au partage des fréquences entre le service de radiodiffusion par satellite et le service de radiodiffusion de Terre dans la bande 620-790 MHz (Recommandation N° 705).
Harmoniques de la fréquence fondamentale (Recommandation N° 706).
Interdépendence entre la conception des récepteurs, le groupement des canaux et les critères de partage (Recommandation N° 712).
Liaisons de connexion dans le service de radiodiffusion par satellite (Recommandation N° 101).
Propagation dans la bande des 12 GHz (Recommandation N° 505).
Rayonnements non essentiels (Recommandation N° 507).
Voir aussi *Conférences administratives* (Recommandation N° 12).

Services de radiorepérage:

Compatibilité entre le service de radiodiffusion dans la bande 100-108 MHz et le service de radionavigation aéronautique dans la bande 108-117,975 MHz (Recommandation N° 704).
Dispositions techniques concernant les radiophares maritimes dans la zone africaine (Recommandation n.° 603).
Nécessité de faire cesser le fonctionnement des stations des services fixe et mobile dans les bandes de fréquences 149,9-150,05 MHz et 399,9-400,05 MHz attribuées au service de radionavigation par satellite (Recommandation N° 703).
Radionavigation aéronautique — système destiné à éviter les collisions (Recommandation N° 601).
Radiophares maritimes (Recommandation N° 605).
Répondeurs (Recommandation N° 707).
Utilisation de la bande de fréquences 32-33 GHz, en partage entre le service inter-satellites et le service de radionavigation (Recommandation N° 707).
Utilisation de la bande de fréquences 9300-9500 MHz (Recommandation N° 600).
Utilisation de radiodétecteurs aéroportés dans les bandes de fréquences partagées par le service inter-satellites et le service de radiolocalisation (Recommandation N° 710).
Voir aussi *Conférences administratives* (Recommandation N° 12).

Services de terre:

Bandes de fréquence partagées par les services de radiocommunication spatiale et les services de radiocommunication de Terre (Recommandation N° 708).

Service fixe:

Partage des fréquences entre, d'une part le service d'exploration de la Terre par satellite (détecteurs passifs) et le service de recherche spatiale (déctecteurs passifs), et d'autre part, les services fixe, mobile, sauf mobile aéronautique, et fixe par satellite dans la bande 18,6-18,8 GHz (Recommandation N° 706).
Voir *Conférences administratives* (Recommandation N° 12).
Voir *Services de radiorepérage* (Recommandation N° 703).

Service fixe par satellite:

Dispersion de l'énergie de la porteuse dans le service fixe par satellite (Recommandation N° 103).
Liaisons de connexion dans le service de radiodiffusion par satellite (Recommandation N° 101).
Partage des fréquences entre, d'une part le service d'exploration de la Terre par satellite (détecteurs passifs), et le service de recherche spatiale (détecteurs passifs), et d'autre part les services fixe, mobile, sauf mobile aéronautique, et fixe par satellite dans la bande 18,6-18,8 GHz (Recommandation N° 706).
Voir *faisceaux hertziens* (Recommandation N° 102).

Services inter-satellites:

Partage des bandes de fréquences entre le service mobile aéronautique et le service inter-satellites (Recommandation N° 709).
Utilisation de la bande de fréquences 32-33 GHz, ne partage entre le service inter-satellites et le service de radionavigation (Recommandation N° 707).
Utilisation de radiodétecteurs aéroportés dans les bandes de fréquences partagées par le service inter-satellites et le service de radiolocalisation (Recommandation N° 710).

Service mobile aéronautique (OR):

Révision du Plan d'allotissement des fréquences — appendice 26 (Recommandation N° 406).

Service mobile aéronautique par satellite (R):

Étude de l'utilisation de ce service (Recommandation N° 405).

Service mobile aéronautique (R):

Application des chapitres NX, NXI et NXII du Remaiement du Règlement des radiocommunications (Recommandation N° 204).
Coopération en vue de l'emploi efficace des fréquences désignées pour utilisation mondiale (Recommandation N° 402).
Emploi efficace des fréquences désignées pour utilisation mondiale (Recommandation N° 401).

Mesures à prendre pour empêcher le fonctionnement de stations de radiodiffusion à bord de navire ou d'aéronefs hors des limites des territoires nationaux (Recommandation Nº 9).
Mise au point de techniques qui contribueront à réduire l'encombrement des bandes d'ondes décamétriques (Recommandation Nº 403).
Modèles normalisés de licences à délivrer aux stations de navire et aux stations d'aéronef (Recommandation Nº 7).
Nº 27/123 de l'Appendice 27 Aer2 (subdivison de Zone 5B) (Recommandation Nº 407).
Partage des bandes de entre le service mobile aéronautique et le service intersatellites (Recommandation Nº 709).
Passage au nouveau Plan d'allotissement des fréquences entre 2850 kHz et 22 000 kHz (Recommandation Nº 400).
Utilisation de la bande 136-137 MHz (Recommandation Nº 404).
Voir aussi *Détresse et sécurité* (Recommandation Nº 604).

Services mobiles:

Application des chapitres NX, NXI et NXII du Remaniement du Règlement des Radiocommunications (Recommandation Nº 204).
Nécessité de faire cesser les fontionnement des stations des services fixe et mobile dans les bandes de fréquences 149,9-150,05 MHz et 399,9-400,05 MHz attribuées au service de radionavigation par satellite (Recommandation Nº 703).
Planification de l'utilisation des fréquences dans la bande 435-526,5 kHz dans la Région 1 (Recommandation Nº 300).
Planification de l'utilisation des fréquences dans les bandes entre 1606,5 kHz et 3400 kHz dans la Région 1 (Recommandation Nº 301).
Voir *Conférences administratives* (Recommandation Nº 12).
Voir *Détresse et sécurité* (Recommandation Nº 200).

Service mobile maritime:

Application des Chapitres NX, NXI et NXII du Remaniement du Réglement des Radiocommunications (Recommandation Nº 204).
Désignations de fréquences des bandes d'ondes hectométriques à utiliser en commun par les stations côtières radiotéléphoniques pour les communications avec les stations de navire de nationalités autres que la leur (Recommandation Nº 308).
Désignation d'une fréquence dans les bandes 435-495 kHz ou 505-526,5 kHz pour l'énissions par les stations côtières des bulletins météorologiques et des avis aux navigateurs, au moyen de la télégraphie à impression directe á bande étroite (Recommandation Nº 309).
Études de l'interconnexion des systèmes de radiocommunication mobiles maritimes aves les réseaux télégraphie et télégraphique (Recommandation Nº 312).
Fréquence réservée aux besoins de la sécurité dans les bandes comprises entre 1605 kHz et 3800 kHz (Recommandation Nº 307).
Fréquences destinés à être utilisées dans le monde entier par les navire de toutes catégories ainsi que par les stations côtières — appendice 16, section B (Recommandation Nº 304).
Meilleure utilisation des voies radiotéléphoniques à ondes décamétriques par les stations côtières (Recommandation Nº 302).
Mesures à prendre pour empêcher le fonctionnement de stations de radiodiffusion à bord de navires ou d'aéronefs hors des limites des territoires nationaux (Recommandation Nº 9).
Modèles normalisés de licences à délivrer aux stations de navire et aux stations d'aéronefs (Recommandation Nº 7).
Partage des fréquences entre, d'une part le service d'exploiration de la Terre par satellite (détecteurs passifs) et le service de recherche spatiale (détecteurs passifs), et d'autre par les services fixe, mobile, sauf mobile aéronautique, et fixe par satellite dans la bande 18,6-18,8 GHz (Recommandation Nº 706).
Planification de l'utilisation des fréquences dans la bande 435-526,5 kHz dans la Région 1 (Recommandation Nº 300).
Planification de l'utilisation des fréquences dans les bandes comprises entre 1606,5 kHz et 340 kHz dans la Région 1 (Recommandation Nº 301).
Système automatique de radiocommunication sur ondes décimétriques pour le service mobile maritime (Recommandation Nº 310).
Utilisation des voies 15 et 17 de l'Appendice 18 par les stations de communication de bord (Recommandation Nº 305).
Utilisation d'un signal à fréquence acoustique consécutif au signal d'alarme radiotéléphonique émis par les stations côtières (Recommandation Nº 311).
Utilisation future de la bande 2170-2194 kHz (Recommandation Nº 203).
Veille sur la fréquence 156,8 MHz par les stations côtières aux fins de détresse (Recommandation Nº 306).
Voir *Détresse et sécurité* (Recommandations Nºs 200, 201, 303 et 604).
Voir *Services de radiorepérage* (Recommandation Nº 604).

Service mobile maritime par satellite:

Dispositions temporaires concernant les aspects techniques et d'exploitation (Recommandation Nº 313).
Voir aussi *Détresse et sécurité* (Recommandation Nº 201).

Service spatiaux:

Bandes de fréquences partagées par les services de radiocommunication spatiales entre eux ainsi qu'entre les services de radiocommunication spatiale et les services de radiocommunication de Terre (Recommandation Nº 708).
Coordination des stations terriennes (Recommandation Nº 711).
Examen, par les conférences administratives mondiales des radiocommunication, de l'état d'occupation du spectre des fréquences dans le domaine des radiocommunications spatiales (Recommandation Nº 2).
Partage des fréquences entre, d'une part le service d'exploration de la Terre par satellite (détecteurs passifs) et le service de recherche spatiale (détecteurs passifs), et d'autre par les services fixe, mobile, sauf mobile aéronautique, et fixe par satellite dans la bande 18,6-18,8 GHz (Recommandation Nº 706).
Utilisation de systèmes de radiocommunications spatiales en cas de catastrophes naturelles, d'épidémies, de famines et d'autre situations critiques analogues (Recommandation Nº 1).
Utilisation et partage des bandes de fréquences attribuées aux radiocommunication spatiales (Recommandation Nº 700).
Voir *Conférences administratives* (Recommandation Nº 12).
Voir *Liaisons de connexion* (Recommandation Nº 101).

Techniques de la bande laterale unique:

Voir *Service de radiodiffusion* (Recommandation Nº 501).

Terminologie:

Définition des termes «zone de sevice» et «zone de couverture» (Recommandation Nº 67).
Emploi du terme «canal» dans le Règlement des Radiocommunications (Recommandation Nº 73).
Généralités (Recommandation Nº 72).

Transmission d'energie électrique:

Transmission d'énergie électrique au moyen de fréquences radioélectriques à partir d'un engin spatial (Recommandation Nº 3).

Union International des Télécommunications:

Exigeant une intervention directe de l'Union:

Comité consultatif international des radiocommunications (CCIR):

Voir *Application des techniques informatiques* (Recommandation Nº 31).
Voir *Contrôle des émissions* (Recommandation Nº 30).
Voir *Détresse et sécurité* (Recommandation Nº 201).
Voir *Diffusion troposhérique* (Recommandation Nº 100).
Voir *Émissions* (Recommandations Nºs 62 et 66).
Voir *Equipement* (Recommandations Nºs 62, 70 et 65).
Voir *Faisceaux hertziens* (Recommandation Nº 102).
Voir *Gestion des fréquences* (Recommandations Nºs 60, 64 et 65).
Voir *Identification des stations* (Recommandation Nº 8).
Voir *Largeurs de bande* (Recommandation Nº 63).
Voir *Normes techniques* (Recommandations Nºs 60 et 61).
Voir *Propagation* (Recommandation Nº 68).
Voir *Radiobalises de localisation des sinistres* (Recommandation Nº 604).
Voir *Radiocommunications en cas de catastrophes* (Recommandation Nº 1).
Voir *Service de radiodiffusion* (Recommandations Nºs 500, 501, 502, 503 et 504).
Voir *Service de radiodiffusion par satellite* (Recommandations Nºs 101, 505, 507, 508, 705 et 712).
Voir *Service fixe* (Recommandation Nº 706).
Voir *Service inter-satellites* (Recommandations Nºs 707, 709 et 710).
Voir *Service mobile aéronautique par satellite* (Recommandation Nº 405).
Voir *Service mobile aéronautique (R)* (Recommandation Nº 709).
Voir *Service mobile maritime* (Recommandations Nºs 300, 301, 302, 307, 310 et 312).
Voir *Services de radiorepérage* (Recommandations Nºs 602, 704 et 707).
Voir *Services spatiaux* (Recommandations Nºs 708 et 711).
Voir *Terminologie* (Recommandations Nºs 67, 72 et 73).
Voir *Transmission d'énergie électrique* (Recommandation Nº 3).

Comité consultatif internationl télégraphie et téléphonie (CCITT):

Voir *Service mobile maritime* (Recommandations Nºs 310 et 312).
Voir *Terminologie* (Recommandation Nº 72).

Comité international d'enregistrement des fréquences (IFRB):

Voir *Application des techniques informatiques* (Recommandation Nº 31).
Voir *Contrôle des émissions* (Recommandation Nº 30).
Voir *Coopération et assistance techniques* (Recommandation Nº 6).
Voir *Émissions* (Recommandation Nº 62).
Voir *Gestion des fréquences* (Recommandation Nº 60).
Voir *Largeurs de bande* (Recommandation Nº 63).
Voir *Normes techniques* (Recommandations Nºs 60 et 61).
Voir *Service mobile aéronautique (R)* (Recommandations Nºs 400, 402, 403 et 404).

Conférences administratives:

Voir *Détresse et sécurité* (Recommandations Nºs 200, 201, 202 et 203).
Voir *Diffusion troposphérique* (Recommandation Nº 100).
Voir *Émissions* (Recommandation Nº 702).
Voir *Equipement* (Recommandation Nº 605).
Voir *Règlement des Radiocommunications* (Recommandations Nºs 13 et 204).
Voir *Service de radioastronomie* (Recommandation Nº 701).
Voir *Service de radiodiffusion* (Recommandations Nºs 500 et 504).
Voir *Service inter-satellites* (Recommandations Nºs 707, 709 et 710).
Voir *Service mobile aéronautique (OR)* (Recommandation Nº 406).
Voir *Service mobile aéronautique (R)* (Recommandations Nºs 204 et 407).
Voir *Service mobile maritime* (Recommandations Nºs 204, 300, 301, 305, 307, 308, 309 et 310).
Voir *Service mobile maritime par satellite* (Recommandation Nº 313).
Voir *Services de radiorepérage* (Recommandations Nºs 602 et 605).
Voir *Services spatiaux* (Recommandation Nº 711).
Voir *Terminologie* (Recommandation Nº 72).
Voir *Union International des Télécommunications (conseil d'administration)* (Recommandation Nº 13).

Conférences de plénipotentiaires:

Convocation de futures conférences administratives des radiocommunications traitant de services déterminés (Recommandation Nº 12).

Conseil d'administration:

Conférence administrative mondiale des radiocommunications pour une révision générale ou partielle du Règlement des Radiocommunications (Recommandation Nº 13).
Voir *Conférences administratives* (Recommandation Nº 12).
Voir *Diffusion troposhérique* (Recommandation Nº 100).
Voir *Service de radiodiffusion* (Recommandation Nº 504).

Voir *Service mobile aéronautique (OR)* (Recommandation Nº 406).
Voir *Service mobile maritime* (Recommandations Nºs 300 et 301).
Voir *Services de radiorepérage* (Recommandation Nº 602).
Voir *Services spatiaux* (Recommandation Nº 2).

Secrétaire général:

Voir *Application des techniques informatiques* (Recommandation Nº 31).
Voir *Conférences administratives* (Recommandation Nº 10).
Voir *Détresse et sécurité* (Recommandations Nºs 200 et 203).
Voir *Règlement des Radiocommunications* (Recommandation Nº 204).
Voir *Service de radiodiffusion* (Recommandations Nºs 9 et 502).
Voir *Service mobile aéronautique (R)* (Recommandations Nºs 400 et 402).
Voir *Service mobile maritime* (Recommandations Nºs 300, 301, 304, 309 et 310).
Voir *Service de radiooorepérage* (Recommandation Nº 602).
Voir *Terminologie* (Recommandation Nº 72).
Voir *Transmisson d'énergie électrique* (Recommandation Nº 3).

Unites si:

Emploi du Système International d'Unités (SI) (Recommandation Nº 74).

(A versão da língua chinesa do presente texto será publicada logo que possível.)

（本文之中文本在可能公布時隨即公布。）

Imprensa Oficial de Macau
澳門政府印刷署
PREÇO DESTE NÚMERO $ 2 246,00
每份價銀二仟二百四十六元正